

Mastering the Essential

Annual Integrated Report 2023



SOLVAY

WE MASTER
THE ELEMENTS



ESSENTIAL TO
OUR WORLD

Table of contents

04	Presidents' messages
08	Strong foundations
12	Solvay at a glance
22	Business environment and Strategy
50	Sustainable value creation
67	Performance
83	Corporate governance statement
139	Risk management
161	Extra-financial statements
245	Financial statements
371	Auditor's reports and Declaration by the persons responsible
389	Glossary

Partial Demerger of Solvay SA/NV and Spin-Off of its Specialty Businesses to Syensqo SA/NV

Until December 8, 2023, Solvay SA/NV owned and controlled the Specialty Polymers, Composites, Novecare, Technology Solutions, Aroma Performance and Oil and Gas Solutions businesses (the "Specialty Businesses"), and the Soda Ash and Derivatives, Peroxides, Silica, Special Chem and Coatis businesses (the "Essential Businesses"). Effective December 9, 2023, the Specialty Businesses were separated from Solvay through a partial demerger of the Company, whereby the shares and other interests held by the Company in the legal entities operating the Specialty Businesses, the Company's rights and obligations under the agreements entered into with those legal entities, as well as certain other assets and liabilities were contributed to Syensqo, and ordinary shares of Syensqo were issued and allocated directly to shareholders in Solvay on a pro rata basis. In connection with the partial demerger, Syensqo became a publicly listed company independent from Solvay with its ordinary shares trading on the regulated markets of Euronext in Brussels and Paris. Solvay's ordinary shares remained listed on the regulated markets of Euronext in Brussels and Paris.

The financial results of the Specialty Businesses for the periods prior to, and until the effectiveness of, the partial demerger have been reflected in Solvay's Consolidated Income Statement, retrospectively, as discontinued operations. Subsequent to the completion of the partial demerger, Solvay decided to depart from its previous organization in four reporting segments (Materials, Solutions, Chemicals and Corporate & Business Services) and now operates under three reporting segments: Basic Chemicals, Performance Chemicals and Corporate. For additional information on the impact of the partial demerger on Solvay's financial results, please refer to Solvay's consolidated financial statements for the year ended December 31, 2023 included in this report.

The completion of the partial demerger also impacted the governance of the Company, as it led to changes to the composition of the Board of Directors and of the Executive Leadership Team, in addition to amendments to the Company's Articles of Association and Governance Charter. For more information, see chapter "Corporate Governance Statement" of this report.

The Solvay spirit in action

When future generations look back at the long history of Solvay, stretching all the way to 1863, this last year will certainly stand out as a milestone moment.

In early December 2023, our shareholders voted overwhelmingly to approve the partial demerger and the spin-off of our specialty businesses to Syensqo. This has created an exceptional opportunity that few organizations are ever presented with: launching a new entity showcasing innovation and renewal, while still leveraging a distinctive industrial platform with strong foundations.

Pulling this off has been achieved against a difficult external macroeconomic environment with a background of geopolitical conflict, weak economic growth, high interest rates, inflation, higher energy prices and high level of regulation in Europe. Despite all of these challenges, building on all the great work accomplished over the last years, Solvay was still able to deliver a strong financial performance, maintaining our competitive position and at the same time continuing to deliver on our ambitious sustainability targets. This is the Solvay spirit in action.

Having served on the previous Solvay Board, I have come to know the company and its assets well. Solvay has always been at the forefront of excellence and innovation because of the enduring values of our founder, Ernest Solvay: science, an eagerness to learn and improve, entrepreneurship and societal responsibility.

At Solvay, we are thus rediscovering our roots and spreading our wings. At the heart lies a central concept: Mastery. Mastery is a rich, multi-faceted and profound concept.

It starts with a key mindset: honoring past experiences to guide us for the future. In today's world we are too often absorbed by the problems of today and planning the future, and tend to forget that each day we walk on paths that have been created by our predecessors.

Then, Mastery is about the relentless drive to improve and perfect our scientific and technological capabilities. Like a craftsman, we must continually work and rework until we reach a level of perfection that we can be proud of. We must both welcome and reinvent traditions.

Mastery also implies the transmission of values and experience, from one person to another, from one team to another, from one generation to another. There is immense beauty and care in the act of genuine transmission.

Finally, Mastery is about a double ambition: pursuing a demanding performance, while committing generously to a noble purpose.

Our endeavor therefore centers on our mastering of the elements essential to our world. There is a growing demand for more sustainable products while remaining competitive, which is why we are focused on applications that help shape a future where everyone thrives. That is the central transformation we are facing. 160 years ago, Ernest Solvay developed the soda ash process and, building on his legacy, we remain committed to continued innovation and to perfecting the science of essential chemistry for generations to come. Nothing is impossible, Ernest Solvay would say, not even re-inventing his original soda ash process as we recently did, which will result in a significant reduction of our carbon emissions and use of resources such as water.

One of the most important lessons I have learned in a long career advising large complex organizations is a very simple but profound truth: in the end, it is all about people — real people like you and me, of flesh and blood, fears and hopes, dreams and ambitions, and with a desire to contribute to noble goals that create pride. Organization and process are paramount, but in the end it is the human factor that counts most. Looking at Solvay, at the core of our legacy and our future is our highly motivated and skilled workforce, who do not spare their efforts and energy. Our strength lies in our people and their values, and how this is transferred from colleague to colleague, from generation to generation. It is this collective journey that makes us successful, starting at the top of the company with its leadership, leading all the way to empowering the base.

The new Board of ten directors, including six independent ones, is diverse, skilled, experienced, and committed. More importantly, we have people with the right mindset, wisdom and ambition to step up Solvay's performance and delivery. To generate resilient cash and create sustainable and abundant value for all of our stakeholders. To serve our customers



in a distinctive manner. To develop our people. To contribute to a more sustainable society. To earn the trust, confidence, and support of our shareholders, our anchor for the future.

We have committed to build a real and effective team with the Board. A team bound by a deep sense of stewardship and will to generate collective intelligence.

Building on the concept of Mastery, this Board will support the Executive Leadership Team as they implement structural measures to raise the bar in all domains — strategy, mindset and operational excellence — to make Solvay more efficient and to enhance our ability to continue creating value in the long term.

So, I want to take this opportunity to express not only my gratitude but the gratitude of the entire Board, to Solvay employees for their unwavering commitment; to the Solvay leaders and Chief Executive Officer, who have strived to set up a new strategy at pace in doing so raising the bar; to our customers for their trust during this period of change and relying on our products and solutions; to the Executive Leadership Team and Board of the “old” Solvay who have made the split possible, and finally to our shareholders for their continued commitment and support for the split.

Building on our strong foundations, we embark with confidence and commitment on the next chapter in our history.

The spirit of Solvay is in action.

Pierre Gurdjian
Chairman of the Board of Directors

Pierre Gurdjian



Solvay has entered a new phase, marking a significant milestone in our history. I am honored to lead the company forward, supported by a skilled team of executives and the dedication of more than 9,000 employees worldwide. I thank the Board for entrusting me with the responsibility of guiding Solvay into a future that holds sustainability at its core.

With over 160 years of history, our portfolio spans key chemical sectors and includes five business lines: soda ash, peroxides, silica, rare earths, and fluorine. We hold global market and technological leadership in these areas, along with a strong regional business in Latin America, known as Coatis. We focus on delivering essential products that play a crucial role in the manufacturing of items integral to the day-to-day life of consumers, such as glass for buildings and bottles, detergents, paper, tires, semiconductors, food, and pharmaceuticals, positioning us across a wide array of markets. In line with the legacy of our founder, Ernest Solvay, we are committed to mastering the core technologies and materials that are essential to meeting our customers' fast-evolving needs, building on our strong foundation.

DELIVERING ON OUR COMMITMENTS

— In 2023, amid a challenging macroeconomic environment, we recorded high-quality results. Our net sales reached €4.9bn. Our EBITDA stands strong at €1.2bn, stable versus 2022 on an organic basis, with the EBITDA margin increasing to a record 25.5%. This demonstrates our ability to maintain solid financial ground even in the face of declining volumes. The higher profit and the simplification of our portfolio resulted in a high free cash flow of €0.6bn, with a record conversion ratio of 45.4%, further strengthening our financial health.

Sustainability is at the heart of our operations, reinforcing our position as market leader and enhancing our competitive advantage. We are committed to achieving carbon neutrality by 2050, and I am pleased to report that we are on the right path. In 2023, we significantly accelerated our energy transition efforts. We achieved a 19% reduction in emissions from our operations (Scope 1 and 2) compared to 2021. We are actively advancing 27 energy transition projects globally and implementing energy efficiency upgrades across all our facilities, making substantial progress in the transition

to renewable energy sources. These initiatives position us strongly to achieve our ambitious target of reducing our emissions by 30% by 2030.

We have made significant progress towards our goal of phasing out coal use in our soda ash plants, and at the beginning of 2024, we announced its complete phase-out at our Green River, Wyoming, USA, facility. In 2025, our plants in Rheinberg, Germany, and Dombasle, France, will also cease coal use. Furthermore, our breakthrough e.Solvay soda ash process which is currently being piloted at an industrial scale, will put our carbon neutrality goal within reach by removing our emissions from the soda ash process.

Our emissions upstream and downstream in the value chain (Scope 3 for the "Focus 5" categories) have experienced an impressive 16% reduction compared to 2021, positioning us well on our trajectory towards achieving our 2030 target of a 20% reduction. To further this progress, we are collaborating with our top greenhouse gas (GHG)-emitting suppliers to better track and reduce emissions from our purchased goods and services.

Embracing our founder's vision, safety is a critical value at Solvay, and we will continue to push the boundaries to reach the zero accident target. In parallel, we have committed to reducing inequalities by ensuring a living wage for all Solvay employees by 2026. We initiated a pilot program to assess our adherence to living wage standards in the U.S., U.K., and China. The initial results have confirmed our compliance, affirming our status as a responsible employer.

We continue our efforts towards achieving gender balance in leadership in ten years and fostering social dialogue through the Solvay Global Forum. Our 2023 initiatives have further integrated Diversity, Equity, and Inclusion (DEI) into our organization, including enhanced disability inclusion practices across all levels.

OUR STRATEGY: LEADING WITH PROCESS INNOVATION AND SUSTAINABILITY

— We have a clear strategy. We aim to deliver value to our customers through our leadership positions in every market where we operate. Our approach to achieving this is to grow in line with our customers' needs and to innovate in our production processes. Our cutting-edge hydrogen peroxide facility in Taiwan is designed to meet the region's growing demand for semiconductors, while our plant in Livorno, Italy, is introducing a new circular silica unit derived from rice husk ash, which will significantly boost the sustainability of the tire industry.

Further strengthening our technology leadership position, we are establishing Europe's first rare earths hub for a permanent magnets value chain in La Rochelle, France, to meet growing needs in the electronics, automotive and clean energy markets. In Saudi Arabia, we plan to construct the world's first carbon-neutral soda ash facility using our innovative e.Solvay process. This initiative will set a new global standard in competitiveness and sustainability.

To drive excellence and competitiveness, we are transforming the way we operate. This means excelling as leaders in processes and cost savings, which we expect to be a major driver of our EBITDA growth over the next five years. We have started deploying initiatives aimed at delivering savings, and we are confident in achieving our goal of €300 million in annual savings by 2028.

LOOKING AHEAD: AMBITIOUS GOALS FOR A SUSTAINABLE FUTURE

Looking ahead, our ambitions are high. Building on our strong foundation, we aim to further enhance our performance metrics. Our objective is not only to preserve our position in the top quartile but also to establish new standards for the industry.

When it comes to creating sustainable value and a resilient, forward-looking business model, maintaining capital discipline is key. Our cash allocation strategy will be simplified and more focused: one third of the generated cash will be directed towards essential capital expenditures, another third will be allocated to our shareholders, to whom we pledge a stable or increasing dividend, and the final third will support growth initiatives.

I am excited about embarking on this new chapter with Solvay. Our dedication to steering the industry towards a sustainable future, through our mastery of technology and sustainable practices, will drive Solvay's ongoing transformation. We aim to become a model of operational excellence, paving the way for a sustainable future that sets a standard for others in our industry. This is our commitment to all our stakeholders.

Philippe Kehren
Chief Executive Officer

Strong foundations

— For over 160 years, through continuous changes and transformations, Solvay has remained true to its legacy of innovation, social responsibility, and technical excellence. Over the past ten years, we have achieved a radical transformation of our company. We deeply reshaped and streamlined our portfolio, with more than 50 mergers and acquisitions in the past 15 years, exiting cyclical businesses. Our G.R.O.W. strategy and Solvay One Planet sustainability objectives accelerated the momentum, allowing us to focus on higher growth and higher margin activities while placing sustainability at the heart of what we do.

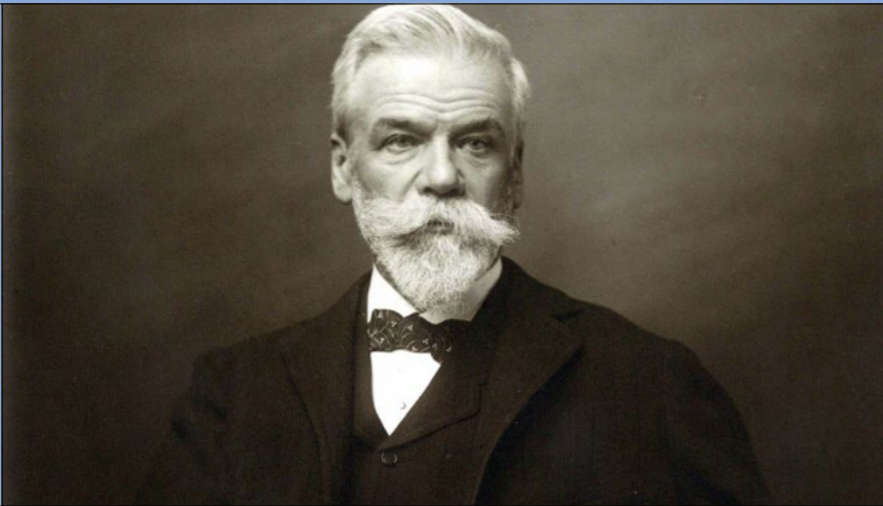
Through a gradual process, we have transitioned to more efficient operations to better serve customers and initiated a profound cultural change towards more agility and customer-centricity. We have achieved our financial mid-term targets three years ahead of schedule and made significant

progress on our sustainability objectives. As a result of our successful transformation journey, two distinct business groups emerged, focused respectively on essential and specialty chemicals. We decided to separate Solvay into two distinct listed companies (Solvay and Syensqo) in order to unlock the full potential of each of these business groups.

On December 8, 2023, our shareholders approved the partial demerger of Solvay SA/NV and the spin-off of our specialty businesses to a new company named Syensqo. From that date, we have welcomed the next chapter of Solvay’s heritage built on the strong foundations of our past and strengthened by our recent transformation. And, as has been the case for 160 years, our products remain at the heart of everyday lives. We are essential. We are SOLVAY.

01

Science, Innovation, Excellence and Leadership within our DNA



Ingrained in our DNA, you will find science, progress, innovation, excellence and leadership that can all be traced back to our founder, Ernest Solvay.

What started with the invention of a synthetic soda ash process, a breakthrough that was more environmentally friendly and revolutionized the industry of the time, has since opened the door to other process innovations. Like our founder, we never settle when it comes to creating high-end chemistry.

We believe in science and, with it, continuous progress.

At the end of the 19th century, we were at the forefront of the first industrial globalization. Today, thanks to the support of our shareholders and our unshakeable commitment to process innovation and operational excellence, we are able to maintain our technology and market leadership. Based on our portfolio of quality and expertise, we continue to build upon the strong global leadership positions existing in every one of

our businesses and lead process technology improvements and sustainability.

Our culture of performance has been over 160 years in the making. We continuously seek to enhance our performance and respond to our customers’ essential needs, expanding our culture of agility and flexibility. This is how we have maintained our leadership positions throughout the years.

02

Responsible business at the heart of our values and culture



Since the creation of Solvay, we have pioneered social welfare and caring for our people.

Our founder was one of the first corporate leaders to implement what we today call Corporate Social Responsibility (CSR), placing a strong emphasis on responsible capitalism and the well-being of employees. The Solvay legacy of CSR lives on through several of our initiatives focused on the well-being of our employees and our communities. For example, the Solvay Life Saving Rules have been implemented to continuously improve safety at the workplace and reinforce our culture in this field.

In the 1880s, Solvay led the way when it came to social policy, taking care of employees through health and protection initiatives and forming a key part of the company’s social policy. We have continued to build on this legacy through the launch of our Solvay Cares social program. Solvay Cares provides a minimum level of company social benefits for employees worldwide and includes 16

weeks of parental leave for all parents, health insurance, and disability and life insurance.

In 2020, we launched the Solvay Solidarity Fund to provide additional support to our people or communities facing hardship. Since then, the Fund has donated more than €10.5 million to individual and collective causes, supporting 67 projects in 16 countries.

At the cornerstone of our beliefs is social dialogue. As the first chemical company to establish a partnership with IndustriALL Global Union back in 2005, we recently renewed and strengthened our Solvay Global Forum Agreement and Global Framework Agreement with them.

Our efforts to reinforce our employees’ sense of belonging has also included our first employee share plan launched in 2022, which achieved an impressive participation rate ahead of the benchmark for similar initiatives, with one out of four employees being Solvay shareholders – a testament to their high level of engagement.

In order to develop and protect our culture of integrity, we have set up a Code of Business Integrity as part of our Ethics & Compliance program. It applies to every Solvay employee, regardless of location or role, and to all third parties acting on Solvay’s behalf, including suppliers. Such internal due diligence procedures are pivotal to mitigating risk across our value chains.



03

Sustainability at the core of our business and operations

One of the driving forces behind Ernest Solvay's initial innovation of the soda ash process was sustainability.

We have long been committed to offering our customers more sustainable products and reducing our impact on the planet based on clear objectives. Within the past few years, we stepped up our sustainability ambitions by creating our Solvay One Planet roadmap, establishing 10 objectives to reduce our impact on the climate and natural resources and to improve the quality of life of our people and communities. This unique approach to sustainability topics provides a holistic view of many areas, such as biodiversity, circularity, quality of life, and more.

We have built a very ambitious roadmap to achieve our goal of carbon neutrality on Scopes 1 and 2 greenhouse gas (GHG) emissions by 2050. We have taken big steps towards reducing our carbon footprint, heavily investing to phase out coal for energy production at our soda ash plants, accelerating the shift to renewable energy worldwide, and constantly innovating to make our processes more sustainable and less carbon intensive.



Furthermore, our solid and unique Sustainable Portfolio Management (SPM) methodology helps us embed sustainability in our key business decisions. And we have made progress, delivering more sustainable solutions, such as our flue gas treatment product based on sodium bicarbonate SOLVair® and a wastewater disinfection treatment based on hydrogen peroxide, all while reinventing a more sustainable soda ash manufacturing process.

We launched our One Dignity program, a comprehensive initiative featuring nine objectives with action plans designed to accelerate the company-wide adoption of a DEI mindset. What sets us apart is our specific approach of using equity and inclusion as building blocks for diversity. To measure our progress, we launched an annual Group-wide Pulse survey. Tackling gender inequities, we were among the very first companies to publish a gender pay gap report and launch a pay equity correction exercise covering mid and senior management across the Group.

As a continuous effort, sustainability is deeply embedded in our culture and operations. This is why we recently increased the sustainability criteria, that now includes DEI, in employees' short-term incentives to 15%.



04

Strong financial foundations

With a long track record of resilient growth, our financial foundations are very strong.

Thanks to the profound transformation implemented by Solvay over the past four years and driven by our G.R.O.W. strategy, we have repeatedly generated record results while significantly strengthening our capital structure.

Over the course of that period, we have been able to deliver consistent strong financial performance. This growth occurred in the face of several unprecedented crises, such as the COVID-19 pandemic, Ukrainian war, and energy crisis in Europe, and is a clear demonstration



of our resilience and our ability to quickly adapt to unexpected turnarounds.

We have evolved into a unique company within our industry and are positioned among the top quartile in all measures of financial performances.

We rank in the top positions among our peers in EBITDA margin, cash conversion¹ and ROCE².

We have been able to convert these strong results into the deleveraging of our balance sheet, allowing Solvay to open this new chapter with a very solid financial position and an investment grade

rating of BBB- (stable outlook). This robust situation gives us more flexibility to take advantage of new opportunities.

Overall, it is clear that the magnitude of our transformation and our strong financial situation are providing solid foundations for Solvay as a new global leader, poised and resourced to generate superior and sustainable value creation.

1. Cash conversion = (Underlying EBITDA – CAPEX from continuing operations)/ Underlying EBITDA.

2. Return on capital employed (ROCE) calculated as the ratio between Underlying EBIT (before adjustment for the amortization of Purchase Price Allocation) and capital employed.

01 SOLVAY AT A GLANCE

We master the elements



14 A new chapter

- 14 Our Vision and Ambition
- 15 Unlocking value creation

16 Key figures 2023

18 Governance

- 18 New Board of Directors: independent and diverse
- 18 Our Executive Leadership Team embodies collective expertise and visionary leadership

20 Highlights of the year

WE MASTER THE ELEMENTS

A new chapter

The successful completion of the partial demerger marks a significant strategic shift and positions us as a frontrunner in essential chemicals on a global level. This pivotal moment in our rich history prepares us to enter a new stage of sustainable growth, building on our strengths, sharpening our focus on core business areas, and reaffirming our dedication to market leadership, social responsibility, and decarbonization. We believe Solvay will be better able to create sustainable shared value for all, both now and in the future.

OUR VISION AND AMBITION

— Just as Ernest Solvay and his brother Alfred mastered the soda ash process over 160 years ago, today we are mastering the elements essential to our world. From glass windows, solar panels, and microchips to electric vehicle batteries, hemodialysis treatments, and green tires – our products are at the heart of everyone's lives – subtly enhancing everyday life. As we move into the next chapter of our history, we carry forward our legacy of progress and leadership as we focus on mastering the essential.

Driven by our founder's visionary spirit, our mission is to harness the power of chemistry in order to create sustainable products that address the world's most pressing challenges and needs.

At the heart of our journey is our determination to achieve carbon neutrality. Such a commitment involves introducing process innovations and sustainable products while minimizing our environmental footprint. We are constantly improving, optimizing, and redesigning our processes with these in mind. Through our commitment to sustainable practices and our mastery of technologies, we are not just adapting to a changing world; we are crafting a path to a sustainable future that others in our industry may follow.

This is our ambition, our promise to you, as we embark on this new chapter.



Building on

160 years

of mastering the elements to craft a path to a sustainable future for the industry

5

main business lines with leading positions in their markets

intermediates, while our presence in multiple end-markets driven by megatrends strengthens our resilience. In addition, our unique global footprint, featuring global and regional manufacturing plants, gives us the flexibility to cater to a diverse and sustainability-focused customer base.

More focused to drive greater value

— Focusing on our essential chemical businesses places us in a strong position to reinforce our track record of achieving strong top-quartile margins, generating cash, and delivering attractive returns.

The separation will enable us to:

- Bring together businesses that have the same profile, the same requirements, and the same strategic imperatives. We will be able to build a fit-for-purpose operating model that will generate cost efficiency and support our market leadership position going forward.
- Streamline operations through standardization and end-to-end optimization. This means cutting out complexity and acting decisively to respond to market dynamics swiftly and effectively.
- Focus our investments and human resources on essential capex and attractive returns. This involves allocating capital to areas with the highest returns, including decarbonization and digitization.

UNLOCKING VALUE CREATION

— The decision to spin off our specialty activities to Syensqo marks a significant strategic move and will unlock value for our shareholders, customers, and employees. We are a major player in the essential chemical arena and are positioned to deliver greater value.

A major player in the industry

— We operate five main business lines that hold leadership positions in their respective markets. They include soda ash and sodium bicarbonate, hydrogen peroxide, highly dispersible silica, fluorine and rare earths formulations. And beyond that, we have a regional leadership in Latin America focused on phenol and solvents. Our key mono technologies make us a vital and reliable supplier of chemical products and in-

Key figures 2023

At Solvay, we are mastering the elements essential to our world. We believe in science and we thrive on process innovation.

As a pioneering chemical company with a legacy rooted in founder Ernest Solvay's pivotal innovations in the soda ash process, we are dedicated to delivering essential products to a broad array of markets.

Our five major businesses — soda ash, peroxides, silica, rare earths and fluorine — hold global market and technology leadership positions, and we have a strong regional business in Latin America relying on phenol and solvents.

Since 1863, we have harnessed the power of chemistry to create innovative, sustainable products that address the world's most essential needs, focusing on applications that help shape a future where everyone thrives. Their purposes include purifying the air we breathe, protecting our health, creating eco-friendly clothing, making car tires more sustainable, cleaning our homes, and supporting the transition to vehicle electrification and digitalization.

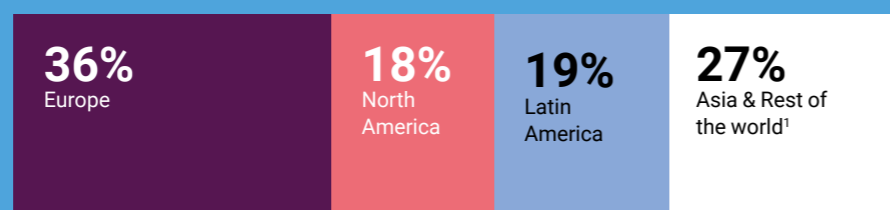
Sustainability is embedded in our operations and culture, and we are committed to driving the transition towards a carbon-neutral future by 2050.

A balanced global presence

41 countries

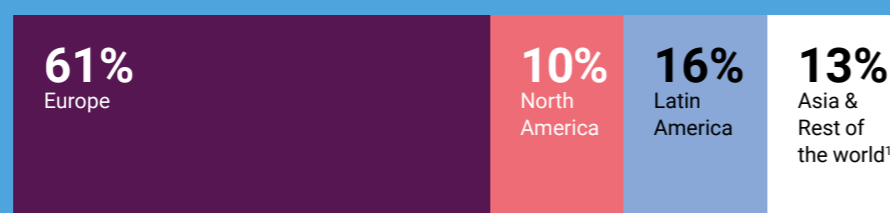
Net Sales

€4.9bn



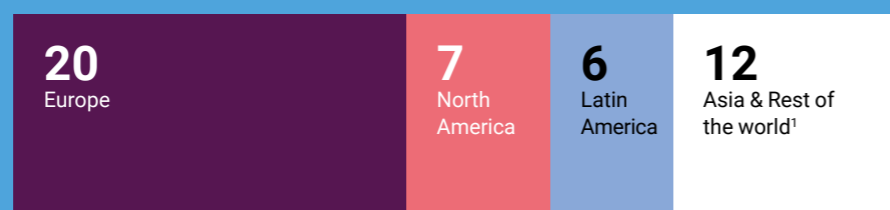
Employees

+9,000



Production sites

45



¹. Includes the Middle East and Africa.

Financial indicators

2023 vs 2022

Underlying EBITDA **+0.2%** (organic basis¹)

€1,246M

Underlying EBITDA margin **+1.0pp**

25.5%

Free Cash Flow² **+17.3%**

to Solvay shareholders
from continuing
operations

€561M

FCF conversion ratio³ **+8.9pp**

45.4%

ROCE⁴ **-2.5pp**

20.4%

Dividend⁵

per share €2.43

¹. Organic growth excludes forex conversion and scope effects. ². Free cash flow to Solvay shareholders is the free cash flow after payment of net interests, coupons of perpetual hybrid bonds and dividends to non-controlling interests. This represents the cash flow available to Solvay shareholders, to pay their dividend and/or to reduce the net financial debt. ³. FCF conversion ratio = FCF (before netting of dividends paid to non-controlling interest) / Underlying EBITDA. ⁴. Return on Capital employed. ⁵. Recommended to the Shareholders meeting on May 28, 2024. ⁶. Total emissions from Solvay operations. ⁷. Emissions upstream and downstream in the value chain (suppliers and customers) from its "Focus 5" categories which are 1. Purchased goods and services. 2. Fuel and energy related activities. 3. Processing of sold products. 4. Use of sold products. 5. End-of-life treatment of sold products. ⁸. Wherever renewable alternatives exist. ⁹. Number of work-related injuries and illnesses (employees and contractors) resulting from an accident with severity above first aid, according to US OSHA 29 CFR 1904, per 200,000 work hours. ¹⁰. Positive kickoff in 2023 with pilots conducted in the US, the UK and China, representing 16% of Solvay's internal workforce.

Extra-Financial indicators

2023 vs 2021

CLIMATE

Greenhouse gas emissions

Scope 1 and 2⁶ **-19%**

7.3Mt CO₂eq.

Scope 3⁷ **-16%**

12.4Mt CO₂eq.

Phase out solid fuels⁸ **-10%**

24.4PJ

BETTER LIFE

Safety

Reportable Injuries and
Illness Rate (RIIR)⁹

0.27

Gender parity **-1.7pp**

Women in mid and senior
management

26.3%

UN living wage initiative

100% employees

pilot¹⁰
NEW objective

Governance

The completion of the Partial Demerger in December 2023 led to changes in the composition of Solvay’s Board of Directors, Executive Leadership Team (ELT), and governance principles, among others. Our new governance will support sustainable value creation for all Solvay stakeholders.

An independent Board representing all stakeholders

—The new Board, made up of 10 directors, possesses the experience, leadership, independence, and diversity needed to help Solvay usher in a new era of sustainable value creation.

Main changes in the Board’s governance include the formal separation between the roles of the Chairperson and CEO, as well as the election of a Vice Chair. A testimonial to Solvay’s strong focus on sustainability, the ESG Committee is now formally integrated into the Governance Charter⁽¹⁾, with missions and KPIs reflective of recent developments in this area.

Solvay Board of Directors at year end 2023

01. **Pierre Gurdjian**
Chairman,
Chair of the Finance
Committee,
Independant Director

02. **Philippe Kehren**
Chief Executive Officer

03. **Thomas Aebischer**
Chair of the Audit and
Risk Committee,
Independant Director

04. **Aude Thibaut de Maisières**
Vice Chair, Chair of
the ESG Committee,
Reference
Shareholder Director

05. **Wolfgang Colberg**
Chair of the
Compensation
Committee,
Independant Director

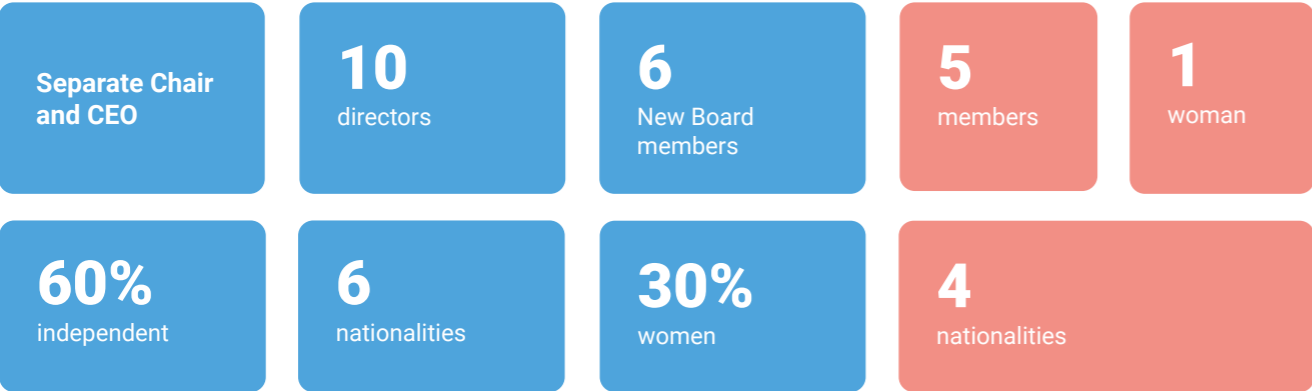
06. **Marjan Oudeman**
Chair of the Nomination
Committee,
Independant Director

07. **Thierry Bonnefous**
Reference Shareholder
Director

08. **Melchior de Vogüé**
Reference Shareholder
Director

09. **Annette Stube**
Independent Director

10. **Yves Bonte**
Independent Director

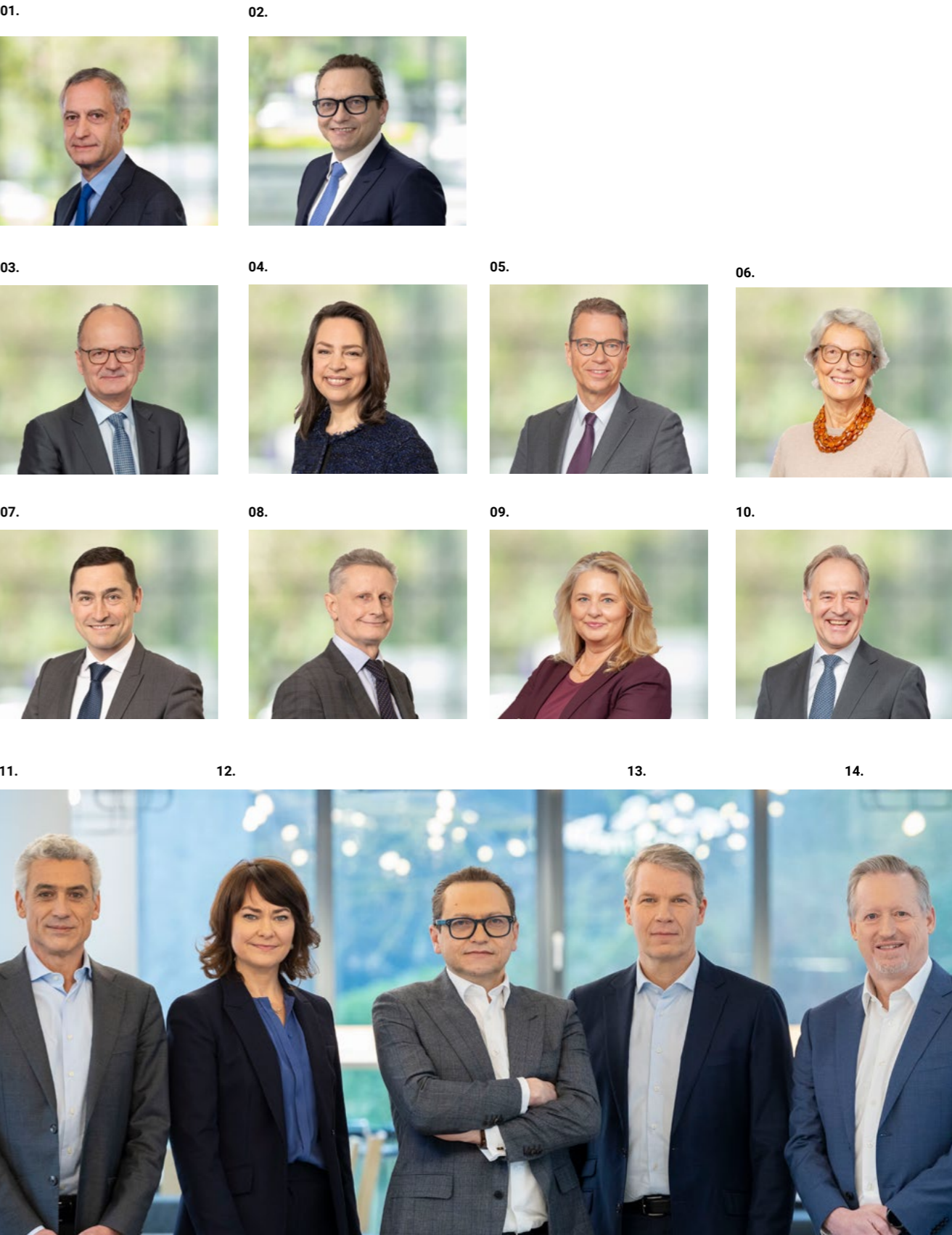


1.The Governance Charter defines the role and mission, functioning, size, composition, training and evaluation of the Board. A new version was approved by the Board on December 9, 2023 and is available on www.solvay.com.

Our Executive Leadership Team embodies collective expertise and visionary leadership

—Solvay’s five new ELT members bring strong expertise in terms of people leadership, energy transition, cost and process excellence, and capital discipline. Their terms of office have been extended to four years, providing a guarantee of stability for Solvay.

- Philippe Kehren**
Chief Executive Officer
- 11. Alexandre Blum**
Chief Finance and Strategy Officer
- 12. Lisa Brown**
Group General Counsel and Corporate Secretary
- 13. Mark van Bijsterveld**
Chief People Officer
- 14. Lanny Duvall**
Chief Operations Officer



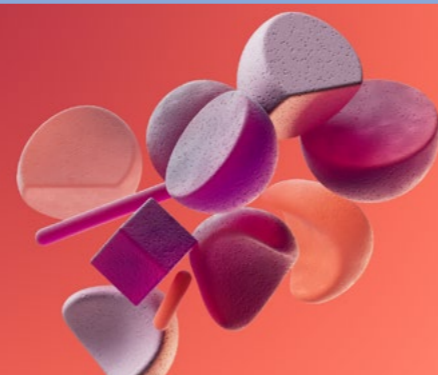
Highlights of the year

01

SOLVAY SHAREHOLDERS APPROVE THE SPIN-OFF OF THE SPECIALTY ACTIVITIES TO SYENSQO

At Solvay EGM, on December 8, 2023, our shareholders approved the Partial Demerger of Solvay SA/NV and the spin-off of our specialty businesses to a new company named Syensqo. Focusing on our essential chemical businesses places us in a strong position to reinforce our track record of achieving strong top-quartile margins, delivering resilient cash generation and attractive returns.

→ [Read page 14](#)

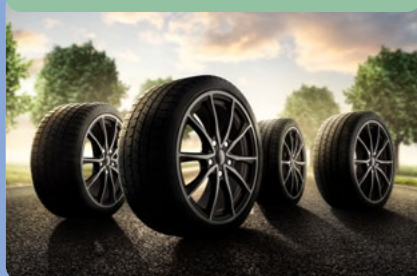


02

SOLVAY TO LAUNCH INNOVATIVE BIO-CIRCULAR SILICA IN EUROPE

We are investing at our Livorno, Italy, site to launch our first unit of circular highly dispersible silica (HDS) made from rice husk ash. It will significantly increase the use of sustainable raw materials and reduce the CO₂ footprint in the tire industry.

→ [Read page 35](#)



03

COMMITTED TO ENSURING A FAIR LIVING WAGE TO ALL EMPLOYEES BY 2026

We joined the UN Global Compact living wage initiative and are assessing our living wage equity with plans to close any potential gaps within the company by 2030, starting with China, the UK, and the US.

→ [Read page 46](#)



04

SOLVAY TO SUPPLY TECHNOLOGY LICENSE FOR HYDROGEN PEROXIDE MEGAPLANT TO GUANGXI CHLOR-ALKALI CHEMICAL IN CHINA

This agreement will also support the strategic growth of our hydrogen peroxide business in China, particularly in the southern part of the country.

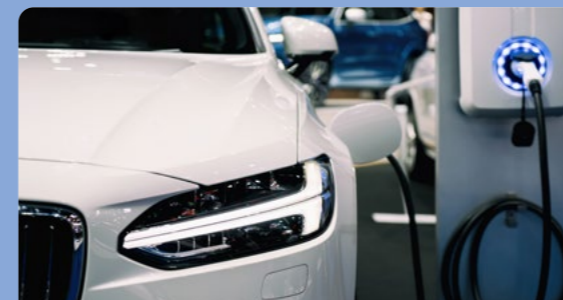


05

A MILESTONE IN OUR PLAN TO DEVELOP A MAJOR HUB FOR RARE EARTH MAGNETS IN EUROPE

Our agreement with Cyclic Materials will provide our site in La Rochelle, in France with recycled mixed rare earth oxides (rMREO), which are essential raw materials for the production of rare earths used in magnets and electronics. We are expanding rare earths operations at this site as we aim to become a leading European player in the value chain for rare earth magnets.

→ [Read page 31](#)



08

PRODUCTION OF GREEN HYDROGEN FOR OUR PEROXIDES ACTIVITY IN ROSIGNANO, ITALY

In a joint development with Sapiro, we will establish Europe's first hub for the production of green hydrogen peroxide by mid-2026 and help decarbonize the plant and our products.

→ [Read page 38](#)



09

SOLVAY COMPLETES COAL PHASE-OUT AT ITS US GREEN RIVER SODA ASH PLANT

Affirming our commitment to pursue sustainable operational practices, our plant at Green River, Wyoming has stopped using coal. The decision to power this strategic, natural soda ash facility with natural gas enhances Solvay's long-term competitiveness and sustainability.

→ [Read page 37](#)



06

INAUGURATION OF A STATE-OF-THE-ART ELECTRONIC-GRADE HYDROGEN PEROXIDE PLANT IN TAIWAN

Built through our joint venture with Shinkong Synthetic Fibers, this plant will primarily address the increasing demand for semiconductors in Taiwan, leveraging our global technology expertise.

→ [Read page 31](#)



07

SOLVAY AND ENOWA TO BUILD FIRST CARBON-NEUTRAL SODA ASH PLANT IN SAUDI ARABIA BY 2030

Solvay is partnering with ENOWA, NEOM's energy and water company, to create the world's first carbon-neutral soda ash production facility in NEOM, Saudi Arabia. This partnership paves the way for a new global benchmark, championing competitiveness, circularity, and carbon neutrality.

→ [Read page 52](#)



02 BUSINESS ENVIRONMENT AND STRATEGY

Focusing on excellence and sustainability



24 Story : STAR Factory program expands, transforming our industrial sites

26 Sustainable megatrends driving our end-markets

26 Efficient and sustainable resources

28 Renewable energy

29 Evolving demographics

30 Strategy: four core priorities

30 Deliver value for customers through market leadership

31 Drive excellence and competitiveness

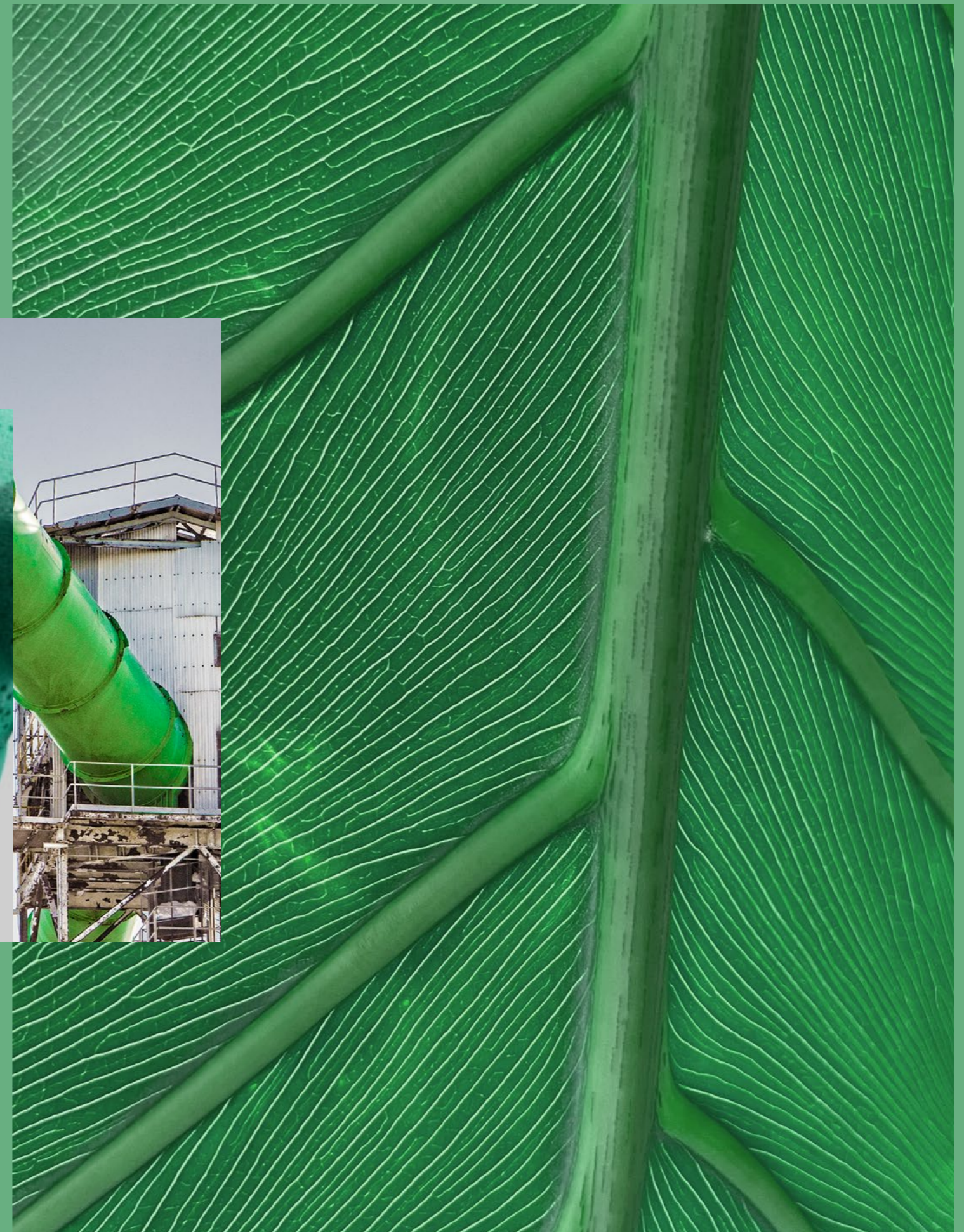
36 Reinforce sustainability commitments

36 — Climate

40 — Nature

45 — Better life

49 Prioritize focused cash allocation



STAR Factory program expands, transforming our industrial sites

With both short- and long-term goals, our STAR Factory program aims to create a radical transformation in all of our plants in order to drastically improve their performance, competitiveness and sustainability. The program addresses all aspects of the plants, such as safety, operational performance, competitiveness, people development, and sustainability, with digitalization acting as a key accelerator for these changes.



NICOLAS DUGENETAY
Site Manager, Rosignano, Italy

“Our 'Zero Events' Safety program is built on partnerships with the suppliers and leverages technology tools like 3D goggles.”

Launched in 2021 among pilot sites, the program has proven to be a real game changer in terms of business and environmental performance. Not only does it provide a framework to efficiently implement our new operating model and energy transition roadmap at all of our sites, but it also helps to prioritize resources to support each one. By upgrading the capabilities and operational efficiencies of our plants, we will be able to better meet the increasingly higher expectations of customers and of the communities around. It is now underway at half of our industrial sites and will be implemented at all 45 of our sites before mid-2024.

Within the program, each plant defines its own unique roadmap and sets bold objectives that address five main areas:

- Safety, aiming for zero accidents.
- Operational excellence: Implementing best practices and leveraging digital technologies to achieve and maintain best-in-industry excellence.
- Sustainability: Reducing environmental footprint, improving diversity, equity and inclusion (DEI) performance and being a responsible community partner.
- Digitalization: Accelerating delivery of digital- and data-enabled value for customers.
- People development: Upskilling our manufacturing teams, empowering them, and developing future talents.

The STAR Factory program's mindset – Standardize, Transform, Accelerate, Repeat – reflects our new operating model. Through sharing best practices and duplicating and applying them to all sites, we will be able to streamline our operations and further leverage our excellence, elevating our performance. STAR Factory is a drastic change initiative where people engagement plays a critical role to drive cultural change and inspire teams, making it a success.

Gaining positive momentum at our Rosignano site

— Following a roadmap consolidation exercise in 2022, our Rosignano, Italy, site implemented STAR Factory at the end of 2023. Since beginning its journey, the site has seen progress made in several areas, specifically competitiveness, sustainability and safety, with additional plans to enhance customer satisfaction, employee engagement and digitalization.

The site has made considerable advancements in optimizing their energy consumption and achieving energy efficiencies. It also reduced well water use for industrial purposes by 80% and freshwater intake by 25%. This has all been made possible by high employee engagement as the site continues to further develop its well-being at work initiatives.



100%

Sites involved by mid-2024

>300kt CO₂

Emissions abated at the end of 2023

STAR Factory set to boost sustainability efforts and more at our site in Collonges

We talk to...

SEBASTIEN DUVAL

Site Leader, Collonges, France



Our Collonges, France, site has already taken significant steps aimed at achieving its sustainability commitments, such as the execution of their project to build an electrical furnace to replace the existing fuel-oil powered one. There is potential to achieve even more by joining the STAR Factory program.

Can you tell us about the site's STAR Factory journey?

Sebastien Duval — We spent some time in 2023 building the site roadmap, beginning with defining the site's vision and working with streams focused on specific topics such as quality, safety, digital, lean management, environment and energy. We also launched several quick-win initiatives that included increasing our capacity to recycle, reusing 5% of our second-choice products that do not match customers' expectations in order to manufacture new ones and continuing to expand our multimodal transportation to save on cost and reduce

CO₂ emissions linked to transport.

What are your expectations of the program for your site ?

S.D. — STAR Factory provides resources for implementing key initiatives that will make a difference, acting as transformation levers to improve the site's competitiveness, safety, people engagement and other dimensions, thanks to new digital tools for instance.

The program also provides an opportunity to empower people, giving employees a chance to learn and grow. People expectations include taking a transversal approach to set up tools that enable quick action implementation and

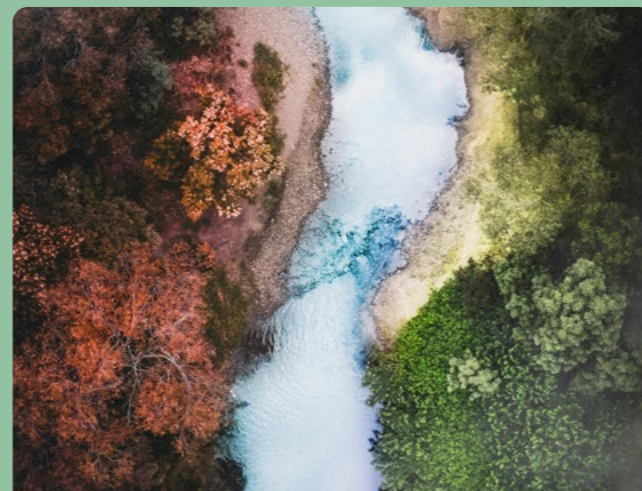
reducing our environmental impact.

How will this initiative impact your stakeholders?

S.D. — Local communities will benefit from our actions with smarter solutions to reduce our impact on biodiversity and water resources, notably by reusing and recycling wastewater. STAR Factory will also help us provide benefits to customers that include improved product quality, reliable supply, flexibility and availability, which are key as we need to be agile and respond swiftly to customers expectations.

Sustainable megatrends driving our end-markets

Our portfolio is aligned with key societal megatrends that drive the leading trends in each of our businesses' main end-markets, such as the increased use of renewable energy, the drive towards sustainable resources and resource efficiency, and demographic evolution. These trends play to Solvay's strengths across its businesses and end-markets, providing it with unique opportunities in each of its main business lines.



Sustainable and efficient resources

— As a result of customers' strong demand for resource-efficient solutions driven by the growing pressure on protecting biodiversity and natural resources, there is an increase in industrial innovation and manufacturing methods that incorporate the principles of recycling and the circular economy.

Consumer behaviors have evolved, with increased preferences for organic and natural products that utilize sustainable raw materials, and have a reduced impact on the environment. Consequently, our customers embrace and accelerate trends related to sustainability, carbon neutrality, and sustainable sourcing.



Sustainable and efficient resources



Renewable energy



Evolving demographics

Shifts and challenges markets face

- Increased focus on sustainable practices and environmental responsibility.
- Growing demand for circular economy models, recycling, and waste reduction.
- Adoption of green chemistry principles and renewable feedstocks.
- Rising interest in bio-based materials and advanced technologies for eco-friendly alternatives.
- Evolving regulatory frameworks focused on environmental protection and product safety.
- Evolving regulations around emissions, waste disposal and hazardous materials.

Opportunities for Solvay

Our products help save resources

- Soda ash for flat glass used in double and triple glazing meets the increased demand for insulation materials in construction.
- More than 80% of residues generated from flue gas cleaning through our SOLVAir® technology can be recycled into purified brine, serving as a circular raw material in soda ash manufacturing.
- Hydrogen peroxide is used in emerging applications and technologies such as urban mining and battery recycling, enabling recovery of scarce metals from electronic waste and end-of-life batteries.
- Oxystrong®, a safe and sustainable solution for municipal wastewater disinfection made of hydrogen peroxide and acetic acid, enables wastewater to be recycled for irrigation.
- Our new soda ash process, e.Solvay, is expected to reduce CO₂ emissions by 50%, and the consumption of natural resources, to result in 20% less water and salt and 30% less limestone.

>5%

CAGR 2023-2030
Demand for Solvay's sodium bicarbonate for SOLVAir®

50%

Consumers ready to pay more for a product designed to be reused or recycled²

We answer customers' needs for sustainable resources

- Developed from a renewable source, our Augeo® line of bio-based solvents offers a readily biodegradable, safer and low-carbon alternative to petrochemical solvents for home and personal care industries.
- Investment in sodium bicarbonate production to support growing demand in our SOLVAir® range which provides flue gas cleaning solutions.
- Launch of SCS-certified Rhodanyl polymer with 100% recycled content, a high-quality polyamide 6.6, for the consumer goods and engineering plastic markets.
- Our Alve-One® chemical blowing agents are used for foam insulation in various markets such as the automotive industry. Made from sodium bicarbonate, they provide a safe and efficient alternative to substances like ADCA¹, with ten times less CO₂ emissions.
- Solvaclean® provides the semiconductor industry with an alternative cleaning option made from fluorinated gas mixtures with much lower environmental impact.
- Shifting highly dispersible silica production to bio-based raw material derived from rice husk ashes will offer the tire industry a circular silica with a reduced carbon footprint.



1. Azodicarbonamide, classified as a Substance of Very High Concern by REACH.
2. Accenture 2019.



Renewable energy

— Renewables, including solar, wind and biofuel, are essential for transitioning to a less carbon-intensive and more sustainable energy system. The increased investment in this area reflects an acceleration in demand for clean energy supplies to tackle the ongoing global energy and climate crises.

Shifts and challenges markets face

- Increased focus on sustainable practices and environmental responsibility.
- Rising interest in advanced technologies for eco-friendly alternatives.
- Evolving emissions regulations.

Opportunities for Solvay

- Using high-quality soda ash for flat glass in solar photovoltaic panels to meet increased demand for cleaner energy.
- Developing a technology to separate rare earths elements to be used in the production of innovative rare earths permanent magnet solutions for diverse markets like electric vehicles and clean energy (wind power). We are investing at our plant in La Rochelle, France, to develop a hub that will help Europe create more autonomous and sustainable solutions in these areas.

~9% CAGR 2023-2030

Demand for Solvay's soda ash in photovoltaic panels



Evolving demographics

— The world's population is projected to reach 9 billion in 2037¹. This unprecedented growth is due to the gradual increase in the human lifespan resulting from improvements in public health, nutrition, personal hygiene and medicine, as well as high and persistent levels of fertility in some countries. Managing this will require constant improvements in healthcare and hygiene, as well as solutions to ensure adequate food and water supplies. Within the industry, it means creating products that help address these challenges and acting responsibly, addressing climate change, social inequality, and improving the quality of life for impacted communities.

Shifts and challenges markets face

- Recognizing the impact of population growth on overall chemical demand.
- Acknowledging consumption growth from the expanding middle class.
- Considering the impact of urbanization trends on supply chain logistics and distribution — produce local to supply local.

46.6 million

plastic bottles/carton containers sanitized per year with INTEROX® AG

> 1 million

patients treated with our Hemodialysis Bicar® solutions every year

Opportunities for Solvay

Supporting the need for high quality, safe, and sufficient food

- Our sodium bicarbonate, which is used as a leavening agent for bakery, for effervescent drinks and as a feed ingredient for ruminants, and swine and poultry breeding, meets the increased demand for ingredients, ensuring high quality and food safety, as well as improved performance and wellbeing for livestock.
- INTEROX® Aseptic Grade (AG) is used to provide sustainable packaging, as it sterilizes paperboard carton containers and plastic bottles prior to filling with UHT or pasteurized food.
- Soda ash is in high demand within the food industry, as it is used for glass containers and helps reduce plastic in recyclable food packaging.

High-performing products for the pharmaceutical industry

- Our pharma-grade Bicar®, a high-purity sodium bicarbonate, is used as an active pharmaceutical ingredient (API), as an effervescent excipient, or to provide electrolytes to stabilize the pH in hemodialysis.
- The INTEROX® range of high-purity hydrogen peroxide offers the highest possible sterilization quality on the market and serves as a disinfectant for medical devices.

Enabling cleaner mobility

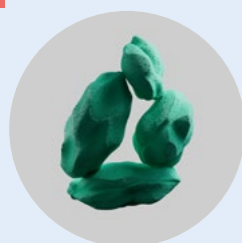
- Soda ash is used in mineral extraction and the production of lithium carbonate for Li-ion batteries to power electric vehicles.

¹. United Nations Report, World population prospects 2022.

Strategy: four core priorities

We announced our ambition to maintain our number one market positions, become the benchmark on costs, sustain top-quartile profitability and returns, and deliver carbon neutrality through process innovation. To help us deliver on these goals, our strategy centers around four core priorities consisting of market leadership, cost and process leadership, energy transition, and capital discipline.

1



**MARKET
LEADERSHIP**

2



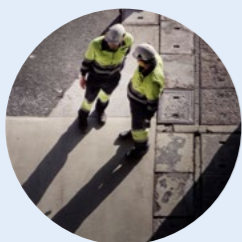
**EXCELLENCE &
COMPETITIVENESS**

3



**SUSTAINABILITY
COMMITMENTS**

4



**CASH
ALLOCATION**

1

DELIVER VALUE FOR CUSTOMERS THROUGH MARKET LEADERSHIP

Strong competitive advantages

— We operate five major businesses and one strong regional business in Latin America, and we hold leading positions in every single one of them. Our strong position is primarily due to a combination of advantages such as product quality and safety, our expertise, and leading process technology strengthened by continued innovation, reliable supply chains, and a well-balanced geographical footprint of manufacturing sites ensuring proximity with customers. Our cost-competitive position is supported by our proprietary technologies, vertical integration in the value chain of our main businesses, our track-record of continuous improvement, and operational excellence.

In addition, we benefit from long-term growth trends that are in line with GDP growth in our principal markets and strong tailwinds from sustainable megatrends.

A balanced portfolio ensuring both resilience and further value creation

— Approximately 75% of our product portfolio, including soda ash, hydrogen peroxide, and silica, is growing alongside global economic growth. These essential products make us resilient through economic cycles. They are critical inputs for a wide range of consumer and industrial products. For instance, our soda ash serves markets such as glass used for double and triple glazing for insulation, a strong driver in the construction market.

The remaining 25% of our portfolio serves markets that are growing at a faster rate than global economic growth, driving value further. To illustrate:

- Our soda ash goes into lithium carbonate that is used in batteries, a market that is growing at 20%¹.
- our green solvents for industrial cleaning products, paints, and coatings benefit from a 15-20%¹ growth in their markets.
- Our new circular silica based on rice husk ash will be used to produce more sustainable automotive tires and this market is growing at 25%¹ — an example of how our process innovation helps us answer our customers much-needed sustainable solutions.
- Our electronic grades of hydrogen peroxide are used in microchips manufacturing, a segment that is growing at 25%¹ per year.

Capacity expansion and partnerships to support market leadership

The way we are strengthening our position in trona-based soda ash in the United States illustrates our strategy well. After taking full ownership of the Green River, Wyoming, site, we are expanding our production capacity by 600 kt, with start-up scheduled in 2025. This expansion will meet the growing need of our customers in the Americas and overseas for a secure and cost-competitive source of supply and enable us to bring lower-carbon-intensive soda ash to the market. We also increased sodium bicarbonate capacity at our Devnya, Bulgaria site by 200kt in anticipation of high growth rates.

A MILESTONE FOR THE RARE EARTH PERMANENT MAGNETS EUROPEAN SUPPLY CHAIN

For decades, we have been the technology leader in rare earths separation, purification, finishing, and formulation. In early 2023, we signed a memorandum of understanding with Cyclic Materials, a Canadian cleantech startup that produces sustainable rare earth elements for downstream processing. Under this agreement, Cyclic Materials will provide our site in La Rochelle, France, with recycled mixed rare earth oxides (rMREO). These are key raw materials for our plant to successfully produce circular rare earth oxides for magnet manufacturing, electronics, and automotive catalysts. The move comes as we are implementing plans to develop a major hub for rare earth magnets in Europe, specifically our expansion of rare earths operations at our La Rochelle site.

1. Market annual Growth Rate 2022-2028 (internal source).

Opening a state-of-the-art electronic-grade hydrogen peroxide plant in Taiwan

— Built through our joint venture with Shinkong Synthetic Fibers, this plant will primarily address the increasing demand for semiconductors in Taiwan, leveraging our global expertise. With an annual production capacity of 35,000 tons of electronic-grade high-purity hydrogen peroxide crafted to meet the stringent global market standards, it will play a pivotal role, as this product is a vital chemical agent in integrated electronic circuit manufacturing. Full-scale production is planned for early 2024.

2

DRIVE EXCELLENCE AND COMPETITIVENESS

Simplification, standardization and digitalization drive our new operating model

— As part of our 2028 financial objectives, we announced that the partial demerger would allow us to generate approximately €300 million of gross savings (i.e. excluding the effect of any inflationary increases) from our new operating model. Simplification, standardization and digital transformation will significantly reduce costs, while our process innovation leadership, with sustainability at its heart, will deliver more progress over time. This will enable us to further anchor our leadership in our markets and create more value for our stakeholders. Lanny Duvall, Chief Operations Officer, explains how.

Interview with

LANNY DUVALL

Member of the Executive Leadership Team,
Chief Operations Officer



Can you describe Solvay's new operating model?

Lanny Duvall — Being an essential chemicals company gives us a clear and simple framework which allows us to focus on delivering value to our customers. Our businesses now have the same profile, requirements and strategic imperatives, allowing us to be more efficient and act faster. This helps us build a fit-for-purpose operating model with a strong central governance that will generate cost efficiency.

We will drive simplification and standardization, duplicating what works in one organization. Soda ash, peroxides and silica represent 70% of our assets and are based on three technologies. We will focus on efficiently scaling our improvements across these technologies.

We are also incredibly fortunate to have talented people who are already driving transformations within their own plants and organizations. Looking forward, we will lift up those best practices and implement them, creating standards. Safety remains our core value and we will continue to progress towards our goal of zero injuries and incidents.

In addition, we will continue to drive process innovation across our businesses, investing to become safer and more reliable, make our operations and products more sustainable and cost-competitive, and disrupt the

market. Examples include e.Solvay, our breakthrough soda ash manufacturing process, and our new circular silica for tires.

How will Solvay achieve its ambition to become the industry benchmark on costs?

L.D. — Our achievements will come as a result of our efforts in three areas: implementing a standard operating strategy, creating a simplified ERP landscape and leveraging our digital transformation.

Our first step is to implement an operating strategy that will deliver lean and efficient operations. We have a wide range of operational maturity across our organization, with some plants having elements that are best-in-class while others can still be improved.

For example, we have several plants that have world-class predictive maintenance practices resulting in higher plant availability and lower cost. However, these practices were developed in isolation. There are many other similar examples across the company.

Furthermore, creating a simplified ERP landscape will enable efficiencies in many of our support functions, such as supply chain and logistics. This critical component will help us move from being top-quartile to becoming

the industry benchmark in terms of general and administrative expenses.

Can you further explain the role of digital transformation as a key enabler?

L.D. —This is our biggest opportunity to improve our business in every dimension. In digital, it all starts with data. We are in the process of creating a structured data platform where the majority of our improvements will take place. We simplified the digital agenda to focus on short- to medium-term opportunities while creating the opportunities to explore advanced tools.

As an example, there are multiple facilities that have implemented an IoT strategy to improve the reliability of our assets. We have demonstrated a significant improvement in the cost and reliability of our assets. As a result of the effort to create a clear data structure we can now implement this improvement across all of our plants. This is just one example. We have a whole list of improvements in all of our technologies and the fact that we have repeatable technologies that allow us to go further and faster.

“Our achievements will come as a result of our efforts in three areas: implementing a standard operating strategy, creating a simplified ERP landscape, and leveraging our digital transformation.”

How will you implement this strategy across the company?

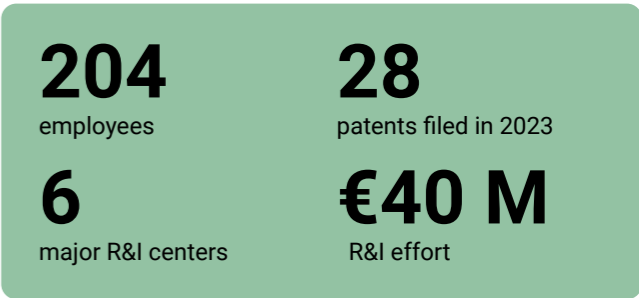
L.D. —There is still more to tackle to drive excellence and efficiency in the organization. We are working on transforming how we operate company-wide, looking at all aspects to standardize business performance with a strong central governance.

To support this, our STAR Factory program is being deployed in all 45 sites. It has proven to be a realgame-changer in terms of business performance, providing a framework to efficiently implement our improvements across our sites and prioritize resources to support. The STAR Factory program is so successful that we recently launched STAR Operations to support the company-wide transformation. These are the activities that will ensure that, in addition to being low cost and highly competitive, we are safe, environmentally conscious, and careful about being a responsible partner in the communities where we operate. It will also be a key lever to attract and retain talent.

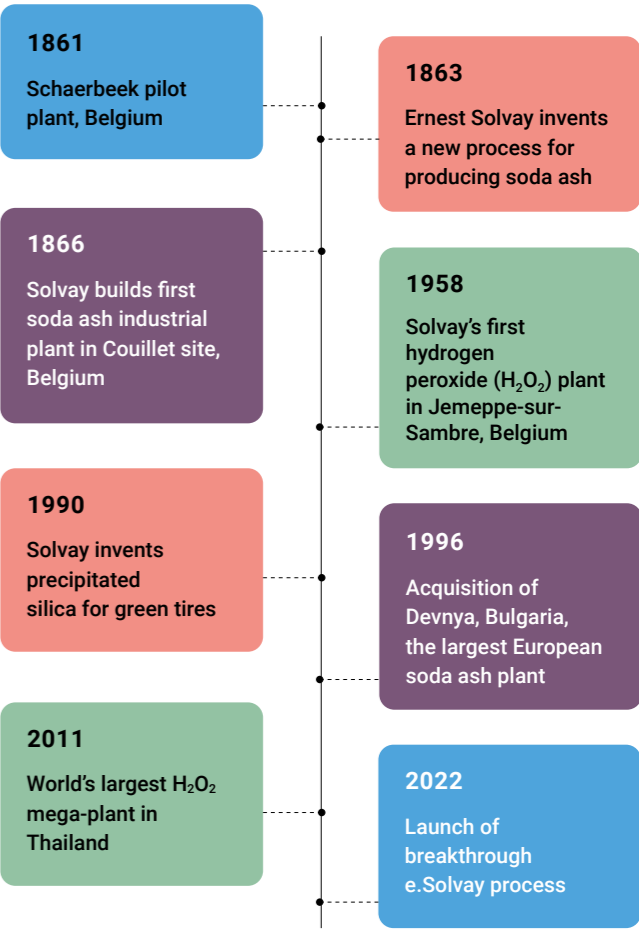
We already have the elements for success. Our teams are hard at work building on the momentum that we have, and I am confident we will deliver on our commitment to make our plants “THE benchmark” in the industry.

Process innovation to make our operations more sustainable

— Without process innovation, Solvay would not be the industry leader that we are today. Process innovation is in our DNA. It has enabled us to continuously disrupt the industry and we will continue to do so. By improving or reinventing our processes to make them more competitive and sustainable, we will strengthen our market leadership. Here are two examples of how we are mastering the elements essential to our world.



160 years of mastering process innovation...





Our e.Solvay, a game-changer in the soda ash industry

— 160 years ago, Ernest Solvay transformed the soda ash industry with a process that surpassed the existing Leblanc process. Solvay’s process was much more effective, competitive, and sustainable. Our founder established the continuous cultivation of innovation into our DNA and today, we carry on his legacy, once again reinventing our process to stay ahead of the competition.

To provide our customers with the sustainable and competitive products they require, we need to go beyond decarbonizing our plants, phasing out coal, and adopting renewable energy sources as we are currently doing. We must change the process itself. Accounting for a significant amount of our emissions, our founder’s process produces high levels of GHG emissions related to the steam generation required as part of it.

To address this, we are once again at the forefront of innovation, reimagining the soda ash production process resulting in our patented new e.Solvay technology. After investing a cumulative €40 million in research over the past 30 years, today, we are the only one in the world to propose such a breakthrough technology that adopts an electrochemical process powered by renewable energy.

We built a pilot production unit at our research center in Dombasle, France, to validate the new process at an industrial scale. It is currently running in shifts and can produce 500t of soda ash per year. Even though this is 1/1000 of a typical soda ash plant operation, it is an appropriate scale-up for an electrochemical process. The pilot study will enable us to make necessary adjustments.

Complementing our energy transition program, this technology replaces lime kilns with an electrochemical process that can be powered by renewable energy instead of fossil fuels while requiring 20% less energy than the existing process. It will reduce our CO₂ emissions by 50% compared to the current process. Because it is more efficient, it will also reduce our consumption of natural resources, specifically 20% less water and salt and 30% less limestone, while significantly reducing the limestone residues. Before 2030, our existing plants will gradually be converted to e.Solvay. From 2030 onwards, we will build new greenfield plants using this technology. This transformation will enable us to achieve carbon neutrality on Scope 1 and 2 emissions by 2050.

Reducing our energy requirements and dependence on fossil fuels will improve our competitiveness and ability to keep up with customer demand overall. Through this more sustainable e.Solvay process, we will also set a new standard for the soda ash industry.

50%

reduction of CO₂ emissions

20%

less water and salt

30%

less limestone



A bio-sourced silica reducing carbon footprint of the tire industry

— As a leader in highly dispersible silica (HDS), we are continuously developing breakthrough innovative products in partnership with customers to improve the sustainability of the tire industry. When added to a tire, our HDS helps decrease the CO₂ emissions of thermal engines by approximately 7% and extends the battery range for electric vehicles up to 10% without wear compromise by combining best-in-class technologies, while improving the lifetime of tires and the grip performance for safety.

Tire manufacturers have set up ambitious targets in terms of sustainable raw materials, and precipitated silica is instrumental to achieving them. For example, Michelin has a target of using 40% sustainable raw materials by 2030 and 100% by 2050, while Pirelli is targeting 60% by 2030.

In response, Solvay has developed a patented proprietary process for biosourced HDS from rice husk ashes, a rice byproduct, making it a circular material. This breakthrough silicate process provides a circular solution, giving a second life to rice husks ashes in local value chains. Both customers and our planet benefit from this new process, which features a circular HDS with 100% locally sourced raw materials, a 35% reduction of CO₂ emissions per metric ton of precipitated silica, thanks to a less-energy-intensive manufacturing process, and the same performance of current grades, shortening the qualification process. This project makes Solvay the first HDS producer in Europe with a circular production. This new process is under industrialization at our plant in Livorno, Italy, with production expected to begin in early 2025.

This launch is only the beginning of our silica circular journey. The new generation of precipitated silica will also be able to address needs in other markets, such as Home & Personal Care and Feed & Food, where silica is used in products ranging from toothpaste to animal feed in all regions, as circular projects are being investigated in Asia and the Americas. For circular HDS, a promising future awaits!

35%

reduction of CO₂ emissions per metric ton

100%

locally sourced

2025

starting production

3

REINFORCE OUR SUSTAINABILITY COMMITMENTS

Sustainability is key for Solvay. It secures our position as a leading supplier for our customers and preserves our competitive advantage in the long run. With the spin-off of Syensqo in December 2023, we have closed our Solvay One Planet roadmap and opened a new chapter for our sustainability commitments as the new Solvay. We look to provide the best results when it comes to our commitments, including reaching carbon neutrality on Scope 1 and 2 by 2050 and improving the quality of life for our employees and communities with a safety goal of zero accidents, and gender parity in mid and senior management within ten years. We continue to drive progress, committing to a living wage for all employees worldwide by 2026 (as defined by the UN Global Compact Initiative).

2030 goals Baseline 2021

Climate

Greenhouse gas emissions

-30%
Scope 1 and 2¹

→ by 2030

-20%
Scope 3²

→ by 2030

Coal Phase out³

→ by 2030

Better life

Safety (RIIR⁴)

Aim for zero

Gender parity
Women in mid and senior management

50%

→ in 10 years

UN Living wage initiative **NEW**

to **100%**
of employees

→ by 2026

1. Total emissions from Solvay operations.
2. Emissions upstream and downstream in the value chain (suppliers and customers) from its "Focus 5" categories which are 1. Purchased goods and services. 2. Fuel and energy related activities. 3. Processing of sold products. 4. Use of sold products. 5. End-of-life treatment of sold products.
3. Where renewable alternatives exist.
4. Number of work-related injuries and illnesses (employees and contractors) resulting from an accident with severity above first aid, according to US OSHA 29 CFR 1904, per 200,000 work hours.

Climate



2030 goals Baseline 2021

Carbon neutral by 2050 (Scope 1 and 2)

Greenhouse gas emissions Scope 1 and 2¹

-30%
2023: 7.3Mt CO₂eq.
-19% (-5% structural)

Greenhouse gas emissions Scope 3²

-20%
2023: 12.4Mt CO₂eq.
-16%

Coal phase out³

2023: 24.4PJ
-10%

Following the spin-off of the specialty businesses to Syensqo in December 2023, Solvay has reconfirmed and even reinforced its ambitious commitment to reduce its CO₂ emissions. Our new baseline has shifted from 2018 to 2021 while maintaining a goal of a 30% reduction on Scope 1 and 2 emissions and a reduction of 20% of Scope 3 (upstream and downstream) emissions by 2030. We are also maintaining our objective to phase out coal from energy production in soda ash by 2030 wherever an alternative exists. In addition, carbon neutrality by 2050 remains an overarching objective.

Solvay joined the Science-Based Targets initiative (SBTi) in October 2020, receiving a formal approval from the Initiative (well below 2°C) in early 2023 for its 2030 climate targets. The spin-off of Syensqo has triggered the need for a reassessment that will start with SBTi in 2024.

Accelerating our energy transition roadmap

- Our current objectives are supported by a global energy transition roadmap made of already validated and financed projects with a strong delivery anticipated in 2025, as well as a portfolio of projects (still under validation process) grouped by type:
 - Energy transition projects for which a significant investment is necessary to use a less emitting primary source of energy.
 - Energy efficiency projects that allows us to consume less energy per production unit.
 - Renewable sourcing consisting of the substitution of current fossil energy with a renewable or low carbon option.

In 2023, Scope 1 and 2 emissions decreased by 1.7 Mt CO₂eq. (-19%) compared to 2021 and 1.2 Mt CO₂eq. compared to 2022, which can be explained by lower activity, new GHG reduction projects, including biomass consumption in Devnya in substitution to coal, better mine gas usage in Green River, and other energy efficiency projects. Overall, we have more than 27 projects around the world that are either completed or underway, including four new ones that were validated in 2023.

By the end of 2023, we had already delivered a 5% structural emission reduction in Scope 1 and 2 compared to 2021 thanks to our projects in Rheinberg, Germany, Devnya, Bulgaria, and Green River, Wyoming, United States. We have launched new projects that will deliver an additional 15% emission reduction by 2025¹, with designs for more plans to save another 10% by 2030¹.

Energy transition to phase out coal from the energy mix at our soda ash plants

Soda ash production is based on an energy-intensive process, originally relying on local coal sources. Phasing out coal from our energy mix is obviously necessary to achieve the carbon neutrality target. This journey is almost completed at Green River, US, plant (Q1 2024) and underway at Rheinberg, Germany, and Dombasle, France, with the construction of validated projects (Q1 and Q2 2025 respectively).

Devnya, Bulgaria, and Torrelavega, Spain, are in the final step of defining their own roadmap. In addition:

- The Green River, Wyoming, US plant will complete its full coal phase-out by Q1 2024. The full substitution of coal by natural gas will allow a CO₂ emission reduction close to 280 kt/y.
- The Rheinberg, Germany, plant will be primarily powered by locally sourced biomass waste. The first step of the project is already completed (2022) while the second one will be finalized by the end of 2024 to deliver 485 kt/y CO₂ emission reduction.
- In Dombasle, France, where Solvay is partnering with Veolia, the plant expected to completely phase out the use of coal for energy generation by mid-2025. The coal will be substituted by local refuse-derived fuel (RDF). After the completion of the project, the plant is expected to emit 240 kt/y less CO₂ than in 2021.
- The Devnya, Bulgaria, plant has already adapted one of its existing boilers to increase its co-combustion rate with biomass. The boiler, which can be powered by 30% biomass fuel from a variety of sources, including locally sourced sunflower husk pellets, it reduced the plant's CO₂ emissions by around 100 kt in 2023 compared to the current process.

Energy transition to phase out fuel oil at our Collonges silica plant

In 2023, Solvay announced that our Silica business was planning to construct an electric furnace to replace the existing fuel-powered one at our Collonges, France, facility, with operations scheduled to start in 2025. This strategic shift towards clean energy sources is expected to reduce by 20 kt per year the CO₂ emissions related to Silica production activities compared to the current process. This new investment will secure long-term sustainability and competitiveness targets and delivers enduring advantages to our customers. Combined with our circular silica offering, this should position us to provide a unique value proposition to customers and consumers alike.

Reducing emissions through process upgrades

— In order to further reduce our carbon emissions, Solvay is constantly innovating and upgrading its processes across all of its business units.

Soda Ash

- In Green River, Solvay is implementing a breakthrough technology to reduce emissions originating from trona mining operations. This innovation makes us one of the first companies to implement regenerative thermal oxidation technology to decrease emissions in a trona mine. With an anticipated launch before the end of 2024, the project is expected to reduce our GHG emission by 740 kt/y. In combination with our coal phase out plan, it will aid in reducing Scope 1 and 2 emissions by 20% despite the capacity expansion.
- In Dombasle, our new e.Solvay soda ash manufacturing process is being piloted and will enable a 50% reduction in CO₂ emissions compared to our current process.

Peroxides

— Our peroxides business is focused on the reduction of steam consumption and energy excellence, including the use of decarbonized hydrogen. Through our partnership with Sapio, we will develop Europe’s first hub for the production of green hydrogen peroxide at our Rosignano, Italy, plant. Beginning mid-2026, we will produce hydrogen peroxide using green hydrogen gene-

rated by on-site solar energy. This project will further enable the decarbonization of Solvay’s activities in Rosignano, leading to a reduction of CO₂ emissions for peroxides-related operations.

Accelerating our switch to renewable energy sourcing

— The shift towards more renewable energy sources instead of fossil fuel is reflected in the power purchase agreements for our peroxides business, as well as in a solar panel installation program, which includes a project at our Silica plant in Qingdao, China, starting in 2024.

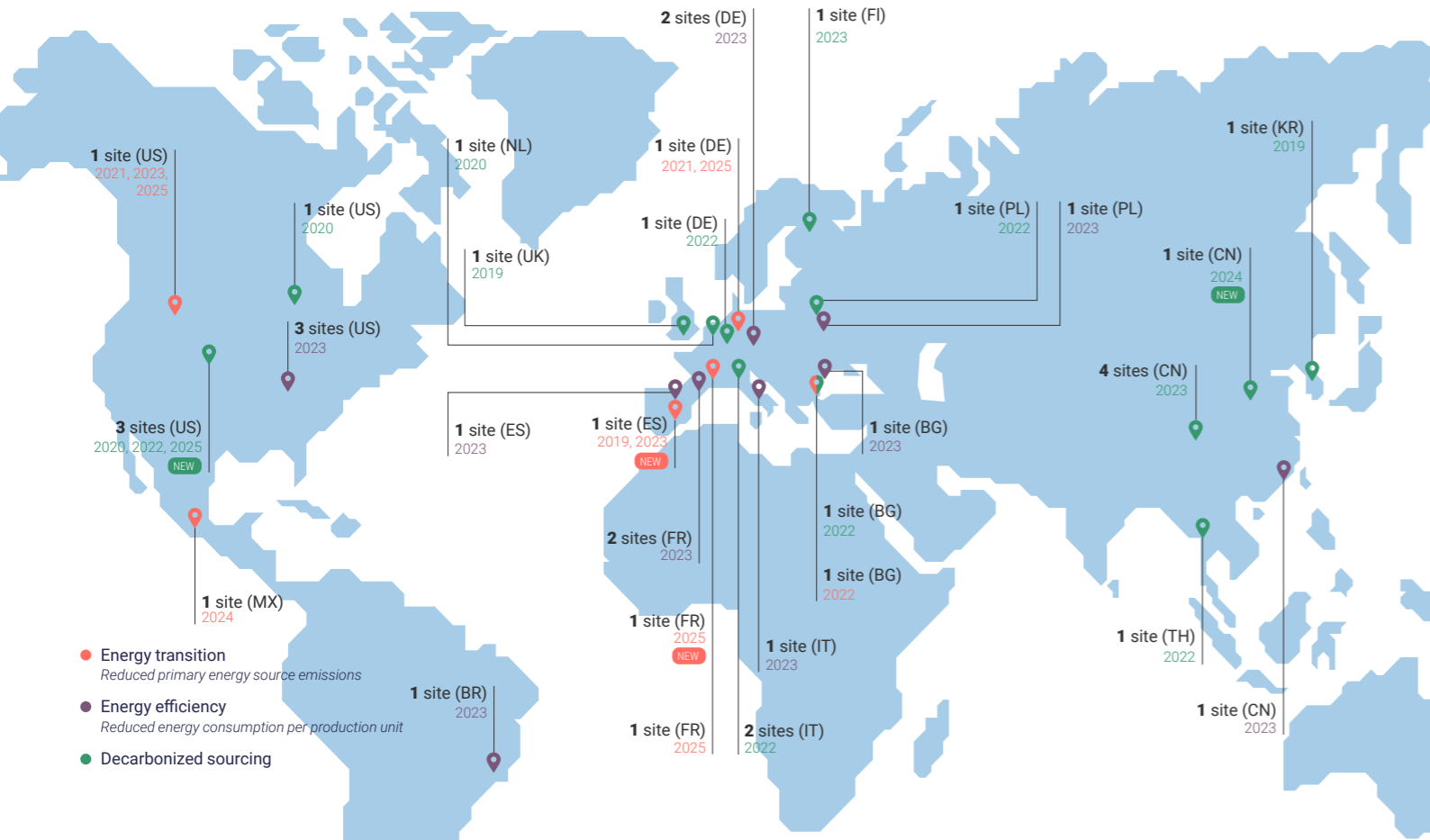
In addition, our production site in Voikkaa, Finland, began operating on 100% renewable electricity at the end of 2023. This is a significant step in decarbonizing the production of hydrogen peroxide at Voikkaa.

We also have a biogas project at our site in Juarez, Mexico, to install a biodigester onsite in order to produce biomethane using slurries from the city’s wastewater treatment plants. Operation is expected to start in Q2 2024.

1. These figures do not take into account the activity increase compared to baseline.

27 energy transition projects (1.8 Mt of CO₂ per year)
60+ projects in energy efficiency (0.2 Mt of CO₂ per year)

→ equivalent to taking 1.2 million cars off the road



Collaborating with suppliers to reduce value chain emissions

— Scope 3 emissions include all indirect upstream and downstream GHG emissions occurring in the value chain. Upstream emissions come from the suppliers of goods and services we purchase. Downstream emissions are associated with the use and disposal of our products by the consumer.

As part of our climate roadmap, we engaged to reduce by 20% the emissions of our five main categories of Scope 3 by 2030 compared to 2021. A change in our Scope 3 methodology impacted 2023 results by -1.1 Mt CO₂ (rf. Section 4.2 Extra Financial Statements). Despite the change, we were able to reduce overall Scope 3 (for our five¹ main categories) GHG emissions by 16% in 2023 compared to 2021, inclusive of the methodological change.

Collaborating with suppliers is key to achieving our target and addressing the first and main category: purchased goods and services.

We have active collaboration with our most GHG-emitting raw materials suppliers to collect data on the product carbon footprint (PCF) of the raw materials they supply to us — a preliminary step that enables us to track and manage progress. In 2023, we collected more than 50%² of the PCF coverage of our raw materials. We have also created a more dedicated and specific approach with suppliers, for example, understanding their Scope 1 and 2 climate strategies and their potential impacts on our Scope 3 emissions.

In Q4 2023, we called on some of our top raw materials suppliers to share their actions towards decarbonization and climate strategies so that we can better understand how their plans will impact our PCF. The first wave consisted of eight suppliers, and a second wave of requests is planned for 2024. Our objective is to create a clear upstream Scope 3 roadmap featuring specific actions to help us reach our goal.

Furthermore, Solvay is partnering with transportation providers to reduce upstream emissions resulting from transportation. The Voikkaa site, for example, takes an additional step forward as it transitions transportation fuel from diesel to biofuel. This shift will result in a significant reduction of over 700 tons of CO₂ emissions in 2024, representing more than 80% of the site transportation carbon footprint.

Besides suppliers, Solvay is looking to engage its employees in reducing Scope 3 emissions linked to business travel. In 2023, Solvay launched the Travel Carbon Fund to track its carbon travel footprint, raising awareness of responsible and sustainable travel. In doing so, we ultimately aim to finance a fund for sponsoring sustainability projects with a carbon-offset focus wherever feasible. Starting in 2023, Global Business Units began contributing a monetary amount based on the entity’s travel footprint, calculated at €100 per ton of CO₂, to the Fund.



We talk to...

JORGE SOTO

Sustainable Development Director, Braskem

Braskem, a global petrochemical company has been a key supplier for Solvay for several decades. We have developed strong relationships based on our common commitment to sustainability, competitiveness, and innovative solutions to stay ahead of market needs. Braskem is engaged in contributing to the value chain to strengthen the circular economy.

on the continuous improvements of our environmental key indicators, such as GHG, water and waste. Through Braskem’s sustainability efforts, our objective is to become a standard in sustainable development in the chemical and plastics industry globally.

What is the driving force behind the relationship between Braskem and Solvay?

Jorge Soto — Braskem and Solvay’s long-lasting business relationship is directly aligned to both companies’ sustainable development goals. Since the 70s, Braskem’s Cumene plant located in Mauá – São Paulo, has focused on supplying Solvay’s Paulínia – São Paulo site, with raw material, for their Coatis business in Latin America.

How could our companies further collaborate to bring more sustainability across the value chain?

J.S — Solvay and Braskem are committed to working on new opportunities focused on the sustainability of the value chain, such as evaluating the development of Bio/Circular feedstock, through mass balance. For Braskem, our relationship with Solvay represents an important contribution to what we believe to be essential to sustainable development and the circular economy. It is only possible to achieve sustainability goals throughout the value chain by working together and adding efforts.

How is Braskem reducing its carbon footprint?

J.S. — At our Mauá unit, Braskem produces an array of chemical products as well as polymers, while focusing

1. 1. Purchased goods and services. 2. Fuel and energy related activities. 3. Processing of sold products. 4. Use of sold products. 5. End-of-life treatment of sold products.
2. Based on identified raw materials purchases done in 2022 and secondary CO₂ data

Nature



We remain focused on reducing our environmental footprint by prioritizing actions to mitigate environmental and climate risks at our plants. We are also preserving local biodiversity through site-specific actions and engaging in a circular economy.

In addition, improving waste recovery and water-use efficiency helps us to create value by enhancing the sustainability of our sites, processes, and products, and allows us to better cater to the needs and expectations of our customers. Our STAR Factory program, which is currently being rolled out globally across our sites, defines clear roadmaps for each plant with targeted actions that will be pursued long term. They include initiatives to reduce our non-sustainable industrial waste and freshwater intake where applicable.

Reducing pressure on biodiversity

— Since 2020, Solvay has been combining a global and local approach with the aim of reducing pressure and damage, and progressively restoring biodiversity around our sites. We want to contribute to the main objectives of the Global Biodiversity Framework adopted in Montréal-Kumming COP 15 in December 2022, which are to stop biodiversity loss and reverse the trend.

By understanding and addressing our impact throughout the value chain, from raw materials to production, we have found ways to reduce pressure on biodiversity. Since 2018, we have decreased our impact by 20%. Our impact on biodiversity is calculated across the value chain for our entire portfolio¹ of products.

Recognized for our actions to protect and restore biodiversity

— Our Paulínia, Brazil, Torrelavega, Spain, and Rosignano, Italy sites were recognized by the International Union for Conservation of Nature (IUCN) for contributing to the protection and restoration of biodiversity. In its 2023 report, the IUCN compiled 28 case studies that highlighted the initiatives from several multinational companies among which our three sites were recognized. This demonstrates our proactive approach to safeguarding natural ecosystems and setting a higher standard for biodiversity conservation within our operational areas. Our approach not only aims for the protection of natural environments but also actively contributes to local communities and ecological education.

GOING BEYOND REGULATORY OBLIGATIONS AT OUR PLANT IN TORRELAVEGA

Today, the Cuchía quarry in Torrelavega, Spain is an area full of new life where you can observe 169 species of birds, 19 of mammals, seven of amphibians, six of reptiles, and 289 varieties of plants. From 1927 to 2006, the Cuchía quarry supplied limestone to our soda ash factory in Torrelavega. When the quarry ceased activity in 2006, we went beyond regulatory obligations ahead of the quarry's closure. Focused on landscape integration and biodiversity, we launched the Ecological Recovery Plan, planting thousands of native trees and documenting diverse wildlife. We also collaborated with organizations like SEO BirdLife and the European Union's LIFE Stop Cortaderia project to further enhance restoration. This transformed area now thrives as a bird sanctuary and is a natural area available to the local community.



Preserving local biodiversity through site-specific objectives

— All of our sites have been assessed based on their sensitivity towards biodiversity using two international reference tools: the IUCN Integrated Biodiversity Assessment Tool (IBAT) and the World Wide Fund for Nature's (WWF) Biodiversity Risk Filter. These tools identify protected species and areas around a specific location, as well as "Key Biodiversity Areas," which play a significant role in biodiversity conservation and sensitive ecosystems. An update of previous assessments was performed in 2023 to consider additional information from these international databases.

Based on this evaluation, we have prioritized 16 of our manufacturing sites and are developing and implementing biodiversity roadmaps for each.

Our roadmaps aim to:

- Develop a vision for improved integration of the site into its local environment and communities.
- Identify and implement projects at sites and in surrounding areas to protect biodiversity and support regeneration.
- Develop "nature-based solutions" that will bring economic, environmental, and social benefits.

Out of the 16 priority sites, nine of them have already validated their roadmap and started implementation, including Dombasle and La Rochelle in France, Linne Herten in the Netherlands, Anan in Japan, Paulinia in Brazil, Torrelavega in Spain, and Rosignano in Italy.

Launching SBTs to prioritize actions for our plants

— In 2023, the first two steps of the method developed by the Science Based Targets Network were applied to our sites. They consisted of evaluating impacts and dependencies on nature all along the value chain and prioritizing key issues and locations for taking action.

The results from step two confirmed the importance of investing in the carbon neutrality trajectory, as climate change is the main pressure on biodiversity from direct operations. Brazilian sites from Coatis appear in the top three priorities for land use pressure while soda ash sites have to be prioritized based on water consumption, especially when the sites are located in water stressed areas. For upstream supply, mineral raw materials represent the main pressure on nature and the use of coal in a few remaining sites is the primary pressure related to energy.

The Science Based Targets Network by the Global Common Alliance has developed methods to support companies to operate within environmental boundaries on a social equitable basis through the setting of science-based targets (SBTs). SBTs are measurable, actionable and time-bound objectives based on best-available science that allow companies to align with Earth's limits and social sustainability goals.

Managing our water-related risks

— 2023 was again a year marked by record high temperatures, long periods without rainfall around the world, and more frequent extreme events such as floods. NASA and other climate observatories like Copernicus in Europe confirmed 2023 as being the warmest year on record. Because water is essential to our operations, shortages can have a significant impact and even lead to production losses.

¹ This global approach is based on a Life Cycle Impact Assessment (LCIA) methodology known as the ReCiPe method that translates emissions and resource extraction into an environmental impact score.

Repeated episodes of drought and the associated environmental and industrial risks have been the driving force behind the construction of a roadmap for water sobriety, focused on the following areas:

- Consolidated annual reporting of water withdrawals and in priority sites, direct monitoring of water consumption, with weekly reporting in the event of a drought crisis. We can now monitor more than 90% of Solvay's daily freshwater intake across the world, thanks to the dashboard put in place last year.
- Drawing up and/or updating water-related risk mitigation plans for each industrial site.
- Launching water consumption reduction projects to manage risks at priority sites.

In 2023, we reduced our freshwater intake by around 20 million m³ compared to last year, and by 9% compared to 2021, mainly due to lower volumes of production.

The investment procedure was also revised to integrate costs of externalities for water. This project includes comprehensive cost of water use, pre-treatment, and post-treatment before release to the environment.

Projects to reduce freshwater intake underway at more than 20 sites across the world



Number of initiatives across our sites

— To address water scarcity at our sites, we have launched various water management initiatives. Through our STAR Factory program, we are developing water intake and consumption reduction roadmaps for over 20 of our sites.

At our silica plant in Włocławek, Poland, we were able to reduce the freshwater intake by 8% in 2023 compared to 2022, at similar production levels, thanks to water reuse and recycling initiatives.

In parallel, to minimize the consumption of surface water and control well water intake, we continued to optimize the operation of cooling towers. Actions were implemented in several sites, such as our soda ash plant in Bernburg, Germany, where we put in place a tracer-based river water system targeted at reducing river water intake by 250.000 m³ on a yearly basis beginning in 2023.

Addressing water risks at our sites

— We have conducted a review of water risks in about 80% of our sites, assessing them according to several criteria including water scarcity, quality of effluents, and risks related to regulations. This led to the implementation of seven additional water risk mitigation plans in 2023. In total, we now have 10 plants with water mitigation plans, with the potential to achieve 10% water intake reduction through specific water projects and even possibly go beyond this thanks to our carbon neutrality strategy.

To mitigate the impact of drought, we conducted several on-site diagnostics at our plants in Dombasle and Collonges in France. In Dombasle, the shortage of water could jeopardize plant operations and may lead to severe reduction of production capacity of the site. Water scarcity impacts both the availability of cooling water and of process water for the production of its final product. A project was launched in 2023 to create a detailed mapping of all process water flows and usages. An action plan was made to reduce, recycle, and reuse the process water in order to be better prepared for drought. This plan will be implemented in the frame of the National French program to reach -10% water intake by 2030 compared to 2023.

Our initiatives to reduce non-sustainable industrial waste

— Non-sustainable industrial waste is waste that is disposed of without energy recovery, for example through incineration. At Solvay, we are committed to reducing our impact on nature and we have long been taking initiatives to reduce this type of waste. This means finding ways to either reduce it at the source, reuse it in the same process, recycle it in another process, or recover energy from it.



In 2023, we had projects deployed at more than 20 plants across the world to address non-sustainable industrial waste and this is expected to continue growing through our STAR Factory program.

Recycling is one of our ways to reduce our industrial waste, contributing to a circular economy along with preserving resources and nature.

CREATING A CIRCULAR ECONOMY FOR THE RESIDUES GENERATED FROM OUR SOLVAIR® TECHNOLOGY

For decades, Solvay has been dedicated to establishing a circular economy for the residues generated from flue gas cleaning through our SOLVAir® technology. More than 80% of SOLVAir® residue can be recycled into purified brine, serving as a circular raw material in soda ash manufacturing at our facilities in Dombasle, France, and Rosignano, Italy.

In January 2024, we announced capacity expansions for our Resolest®¹ and Solval® units, specifically designed for recycling residues from the flue gas cleaning process using the market-leading SOLVAir® solution. The rising demand for this advanced technology stems from the enforcement of stringent environmental standards governing emissions across various industries. By the end of 2025, Resolest® is poised to undergo a significant 60% surge in recycling capacity. Likewise, commencing January 2024, Solval® is set to witness a substantial 30% increase in its capacity.

This aligns with our dedication to a circular economy, supporting initiatives such as the European Green Deal. By doing so, we support our customers from various industries in their sustainability journey while fostering responsible business growth at Solvay. In addition, this innovative process empowers both plants to reduce natural brine consumption, actively contributing to resource conservation. SOLVAir® patented sodium-based solutions enable various industries to efficiently eliminate over 99% of pollutants.

1. A joint-venture between Solvay and Sarp Industries.

Recycling wastewater treatment sludges at our plant in Paulínia, Brazil

— At our Paulínia site, we wanted to reduce our industrial waste in a more sustainable way. In order to implement more circular processes, we looked for partnerships outside of the value chain and worked with open innovation to find new feasible solutions that would create additional value for all. For wastewater treatment sludge and water treatment sludge, we are currently working with partners and circular alternatives of waste recovery, where these materials will be used in the bricks for the fertilizers industry. In 2023, while we are working on those alternatives, we sent approximately 36% of the sludge from the water treatment unit to partners in the cement industry to be incorporated as raw material (co-processing).

Giving a second life to soda ash production waste

— At the Solvay site in Torrelavega, Spain, where we produce soda ash and bicarbonate, discussions about sustainability and circularity have led to new partnerships. When looking to create sustainable solutions for waste, team members developed external collaborations to find a second life for select materials, such as ashes resulting from the soda ash manufacturing process. This led to a partnership with a cement plant with whom we worked closely to sort, adapt, and upgrade our ashes in order to meet their needs and quality specifications. This win-win situation, made possible thanks to transparency, flexibility, and agility from both sides, enabled us to recycle about 35% of the non-hazardous waste generated by the plant in 2023.

Projects deployed at over 20 plants across the world to address non-sustainable industrial waste



Better life



Goals Baseline 2021

Safety RIIR¹

Aim for Zero

2023: 0.27

Gender parity Women in mid and senior management

50% in ten years

2023: 26.3%

Living wage to

100% of employees by 2026

NEW Pilot²

1. Number of work-related injuries and illnesses (employees and contractors) resulting from an accident with severity above first aid, according to US OSHA 29 CFR 1904, per 200,000 work hours.
2. Positive kick off in 2023 with pilots conducted in the US, the UK and China, representing 16% of our internal workforce.

Solvay is proud of the legacy of its founder, Ernest Solvay, who was one of the first corporate leaders to implement what we call today Corporate Social Responsibility (CSR), placing a strong emphasis on responsible capitalism. In 2023, our commitment to improving the quality of life of our employees and communities was in the spotlight through initiatives like committing to a fair living wage (as defined by the UN Global Compact initiative) for 100% of our employees by 2026 and bringing an additional benefit to our Solvay Cares program. We are also driving various initiatives with dedicated objectives across areas such as safety, well-being, and diversity, equity, and inclusion (DEI).

Committed to being a responsible employer

— Our comprehensive social benefits program provides employees with the support they need to perform at their best and results in a positive impact on our local communities. Our Better Life at Work program offers our colleagues worldwide a range of well-being webinars and workshops along with an Employee Assistance Program, which includes free psychological support, well-being advice, life coaching, and mindfulness for all employees and members of their households.

Additional benefit for Solvay Cares

— Our Solvay Cares program aims to provide all of our employees with social benefits addressing major healthcare costs, disability leave, parental leave, adoption leave, life insurance, and more. In 2023, a new Solvay Cares Agreement was signed with the Solvay Global Forum to include an additional benefit: Solvay will now also support employees with caregiving duties. Employees will be able to take a maximum of five days each year to handle unexpected situations where they must care for a loved one, so as to complement any provisions of local legislation. In addition, Solvay is creating a holiday donation bank with 100 days of leave for employees to use for caregiving purposes.

ENSURING A FAIR LIVING WAGE FOR ALL EMPLOYEES

In 2023, we joined the UN Global Compact living wage action, part of the organization's Forward Faster initiative that calls for ambitious corporate action in order to accelerate progress. As a result, we are assessing our living wage equity with plans to close any potential gaps within the company by 2030. This will ensure that our 9,000+ employees around the world receive a fair living wage by 2026, meaning a sufficient salary to afford a standard of living for each employee even if they should become the single income earner of their family. In order to do so, we have partnered with experts, such as the Fair Wage Network, an independent organization that provides a comprehensive and updated database used to define, build and deploy living wage assessments to make concrete steps towards improved fair wage practices. The first assessments have taken place in China, the US and the UK, which represent 16% of our internal workforce. As part of this step towards securing a more equitable workplace, Solvay will report on the fair living wage initiative progress annually to the UN Global Compact.



Strong commitment to ethics and compliance

— Ethical and compliant behavior is essential to how Solvay does business. In 2023, we published a new section on our corporate website, highlighting our commitment to ethics and compliance, our Code of Business Integrity, and our policies, actions, and audited data. All of our employees are required to undertake mandatory annual training, and our Speak Up service gives employees a way to safely report or seek assistance if they witness any inappropriate or unethical behaviors.

Social dialogue key in times of strategic disruption

— Good social dialog is key to driving commitment, motivation, and business success. We ensure our employees' representatives stay informed about strategic decisions and encourage feedback. As a result, we experience a high level of maturity, transparency, and trust among senior management and employees. This greatly contributed to our successful separation from Syensqo.

In 2022, we renewed and strengthened our Solvay Global Forum Agreement and Global Framework Agreement with the IndustriALL union, the global union for the chemical industry. Current commitments in the agreements address the areas of mental and physical health and safety at work, including the fight against discrimination, promotion of inclusion and diversity, remote work rights, and respect for the environment. The latest addition to our Agreement is that Solvay expects its suppliers, contractors, and subcontractors to contribute to Solvay's compliance with the provisions of this agreement.

Throughout the partial demerger project, regular discussion took place with both the Solvay Global Forum (SGF) and the European Works Council (EWC), both before and after the official consultation, through the creation of an "Ad Hoc Committee." This enabled us to address the concerns of the representatives at an early stage and to provide responses, such as the support put in place for the exit from the Master Transitional Service Agreements (TSAs) entered into between Solvay and Syensqo in connection with the partial demerger.

We talk to...

MARCO ROUMEN

Solvay Global Forum Coordinator



As a result of the separation, a new Solvay Global Forum was elected and Marco Roumen remained the Coordinator. The SGF is a global body representing the interests of 9,000 Solvay colleagues worldwide, ensuring their voices are heard by leadership and their rights are protected. We had the chance to interview Marco and discuss how we can best use our Solvay legacy to build our next chapter.

How was the Solvay Global Forum involved in the process that led to the partial demerger?

Marco Roumen — We were involved from the beginning, a day after the announcement, and we kept discussing from day one until spin off. It's something we are very proud of and that is unique.

The company really listened and even changed some decisions based on the feedback that was received. We also applied what we learned from previous experiences, such as improving the Voluntary Separation Plan (VSP) to make it as clear as possible, and we could even save some jobs.

What do you value most from Solvay legacy that we should build on in the new company?

M.R. — Our open dialogue is one-of-a-kind. We have a hierarchy but our leaders are always available to employees, who have the opportunity to speak with their high-level managers. This is something that not many companies have.

We also enjoy a wide range of nationalities and cultures, notably in production teams where people have learned to listen and understand each other beyond their differences. Providing and implementing DEI initiatives is

challenging, but changes also happen naturally, and that's a great thing to see.

Lastly, we keep the agreements and social benefits from Solvay legacy and we can continue building on them.

What are your priorities as SGF coordinator? How could the new Solvay become an even more attractive employer?

M.R. — We have made a lot of progress, but we must remain honest and acknowledge that we still have work to do. We need to be more inclusive and diverse, respecting everybody's opinions and the way every individual acts in life, which is not always the case across the company. In addition, we'll have to face a more challenging global economic situation and the constraints that come with it.

A critical point for the future is to look after all our talents, not only the high-potential ones. We have to create opportunities for the many talents we have working on shop floors, especially in the many small sites we have, in order to keep them in the company for a much longer time.

We have a very open and transparent atmosphere in many areas of the company and we need to continue working to make that available everywhere. Let's celebrate our progress and our unique social dialogue!

Embedding DEI in the day-to-day business and industrial sites

— In 2023, we continued to progress in implementing our Solvay One Dignity program, launched in 2021. After first establishing our vision and baseline for diversity, equity, and inclusion (DEI) and then putting into motion the major cultural change to make it a reality, we were ready for the next phase. Last year, we continued to carry out our strategic roadmap, aiming to strengthen DEI within our organization's culture and embed it in our day-to-day business through initiatives that focused on leaders, employees, industrial sites, customers, and suppliers, using our nine Employee Resource Groups (ERGs) to help raise awareness through our organization.

Throughout the year, we focused on gender parity during recruitment as well as the nomination of Solvay leaders. In 2023, 26.3% of mid and senior managers were women.

Additionally, we have progressed forward on our pay equity journey, ensuring this is done in a gender-neutral manner. We conducted off-cycle reviews using a statistically sound model for computing "expected salaries" by country and job class. A review was conducted for 951¹ employees identified as a priority. When the pay gap could not be justified by performance, seniority or another objective reason, it led to an off-cycle salary increase, performed in January 2023.

¹ Within the Solvay group before completion of the partial demerger in December

Driving change begins with our leaders

— Two key initiatives helped to further embed DEI in our day-to-day business operations:

- **Inclusive leadership training.** This four-hour Inclusive Leadership Workshop was attended by +600¹ leaders in 2023 and provided the tools and resources needed to recognize their own unconscious biases and foster an environment where everyone feels valued, respected, and included. The session also provided a space for leaders to engage in meaningful conversations with peers and share their experiences and challenges.
- **ERG mentorship.** As a vital part of our DEI program, mentorship provides underrepresented groups with equitable career opportunities and helps to diversify our talent pipeline. Several of our leaders participated in mentorship programs, mentoring members of our ERGs.

Including all employees from offices to shop floors

— For employees, we are advancing our DEI practices through improving our disability inclusion and encouraging hands-on participation at industrial sites, notably through our STAR Factory program.

To assess and improve our disability inclusion, we began implementation of the Disability Equity Index in partnership with Disability:IN, the leading nonprofit resource for business disability inclusion worldwide. The Index is a comprehensive benchmarking tool that helps us advance our disability inclusion practices. To further align with this initiative, we have started to assess our digital accessibility through internal reviews as well as external benchmarking.

Sites within our STAR factory program were invited to create their specific DEI targets related to people and capabilities as part of their roadmaps.



NEW DEI INITIATIVE PROMOTES INCLUSION AMONG SHOP FLOOR EMPLOYEES AT OUR PAULINIA SITE

When Claudinei Alves, supervisor and local Eureka ERG member, had trouble participating in events and meetings due to revolving shift schedules, he knew this was a problem many of his colleagues faced. Eureka, our Latin American based ERG that helps employees nurture their well-being at work, planned and implemented the action led by Claudinei, who shared information among shop floor employees, encouraged open conversation, and built unity among teams, creating a safe space for all to share and learn about DEI. Acting as the voice for all shifts, Claudinei participates in events, taking notes and materials to share with shop floor employees. The response from every shift has been overwhelmingly positive, with plans to expand and enhance this initiative. "Schedules are always in flux and these meetings require careful planning for every shift, but this is something that can be done in all areas," explained Claudinei. "There is a strong need for this initiative, similar to the way we do safety meetings. It is a matter that matters for everyone."

Solvay awarded Great Place To Work® for its plants in Portugal and Brazil

— We are proud to have two of our sites recognized for our commitment to creating a culture of employee well-being in the workplace. Awarded by the Great Place To Work® organization, a leading player in the field of quality of life at work, this certification is the highest level of recognition of the quality of a company's working environment.

Promoting diversity among our customers and supply chain

— We are also working to promote diverse suppliers who source from companies that may be owned by minority underrepresented groups, employ individuals who have a disability, etc. in the Solvay marketplace. Through our partnership with Amazon's B2B marketplace, we are able to buy from and support diverse suppliers. This aligns with our objective to implement diversity not just within our teams and among leadership, but also within our value chain.

1. Within the Solvay group before completion of the partial demerger in December, representing around 200 leaders from Solvay as it exists today.

4

PRIORITIZE FOCUSED CASH ALLOCATION

Our capital discipline is key and we are prioritizing a simple and focused cash allocation strategy. With a business that is highly cash-generative, how we allocate our capital matters.

Our essential capex consumes approximately one third of our pre-capex cash, addressing maintenance and regulatory improvements, a key priority for our plants to run efficiently for our customers and safely for our employees. This also includes our investments related to our energy transition commitments. These are essential for the planet and for the competitiveness of our operations.

Approximately another third is devoted to rewarding our shareholders, whose support is essential to our success, through our dividend policy of paying stable to growing dividends year after year, in the continuation of Solvay for more than 30 years.

The remaining cash will be allocated with discipline and returns at the front of our minds. Discretionary capex decisions will be made on the basis of merit and affordability in the domains of process efficiency and of capacity expansion, in order for Solvay to grow its production capacities in line with customers' needs. As many of our end-markets are growing 2-3% per year in line with GDP, we will need to expand our capacities to respond to the increasing demand.



ALEXANDRE BLUM

Member of the Executive Leadership Team,
Chief Finance and Strategy Officer

"In everything we do, we will ensure that we focus on delivering the value, improving margins, cash and returns within two main red lines, our dividends distribution and maintaining our investment grade rating."

Expanding hydrogen peroxides capacities in China

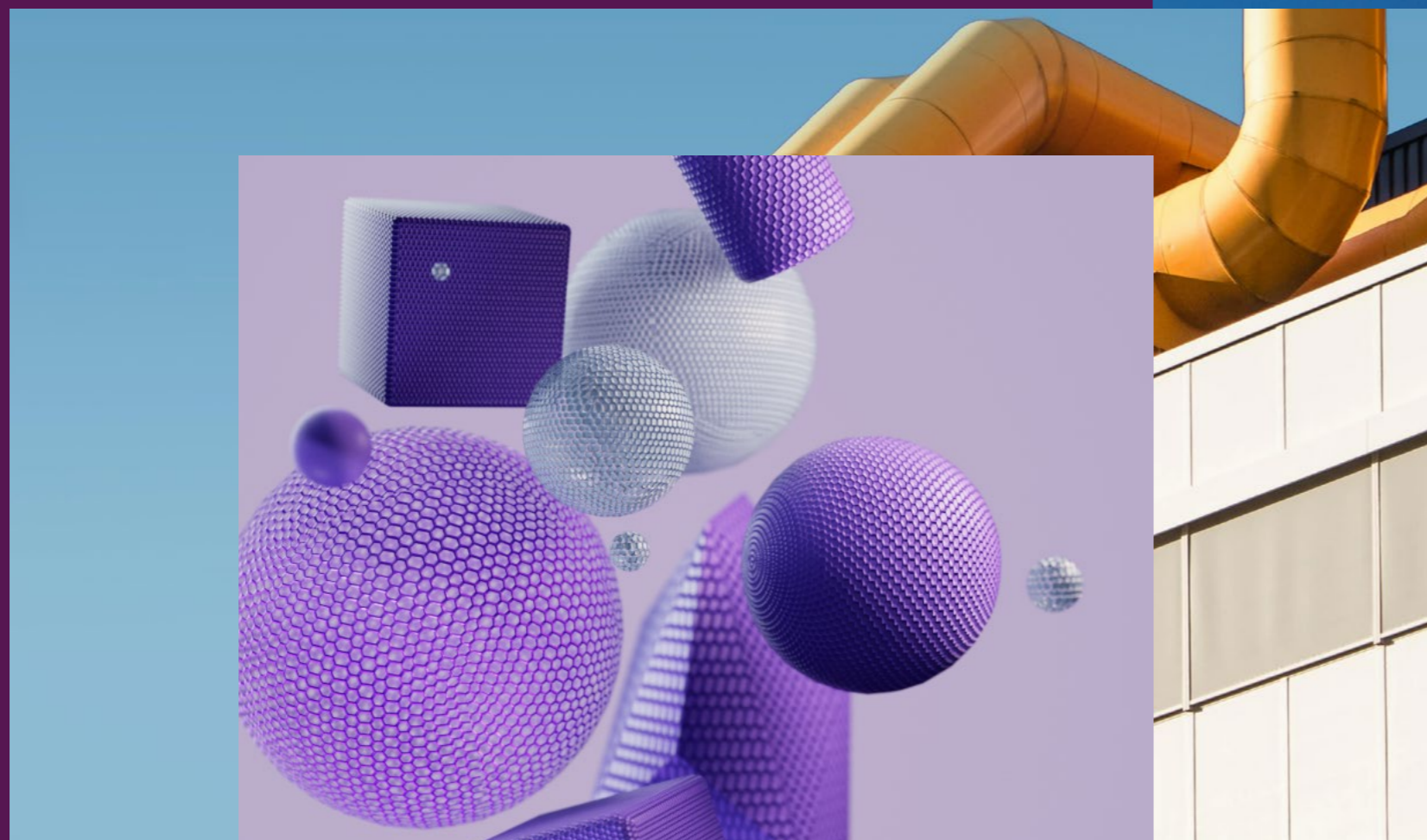
— We are extending our leadership position in the global hydrogen peroxide market through a capacity expansion at the Shandong Huatai INTEROX® Chemical site in China. This investment will position us to efficiently meet the rising demand from the photovoltaic industry, strengthen our ability to secure a more significant share of the growing Chinese market, and further enhance our strong industrial presence in the region.

Increasing soda ash capacity in Green River (USA)

— Solvay is investing in the construction of a 600kt soda ash capacity expansion in its trona-based Green River site in Wyoming, USA, extending its position as a global leader. Production is expected to start in 2025, in time to meet customers' growing needs for a secure and cost-competitive supply source.

03 SUSTAINABLE VALUE CREATION

Essential products drive progress and create sustainable value



52 Story — Building the world's first carbon-neutral soda ash plant in Saudi Arabia

54 Essential products serving multiple end-markets

60 Creating sustainable value for all

62 Value chain
62 End-to-end value creation
63 Our segments and Global Business Units

64 Engaging stakeholders to drive progress

66 Ratings



Building the world's first carbon-neutral soda ash plant in Saudi Arabia

As an example of our pioneering mindset, Solvay is partnering with ENOWA, the energy and water company of NEOM, to build the world's first carbon-neutral soda ash production facility. Equipped with the e.Solvay process, the state-of-the-art facility will use converted brine from seawater desalination as its raw material and is expected to set a new global benchmark for competitiveness, circularity, and sustainability.



JEAN-CHARLES DJELALIAN
Chief Sustainability Officer

Located at the crossroads of the world in northwest Saudi Arabia, NEOM's greenfield site provides unrivalled access to renewable resources and a unique opportunity to advance energy and water innovation. The Solvay-ENOWA partnership will lay the foundation for building the soda ash plant of the future that competes effectively and also maintains neutral environmental impact.

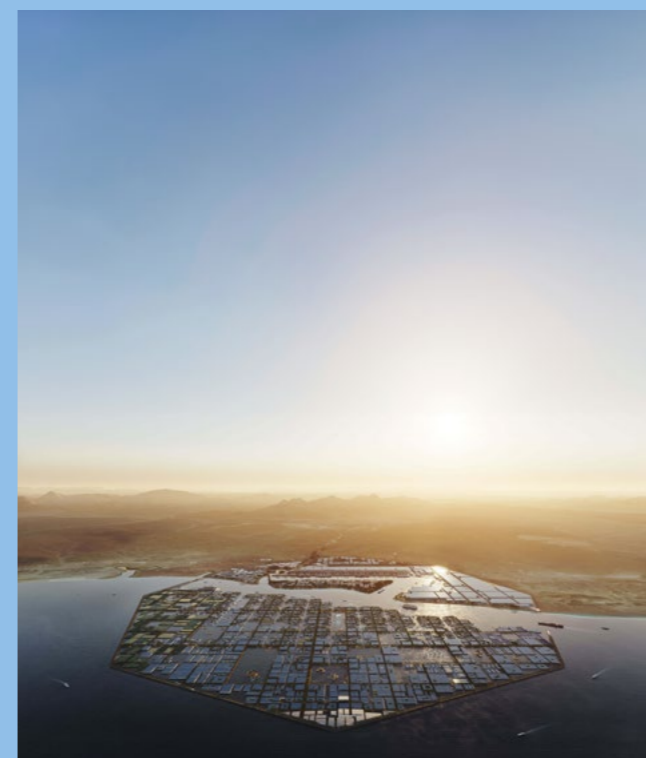
"The preliminary discussions with ENOWA convinced both parties that there was a strong fit between Solvay and NEOM," said Jean-Charles Djelalian, Chief Sustainability Officer at Solvay. "The partnership allows us to conduct an in-depth feasibility assessment in view of constructing by the end of the decade the first ever carbon neutral soda ash plant. This strategic move further reinforces our position as a global leader, securing a sustainable supply to our valued customers."

Earlier this year, the e.Solvay pilot production process began operations in Europe. Designed to evaluate the viability of a more sustainable and competitive soda ash production technology, the pilot has yielded positive results: showcasing potential for low emissions, reduced resource and energy consumption, and removal of limestone residues. The next two-year pilot phase will set the stage for industrial-scale production to begin in the latter half of the decade, aligning with the NEOM implementation timeline.

Pending approval, the project will commence with an initial capacity of 500,000 tons of soda ash by 2030 and production is planned to gradually increase, ultimately reaching 1.5 million

tons by 2035. Situated strategically along the Red Sea coast to facilitate market access throughout the Middle East, Africa, and South East Asia, the future soda ash plant at NEOM intends to serve our customers in these regions. This facility will offer valuable insights beneficial to our current network of Solvay plants in Europe, which is undergoing energy transition and process innovation.

By combining our innovative process with NEOM's renewable energy and circular raw materials, Solvay will lead the market to carbon-neutral soda ash and shape the future of the global industry.



Solvay soda ash pioneering the industry

1863

Ernest Solvay reinvents soda ash manufacturing using a more competitive and sustainable process.

1865 – 1916

Rapid expansion in Europe and USA with more than 9 plants operated.

1865

Solvay builds its first Soda Ash plant in Couillet, Belgium, and then pioneers the heavy chemical industry in numerous countries.

2022

160 years later, we unveiled our new, breakthrough e.Solvay process and we remain the undisputed market leader, producing soda ash through both natural trona-based and synthetic processes in some of the most cost-efficient, vertically integrated production facilities in the world.



We talk to...

GAVIN VAN TONDER

Managing Director, Water Sector, ENOWA

Why do you think a Solvay-NEOM partnership is a win-win proposition?

Gavin Van Tonder — Being a market leader for 160 years, Solvay is reconceiving Soda Ash to meet the environmental and economic expectations of the industry. As a new region under development, NEOM in Saudi Arabia is being built as a living laboratory for new sustainable and circular technologies. This partnership offers an unprecedented opportunity for Solvay to build the soda ash plant of the future, leveraging access to abundant renewable energy and strategic proximity to global markets.

Why do so many companies want to join you in your journey?

G.V.T. — NEOM is the land of the future, founded on its vision to redefine livability and sustainability. As the energy and water company of NEOM, ENOWA will produce green chemicals from seawater brine and is on-track to build the world's largest green chemical production facility. This commitment could be instrumental in propelling forward the future of green chemicals powered by 100% renewable energy. This is especially attractive to partners and investors who want to be at the forefront of this journey.

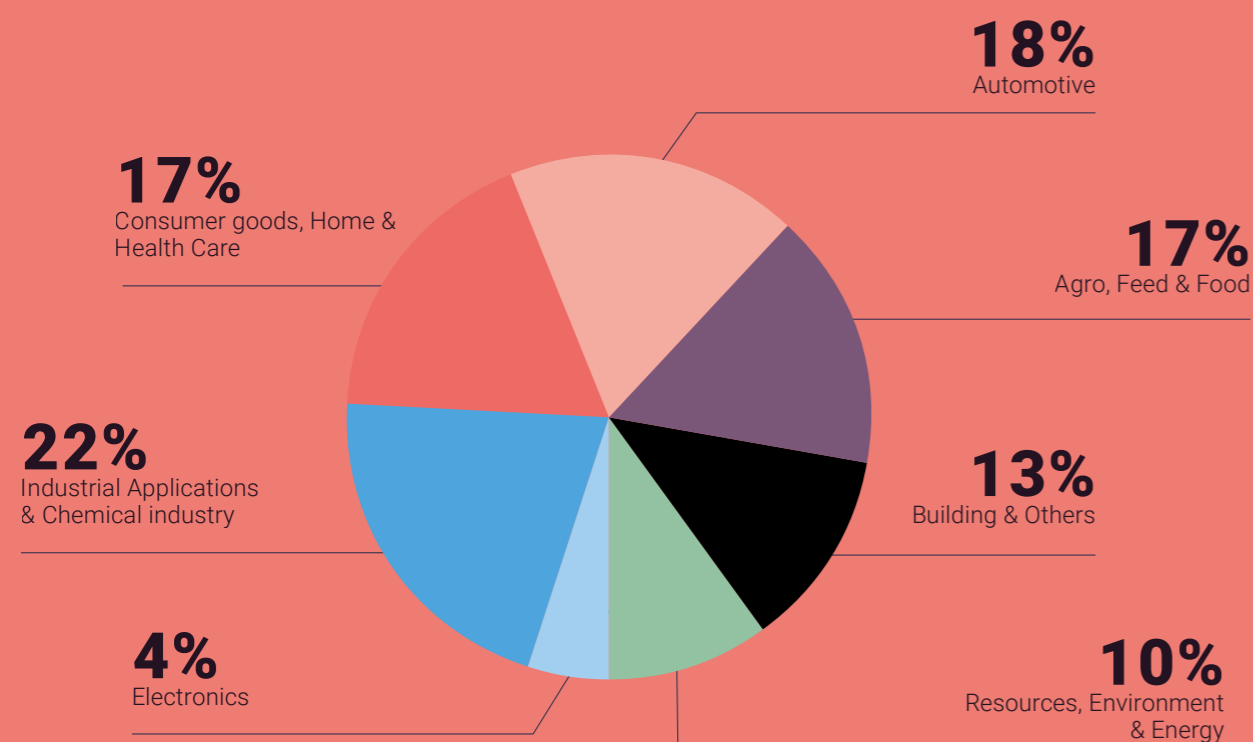
Essential products serving multiple end-markets

We have a global market and technology leadership on our five major business lines that include soda ash and sodium bicarbonate, hydrogen peroxide, highly dispersible silica, fluorine, and rare earth formulations. We also have a regional leadership in Latin America on phenol and solvents.

Our products are essential to multiple end-markets driven by megatrends with sustainability at their core. 44% of Solvay's net sales are generated by "sustainable solutions" according to our Sustainable Portfolio Management (SPM) methodo-

logy: in a given application, our "sustainable solutions" make a greater social and environmental contribution to the customer's performance while demonstrating a lower environmental impact in their production phase.

In addition, eight of our products have been labeled as Efficient Solutions by the Solar Impulse Foundation, meaning they offer profitable and sustainable solutions that tackle the world's environmental and health challenges and help to achieve the United Nations' Sustainable Development Goals (SDGs).



% of Solvay net sales



Automotive

18% of Solvay net sales

Sustainable and efficient resources



— Our products enable safer, cleaner, and more energy-efficient automotive solutions. They meet our customers' demand for sustainability, stringent regulations on CO₂, and particulate emissions that are driving the automotive industry to develop cleaner mobility systems.

Clean and green technologies

- We offer the widest performing range of highly dispersible silica (HDS) for sustainable mobility and energy-efficient tires. Our best-in-class Zeosil® specialty grades for electric vehicles improve wear and rolling resistance up to 30% with no compromise on wet grip, contributing to boost EV battery autonomy range up to 10%.
- We are developing a circular silica made with bio-based sodium silicate derived from rice husk ash. Supported by major tire manufacturers, it will offer the same level of performance as current grades, helping the tire industry to significantly reduce their CO₂ footprint.
- Several Solvay solutions are used in automotive catalytic converters to minimize pollutant emissions, boost performance, and reduce fuel consumption.
- Our cutting-edge solutions for body and chassis applications put the planet first. Our oxygenated solvents offer non-toxic, high-performance solutions for automotive coatings. And Rhodianyl, used in many parts of the car, offers a 100% recycled grade polyamide 6.6 polymer for engineering plastics.

Powertrain efficiency

Recognized as a benchmark in the industry the NOCOLOK® aluminum brazing solution improves heat exchanger performance in new energy vehicles and Internal Combustion Engine thermal management systems, saving emissions and resources.

ALVE-ONE®* FOR SAFER AND MORE SUSTAINABLE CAR INTERIORS

Our Alve-One® foaming solutions are an innovative generation of high-performance, sustainable and cost-effective chemical blowing agents. Based on sodium bicarbonate, a 100% safe raw material, they offer customers a safe alternative to ADCA**, ensuring that environments, like car interiors, contain negligible quantities of volatile organic compounds (VOC), and contributing to significantly improved vehicle indoor air and quality. Helping fulfill the plastic industry's move towards a circular economy, they provide the specific properties needed for insulation, strength, and lightweighting.

*Alve-One® was awarded the Solar Impulse Foundation's Efficient Solution Label.

** Azodicarbonamide, classified as a Substance of Very High Concern (SVHC) by REACH.



Consumer goods, Home and Health Care

17% of Solvay net sales

Sustainable and efficient resources



Evolving demographics



— Our products meet consumers’ demand for more natural and biobased ingredients, making the products they use healthier and more eco-friendly. We also provide solutions for the increasing needs in the healthcare market, driven by the world’s growing and older population, advances in treatments and health technologies, and high sterilization capabilities to name a few.

Home and hygiene

- Our soda ash is essential as a water softener and a detergent (i.e. saponification effect).
- In fragrance markets, the priority is finding bio-renewable, sustainable, and safer alternatives to petrochemical solvents. Our Augeo®* line of bio-based solvents for air care and home cleaning meet these needs. Developed from glycerin, a renewable source, they comply with the strictest global legislation, are readily biodegradable, have a low carbon footprint, and are not toxic to humans or the environment.
- Our silicas, such as Tixosil SoftClean™, meet the oral care market’s current demand for softness and enamel protection, while offering sufficient abrasiveness to get teeth clean.

Consumer goods

Our solutions bring performance and healthcare benefits, enabling a new generation in textiles. We developed the world’s first polyamide yarn with accelerated decomposition and the first partially bio-based polyamide textile yarn, Bio Amni®, designed for breathability and moisture absorption.

Pharmaceuticals

- To ensure safety and patient well-being, medical devices, isolators and room decontamination must be sterile. Whether in vaporized form for the pharmaceutical aseptic filling industry or as a disinfectant for medical devices, our INTEROX® range of high-purity hydrogen peroxide (H₂O₂) offers the highest possible disinfection quality on the market.
- Based on high-purity sodium bicarbonate, Bicar®pharma is optimal for use as an active pharmaceutical ingredient (API), an effervescent excipient and to stabilize the pH in hemodialysis, enhancing the efficiency and dependability of the procedure.

*Augeo® was awarded the Solar Impulse Foundation's Efficient Solution Label

RHODIANYL HELPS TEXTILE AND ENGINEERING PLASTICS INDUSTRIES ADVANCE THE CIRCULAR ECONOMY

Solvay continuously improves its production process and products to offer more sustainable raw materials to the textile and engineering plastics industries. Launched in 2023, our new and innovative specialized grade of Rhodanyl, a PA66 polymer made of 100% pre-consumer recycled polyamide, achieved SCS Recycled Content Certification, reaffirming Solvay’s commitment to circular economy. Our Santo Andre, Brazil, plant recovers and reintroduces textile polymers production waste into the manufacturing lines, transforming them into new polymers.



Resources, Environment and Energy

10% Solvay net sales

Sustainable and efficient resources



Renewable energy



— Our chemical formulations enable the recovery, purification, and reuse of natural resources, including the water we use, and the metals and minerals on which society depends. With our products, the industry can meet ever-stricter regulations and growing demand for innovations for more efficient processes and more competitive products to address air pollution, especially in Asian markets.

Energy

- We respond to the increasing demand for cleaner mobility and renewable energy with our soda ash, which is used as a precipitating agent for mineral extraction and the production of lithium carbonate used in Li-ion batteries while its high-quality grade helps to manufacture the flat glass used for solar photovoltaic panels.
- We are also developing a technology to separate rare earths elements used in the production of innovative rare earths permanent magnet solutions, serving various markets like electric vehicles and wind power.

Water treatment

- Our hydrogen peroxide plays a key role in water treatment, providing eco-friendly solutions that eliminate pollutants and pathogens in municipal and industrial segments.
- We also help purify wastewater or polluted water with Oxystrong®, a completely safe and sustainable solution for municipal wastewater disinfection made of hydrogen peroxide and acetic acid, enabling water to be recycled for irrigation or return to environment.

Mining

In mining, there is a strong demand for more sustainable solutions with stricter standards to minimize the impact on the environment and employees alike. Our hydrogen peroxide products enhance metal recovery, extraction performance, leaching, purification, and separation, improving yields. Our high-purity INTEROX® helps reduce cyanide consumption during leaching, boosting gold and silver recovery while protecting the environment, ensuring safe water is released back into the environment.

SOLVAIR®* AND SOLVAIR® MARINE*: FOR CLEANER AIR AND ENERGY EFFICIENCY

SOLVAir® provides simple, innovative, and efficient flue gas cleaning solutions. This sodium-based sorbent can efficiently remove up to around 99% of SO_x, HR, and HCl emissions from exhausts in a range of sectors, including energy from waste, energy production, cement manufacturing, and marine industry. Our SOLVAir® Marine solution is designed for ships that use heavy fuel oil and enables them to avoid releasing wastewater back to the sea and features quick installation without dry docking. It helps reduce pollutant emissions, meeting a crucial need from the marine industry to comply with International Maritime Organization regulations.

*SOLVAir® and SOLVAir® Marine were awarded the Solar Impulse Foundation's Efficient Solution Label



Agro, Feed and Food

17% Solvay net sales

Sustainable and efficient resources



Evolving demographics



— Feeding a growing global population while adapting to increasingly strict regulations and changing consumer preferences for healthier, more natural, and more convenient food drives the agriculture, food, and feed markets. Our products meet our customers’ need for better performance and sustainability.

Food packaging

- Our products help make food packaging healthier and safer for consumers. Our oxygenated solvents for inks are aromatic-free and safe for use on wrappers that come in direct contact with food and the aseptic grade of our hydrogen peroxide, INTEROX® AG is used during packaging to sterilize paperboard carton containers or plastic bottles before filling with UHT or pasteurized food.
- Our soda ash is also used to manufacture glass containers, contributing to reduced plastic in recyclable food packaging.

Animal nutrition

Our supplements for healthier livestock and fish farming are designed to improve productivity, nutrient use, and overall animal health. They include our Bicar®Z, a sodium bicarbonate-based feed ingredient for livestock breeding that improves well-being and performance.

BICAR®FOOD, A HIGH-QUALITY INGREDIENT FOR MORE THAN 150 YEARS

Our Bicar®Food, a premium sodium bicarbonate used as a leavening agent for baked goods like cakes or biscuits, can also be a tenderizer for meat and seafood or a carbon dioxide source for effervescent drinks. This environmentally friendly mineral substance, without risk for human health or for the environment, meets the highest and most stringent international food safety standards.

Coatings and paints

By improving durability, our coating solutions such as Augeo® SL 191, a bio-based non-corrosive solvent with a low odor profile and low volatility, contribute to longer end-product lifetimes. With over 60 years of expertise, Solvay is a leader in Latin America in the production of non-toxic oxygenated solvents, offering superior performance in coating formulations.

SODA SOLVAY® FOR ENERGY-EFFICIENT BUILDINGS

As a global leader in the production of sodium carbonate, we supply one of the main raw materials for the manufacturing of flat glass for construction used in energy-saving double- and triple-glazed windows, creating more energy-efficient buildings. Our Soda Solvay® is used as a melting and flux agent to lower the melting point of silica in glass manufacturing, resulting in a reduced energy consumption process.



 **Building and Others**

13% Solvay net sales

Sustainable and efficient resources



Evolving demographics



— Buildings represent 40% of the world's energy consumption, and with a growing urban population, there is a need for durable, safer, energy-efficient, and sustainable buildings. From paints and plumbing to insulation and glass, our innovative products and solutions are found throughout buildings.

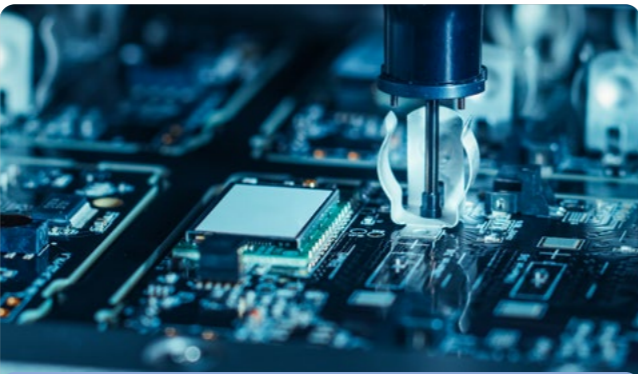
 **Electronics**

4% Solvay net sales

Sustainable and efficient resources



Evolving demographics



— The growing demand for hyperconnectivity, development of 5G and Artificial Intelligence, and exponential growth of data driving the market, have resulted in miniaturization and a need for more environmentally-friendly chemicals. In the semiconductor industry, our innovative solutions help redefine manufacturing processes, making them more precise and sustainable.

Semiconductors

Our Cerium abrasives like Zenus® are used in a critical step of the semiconductor manufacturing process to remove excess materials and create a smooth surface on each wafer layer.

INTEROX® HYDROGEN PEROXIDE PICO AND PICOPLUS FOR ADVANCED SEMICONDUCTOR CLEANING

We provide high-purity chemical solutions needed for advanced cleaning, an increasingly important requirement as electronic devices become smaller. Our INTEROX® Hydrogen Peroxide Pico and PicoPlus are two of a range of Electronic Wet Chemicals, primarily used in the cleaning and etching stages of semiconductor chip production, and are the market reference in this area amid rapidly growing demand.



 **Industrial applications and Chemical industry**

22% Solvay net sales

Sustainable and efficient resources



— As manufacturers must comply with ever-stricter regulations and constraints on resources, they rely on innovations for greener and more efficient processes, as well as the development of more competitive products. Our products help industrial manufacturers meet strict environmental regulations while maintaining stringent quality control.

Industrial and protective coatings

We offer oxygenated and bio-based solvents for industrial coatings used in a broad range of industrial applications. In addition to investments in production decarbonization and innovation, Solvay is investing resources in a broad process of digital transformation of solvent operations, with the adoption of virtual reality technologies and industry 4.0.

Metal and surface treatment

Our Aqueous Hydrofluoric Acid is crucial for steel manufacturers to “pickle” stainless steel to remove impurities, and for quartz purification in the rapidly growing photovoltaics market.

Cutting-edge solutions for industrial applications

Through our Hydrogen Peroxide to Propylene Oxide (HPPO) technology mega plants in Belgium, Thailand, and Saudi Arabia, we produce propylene oxide (PO), a crucial organic building block in industry that is used to produce polyurethane foam, found in everything from mattresses to thermal insulation, and is a key component of a food and cosmetics ingredient. These cutting-edge plants significantly reduce wastewater, increase energy efficiency, and lower operational costs.

SOLVACLEAN®*: AN ENVIRONMENTALLY-FRIENDLY CLEANING GAS FOR SEMICONDUCTOR TOOLS

Semiconductor manufacturers use a variety of gasses to pattern silicon wafers. Made from environmentally-friendly fluorinated gas mixtures, Solvaclean® offers a zero global warming potential shaping a more sustainable future for the semiconductor industry as an alternative to usual cleaning options. Not only does it help to reduce the industry's climate impact by reducing emissions, but as less gas is required for the cleaning process, it also helps to save energy and water.

*Solvaclean® was awarded the Solar Impulse Foundation's Efficient Solution Label.

Creating sustainable value for all

We are mastering the elements essential to our world. We are committed to optimizing the use of our resources to reducing our impact on people and the environment and reach carbon neutrality by 2050. This involves transforming the way we operate and introducing process innovations to support our market leadership, enhance competitiveness, and drive energy transition. Our products and technologies serve very diverse end-markets, contributing to our resilience. In 2023, we delivered a solid financial performance and strong progress towards our ambitious sustainability objectives. We are committed to creating greater sustainable value for our stakeholders.

1. Number of work-related injuries and illnesses (employees and contractors) resulting from an accident with severity above first aid, according to US OSHA 29 CFR 1904, per 200,000 work hours.
2. Positive kick off in 2023 with pilots conducted in the US, the UK and China, representing 16% of our internal workforce.
3. Recommended to the Shareholders meeting on May 28, 2024.
4. Due to the partial demerger, this number is based on an assumption (55% of the total number of evaluated suppliers before the split).
5. Total emissions from Solvay operations.
6. Emissions upstream and downstream in the value chain (suppliers and customers) from its «focus five» categories which are 1. Purchased goods and services. 2. Fuel and energy related activities. 3. Processing of sold products. 4. Use of sold products. 5. End-of-life treatment of sold products.

Resources we use

SOCIAL

+9,000
Employees
→ **61%** in Europe
→ **10%** in North America
→ **16%** in Latin America
→ **13%** in Asia & Rest of the world

24%
Women

79
Nationalities

204
R&I employees

ECONOMICAL

€1.3bn
Equity attributable to Solvay share

€1.5bn
Underlying Net Debt

€450m
Capex from continued operations

€835m
Total personal expenses

232
Core Suppliers

ENVIRONMENTAL

Raw materials

2,865kt
Consumption

~ €1bn
Overall expenses

Energy

70.1PJ
Consumption

€0.8bn
Net costs

How we create value

Two operating segments

Basic Chemicals
Chemical intermediate businesses focused on mature and resilient markets. We are a world leader in soda ash, bicarbonate, and peroxides, serving major markets.
~60% of Solvay's Net sales

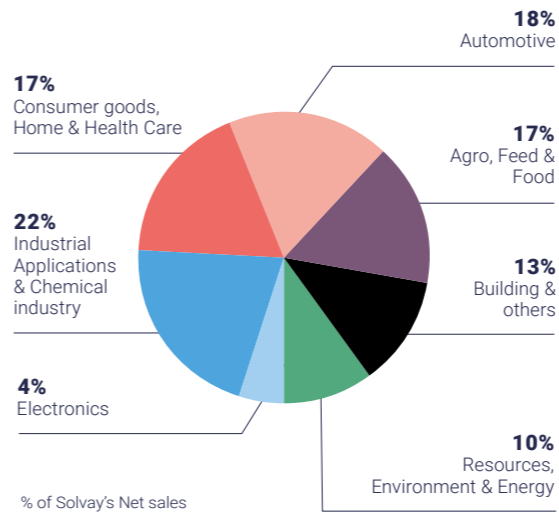
Performance Chemicals
Wide range of products, in Silica, Coatis, and Special Chem businesses, that can be customized based on unique formulation & application expertise. They hold strong positions in their markets.
~40% of Solvay's Net sales

Four strategic priorities

- Deliver value for customers through market leadership
- Drive excellence and competitiveness through process leadership and cost savings
- Reinforce sustainability commitments and achieve energy transition to deliver carbon neutrality by 2050
- Prioritize focused cash allocation

Where we create value

Essential products serving multiple end-markets



Value we create

SOCIAL

0.27
Reportable Injury and Illness rate (RIIR¹)

26.3%
Women in mid and senior management

Pilot² NEW
UN Living wage initiative for 100% workforce

14h
Average training hours/employee

8.8%
Employee turnover

38% in 22 countries
Employees are Solvay shareholders

€400,000
Solvay donations

6,900
participants to Corporate citizenship activities

ECONOMICAL

€1.2bn
Underlying Ebitda

€0.6bn
FCF to Solvay shareholders from continuing operations

€2.43 per share
Recommended 2023 dividend³

€198m
Underlying Income taxes

28
Patents filed in 2023

1,600⁴
Suppliers assessed through Together for Sustainability

ENVIRONMENTAL

Greenhouse gas emissions

7.3Mt CO₂eq.
Scope 1 and 2⁵

12.4Mt CO₂eq.
Scope 3⁶

24.4PJ
Solid fuels consumption

44%
Solvay's net sales with sustainable solutions

Air emissions

4.3kt
Nitrogen oxides

2.1kt
Sulfur oxides

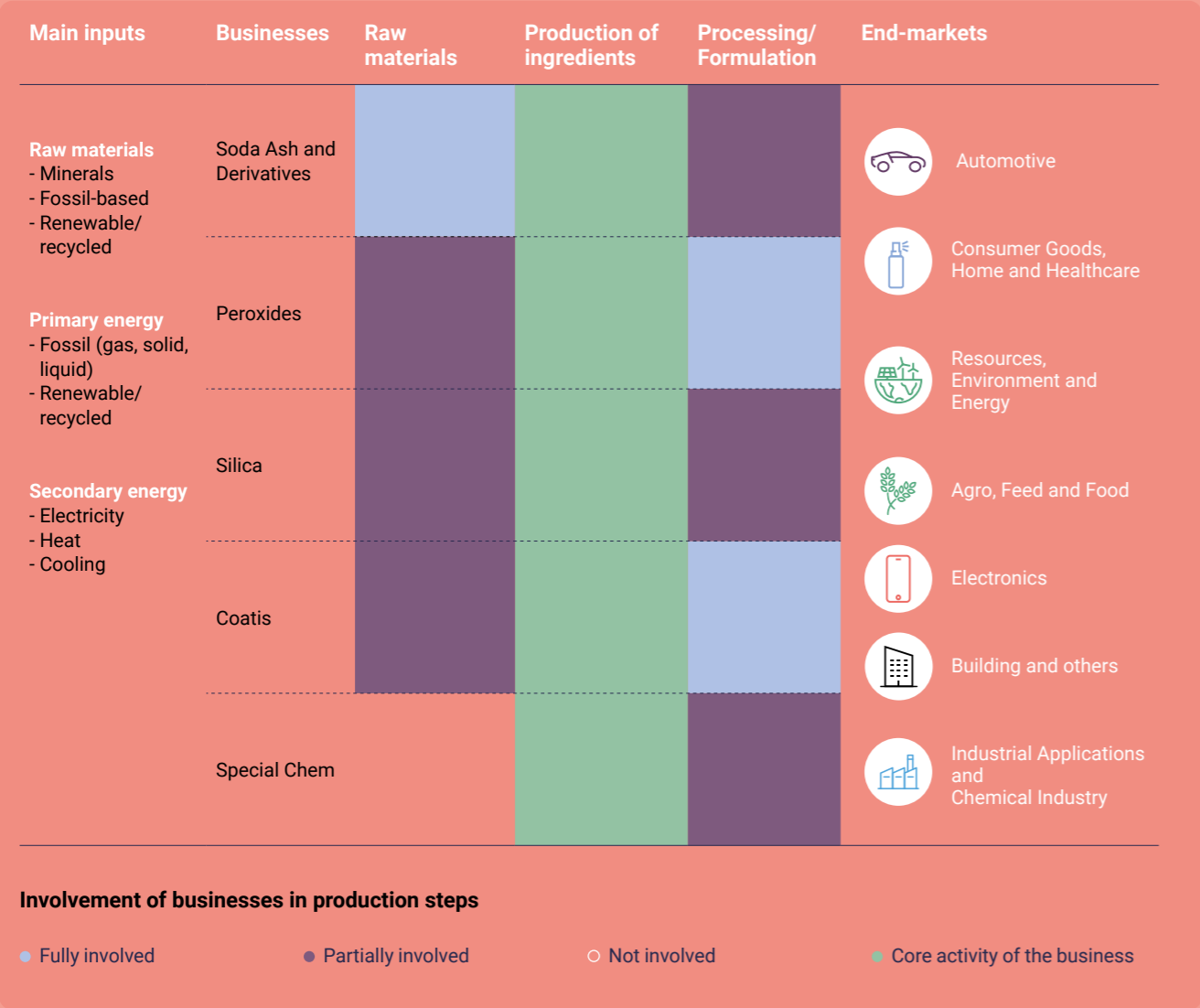
Value chain

END-TO-END VALUE CREATION

Our core activity as a chemical manufacturer is the production of synthetic and natural ingredients which we are committed to produce using processes with a reduced environmental impact. Depending on our different business models, we are involved upstream in the value chain, producing some of the raw materials we use, or downstream, processing chemicals or producing formulations.

To offer more innovative features and bring greater added value to customers, we blend or transform products. We also collaborate with brand owners and their suppliers to develop tailor-made solutions based on our products.

In addition, we work closely with suppliers, partners, customers, and brand owners to share knowledge and unlock shared value all across the value chain. This includes constantly raising the bar to reach our sustainability commitments by working together to build a greener, more agile, and resilient supply chain. In 2023, we mapped more than 50% of the product carbon footprint (PCF) coverage of our raw materials.



OUR SEGMENTS AND GLOBAL BUSINESS UNITS

Basic Chemicals

— This segment hosts global chemical intermediate businesses focused on mature and resilient markets.

Soda Ash and Derivatives €2.1bn Underlying net sales

— Solvay is a world leader in the production of soda ash and sodium bicarbonate. We provide a secure and sustainable global supply of soda ash used by customers in glass for building, solar panels, glass containers and packaging; lithium-ion batteries for electric vehicles; detergents; and chemicals. Our solutions based on sodium bicarbonate serve the healthcare, food, animal feed, and flue gas cleaning markets. To achieve carbon neutrality by 2050 and ensure our long-term competitiveness, we are developing process innovations, such as our new e.Solvay process, and implementing energy transition projects at our plants.

Peroxides €0.9bn^{1,2} Underlying net sales

— Solvay is a world leader in hydrogen peroxide. This environmentally friendly oxidant is used for bleaching, decontamination, disinfection, and antiseptic purposes in industries including pulp, textile, water, and food. It serves as an intermediate for the production of chemicals, such as propylene oxide and caprolactam. It is also essential in growing and emerging applications such as in semiconductors, photovoltaic, urban mining and battery sectors. Our tailored solutions cater to our customers' specific needs. The myH₂O₂ plant, a compact version of a standard H₂O₂ facility, addresses application challenges in remote areas, and our mega-plants, representing advanced H₂O₂ manufacturing, are ideally suited for large scale chemical processes.

1. Special Chem and Peroxides net sales take into account the transfer of eH₂O₂ business from Special Chem to Peroxides (effective in 2024) for €0.1bn.
2. Peroxides: including changes related to Peroxidos do Brazil and Zhenjiang for €+0.1bn.
3. Special Chem net sales exclude thermal insulation business (phased out in 2023) for €-0.1bn.

Performance Chemicals

— This segment hosts a wider range of products (in the Silica, Coatis, and Special Chem businesses) that are subject to customization based on unique formulation and application expertise. These businesses hold strong positions in their markets.

Silica €0.6bn Underlying net sales

— Solvay is a worldwide innovation leader in Highly Dispersible Silica (HDS), which is primarily used in fuel-efficient and performance tires and is also an essential component in applications in the home and personal care, feed and food industries. Solvay is the inventor of HDS for tire applications and offers global tire manufacturers the broadest HDS portfolio available, enabling lower fuel consumption and extended battery range in electric vehicles. We have developed a bio-circular silica from rice husk ashes and we are investing at our plant in Livorno, Italy, where we will produce it using our proprietary process technology.

Special Chem €0.7bn^{1,3} Underlying net sales

— We produce fluorine and rare-earth formulations for automotive, electronics, agrochemical, and construction applications. With our industrial know-how, global presence, and proximity to research and innovation, we position ourselves as a strategic partner for the automotive sector, as a producer of materials used in emission-control catalysis and aluminum brazing, and for the electronics industry, with cleaning and polishing materials for semiconductors. In our La Rochelle, France, plant, we are developing a European rare earths hub for a permanent magnets value chain to support Europe's self-sufficiency in its transition to vehicle electrification, wind energy, and digitalization.

Coatis €0.6bn Underlying net sales

— Solvay provides phenols and derivatives, polyamide derivatives, high-performance and bio-based solvents, and smart, functional and sustainable yarns and polymers, predominantly for the Latin American market. We are a strong regional leader in oxygenated solvents used in paintings, hygiene and home care applications, and for the production of phenol and derivatives, used as intermediates to produce synthetic resins employed in foundries, construction, and abrasives. We are the only producer of adipic acid in Latin America with a low CO₂ footprint in the process, and our polyamide polymers and yarns enable the sustainable fashion industry to reduce its environmental impact.

Engaging stakeholders to drive progress

In 2023, we continued our efforts to deliver on the priorities defined through our sustainability roadmap. We continuously seek to strengthen our bonds with our stakeholders, listening to their expectations and building on their feedback to progress. We are committed to working together to address our collective impact on climate change, natural resources, and quality of life. This includes working with our suppliers to reduce the environmental footprint of our products and committing to foster diversity, equity, and inclusion throughout the company.

Customers	Employees	Investors	Suppliers	Local Communities	Planet (NGOs & Government)	
HOW WE BOUNDED IN 2023			HOW WE BOUNDED IN 2023			
<ul style="list-style-type: none">→ Engaging major customers on common high-materiality topics→ Direct contact with GBU teams (management, industrial, sales, supply chain)→ Rating questionnaires (CDP, EcoVadis)→ Sustainable Portfolio Management (SPM) profiles	<ul style="list-style-type: none">→ Two internal Pulse surveys focused on employee well-being→ Communication between CEO and employees on a regular basis→ Digital communication with employees→ Regular dialogue between managers and employees, e.g., through annual performance and development appraisal→ Labor relations dialogue with employee representative bodies at site, country, European, and Group levels→ Partnership with IndustriAll Global Union	<ul style="list-style-type: none">→ Many investors interactions: Virtual events, roadshows, conferences across Europe and NA→ Participation in diverse shareholder events→ Responding to rating agency questionnaires, credit rating agencies, proxy voting agencies→ Webinar on Soda Ash and Bicarb business (February)→ Specific information shared on the New Solvay remaining activities and financial policies ahead of the partial demerger: Target capital structure and Information document with Proforma accounts for 2020, 2021, and 2022 (June), H1 2023 proforma accounts (August)→ Capital Markets Day on November 13: Unveiling new management, strategy, financial and extra financial targets following the completion of the partial demerger	<ul style="list-style-type: none">→ Supplier Key Account Management→ Supplier commitment to Supplier Code of Business Integrity→ Corporate Social Responsibility questionnaire→ Third-party assessments through EcoVadis and Together for Sustainability (TfS)→ Engaging suppliers to reduce value chain emissions through several initiatives	<ul style="list-style-type: none">→ Engagement at site level through the STAR Factory project and our sustainability initiatives (biodiversity, DEI), developing and managing relationships with local stakeholders→ Partnership with Wildlife Habitat Council	<ul style="list-style-type: none">→ Constructive dialogue with public authorities on issues of legitimate interest to Solvay→ Participation in global and regional trade associations (ICCA, BusinessEurope, CEFIC) and scientific organizations (IUCN, SETAC)	
HIGH MATERIALITY ASPECTS			HIGH MATERIALITY ASPECTS			
<ul style="list-style-type: none">→ Product design and life cycle management→ Hazardous materials→ Product quality and safety→ Business ethics→ Greenhouse gas emissions	<ul style="list-style-type: none">→ Employee health and safety→ Inclusion and diversity→ Employee engagement	<ul style="list-style-type: none">→ Labor practices→ Human rights & community relations	<ul style="list-style-type: none">→ All high-materiality aspects	<ul style="list-style-type: none">→ Management of the legal, ethics and regulatory framework→ Human rights & community relations→ Business ethics	<ul style="list-style-type: none">→ Air quality→ Water and wastewater→ Waste→ Hazardous materials→ Biodiversity→ Critical incident risk management→ Human rights & community relations	<ul style="list-style-type: none">→ All high-materiality aspects
OUR STAKEHOLDERS' EXPECTATIONS			STAKEHOLDERS' EXPECTATIONS			
<ul style="list-style-type: none">→ Increasing number of customers assessing Solvay's performance through EcoVadis, CDP, or specific questionnaires, confirming focus on risks and opportunities in supply chain→ Customers want us to help them reduce their Scope 3	<ul style="list-style-type: none">→ Management of the partial demerger project and transition to the new Solvay company→ Well-being at work→ Impact of inflation on well-being	<ul style="list-style-type: none">→ Consistent financial performance and solid cash flow generation, to sustain dividend policy→ Focus on long-term value creation→ Necessity to make the energy transition and phase out coal	<ul style="list-style-type: none">→ Increased collaboration on goal setting, strategic thinking and sustainability	<ul style="list-style-type: none">→ Contribution to local material topics→ Sensitivity to local environmental and social issues	<ul style="list-style-type: none">→ Acceleration of actions to reduce greenhouse gas emissions and address climate change→ Confirmation of UN SDGs as reference for sustainability priorities at planetary scale	
OUR RESPONSES			OUR RESPONSES			
<ul style="list-style-type: none">→ >200 customers require Solvay's EcoVadis evaluation→ Solvay is in the top 6% of companies assessed by EcoVadis in the chemical industry→ Confirmation of our goal to reduce Scope 1 and 2 by 30% by 2030→ Our process innovations like e.Solvay and circular silica help customers to reduce their environmental footprint and facilitate a circular economy respectively	<ul style="list-style-type: none">→ Diversity, Equity, Inclusion (DEI): 2023 achievements include assessing and closing gender pay gaps; a roadmap to improve inclusion for people with disabilities; mentoring actions and inclusive leadership team sessions.→ Solvay joined the UN Living Wage initiative and committed to ensure a fair living wage to 100% workforce by 2026 and to close gaps before 2030. Pilots launched in the UK, the US, and China (16% of employees)→ Two Solvay plants (Portugal and Brazil) awarded Great Place to Work®→ 14 training hours per employee in average→ 100% employees covered by collective agreement→ Regular discussion between the management and both the Solvay Global Forum (SGF) and the European Works Council (EWC) on the partial demerger project	<ul style="list-style-type: none">→ Strong free cash flow performance in 2023→ Dividend of €2.43 for Solvay→ Ambitious 2028 financial objectives including gross savings of €300M by 2028→ Acceleration of our transformation program to deliver savings while enhancing the competitiveness and sustainability of our plants and processes→ Confirmation of carbon neutrality by 2050 and of our Scope 1, 2, and 3 goals	<ul style="list-style-type: none">→ 1,600 suppliers assessed via EcoVadis TfS Audit Program→ Collaboration with our suppliers to collect data on the product carbon footprint (PCF) of the raw materials they supply to us: >50% of the PCF coverage of our raw materials collected→ Partnering with industry leaders to develop the next generation of product carbon footprint (PCF) assessments and accelerate transparency in the value chain with customers and suppliers. Examples include initiative from Together for Sustainability (TfS).	<ul style="list-style-type: none">→ Plants are implementing initiatives to reduce pressure on biodiversity and address water scarcity→ Partneship with the CERN aimed at igniting a passion for STEM among younger generation→ Supporting the XperiLab project that promotes science in schools with the help of its mobile laboratory	<ul style="list-style-type: none">→ Confirmation of SDGs where Solvay can have most impact across the value chain:<ul style="list-style-type: none">→ SDGs 7, 13, 14 & 15 on Climate;→ SDG 12 on Resources;→ SDGs 3, 6, 8 & 17 on Better Life→ Carbon neutrality by 2050 confirmed as a key objective→ Six goals defined through our new Solvay's sustainability roadmap→ Confirmation of our 2030 objectives to reduce Scope 1 and 2 emissions by 30% and Scope 3 emissions by 20%	
OUR CHALLENGES			OUR CHALLENGES			
<ul style="list-style-type: none">→ Continuous process to improve our score with EcoVadis→ Reducing Scope 3 emissions linked to raw materials and processing, use, and end of life of sold products	<ul style="list-style-type: none">→ DEI: Gender parity objective in mid and senior management→ Talent recruitment	<ul style="list-style-type: none">→ Realize the energy transition to reduce our impact on the environment and sustain the competitiveness of our plants→ Challenging macro-environment in key markets→ Uncertain geo-political environment	<ul style="list-style-type: none">→ Mitigate CSR risks in our supply chain through due diligence and traceability→ Reduce Scope 3 greenhouse gas emissions linked to raw material extraction and processing	<ul style="list-style-type: none">→ Sensitive handling of social media, which can make a local issue global→ Controversies related to effluents or emissions→ Increased sensitivity to potential exposure to substances of concern	<ul style="list-style-type: none">→ Our sustainability objectives→ Carbon neutrality before 2050, Scope 1 and 2→ Scope 3 GHG emissions reduction	

Ratings

Solvay is committed to achieving strong ratings in both financial and sustainability indexes to maintain our stakeholders' trust. Agency feedback has a real impact on our priorities, as it helps us to better understand our stakeholders' key concerns and is an invaluable measurement of our strengths as well as areas where we need to improve.

In previous years, we have focused our action plans on addressing the common strengths and weaknesses identified by the ratings agencies. This allowed us to achieve results in the top quartile, and sometimes even the top ten. However, questionnaires are evolving and agencies are now sometimes assessing the same dimensions differently. This means, for example, that while some ratings agencies identify "green sales" as a strength for Solvay, based on the use of our Sustainable Portfolio Management methodology, others identify it as a weakness because of our limited use of bio-sourced raw materials.

Despite these challenges, we continue to take comments from ratings agencies very seriously. This includes addressing operational eco-efficiency, the need to reduce emissions while monitoring our impact on biodiversity and on the entire value chain. We have developed an ESG risk management

approach for our supply chain, to address human rights and environmental impacts across our value chain, and we are implementing specific actions, among others, with our suppliers.

Solvay continues its upward trajectory with a C+ grade with ChemScore, demonstrating considerable progress over the past four years. We improved in circular topics and controversies but not yet as much on reducing hazardous substances to further improve our score. We are addressing that topic thanks to extensive assessments, such as life cycle assessments and intrinsic hazard evaluations, and we expect to see a positive impact in 2024.

We are also performing gap analysis with the rating agencies to better understand our areas of improvement and to implement actions and initiatives accordingly.

OUR MAIN INDEXES¹

MSCI²

A (scale AAA to CCC) in the MSCI ESG Ratings assessment.
In the **top 15%** in chemicals



Ecovadis

70/100
In the **top 6%** in our category



CDP³

A- in the 2023 Climate Change questionnaire (from F to A).
Among the **top 8%** assessed for supplier engagement on climate change



Sustainalytics

24
Solvay is rated
"Medium ESG Risk"



Chemscore

C+
In the **top 6%** in our category



Vigeo eiris

65/100



¹. Last updated in March 2024. ². MSCI ESG Research provides MSCI ESG Ratings on global public and a few private companies on a scale of AAA (leader) to CCC (laggard), according to exposure to industry-specific ESG risks and the ability to manage these risks relative to peers. ³. An international organization, CDP analyzes how companies integrate climate change into their strategies.

04 PERFORMANCE

68 1. Overview of the consolidated results

68 Financial figures

69 Extra-financial figures

70 2. Preparation background

70 2.1. Comparability of results & reconciliation of underlying Income Statement indicators

70 2.2. Alternative performance metrics (APM)

70 2.3. Description of the operational segments

71 3. Underlying Group figures

71 Note P1: Net sales

71 Note P2: Underlying raw materials & energy costs

72 Note P3: Underlying EBITDA

72 Note P4: Underlying depreciation & amortization

72 Note P5: Underlying net financial charges

73 Note P6: Underlying income taxes

73 Note P7: Underlying profit from discontinued operations

74 Note P8: Capex

75 Note P9: Free Cash Flow

76 Note P10: Net working capital

76 Note P11: Underlying net debt

77 Note P12: Provisions

77 Note P13: ROCE

78 4. Underlying figures per segment

78 Segment overview

78 Note P14: Basic Chemicals

79 Note P15: Performance Chemicals

80 Note P16: Corporate & Business Services

80 5. Reconciliation of underlying and IFRS measures

81 6. Notes to the figures per share

81 Note P17: Earnings per share

81 Note P18: Dividend

81 7. Outlook

Performance

Note to the Performance section: The comparative figures have been restated in accordance with IFRS 5.

1. OVERVIEW OF THE CONSOLIDATED RESULTS

Financial figures

FY key figures	Notes	IFRS			Underlying		
(in € million)		FY 2023	FY 2022	% YoY	FY 2023	FY 2022	% YoY
Net sales	P1	4,880	5,539	-11.9%	4,880	5,539	-11.9%
Net operating costs, excluding depreciation & amortization	P2	-4,178	-4,117	-1.5%	-3,633	-4,181	+13.1%
EBITDA	P3	701	1,422	-50.7%	1,246	1,359	-8.3%
EBITDA margin					25.5%	24.5%	+1.0pp
Depreciation, amortization & impairments	P4	-423	-301	-40.4%	-321	-321	+0.1%
EBIT		278	1,121	-75.2%	926	1,038	-10.8%
Net financial charges	P5	-98	11	n.m.	-140	-121	-16.0%
Income tax expenses	P6	-208	-228	+8.6%	-198	-177	-11.7%
Tax rate	P6				26.7%	22.4%	+4.3pp
Profit from continuing operations		-28	904	n.m.	588	740	-20.6%
Profit from discontinued operations	P7	2,132	1,030	n.m.	842	1,032	-18.4%
Profit / (loss) for the period		2,105	1,934	+8.8%	1,430	1,772	-19.3%
(Profit) / loss attributable to non-controlling interests		-12	-29	-58.7%	-13	-29	-56.4%
Profit / (loss) attributable to Solvay shareholders		2,093	1,905	+9.8%	1,417	1,743	-18.7%
Basic earnings per share (in €)	P24	20.09	18.37	+9.4%	13.61	16.80	-19.0%
of which from continuing operations	P24	-0.36	8.58	n.m.	5.55	6.99	-20.6%
Dividend [1]	P25	2.43	4.05	-40.0%	2.43	4.05	-40.0%
Capex in continuing operations	P8				450	380	+18.4%
Cash conversion (continuing operations)	P8				63.9%	72.0%	-8.1%
FCF to Solvay shareholders from continuing operations	P9				561	479	+17.3%
FCF to Solvay shareholders	P9				1,042	1,094	-4.8%
FCF conversion ratio (LTM, continuing operations)					45.4%	36.5%	+8.9pp
Net working capital [2]	P10	509	1,969		509	1,969	
Net working capital / quarterly total sales	P10				9.5%	12.6%	
Net financial debt [3]	P11				1,489	3,591	-58.5%
Underlying leverage ratio	P11				1.2	1.1	+7.5%
ROCE (continuing operations)					20.4%	22.9%	-2.5pp

1) Recommended dividend for 2023.
2) Net working capital/sales ratio is the average of the quarterly net working capital/sales ratios.
3) Underlying net debt includes the perpetual hybrids bonds for 2022, accounted for as equity under IFRS.

Extra-financial figures

In 2020, Solvay embarked on a sustainability journey captured in the Solvay One Planet roadmap, which was an integral element of its G.R.O.W. strategy and company Purpose. Structured around the three major categories of climate, resources and better life, Solvay One Planet was a roadmap towards a sustainable future that provides shared value for all. The 2023 achievements on the 10 targets of this One Planet Roadmap can be found on Solvay’s website.

Following the Partial Demerger on December 9, 2023, Solvay has re-endorsed the One Planet targets that are appropriate to its activities, and is currently reviewing and designing an updated ESG roadmap that will be shared later in 2024.

The table below provides an update on Solvay’s progress in 2023 on the six KPIs that were presented during the Capital Market Day on November 13, 2023.

Climate	2023	2022	2021	Progress vs 2021	Comment	2030 target
Greenhouse gas emissions (scopes 1&2) (Mt)	7.3	8.5	9.0	-19%	-19% out of which savings notably in Rheinberg, Devnya and Green River	-30 vs 2021
Greenhouse gas emissions (scope 3) (Mt) Focus 5 categories (a)	12.4	12.6 (b)	14.7 (b)	-16%	-16% for the focus 5 categories and -19% for the whole scope 3	-20 vs 2021
Solid fuels (Petajoules) (c)	24.4	28.3	27.2	-10%	Substitution of coal in Rheinberg, Devnya and Green River	Thermal coal phase out when renewable alternatives exist
Better life	2023	2022	2021	Progress vs 2021	Comment	target
Safety (Reportable Injury and Illness rate - RIIR) (d)	0.27	0.27	0.34	-21%	Step change achieved in 2022 and confirmed in 2023 with leaders back to the field after Covid19 sanitary crisis	Zero accident
Diversity (% of women in middle/senior management) (e)	26.3	28.8	28.0	-1.7pp	Mid and senior management reshuffling after Syensqo’s spin-offs	Gender parity in 10 years
Living Wage initiative (f)	New commitment				Positive kick off in 2023 with pilots conducted in the US, UK and China.	Living wage for 100% of the workforce by 2026

(a) scope 3 emissions focus 5 categories are “Purchased goods and services”, “Fuel and energy related activities”, “processing of sold products”, “Use of sold products” and “End-of-life treatment of sold products”. Total Scope 3 greenhouse gas emissions indicator is in the scope of the reasonable assurance report from our independent auditor while Scope 3 “focus 5” categories greenhouse gas emissions indicator is not in the scope of our Independent auditor.
(b) 2022 and 2021 Scope 3 emissions focus 5 categories adjusted with 2023 new methodology.
(c) Includes coal and petcoke used in energy production. Coke and anthracite used in the soda ash production process are not included.
(d) The definition of the indicator changed in 2020: RIIR replaced MTAR - RIIR: (Reportable Injury & Illness rate): number of reportable injury or illness per 200,000 work hours. Scope: Employees and contractors.
(e) Management categories are defined on the basis of the Hay Job Evaluation Methodology. Middle and senior management levels refer to the entire active internal workforce having Hay points above 530 and 2022 is out of the audit scope.
(f) This KPI is out of the scope of the audit.

Climate

In November 2023, Solvay renewed its ambition to become carbon neutral by 2050 and confirmed its mid-term targets of -30% for scope 1 & 2, and -20% for scope 3 greenhouse gas emissions by 2030 vs. 2021 baseline.

Scope 1 & 2 emissions decreased by 1.7 Mt CO2eq (-19%) as compared to 2021 and 1.2 Mt CO2eq as compared to 2022 which can be explained by lower activity (0.8 Mt CO2eq), new GHG reduction projects (0.3 Mt CO2eq), including biomass consumption in Devnya in substitution to coal, better mine gas usage in Green River and other energy efficiency projects. Building on the 5% structural savings achieved from 2018 to 2021, Solvay launched new projects that will deliver additional 20% emission reductions by 2025, with plans to save another 10% by 2030.

Coal phase-out was completed in Green River, U.S. in Q1 2024, and is underway in Rheinberg, Germany and Dombasle, France. Plants in Devnya, Bulgaria and Torrelavega, Spain have started their journey with partial introduction of biomass co-firing. The shift towards more renewable energy sources is also advancing with for instance the switch to 100% wind power in Voikkaa, Finland starting 2023.

In addition, the roll-out of the STAR Factory program which started in 2022 led to an acceleration of energy efficiency initiatives through deployment on about half of the sites. Thanks to a standardized methodology, 60+ projects have been implemented saving fossil-based heat and electricity. Electricity consumptions have been reduced thanks to process control actions and installation of variable frequency drives.

Solvay’s scope 3 emissions (focus 5 categories) decreased by 16% versus 2021. Solvay is collaborating with its most GHG-emitting raw materials suppliers to track and to improve its purchased goods and services emissions (category 1). The Group already mapped a total of more than 50% of the product carbon footprint (PCF) coverage of its raw materials. Solvay also aims at reducing its employees scope 3 emissions linked to business travels (category 6). Concretely, as from January 2023, an internal tax – based on the travel footprint calculated at €100 per ton of CO2 – is charged to every business. It will finance a Travel Carbon Fund with the aim of sponsoring sustainability projects with a carbon-offset focus wherever feasible.

Better Life

In 2023, the rate of reportable injuries and illnesses remained stable versus 2022 at 0.27. This performance derives from the safety culture deployed across the Group with interactive safety dialogues, near misses reporting, Solvay Life Saving Rules improvement initiatives and audit findings.

In 2023, Solvay progressed in its Solvay One Dignity program launched in 2021. The Group took concrete actions to strengthen DEI (diversity, equity and inclusion) within its company's culture and to embed it in its day-to-day activities with a clear focus on leaders and employees. Solvay has nine Employee Resource Groups (ERGs) that encourage employees to recognize and celebrate diversity, which is a critical component to guide the DEI journey. With the spin-off of Syensqo, the population of mid and senior management at Solvay shrank by -4.3% and resulted in a drop of the proportion of women in mid and senior management from 28.8% (end of 2022) to 26.3% (end of 2023) without changing Solvay’s dedication to gender parity within 10 years.

In 2023, the Group joined the UN Global Compact living wage action, part of its Forward Faster initiative. As a result, Solvay is undertaking living wage equity with the objective to close any potential gaps by 2026. The 9,000+ Solvay employees will receive a fair living wage by 2026, meaning a sufficient salary to afford a standard of living for each employee even if they should become the single income earner of their family. The Group is partnering with the Fair Wage Network, an independent organization that provides their expertise to deploy living wage assessments and to improve fair wage practices. The first assessments took place in China, the US and the UK, which represents 16% of Solvay’s workforce. As part of this step towards securing a more equitable workplace, Solvay will report on the fair living wage initiative progress annually to the UN Global Compact.

More information will be available in the Solvay Annual Integrated Report to be published in April 2024.

2. PREPARATION BACKGROUND

2.1. Comparability of results & reconciliation of underlying Income Statement indicators

In addition to IFRS accounts, Solvay also presents underlying Income Statement performance indicators to provide a more consistent and comparable indication of Solvay’s economic performance. These figures adjust IFRS figures for the non-cash Purchase Price Allocation (PPA) accounting impacts related to acquisitions, for the coupons of perpetual hybrid bonds classified as equity under IFRS but treated as debt in the underlying statements, and for other elements to generate a measure that avoids distortion and facilitates the appreciation of performance and comparability of results over time.

2.2. Alternative performance metric (APM)

Solvay measures its financial performance using alternative performance metrics, which can be found below. Solvay believes that these measurements are useful for analyzing and explaining changes and trends in its historical results of operations, as they allow performance to be compared on a consistent basis. Definitions of the different metrics presented here are included in the glossary at the end of this financial report.

2.3. Description of the operational segments

Following the Partial Demerger of the Specialty business on December 9, 2023, Solvay restructured its operating segments to better align with the Group’s strategy and is organized in the following operating segments:

- Basic Chemicals host chemical intermediate businesses focused on mature and resilient markets. Solvay is a world leader in soda ash and peroxides and major markets served include building and construction, consumer goods and food.
- Performance Chemicals offer a unique formulation & application expertise through customized specialty formulations. Its Silica, Coatis and Special Chem businesses are also high quality assets with strong positions in their markets.
- Corporate comprises corporate and other business services, such as Group research & innovation.

3. UNDERLYING GROUP FIGURES

Note P1: Net sales

Net sales of €4,880 million for the full year 2023 were lower by -11.9% versus 2022 (-12.6% organically) primarily due to lower volumes (-14.8%), as a result of softer demand across all end markets, while prices were slightly up.

Net sales - in € million	
FY 2022	5,539
Scope	+77
Forex conversion	-37
Volume & mix	-820
Price	+120
FY 2023	4,880

SALES BY END-MARKET

2023 sales by end-markets (in %)	Basic Chemicals	Performance Chemicals	Solvay
Automotive	0%	41%	18%
Electronics	0%	9%	4%
Agro, feed and food	24%	7%	17%
Resources and environment	15%	4%	10%
Consumer goods, healthcare and HPC	21%	12%	17%
Building and others	14%	11%	13%
Industrial applications and chemical industry	26%	15%	22%

Note P2: Underlying raw materials & energy costs

The overall raw materials expense of the Group amounted to circa €1.0 billion in 2023 (vs. €1.4 billion in 2022). The raw materials expense can be split into several categories: minerals derivatives for 32% (e.g., sodium silicate, calcium fluoride, sodium hydroxide...), crude oil derivatives for 27%, natural gas derivatives circa 22% and others for 19%.

Net energy costs represented around €0.8 billion (vs €1.3 billion in 2022). The distribution per region is the following: in Europe (70%) followed by the Americas (21%), and Asia and the rest of the world (8%). The main energy sources expense are natural gas for 33% (vs 44% in 2022), coke, anthracite, petcoke and coal for 39% (vs 29% in 2022), electricity for 21% (vs 21% in 2022), steam, hydrogen and biomass for 6% (vs 5% in 2022).

More information on energy efficiency is available in the Extra-financial section of this Annual Report 4.2. Energy.

Note P3: Underlying EBITDA

Underlying EBITDA evolution

Underlying EBITDA - in € million		
FY 2022		1,359
Scope		-110
Forex conversion		-5
Basic Chemicals		+65
Performance Chemicals		-14
Corporate		-48
FY 2023		1,246
Underlying EBITDA - in € million		
FY 2022		1,359
Scope		-110
Forex conversion		-5
Volume & mix		-324
Net pricing		+308
Fixed costs		+18
Other		-
FY 2023		1,246

Underlying EBITDA of €1,246 million in 2023 was down -8.3%, including the impact from the divestment of RusVinyl in Q1 2023, and essentially flat organically (+0.2%), with lower volumes being offset by increased Net Pricing and lower fixed costs from strong costs discipline. Overall, the EBITDA margin increased by +1.0pp to a record +25.5%.

Note P4: Underlying depreciation & amortization

Amortization and depreciation & impairment charges were €321 million in 2023, equal to €321 million in 2022.

Note P5: Underlying net financial charges

Net financial charges		Underlying	
(in € million)		FY 2023	FY 2022
Cost of borrowings		-63	-43
Interest on loans and short term deposits		36	16
Other gains and losses on net indebtedness		2	27
Net cost of borrowings	a	-25	-
Coupons on perpetual hybrid bonds	b	-70	-82
Interests and realized foreign exchange gains (losses) on the RusVinyl joint venture	c	-	-15
Cost of discounting provisions	d	-45	-23
Result from equity instruments measured at fair value	e	-	-
Net financial charges	f = a+b+c+d+e	-140	-121

The variance in the underlying net financial charges is mainly explained by the increase in the cost of borrowing and by the higher cost of discounting provisions.

Note P6: Underlying income taxes

(in € million)		FY 2023	FY 2022
Profit / (loss) for the period before taxes	a	786	917
Earnings from associates and joint ventures	b	46	143
Interests and realized foreign exchange gains (losses) on the RusVinyl joint venture	c	-	-15
Income taxes	d	-198	-177
Underlying tax rate	e = -d/(a-b-c)	26.7%	22.4%

The 4.3 percentage point increase is mainly due to the change in taxable profit by country following the Partial Demerger.

Note P7: Underlying profit from discontinued operations

The profit from discontinued operations in the consolidated income statement is analyzed as follows (2023 – from January 1, 2023, to December 8, 2023).

(in € million)	2023	2022
Sales	6,656	8,092
of which revenue from non-core activities	167	205
of which net sales	6,489	7,887
Cost of goods sold	-4,357	-5,489
Gross margin	2,299	2,604
Commercial costs	-272	-222
Administrative costs	-466	-617
Research and development costs	-318	-312
Other operating gains / (losses)	-132	-152
Earnings from associates and joint ventures	18	18
Results from portfolio management and major restructuring	-53	-37
Results from legacy remediation and major litigations	-274	-182
EBIT	802	1,100
Cost of borrowings	-54	-63
Interest on loans and short term deposits	14	1
Other gains and (losses) on net indebtedness	-22	-24
Cost of discounting provisions	-20	18
Result from equity instruments measured at fair value	3	-13
Profit/(loss) for the year before taxes	723	1,019
Income taxes	-242	11
Profit for the year from discontinued operations	481	1,029
Gain on Partial Demerger according to IFRIC17	1,651	0
Profit for the year from discontinued operations	2,132	1,029

Note P8: Capex

<i>(in € million)</i>		FY 2023	FY 2022
Acquisition (-) of tangible assets	a	-967	-815
of which capital expenditures required for the Partial Demerger and excluded from Free Cash Flow	b	57	-
Acquisition (-) of intangible assets	c	-97	-94
Payment of lease liabilities	d	-112	-113
Capex	e = a+b+c+d	-1,119	-1,022
Capex in discontinued operations		-669	-642
Capex in continuing operations	f	-450	-380
Basic Chemicals		-294	-235
Performance Chemicals		-121	-102
Corporate		-35	-43
Underlying EBITDA	g	1,246	1,359
Basic Chemicals		916	859
Performance Chemicals		405	414
Corporate		-75	86
Cash conversion (continuing operations)	h = (g+f)/g	63.9%	72.0%
Basic Chemicals		67.9%	72.7%
Performance Chemicals		70.2%	75.4%

Capex in continuing operations was €450 million in 2023, an increase of 18% compared to €380 million in 2022.

Among the major Capex projects for the year was the soda ash capacity expansion at our US facility in Green River, Wyoming.

Note P9: Free Cash Flow

Free Cash Flow (FCF)			FY 2023	FY 2022
<i>(in € million)</i>				
Cash flow from operating activities	a		1,911	2,006
of which voluntary pension contributions	b		-116	-155
of which cash flow related to internal portfolio management and excluded from Free Cash Flow	c		-270	-67
Cash flow from investing activities	d		-1,792	-831
of which capital expenditures required for the Partial Demerger and excluded from Free Cash Flow	e		-57	-
Acquisition (-) of subsidiaries	f		-2	-
Acquisition (-) of investments – Other	g		-12	-14
Loans to associates and non-consolidated companies	h		-4	-23
Sale (+) of subsidiaries and investments	i		-718	94
Recognition of factored receivables	j		-	-26
Payment of lease liabilities	k		-112	-113
FCF		l = a-b-c+d-e-f-g-h-i-j+k	1,187	1,255
FCF from discontinued operations	m		528	684
FCF from continuing operations		n = l-m	659	571
Net interests received/(paid) from continuing operations	o		1	-1
Coupons paid on perpetual hybrid bonds	p		-95	-82
Dividends paid to non-controlling interests (continuing operations)	q		-4	-9
FCF to Solvay shareholders		r = l+o+p+q	1,042	1,094
FCF to Solvay shareholders from discontinued operations	s		480	615
FCF to Solvay shareholders from continuing operations		t = r-s	561	479
FCF to Solvay shareholders from continuing operations (LTM)	u		561	479
Dividends paid to non-controlling interests (continuing operations) from continuing operations (LTM)	v		-4	-17
Underlying EBITDA (LTM)	w		1,246	1,359
FCF conversion ratio (LTM, continuing operations)		x = (u-v)/w	45.4%	36.5%

Free cash flow to shareholders from continuing operations amounted to €561 million in 2023 (+17.3% higher than in 2022) thanks to the solid EBITDA performance. Additionally, the softer demand around year end, combined with the effects of the simplification of our portfolio (spin-off of Syensqo activities and phasing out of our energy and thermal insulation businesses) led to a positive upside in working capital variation of €+88 million.

Note P10: Net working capital

(in € million)		December 31, 2023	December 31, 2022
Inventories	a	642	2,109
Trade receivables	b	840	2,026
Other current receivables	c	462	1,629
Trade payables	d	-850	-2,296
Other current liabilities	e	-585	-1,499
Net working capital	f = a+b+c+d+e	509	1,969
Quarterly total sales	g	1,341	3,907
Annualized quarterly total sales	h = 4*g	5,365	15,626
Net working capital / quarterly total sales	i = f / h	9.5%	12.6%

Net working capital over sales improved to 9.5% in 2023, due to softer demand around year end, combined with the effects of the simplification of our portfolio (spin-off of Syensqo activities and phasing out of our energy and thermal insulation businesses).

Note P11: Underlying net debt

(in € million)		December 31, 2023	December 31, 2022
Non-current financial debt	a	-1,981	-2,450
Current financial debt	b	-211	-510
IFRS gross debt	c = a+b	-2,192	-2,959
Underlying gross debt	d = c+h	-2,192	-4,759
Other financial instruments (current + non-current)	e	118	236
Cash and cash equivalents	f	584	932
Total cash and cash equivalents	g = e+f	703	1,168
IFRS net debt	i = c+g	-1,489	-1,791
Perpetual hybrid bonds	h	-	-1,800
Underlying net debt	j = i+h	-1,489	-3,591
Underlying EBITDA (LTM)	k	1,246	3,229
Underlying leverage ratio	l = -j/k	1.2	1.1

Underlying net financial debt was €1.5 billion at the end of 2023. The capital structure of Solvay after the completion of the Partial Demerger is generally in line with the target capital structure announced in June 2023. This will allow Solvay to deploy its strategy in the coming years, while upholding its commitment regarding dividend payments. The underlying leverage ratio was 1.2x at the end of 2023.

Note P12: Provisions

Provisions at the end of 2022 (in € million)		-2,097
Payments		304
Net new provisions		-644
Unwinding of provisions		-118
Additional voluntary pensions contributions		116
Asset return		66
Remeasurements		-173
Separation project, changes in scope and other		901
Provisions at the end of 2023		-1,645

Provisions amounted to €1.6 billion at the end of 2023, and included €793 million of provisions relating to employee benefits (primarily pensions) and €506 million of environmental provisions.

Note P13: ROCE

(in € million)		2023 as calculated	2022 as calculated
EBIT (LTM)	a	926	1,038
Accounting impact from EUAs and amortization and depreciation of purchase price allocation (PPA) from acquisitions	b	-7	-8
Numerator	c = a+b	918	1,030
WC industrial	d	533	381
WC other	e	99	172
Property, plant and equipment	f	2,152	2,092
Intangible assets	g	216	232
Right-of-use assets	h	273	272
Investments in associates and joint ventures	i	417	517
Other investments	j	32	35
Goodwill	k	783	802
Denominator	l = d+e+f+g+h+i+j+k	4,506	4,503
ROCE	m = c/l	20.4%	22.9%

ROCE was 20.4% in 2023, -2.5pp compared to 2022 as a result of lower profit.

4. UNDERLYING FIGURES PER SEGMENT

SEGMENT OVERVIEW

<i>(in € million)</i>	FY 2023	FY 2022	% YoY	% Organic
Net sales	4,880	5,539	-11.9%	-12.6%
Basic Chemicals	2,726	2,994	-9.0%	-9.4%
Soda Ash & Derivatives	2,093	2,221	-5.8%	-6.8%
Peroxides	633	773	-18.1%	-16.9%
Performance Chemicals	2,148	2,542	-15.5%	-16.4%
Silica	583	631	-7.7%	-6.8%
Coatis	646	870	-25.8%	-29.0%
Special Chem	919	1,040	-11.7%	-11.1%
Corporate	6	4	n.m.	n.m
EBITDA	1,246	1,359	-8.3%	+0.2%
Basic Chemicals	916	859	+6.7%	+7.6%
Performance Chemicals	405	414	-2.1%	-3.3%
Corporate	-75	86	n.m.	n.m
EBITDA margin	25.5%	24.5%	+1.0pp	-
Basic Chemicals	33.6%	28.7%	+4.9pp	-
Performance Chemicals	18.9%	16.3%	+2.6pp	-
Capex in continuing operations	450	380	+18.4%	-
Basic Chemicals	294	235	+25.4%	-
Performance Chemicals	121	102	+18.4%	-
Corporate	35	43	-19.7%	-
Cash conversion (continuing operations)	63.9%	72.0%	-8.1pp	-
Basic Chemicals	67.9%	72.7%	-4.8pp	-
Performance Chemicals	70.2%	75.4%	-5.1pp	-

Note P14: Basic Chemicals

<i>(in € million)</i>	FY 2023	FY 2022	% YoY	% Organic
Net sales	2,726	2,994	-9.0%	-9.4%
Soda Ash & Derivatives	2,093	2,221	-5.8%	-6.8%
Peroxides	633	773	-18.1%	-16.9%
EBITDA	916	859	+6.7%	+7.6%
EBITDA margin	33.6%	28.7%	+4.9pp	-
Capex in continuing operations	294	235	+25.4%	-
Cash conversion	67.9%	72.7%	-4.8pp	-

NET SALES BRIDGE

<i>(in € million)</i>	
FY 2022	2,994
Scope	42
Forex conversion	-28
Volume and Mix	-422
Price	140
2023	2,726

Basic Chemicals sales in the full year 2023 were down -9.0% (-9.4% organically) compared to 2022, mainly due to lower volumes (-14.1%) while pricing was up (+4.7%). Full year EBITDA for the segment was up +6.7% (+7.6% organically) thanks to strong Net Pricing more than offsetting the negative impact from lower volumes. The EBITDA margin increased by +4.9pp to 33.6%.

Soda Ash & Derivatives sales for 2023 were lower by -5.8% (-6.8% organically), with continued low demand for soda ash in both flat glass and container glass applications, while bicarbonate volumes were also down. This was partially offset by higher prices especially in Europe.

Peroxides sales decreased by -18.1% (-16.9% organically) in 2023, driven by lower volumes from reduced demand mostly in merchant markets, particularly in pulp and paper.

Note P15: Performance Chemicals

<i>(in € million)</i>	FY 2023	FY 2022	% YoY	% Organic
Net sales	2,148	2,542	-15.5%	-16.4%
Silica	583	631	-7.7%	-6.8%
Coatis	646	870	-25.8%	-29.0%
Special Chem	919	1,040	-11.7%	-11.1%
EBITDA	405	414	-2.1%	-3.3%
EBITDA margin	18.9%	16.3%	+2.6pp	-
Capex in continuing operations	121	102	+18.4%	-
Cash conversion	70.2%	75.4%	-5.1pp	-

NET SALES BRIDGE

<i>(in € million)</i>	
FY 2022	2,542
Scope	35
Forex conversion	-9
Volume & mix	-401
Price	-21
FY 2023	2,148

Performance Chemicals sales for the full year 2023 were down -15.5% (-16.4% organically) compared to 2022, entirely from lower volumes (-15.8%) while prices were essentially flat (-0.8%). The EBITDA for the full year was down -2.1% (-3.3% organically), with the drop of volumes not totally offset by higher Net Pricing and positive impact from fixed cost discipline, while the EBITDA margin was up by +2.6pp at 18.9%.

Silica sales for the 2023 year were lower by -7.7% (-6.8% organically), from lower volumes in the tire and consumer and industrial goods markets.

Coatis sales in 2023 were down by -25.8% (-29.0% organically) from lower volumes and pricing in a continued competitive environment, especially in the phenol and derivatives market.

Special Chem sales were lower by -11.7% (-11.1% organically), from lower volumes in most end markets.

Note P16: Corporate & Business services

(in € million)	FY 2023	FY 2022	% YoY	% Organic
Net sales	6	4	n.m.	n.m.
EBITDA	-75	86	n.m.	n.m.
Capex in continuing operations	35	43	-19.7%	-

Corporate activities include the RusVinyl joint venture activities for 2022, which were divested in Q1 2023.

For the full year 2023, EBITDA was €-75 million, €-161 million lower (€-48 million organically, i.e. excluding the RusVinyl impact) compared to 2022, the difference being explained by various impacts relating to energy activities.

5. RECONCILIATION OF UNDERLYING AND IFRS MEASURES

In addition to IFRS accounts, Solvay also presents underlying Income Statement performance indicators to provide a more consistent and comparable indication of Solvay's economic performance. These figures adjust IFRS figures for the non-cash Purchase Price Allocation (PPA) accounting impacts related to acquisitions, for the coupons of perpetual hybrid bonds classified as equity under IFRS but treated as debt in the underlying statements, and for other elements to generate a measure that avoids distortion and facilitates the appreciation of performance and comparability of results over time.

EBITDA on an IFRS basis totaled €701 million, versus €1,246 million on an underlying basis. The difference of €545 million is explained by the following adjustments to IFRS results, which are done to improve the comparability of underlying results:

- €455 million to adjust for the “Result from portfolio management and major restructuring” (excluding depreciation, amortization and impairment elements), including the loss on RusVinyl disposal and the restructuring and other costs incurred for the project aimed at the separation of the Group into two independent, publicly listed companies and other restructuring initiatives.
- €50 million to adjust for the “Result from legacy remediation and major litigations”, mainly due to environmental provisions accrued.
- €68 million to adjust for the pure corporate cost related to the project aimed at the separation of the Group into two independent listed companies
- €-21 million to exclude net losses/gains related to the management of the CO2 hedges not accounted for as Cash Flow Hedge, deferred in adjustments until the maturity of the economic hedge
- €-7 million to exclude contribution to equity earnings of RusVinyl, disposed of in Q1 2023.

EBIT on an IFRS basis totaled €278 million, versus €926 million on an underlying basis. The difference of €647 million is explained by the above-mentioned €545 million adjustments at the EBITDA level and €102 million of “Depreciation, amortization & impairments”. The latter consist of:

- €7 million to adjust for the non-cash impact of purchase price allocation (PPA), consisting of amortization charges on intangible assets, which are adjusted in "Other operating gains & losses" for €7 million.
- €95 million to adjust for the impact of impairment of other non-performing assets in “Results from portfolio management and major restructuring”

Net financial charges on an IFRS basis were €-99 million versus €-140 million on an underlying basis. The €-41 million adjustment made to IFRS net financial charges mainly consists of:

- €-70 million reclassification of coupons on perpetual hybrid bonds, which are treated as dividends under IFRS, and as financial charges in underlying results
- €17 million related to the impact of decreasing discount rates on environmental provisions
- €16 million related to costs for the refinancing in the context of the Partial Demerger.

Income taxes on an IFRS basis were €-208 million, versus €-198 million on an underlying basis. The €10 million adjustment mainly relates to the adjustments of the earnings before taxes described above and valuation allowances on deferred tax assets.

Discontinued operations generated €2,132 million profit on an IFRS basis and a profit of €842 million on an underlying basis.

Profit / (loss) attributable to Solvay shareholders was €2,093 million on an IFRS basis and €1,417 million on an underlying basis. The delta of €-676 million reflects the above-mentioned adjustments to EBIT, net financial charges and income taxes.

6. NOTES TO THE FIGURES PER SHARE

Note P17: Earnings per share

Earnings per share	Footnote		
	A	FY 2023	FY 2022
Profit attributable to Solvay share (in € m)			
Underlying profit for the period	a	1,417	1,743
Underlying profit from continuing operations	b	578	725
IFRS profit for the period	c	2,093	1,905
IFRS profit from continuing operations	d	-37	890
Number of shares (in 1,000 shares)			
Issued shares at end of year	e	105,876	105,876
Treasury shares at end of year	f	862	2,107
Outstanding shares at the end of year	g = e-f	105,014	103,769
Average outstanding shares (basic calculation)	h	104,162	103,744
Average outstanding shares (diluted calculation)	i	105,437	104,143
Data per share (in €)			
Underlying profit for the period (basic)	j = a/h	13.61	16.80
Underlying profit from continuing operations (basic)	k = b/h	5.55	6.99
IFRS profit for the period (basic)	l = c/h	20.09	18.37
IFRS profit from continuing operations (basic)	m = d/h	-0.36	8.58
IFRS profit for the period (diluted)	p = c/i	19.85	18.30
IFRS profit from continuing operations (diluted)	q = d/i	-0.35	8.55

Note P18: Dividend

The Board of Directors has decided to propose a total gross dividend of €2.43 per share, subject to shareholders’ approval during the Ordinary General Meeting scheduled for May 28, 2024. If approved and taking into account the interim gross dividend of €1.62 per share paid on January 17, 2024, a final gross dividend of €0.81 per share will be paid on June 5, 2024.

In addition, the Board has confirmed the dividend policy of Solvay as follows:

- “Solvay's policy is to propose a stable or growing dividend to its shareholders. Solvay yearly dividend is paid in two installments:
- the interim dividend (typically 40% of the previous year's total dividend) is announced with the Third Quarter Results and paid in January.
 - the final dividend is announced in February/March, along with the Full Year Results, and is paid, if approved, after the Ordinary General Meeting.”

For over 40 years, the dividend has been stable or has gradually increased, and has never been reduced.

7. OUTLOOK

Across its product portfolio, Solvay expects current demand levels to continue over the next few months and, as such, expects H1 2024 volumes to be broadly in line with H2 2023. At this point, there is little visibility on the second half of the year, however there are signs that the trend in the second half could improve. Solvay expects Soda Ash prices over FY 2024 to be lower than FY 2023, consistent with the current market environment, which will affect the business margin in 2024. Pricing trends across Solvay's other businesses are forecasted to be more resilient year on year.

Lower energy and raw materials prices should offset some of the negative pressure on the topline. More importantly, Solvay has started to implement cost savings initiatives that will start to deliver results in 2024.

For full year 2024, Solvay expects an organic growth of the underlying EBITDA by -10% to -20% versus a high comparison base in 2023, especially in H1. This translates into a range of €925 million to €1,040 million at a 1.10 EUR/USD exchange rate.

The organic growth of the underlying EBITDA is calculated from a 2023 restated figure of €1,154 million (vs a reported figure of €1,246 million), including the following elements:

- Phase-out of the thermal insulation HFCs business: -€54 million
- Phase-out of the third party energy supply activities: -€41 million
- Dis-synergies, net of the "Transition Services Agreement" mark-up: -€12 million
- Change in consolidation method of Solvay (Zhenjiang) Chemicals, part of Peroxides, where Solvay retains 9% ownership resulting in the loss of control due to the Partial Demerger. Impact on the underlying EBITDA: -€8 million
- Change in scope of the APM: as from January 1, 2024, the Group's net sales and underlying EBITDA will include Solvay's share of net sales and underlying EBITDA of Peroxidos do Brasil. Impact on the underlying EBITDA : €+23 million.

Free cash flow to Solvay shareholders from continuing operations is expected to be greater than €260 million, in line with the cash usage prioritization presented during the Capital Market Day in November 2023. It is supported by Solvay's ability to manage its capex and working capital to ensure the financing of its businesses and the payment of dividends while keeping the strength of its balance sheet intact.

Solvay remains fully committed to implement its strategic roadmap and reconfirms its 2028 targets as communicated at the Capital Markets Day of November 2023.

Summary table with Underlying EBITDA and Net Sales impacts:

(in € million)	impact	Underlying EBITDA	Underlying net sales	% organic
2023 underlying figures, as published		1,246	4,880	n.m.
— phase-out thermal insulation business	scope	-54	-107	n.m.
— phase-out third party energy supply activities	scope	-41	N/A	-
— Dis-synergies, net of the "Transition Services Agreement" mark-up	scope	-12	N/A	
— Zhenjiang	scope	-8	-25	
— Peroxidos do Brasil	APM	+23	+163	
2023 underlying figures, new base		1,154	4,911	

In addition, on January 1, 2024, as communicated in Solvay's Capital Market Day presentation on November 13, 2023, the "eH2O2" (electronic-grade hydrogen peroxide) business has been transferred from GBU Special Chem to GBU Peroxides.

05

CORPORATE GOVERNANCE STATEMENT

84	1. Introduction
84	2. Highlights of the year
87	3. Capital, shares and shareholders
91	4. Board of Directors and Board Committees
91	4.1. Board of Directors
99	4.2. Board committees
103	5. Executive Leadership Team (ELT)
106	6. Remuneration report
132	7. Main characteristics of risk management, internal control and internal audit
135	8. External audit
136	9. Deviation from the 2020 Code
136	10. Items to be disclosed pursuant to article 34 of the Belgian Royal Decree of November 14, 2007

Corporate governance statement

1. INTRODUCTION

Solvay SA/NV (“Solvay” or the “Company”) – headquartered in Belgium and listed on Euronext Brussels and Euronext Paris – is committed to upholding the highest level of Belgian governance practices and disclosures. We consistently seek to strengthen our corporate governance practices and disclosures, emphasizing transparency and promoting a culture of sustainable long-term value creation, in line with our Purpose.

Solvay’s Board is responsible for maintaining the Solvay Group’s long-term strategic thinking and for overseeing, challenging and supporting the Executive Leadership Team’s implementation of Solvay’s strategy.

In accordance with Belgian law, Solvay adheres to the principles and provisions of the 2020 Belgian Corporate Governance Code (the “Belgian Governance Code”), which is based on a “comply or explain” principle. The English, French and Dutch versions of the Belgian Governance Code can be found on the website of the Belgian Corporate Governance Committee.

Solvay’s Board has adopted a Corporate Governance Charter (the “Governance Charter”). The Governance Charter was last amended on December 9, 2023 (see section 2.4. below for further details on the latest changes to the Governance Charter) and is available in English, French and Dutch on Solvay’s corporate website. It describes the main aspects of Solvay’s approach to corporate governance, including the governance structure and the internal rules of the Board, the Executive Leadership Team and the Committees set up by the Board.

In addition, Solvay publishes a Corporate Governance Statement in the Annual Integrated Report, which includes the information required by the Belgian Code of Companies and Associations (hereafter the “Code of Companies and Associations” or “BCCA”) and the Belgian Governance Code. The Corporate Governance Statement includes additional factual information regarding Solvay’s corporate governance practices and relevant modifications thereto, together with details on the remuneration of directors and executives and on relevant events that took place during the preceding year.

This section of the Annual Integrated Report constitutes Solvay’s Corporate Governance Statement for the year 2023.

2. HIGHLIGHTS OF THE YEAR

2023 was a pivotal year for the Solvay Group with the completion of the separation of Solvay into two independent publicly listed companies.

On December 8, 2023, the Extraordinary Shareholders’ Meetings of the Company and Syensqo SA/NV (“Syensqo”) approved the Partial Demerger of the Company whereby the shares and other interests the Company held in the legal entities operating the so-called “Specialty Businesses,” its rights and obligations under the agreements entered into with those legal entities, as well as certain other assets and liabilities were transferred to Syensqo (the “Partial Demerger”), with 99.53% of positive votes.

Accordingly, the Partial Demerger became effective at 00:00 am CET during the night of December 8, 2023 to December 9, 2023 (the “Partial Demerger Date”), at which time the assets and liabilities of the Company set forth in the Partial Demerger proposal were transferred pursuant to a universal succession regime to Syensqo.

The completion of the Partial Demerger impacted the governance of Solvay. Amongst others, it led to changes to the composition of the Board of Directors and of the Executive Leadership Team and to amendments to the Articles of Association and to the Governance Charter. In accordance with Principle 1.3 of the Belgian Governance Code, these changes are further described below.

2.1. Changes to the composition of the Board of Directors

Before the Partial Demerger Date, the Board of Directors was composed of the following 15 directors (the “**Pre-Demerger Board**”):

- Mr. Nicolas Boël
- Ms. Ilham Kadri
- Mr. Charles Casimir-Lambert*
- Mr. Wolfgang Colberg
- Mr. Hervé Coppens d’Eeckenbrugge
- Ms. Françoise de Viron
- Ms. Laurence Debroux*
- Mr. Pierre Gurdjian
- Mr. Edouard Janssen
- Ms. Agnès Lemarchand
- Mr. Matti Lievonen
- Mr. Gilles Michel
- Ms. Marjan Oudeman
- Ms. Aude Thibaut de Maisières
- Ms. Rosemary Thorne

**At the Annual Shareholders Meeting of the Company held on May 9, 2023, Mr. Charles Casimir-Lambert’s mandate ended and was not renewed and Ms. Laurence Debroux resigned from her mandate.*

At the Extraordinary Shareholders’ Meeting of the Company held on December 8, 2023, which approved the Partial Demerger of the Company:

- Mr. Nicolas Boël, Ms. Ilham Kadri, Mr. Hervé Coppens d’Eeckenbrugge, Ms. Françoise de Viron, Mr. Edouard Janssen, Ms. Agnès Lemarchand, Mr. Matti Lievonen, Mr. Gilles Michel and Ms. Rosemary Thorne, resigned from their mandate of Director
- Mr. Philippe Kehren, Mr. Thomas Aebischer, Mr. Thierry Bonnefous, Mr. Yves Bonte, Mr. Melchior de Vogüé and Ms. Annette Stube, were appointed directors of the Company for a four-year term

Following completion of the Partial Demerger, the Board of Directors is composed of the 10 following directors (referred in this section as the “**Board**”):

- Mr. Pierre Gurdjian (Chair and Independent director)
- Mr. Philippe Kehren (Executive director and Chief Executive Officer)
- Mr. Thomas Aebischer (Independent director)
- Mr. Thierry Bonnefous*
- Mr. Yves Bonte (Independent director)
- Mr. Wolfgang Colberg (Independent director)
- Mr. Melchior de Vogüé*
- Ms. Marjan Oudeman (Independent director)
- Ms. Annette Stube (Independent director)
- Ms. Aude Thibaut de Maisières* (Vice-Chair)

**Director whose appointment was proposed by Solvac SA to the Company.*

The directors of Solvay collectively possess a wealth of expertise in areas such as governance and strategic planning, global chemicals and industrials sectors, ESG, corporate financial management and business development.

For more details on the Board of Directors and the Board Committees, please refer to section 4 of the Corporate Governance Statement.

2.2. Changes to the composition of the Executive Leadership Team

Before the Partial Demerger Date, the Executive Leadership Team was composed as follows (the “**Pre-Demerger ELT**”):

- Ms. Ilham Kadri, (Chief Executive Officer and Chair of the ELT)
- Mr. Marc Chollet (Chief Strategy Officer)
- Mr. Augusto Di Donfrancesco (Chief Transformation and Operations Officer)
- Mr. Dominique Golsong (Group General Counsel and Corporate Secretary)
- Mr. Karim Hajjar (Chief Financial Officer)
- Mr. Hervé Tiberghien (Chief People Officer)

Following the completion of the Partial Demerger, the mandates of Ms. Ilham Kadri, Mr. Marc Chollet, Mr. Augusto Di Donfrancesco, Mr. Dominique Golsong, Mr. Karim Hajjar and Mr. Hervé Tiberghien as members of the Executive Leadership Team were terminated.

On the Partial Demerger Date, the Board appointed the following new members of the Executive Leadership Team (referred in this section as the “ELT”):

- Mr. Philippe Kehren (Chief Executive Officer and Chair of the ELT)
- Mr. Alexandre Blum (Chief Financial and Strategy Officer)
- Ms. Lisa J. Brown (Group General Counsel and Corporate Secretary)
- Mr. Lanny Duvall (Chief Operations Officer)
- Dr. Mark van Bijsterveld (Chief People Officer)

The ELT brings decades of expertise to drive market leadership, people leadership, cost and process excellence, energy transition, governance and capital discipline.

For more details on the ELT, please refer to section 5 of the Corporate Governance Statement.

2.3. Amendments to the Articles of Association

In the context of the Partial Demerger, the Articles of Association of the Company were amended.

The main changes were as follows:

- **Vice-Chairperson:** The Articles of Association were amended to allow the Board of Directors to appoint a Vice-Chairperson from among its members.
- **Thresholds for supermajority matters at Board level:** The monetary thresholds for actions or decisions to qualify as “actions that would substantially modify the activities of the Company or its Group,” which require a majority of three-quarters of the votes (rounded up to the nearest unit) of the directors present or represented, were reduced to reflect the impact of the Partial Demerger.
- **Vote by correspondence:** Additional means for shareholders to vote before the future Shareholders’ Meetings of the Company, by correspondence or via the Company’s website, were added.
- **Date of 2024 AGM:** Exceptionally, the Annual Shareholders’ Meeting of Solvay to be held in 2024 to resolve on the Company’s financial statements for the year ended December 31, 2023, will take place on May 28, 2024.
- **Share capital:** As a result of the Partial Demerger, the capital of the Company was reduced from one billion five hundred eighty eight million one hundred forty-six thousand two hundred forty euros (EUR 1,588,146, 240.00) to two hundred and thirty-six million five hundred and eighty-three thousand four hundred and forty-seven euros and eighteen cents (EUR 236,583,447.18) without cancelation of existing shares.
- **Authorized capital:** The balance of the authorization granted to the Board of Directors by the Extraordinary Shareholders’ Meeting of May 12, 2020, was canceled and replaced with new authorizations to increase the capital, including in the event of a takeover bid (see section 10 of this Corporate Governance Statement for a description of such authorizations).
- **Share buy-backs:** The authorization granted to the Board of Directors by the Extraordinary Shareholders’ Meeting of May 12, 2020, was canceled and replaced with new authorizations to acquire, pledge, dispose and cancel own shares, including in the event of a takeover bid (see section 10 of this Corporate Governance Statement for a description of such authorizations).

2.4. Amendments to the Governance Charter

The Governance Charter defines the role and mission, functioning, size, composition, training and evaluation of the Board. The internal rules of the Board and the Committees are attached to the Governance Charter, available on the Company’s corporate website. The Governance Charter was amended in the context of the Partial Demerger and a new version was approved by the Board on December 9, 2023.

The main changes to the Governance Charter related to the below topics:

- **Separation between the roles of the Chairperson and the CEO:** The principle pursuant to which the Chairperson of the Board of Directors shall not be the CEO was formally added to the Governance Charter.
- **Vice-Chairperson:** If a Vice-Chairperson is elected, he or she shall be a non-independent director if the Chairperson is independent.
- **Age limit for directors:** The age limit for directors was increased to 75 years old.
- **Solvac:** Considering the level of its stake in the share capital of Solvay, Solvac should be entitled to propose the appointment of three directors, and the Board may appoint on each Board Committee one of the directors appointed upon proposal of Solvac (subject to such director having the appropriate skills and experience to serve in the relevant Committee).
- **Board Committees:**
 - The Audit committee was renamed “Audit and Risk Committee.”
 - The Environmental, Social and Governance (ESG) Committee was formally added to the Governance Charter.
 - The respective roles and missions of the ESG Committee and the Audit and Risk Committee in terms of ESG KPIs were specified, taking into account recent developments in this respect.
- **ELT:** The default duration of ELT members’ terms of office was increased to four years.
- **Board and ELT nomination and evaluation:** The process for the nomination and evaluation of Board and ELT members was reviewed and updated.

3. CAPITAL, SHARES AND SHAREHOLDERS

3.1. Capital

As a result of the Partial Demerger which became effective on December 9, 2023, the capital was reduced from €1,588,146,240.00 to €236,583,447.18.

On December 31, 2023, Solvay’s share capital amounted to €236,583,447.18 and was represented by 105,876,416 issued ordinary shares.

3.2. Solvay shares

Solvay (SOLB.BE) is listed on Euronext Brussels, which is its primary listing. Solvay has a secondary listing on Euronext Paris. Solvay shares are also traded over the counter (OTC) as an unsponsored American Depository Receipt (ADR).

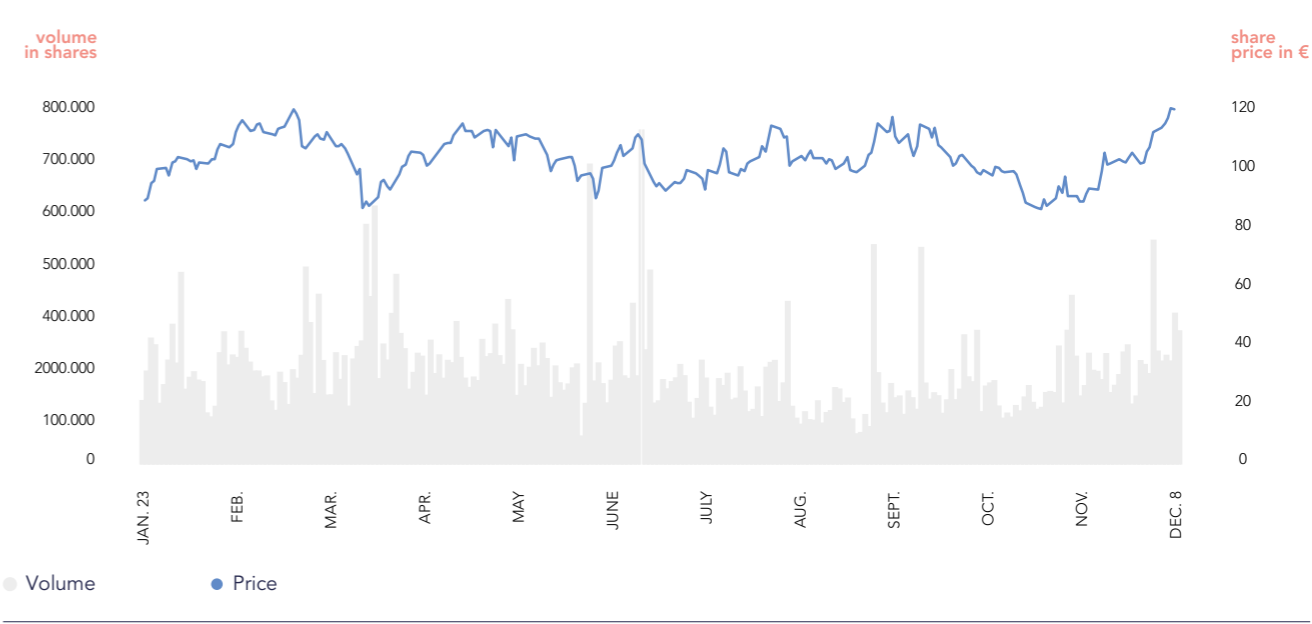
On December 31, 2023, Solvay was a member of the BEL20, the main Belgian index. Solvay shares are also part of other major indexes including the BEL Chemicals, indexes from the STOXX (DJ STOXX, DJ Euro STOXX, STOXX Europe 600 chemicals) and MSCI families, Euronext 100, Dow Jones Sustainability World Index and FTSE4Good Index.

Between January 1, 2023, and December 8, 2023 (i.e., before completion of the Partial Demerger), the average closing price of the Solvay share was €104.27, the price range was €94.12 to €113.05 and the average daily trading volume as reported by Euronext was 196,583 (compared to 207,208 shares for the full year 2022).

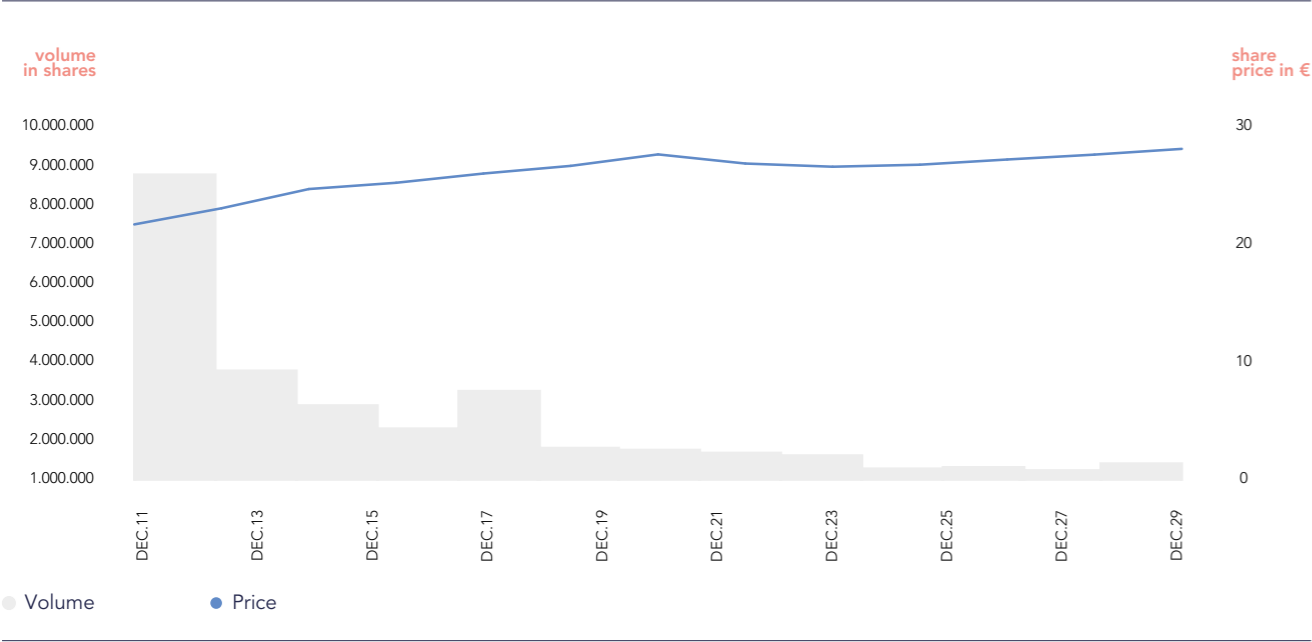
Between December 11, 2023 and December 29, 2023 (i.e., after completion of the Partial Demerger), the average closing price of one Solvay share was €25.41, the price range was €17.90 to €27.96 and the average daily trading volume as reported by Euronext was 1,818,168 (compared to 207,208 shares for the full year 2022).

Solvay’s closing share price on December 29, 2023, was €27.73.

SOLVAY SHARE PRICES AND TRADING VOLUMES FROM JANUARY 2023 TO DECEMBER 8 2023



SOLVAY SHARE PRICES AND TRADING VOLUMES FROM DECEMBER 11 TO DECEMBER 29, 2023



3.3. Shareholders

Shareholder structure

As of December 31, 2023, Solvay's capital was represented by 105,876,416 ordinary shares. As there are no different classes of shares, all Solvay shares carry the same rights. Each share comes with the right to one vote, following the “one share, one vote” principle.

Solvay ordinary shares can be held as either:

- Registered shares: shares represented by an entry within Solvay's share registry, managed by Solvay's Shareholder Services
- Dematerialized shares: shares represented by a book entry in the name of the shareholder with a recognized account keeper or a clearing institution

The transparency notifications are required by Belgian law and Solvay's bylaws when an investor crosses the thresholds of 3%, 5%, 7.5% or any multiple of 5% of Solvay voting rights. Unless otherwise indicated, section 2.3.1 of this Annual Integrated Report refers to theoretical voting rights, taking into account all the shares to which voting rights are attached, even if the exercise of these rights is suspended.

Solvac

Solvay's largest shareholder is Solvac SA (“**Solvac**”). Solvac is a public limited liability company established under Belgian law, founded in 1983. Its annual reports indicate that its primary asset consists of shares in Solvay.

Its most recent notification to Solvay is dated from March 29, 2021, and indicates it owns 32,621,583 shares of Solvay, representing 30.81% of the total number of shares issued by Solvay.

Solvac's shares are traded on Euronext Brussels. It has approximately 14,000 shareholders. Among these, approximately 2,400 individuals are related to the founding families of Solvay and Solvac, which, combined, are reported to hold approximately 77.32% of Solvac's shares.

In the context of the Partial Demerger, Solvac's Board expressed its strategic investment objective in Solvay as follows (press release dated November 14, 2023):

“Over the last few years, Solvay has undergone a successful transformation in a highly volatile global environment. The contemplated separation would firmly establish two industry leaders respectively in essential and specialty chemicals, each positioned to meet their key strategic, financial and sustainability goals.

Solvac continues to be convinced of the role that essential chemistry plays to respond to humanity's needs and of the impact of innovation that specialty chemistry will play to answer future sustainability challenges.

“Following Solvac's initial expression of support in its press release of March 15, 2022, Solvay has published further information with respect to the

project, which Solvac has analyzed with its independent financial advisors PJT Partners and KBC Securities and with its legal advisor, Freshfields Bruckhaus Deringer LLP. This project is intended to be completed shortly, with a Solvay shareholder meeting vote on the Partial Demerger planned on December 8, 2023. The Board of Directors of Solvac, on the basis thereof, confirms Solvac's continued full support of the project as announced on Solvay's website and as presented in the documents and the capital market day relating to it.”

A relationship agreement with Solvac has not been considered necessary so far. Under the new Corporate Governance, Solvay welcome the proportional representation of Solvac's representative on the Board of Solvay as a sign of long term commitment to Solvay's new chapter and its continued success.

Solvay Stock Option Management

Solvay Stock Option Management SRL (SSOM) is a wholly-owned indirect subsidiary of Solvay. As of December 31, 2023, SSOM held 868,990 Solvay shares and 279,880 call options entitling it to purchase Solvay shares. Those shares and options are held by SSOM on its own account, as part of its strategy to cover the obligations assumed by SSOM regarding stock options granted by Solvay to Solvay Group senior executives.

The voting rights attached to the shares held by Solvay Stock Option Management are, as a matter of law, suspended.

Employee Share Purchase Plan

In December 2021, Solvay announced a global employee shareholding initiative, the Employee Share Purchase Program (“ESPP”), in coordination with the Solvay Global Forum, a global employee representative body created in 2015 to meet with Solvay's top management on a quarterly basis to comment on and discuss the quarterly results of Solvay and to keep everyone informed of the main new projects. The ESPP was set-up to increase the Solvay Group employees' understanding of Solvay's performance and enhance their sense of belonging and ownership in Solvay.

In September 2022, 6,105 employee shareholders participated to the first employee shareholder plan. As at December 31, 2023, 2,075 active employees at Solvay were part of the ESPP.

In October 2024 they will receive their free and matching Solvay shares. The number of those free and/or matching shares will be determined based on the 30-day average closing price of the Solvay share relative to the combined 30-day average closing prices of the Syensqo share and the Solvay share.

3.4. Relations with investors and analysts

Solvay maintains an open, ongoing and constructive dialogue with the investment community. We always seek to provide pertinent and accurate information to ensure understanding of Solvay's business and strategy, helping the financial community to make its own informed assessments and judgments. Detailed information on our business activities, strategy and financial performance is available through various regulatory and other publications, such as the Annual Integrated Report, financial reports and press releases, as well as other media, such as webcasts, which are available on our website.

The Investor Relations team maintains a close relationship with investors throughout the year. The CEO and CFO also prioritize interactions with the investment community. Solvay's teams have been agile and flexible in maintaining these interactions, supplementing the use of digital technologies with a return to face-to-face meetings.

In February 2023, the webinar series that we initiated in 2022 continued with a focus on the Soda Ash business, showcasing the leading positions and growth prospects. Another webinar on the Composite Materials segment focused on innovation and growth opportunities in the aerospace and defense market.

Further, throughout 2023, specific information was shared with the financial community regarding the activities of Solvay that remained with Solvay following the completion of the Partial Demerger:

- Mid-June 2023, Solvay announced the capital structure and financial policies applicable to Solvay after the Partial Demerger.
- On June 30, 2023, Solvay published an information document providing additional information, including pro forma financial information, about Solvay and how it would operate following completion of the Partial Demerger.
- On August 28, 2023, Solvay published H1 2023 unaudited pro forma financial information covering Solvay's activities following completion of the Partial Demerger.
- On November 13, 2023, at its Capital Market Day, Solvay unveiled its new management, new strategy and financial and extra-financial targets following completion of the Partial Demerger. In that context, Solvay confirmed its climate commitments, driving towards carbon neutrality by 2050 through its investment in energy transition.
- On November 20, 2023, Solvay published a supplement to its information document dated June 30, 2023.
- On December 8, 2023, at the Extraordinary General Shareholders' Meeting of Solvay SA/NV, the separation plan was supported by 99.53% of positive votes, officially establishing Syensqo as a separate new entity.

These documents, as well as recordings of these events, are available on the investors section of our website.

3.4.1. Interactions with shareholders, Solvac and Solvay founding families

Every shareholder has access to clear, comprehensive, transparent information, tailored to his or her individual needs, through a dedicated section on the Solvay website. Solvay also engages with retail banks, regularly interacting with their analysts and participating in events dedicated to private investors.

In 2023, Solvay held regular meetings with its reference shareholder, Solvac. The CEO and CFO gave three presentations to Solvac’s Board of Directors in 2023, covering the Solvay Group’s half- and full-year results and the progress on the project to separate Solvay into two companies.

Solvay’s management participated in two events organized by shareholders from Solvay’s founding families to update them on strategy and results.

In addition, the IR team participated in Finance Avenue – a shareholder event hosted in Brussels – prior to the Extraordinary General Shareholders’ Meeting to share information related to the Partial Demerger.

3.4.2. Interactions with sell-side analysts

Solvay is covered by 19 sell-side analysts who regularly publish research on the Company. The up-to-date list of analysts can be found on Solvay’s website.

Apart from regular individual meetings, emails and phone conversations, Solvay organizes quarterly conference calls and webinar series between the senior management and the financial community, following the publication of the Group’s results. Although specifically geared toward analysts, these conference calls are accessible live to all investors, and remain available in the form of a video and transcript on the Solvay website.

Where opportunities permit, such as when Solvay management undertakes investor roadshows or participates in investor conferences, face-to-face meetings with analysts are also periodically arranged in major financial cities, including Brussels, London, Paris, New York and Boston.

3.4.3. Interactions with institutional investors

Solvay mainly interacts with institutional investors following the announcement of quarterly, half- and full-year results. In 2023, Solvay participated in many events, including with senior management. This included roadshows, virtual meetings and investor conferences in countries across Europe and North America.

Solvay’s CEO and CFO attended many of the meetings with the financial community. They discussed different topics, including quarterly earnings results, market conditions, the prospects for the current year and the medium-term strategy. In 2023, the executive management was also particularly active in communicating information about the separation project at various events organized with institutional investors.

3.4.4. Interactions with stewardship teams at shareholders and ESG research providers, including proxy advisors

At least once a year, the CEO, the CFO, the Group General Counsel and Corporate Secretary, the Chief People Officer, the Chief Sustainability and Government Affairs Officer, and the Head of Investor Relations meet with the stewardship teams of institutional investors and ESG research providers, including proxy advisors. The purpose of this engagement exercise is to provide an update on Solvay’s key ESG targets, as well as our performance. In 2023, topics included:

- The strengthening of Solvay’s climate commitments through our new Scope 3 objective.
- The impact of the separation project: employees’ commitment, culture, performance, governance.
- The definition and functioning of the Boards of Solvay and Syensqo following the Partial Demerger.
- The biodiversity roadmap and results.
- The actions and investments made to reinforce responsible site management.
- The impact of the Partial Demerger for the Solvay One Planet program.

Solvay also treats these engagements as an opportunity to understand changes in the methodologies and policies used by the stewardship teams and service providers, as well as to actively solicit their feedback on how Solvay can improve its ESG practices and disclosures.

During 2023, Solvay engaged with its top investors’ stewardship teams and leading service providers. These meetings were attended by various members of the Pre-Demerger ELT, including Solvay’s former CEO at the relevant time.

4. BOARD OF DIRECTORS AND BOARD COMMITTEES

4.1. Board of Directors

4.1.1. Structure and composition

The composition and functioning of the Board of Directors is continuously reviewed to ensure that the right profiles are represented, with the skills and experience considered necessary to drive Solvay’s business and sustainability strategy.

In the context of the Partial Demerger of the Company, the composition of the Board of Directors was reviewed so that it would continue to comprise, after the Partial Demerger, a diverse group of accomplished leaders with global industrial expertise, deep strategic insight, strong financial acumen and proven track records of driving value creation.

The composition of the Board of Directors before and after completion of the Partial Demerger is summarized below:

Pre-Demerger Board (January 1-December 8)	Board (December 9- December 31)
<div><ul style="list-style-type: none">• Mr. Nicolas Boël (Chair)• Ms. Ilham Kadri (Executive director and Chief Executive Officer)• Mr. Charles Casimir-Lambert*• Mr. Wolfgang Colberg (Independent director)• Mr. Hervé Coppens d’Eeckenbrugge• Ms. Françoise de Viron (Independent director)• Ms. Laurence Debroux (Independent director)*• Mr. Pierre Gurdjian (Independent director)• Mr. Edouard Janssen• Ms. Agnès Lemarchand (Independent director)• Mr. Matti Lievonen (Independent director)• Mr. Gilles Michel (Independent director)• Ms. Marjan Oudeman (Independent director)• Ms. Aude Thibaut de Maisières (Independent director)• Ms. Rosemary Thorne (Independent director)</div>	<div><ul style="list-style-type: none">• Mr. Pierre Gurdjian (Chair and Independent director)• Mr. Philippe Kehren (Executive director and Chief Executive Officer)• Mr. Thomas Aebischer (Independent director)• Mr. Thierry Bonnefous*• Mr. Yves Bonte (Independent director)• Mr. Wolfgang Colberg (Independent director)• Mr. Melchior de Vogüé*• Ms. Marjan Oudeman (Independent director)• Ms. Annette Stube (Independent director)• Ms. Aude Thibaut de Maisières* (Vice-Chair)</div> <div><p><i>*Director whose appointment was proposed by Solvac to the Company.</i></p></div>
<div><p><i>*At the Annual Shareholder Meeting of the Company held on May 9, 2023, Mr. Charles Casimir-Lambert’s mandate ended and was not renewed and Ms. Laurence Debroux resigned from her mandate.</i></p></div>	

As a result, as of December 31, 2023, the Board was composed of 10 directors and had the following attributes:

- The role of Chair of the Board and CEO are separated.
- Nine of the 10 directors on the Board are non-executive and represent diverse competencies, as highlighted in the directors’ skills and qualification matrix below.
- Three of the ten directors are women.
- Six of the 10 directors are considered to be independent non-executive directors, according to the criteria defined by the Belgian Governance Code, and have been recognized as such by the respective Annual and Extraordinary Shareholders’ Meetings during which they were elected. Three of the 10 directors were appointed upon the proposal of Solvac.
- Each of the ten members of the Board has a four-year mandate.
- The Board is represented with six different nationalities.

The table that follows includes information about the members of the Board as of December 31, 2023:

- 🌐 Year of first appointment
- ☑ Presence at Board meetings in 2023 based on their date of appointment



PIERRE GURDJIAN

Belgian/**Born in:** 1961
Chair of the Board of Directors
Independent Director
🌐 2022 ☑ 18/18

Solvay SA mandates:

Chair of the Board of Directors
Chair of the Finance Committee
Member of the Compensation and Nomination Committees

Directorship expiry date: 2026

Diplomas:

Degree in Commercial Engineering from the Free University of Brussels (VUB), (Belgium)
MBA from Harvard Business School, (USA)

Other roles:

Board Member of Lhoist; Board Member of Queen Elisabeth Music Chapel Belgium
Co-founder of Belgium's 40 under 40 societal leadership development platform

Directorships in public companies:

Board Member of UCB SA



PHILIPPE KEHREN

French/**Born in:** 1971
Executive Director
🌐 2023 ☑ 1/1

Solvay SA mandates:

Chair of the Executive Leadership Team
Member of the Finance and ESG Committees

Directorship expiry date: 2027

Diplomas:

Master of Science in Chemical Engineering from the University of Wisconsin - Madison (USA)
Bachelor in Engineering-Petroleum (Spec. in Refining, Engineering and Gas) from the French Institute of PetroleumSchool - Paris (France)
Bachelor in Engineering from École Polytechnique - Paris (France)

Other roles: None

Directorships in public companies: None



THOMAS AEBISCHER

Swiss/**Born in:** 1961
Independent Director
🌐 2023 ☑ 1/1

Solvay SA mandates:

Chair of the Audit and Risk Committee
Member of the Finance Committee

Directorship expiry date: 2027

Diplomas:

Advanced Management Program, Harvard Business School (USA)
Trustee Exams and School for Swiss Certified Accountants, Zurich (Switzerland)

Other roles:

Audit Committee Chair and Vice-Chairman of the Board of dormakaba, Rümlang, CH

Directorships in public companies:

Board Member of dormakaba, Rümlang, CH



THIERRY BONNEFOUS

French/**Born in:** 1979
Non-independent Director
🌐 2023 ☑ 1/1

Solvay SA mandates:

Member of the ESG Committee

Directorship expiry date: 2027

Diplomas:

Master of Engineering, Science and Technology from École Polytechnique – Paris (France)
Master of Science in Project, Innovation and Design Management from École Polytechnique, École des Mines and École des Ponts – ParisTech (France)

INSEAD – Advanced Management Executive Programme (Singapore & France)

Auditor of the Moisson-Desroches cycle – Fer de France – Paris (France)

Other roles:

Digital Train Program Director at Alstom

Directorship in public companies:

None



YVES BONTE

Belgian/**Born in:** 1961
Independent Director
🌟 2023 ✅ 1/1

Solvay SA mandates:
Member of the Nomination and of the Compensation Committees
Directorship expiry date: 2027

Diplomas:
Post-graduate degree in Business, Administration and Management, and Master's degree in Civil Engineering (Metallurgy and Materials Engineering) from the University of Leuven (Belgium)
International Directors Programme at INSEAD Business School – Paris (France)

Other roles:
Chair of the Board of Directors and Chief Executive Officer at Domo Chemicals NV
Chair of the Board of Domo Chemicals Holding NV

Directorships in public companies:
None



WOLFGANG COLBERG

German/**Born in:** 1959
Independent Director
🌟 2021 ✅ 18/18

Solvay SA mandates:
Chairman of the Compensation Committee
Member of the Audit and Risk, Finance and Nomination Committees
Directorship expiry date: 2025

Diplomas:
PhD in Political Science (Business Administration and Business Informatics) from the University of Kiel, (Germany)

Other roles:
Chairman of AMSilk GmbH (Germany)
Board member of Dussur (SA)
Chairman of ChemicalInvest Holding BV (the Netherlands)
Board Member of Fire (BC) Holdco Ltd. (UK)
Industrial Partner of Deutsche Invest Capital Partners (Germany)

Directorships in public companies:
Board Member of Thyssenkrupp AG, Pernod Ricard SA, and Burelle SA



MARJAN OUDEMAN

Dutch/**Born in:** 1958
Independent Director
🌟 2015 ✅ 18/18

Solvay SA mandates:
Chair of the Nomination Committee
Member of the Audit and Risk Committee
Member of the ESG and Compensation Committees
Directorship expiry date: 2027

Diplomas:
Law Degree from Rijksuniversiteit Groningen, the Netherlands
Master's Degree in Business Administration from the University of Rochester New York (USA) and Erasmus Universiteit Rotterdam (the Netherlands)

Other roles:
Board Member SHV Holdings NV and KLM NV
Chair of Groenvermogen, Dutch innovation Fund for Green Hydrogen

Directorships in public companies:
Board Member of UPM-Kymmene Oyi



ANNETTE STUBE

Danish/**Born in:** 1967
Independent Director
🌟 2023 ✅ 1/1

Solvay SA mandates:
Member of the ESG Committee
Directorship expiry date: 2027

Diplomas:
Master's degree in Psychology (Spec. in Organizational Development) from the University of Copenhagen (Denmark)

Other roles:
Chief Sustainability Officer at the LEGO group
Member of the Board of Directors of WWF (Denmark)

Directorships in public companies:
None



AUDE THIBAUT DE MAISIÈRES

Belgian/**Born in:** 1975
Non-independent Director
🔄 2020 ✅ 18/18

Solvay SA mandates:
Vice-Chair of the Board of Directors
Chair of the ESG Committee
Member of the Nomination and of the Compensation Committees
Directorship expiry date: 2024

Diplomas:
MBA from Columbia Business School, New York, (USA)
MSc from the London School of Economics, London, (UK)
MA from the University of La Sorbonne, Paris, (France)

Other roles:
Member of the Investment Committee, The Innovation Fund SA/ NV
Board Member, Paradigm Capital Value Fund SICAV
Cofounder & Managing Director, Sonic Womb Productions Limited

Directorships in public companies: None

4.1.2. Director skills and qualification matrix

Collectively, the members of the Board bring the wide set of skills and experience required to develop and oversee the Solvay Group’s long-term strategy. This experience has been aggregated in the Director Skills and Qualification Matrix. The Board’s skills and experience ranges from international industries and markets – for many of them at executive level – to functional domains, like human resources.

This matrix also helps the Nominations Committee, together with the Board, to identify the skills and experience needed to help drive Solvay’s business and sustainability strategy when considering new Board members.



MELCHIOR DE VOGÜÉ

French/**Born in:** 1962
Non-independent Director
🔄 2023 ✅ 1/1

Solvay SA mandates:
Member of the Audit and Risk and Finance Committees
Directorship expiry date: 2027

Diplomas:
Master’s degree in Business, Administration and Management from the École des Hautes Études Commerciales – Paris (France)
Master’s degree in Business, Administration and Management at the Paris IX-Dauphine University (France)
Certified Analyst degree from the French Society of Financial Analysts – Paris (France)

Other roles:
Board Member of Centre Médical de Bligny
Chief Financial Officer of the Etex Group

Directorships in public companies:
Board Member and Chairman of the Risk and Audit Committee of Solvac SA

Each director’s skills and experience is presented in the Director Skills and Qualification Matrix below.

	Chemical industry	Finance	Corporate governance	Industrial	Research & Development	Digital/ IT	Human resources	ESG	International
Pierre Gurdjian		X	X	X			X		X
Philippe Kehren	X	X		X	X			X	X
Thomas Aebischer	X	X	X	X		X			X
Thierry Bonnefous				X	X	X		X	X
Yves Bonte	X		X	X	X			X	X
Wolfgang Colberg	X	X	X	X		X	X		X
Marjan Oudeman	X	X	X	X	X		X	X	X
Annette Stube			X	X			X	X	X
Aude Thibaut de Maisières	X	X	X		X	X		X	X
Melchior de Vogüé	X	X	X	X		X			X

4.1.3. Diversity at Board level

Solvay values diversity of its directors, including in terms of gender, age, nationalities, experience, education and skill sets. Details of the qualifications and experience of the Board members can be found in sections 4.1.1 and 4.1.2. The composition of the Board satisfies the legal requirements applicable in Belgium relating to gender diversity though the Board considers this to be the minimum threshold to be met and will continuously review the requirements of its institutional investors and proxy advisors. Furthermore, Solvay’s commitment to diversity at Board level is further evidenced by the criteria for appointment of directors listed in section 5.2.3 of the Governance Charter, which is available on Solvay’s corporate website.

4.1.4. Functioning

- The Articles of Association provide that the Board shall meet as often as the Company’s interests so require. The meeting of the Board is convened by the Chairperson or, in the absence of the Chairperson, the Vice-Chairperson or a director with day-to-day responsibilities. The Board of Directors shall be convened each time that the Executive Leadership Team, a director with day-to-day responsibilities or three directors so request(s) it. Further information on the functioning of the Board of Directors is provided for in the Governance Charter.
- 2023 was an exceptional year for the Company as it worked intensively towards the Partial Demerger. The Board undertook an active role in the governance of the project, which is reflected by the number of Board meetings held during the year. The below table indicates the individual attendance rate of directors at Board meetings in 2023.

	Pre-Demerger Board	Board
Number of meetings	17 meetings from January1-December 8	1 meeting from December 9-December 31
Attendance	<ul style="list-style-type: none">• Mr. Nicolas Boël: 17/17• Ms. Ilham Kadri: 17/17• Mr. Charles Casimir-Lambert: 3/3*• Mr. Wolfgang Colberg: 17/17• Mr. Hervé Coppens d'Eeckenbrugge:16/17• Ms. Françoise de Viron: 14/17• Ms. Laurence Debroux: 1/3**• Mr. Pierre Gurdjian: 17/17• Mr. Edouard Janssen: 15/17• Ms. Agnès Lemarchand: 9/17• Mr. Matti Lievonen: 16/17• Mr. Gilles Michel: 14/17• Ms. Marjan Oudeman: 17/17• Ms. Aude Thibaut de Maisières:17/17• Ms. Rosemary Thorne: 17/17	<ul style="list-style-type: none">• Mr. Pierre Gurdjian: 1/1• Mr. Philippe Kehren: 1/1• Mr. Thomas Aebischer: 1/1• Mr. Thierry Bonnefous: 1/1• Mr. Yves Bonte: 1/1• Mr. Wolfgang Colberg: 1/1• Mr. Melchior de Vogüé: 1/1• Ms. Marjan Oudeman: 1/1• Ms. Aude Thibaut de Maisières: 1/1• Ms. Annette Stube: 1/1
<p><small>* Mr. Charles Casimir-Lambert’s mandate ended at the Annual General Meeting held on May 9, 2023. ** Ms. Laurence Debroux resigned at the Annual General Meeting held on May 9, 2023.</small></p>		

Main areas of discussion, review and decisions	<div><div><div><div>· Finalization of the project to separate Solvay into two independent publicly listed companies (Power of 2), achieving the next phase of Solvay's transformation.</div><div>· Completion of the sale of Solvay's entire 50% stake in RusVinyl to its joint venture partner Sibur. This marked the final step in Solvay's strategy to exit its cyclical global polyvinyl chloride (PVC) operations</div><div>· Settlement between Solvay Specialty Polymers USA, LLC (now a subsidiary of Syensqo) and the New Jersey Department of Environment Protection on PFAs remediation .</div><div>· Selection of the candidate directors for Solvay following completion of the Partial Demerger, submitted to the vote of the December 8, 2023 Extraordinary General Meeting, and for Syensqo.</div><div>· Selection of the candidate members of the Executive Leadership Team of Solvay following completion of the Partial Demerger and of Syensqo.</div><div>· Investment for the expansion of the China Research and Innovation Center .</div><div>· Approval of the new capital structure and financial policies for Solvay and Syensqo.</div><div>· Commitment to the UN Global Compact call for action on Living Wage.</div></div><div><div>· Composition of the Board Committees</div><div>· Appointment of the new Executive Leadership Team</div><div>· Delegation of powers to the Executive Leadership Team</div><div>· The Board also attended an onboarding session on the Partial Demerger, its consequences and the key agreements in place between Solvay and Syensqo in this respect.</div></div></div></div>
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4.1.5. Disclosure pursuant to Article 7:96 of the Code of Companies and Associations

Before the Partial Demerger, Article 7:96 of the Code of Companies and Associations, relating to conflicts of interests, was applied by the Pre-Demerger Board on two occasions.

On November 2, 2023, the procedure was applied in relation to the remuneration of Ilham Kadri, Chief Executive Officer of the Company before the Partial Demerger Date, as follows:

“Before starting the discussion on this agenda item, Ilham Kadri, Chief Executive Officer, announced the existence of a potential conflict of interests of financial nature within the meaning of Article 7:96 of the Code of Companies and Associations, arising from the fact that some of the resolutions to be taken concerned (i) her Po2 constitution achievement bonus as CEO potential compensation as CEO of Syensqo, should the demerger take place. The Board of Directors took note of this statement and noted that the Chief Executive Officer left the meeting during the deliberations and decisions relating to her (see point 1 of the resolution, below). The Board reviewed the Remuneration Committee recommendations for the Base remuneration, STI and LTI for the future Solvay ECo) and Syensqo respective Executive Leadership Team members, which were unanimously approved, as follows (see points 2 and 3, below).

Resolutions: After deliberation, the Board of Directors with the exception of Ilham Kadri who did not take part in the deliberations or decisions relating to her, unanimously approved the recommendation of the Remuneration Committee, should the spin-off occur, as follows: (i) Po2 constitution achievement bonus of 12 MEUR, as CEO of Solvay; (ii) Transfer of her existing CEO convention with Solvay SA to Syensqo (contract in place prior to the spin-off, including the SLTI and LTI parameters), including an annual base salary corresponding to the indexed current contractual base salary (1.5 MEUR as of January 1, 2024 / December 2023) and a customary health, benefits and retention scheme.”

On December 7, 2023 the procedure was applied in relation to the remuneration of Ilham Kadri, Chief Executive Officer of the Company before the Partial Demerger Date, as follows:

“Before starting the discussion on this agenda item, Ilham Kadri, Chief Executive Officer, announced the existence of a potential conflict of interests of financial nature within the meaning of Article 7:96 of the Code of Companies and Associations, arising from the fact that her remuneration as Solvay CEO (STI and LTI for 2023) was to be discussed. The Board of Directors took note of this statement and noted that the Chief Executive Officer left the meeting during the deliberations and decisions relating to her.

CEO STI and LTI for 2023: The CEO left the room for the discussion related to her remuneration.

Having previously reviewed the achievements of the CEO, the Board noted that her achievements in 2023 were exceptional, the headlines being:

- Despite strong headwinds of stagnating key economies (notably Europe, China and the US), the business results were broadly in line with market guidance. This is significant considering a number of key competitors issues profit warnings during 2023.
- The CEO drove a boost in reputation by engaging with stakeholders on sustainability issues, receiving SBTi validation on our climate objectives, boosting our Chemscore to rank 6th among 50 peers, marking a gain of nine positions from 2022.
- Improvement of the safety record.
- Delivering of the Po2 separation project on time, below budget and with key stakeholder backing.
- As a consequence of this exceptional performance and recognition of it, the Board agreed:
- A 200% individual performance factor which is 20% of the target amount, resulting in a bonus award for 2023 of: €2,135,000
- An LTI grant for 2024 to the value of €3,200,000 – this is within the mandate and the use of discretion of the Remuneration Committee in rewarding and recognizing the CEO's exceptional performance.

Resolution: After deliberation, the Board of Directors, with the exception of the Chief Executive Officer who did not take part in the deliberations or decisions relating to herself, unanimously approved: the 2023 STI and 2024 LTI award for the CEO as proposed.”

After completion of the Partial Demerger, there was no application of Article 7:96 of the Code of Companies and Associations, relating to conflicts of interests.

4.1.6. Evaluation

In accordance with the Governance Charter, the Board, under the direction of the Chairperson of the Board of Directors and the Chairperson of the Nomination Committee, evaluates on a regular basis its composition, its functioning, its information and interactions with the executive management and the composition and functioning of the Committees created by it.

The members of the Board of Directors are invited to express their opinions on those various points.

In addition, every three years, the evaluation is led by an external consultant.

The Chairperson of the Board of Directors and the Chairperson of the Nomination Committee, together with an external consultant where applicable, analyze the outcome of the evaluation and submit conclusions and recommendations to the Board of Directors. The Board of Directors decides on possible improvements to be made at the end of this evaluation process.

- Considering the new composition of the Board, the next external evaluation is foreseen in 2026.

4.1.7. Induction and continuous Board training

An Induction Program is in place for new directors. The program includes a review of the Group's strategy, activities and corporate governance.

On December 15, 2023, the Board had a dedicated induction session on the Partial Demerger, its consequences and key agreements in place in this respect.

The Board is also actively engaged on the topic of sustainability. Every year, a specific session is organized, dedicated to receiving updates on various themes from sustainability teams, so as to better understand the Group's strengths and weaknesses, and to determine the impact of emerging trends on the Group's business and performance.

Site visits are also part of the Board's continuous training program. They consist of meetings with management and local teams, business presentations and field tours.

4.2. Board committees

The Board of Directors has the following permanent committees: Audit and Risk Committee (formerly named “Audit Committee”), Finance Committee, Compensation Committee, Nomination Committee and ESG Committee. The principles governing the composition, role and missions of the committees, as well as their internal rules, are set out in the Governance Charter.

The composition of the key committees is regularly reviewed, including whether they meet the expectations of the market and our diverse shareholder base. As we continue to refresh the Board, we also consider adding independent members to our committees. As of today, all key committees (Audit and Risk Committee, and the Nomination and Compensation Committees) are composed solely of non-executive directors, a majority of which are independent. More importantly, these committees comprise members that have the experience and skills necessary to add value and deliver effectively on their mandate. The Group Corporate Secretary acts as Secretary to each of the Board committees.

4.2.1. The Audit and Risk Committee

Composition and functioning

The below table indicates the composition of the Audit and Risk Committee before and after the Partial Demerger Date as well as the number of meetings organized respectively during these periods.

	Before the Partial Demerger Date	After the Partial Demerger Date
Number of meetings	The Audit and Risk Committee met 14 times from January 1-December 8	No meeting December 9- December 31
Composition	<div><div>· Ms. Rosemary Thorne (Chair): 14/14</div><div>· Mr. Wolfgang Colberg: 14/14</div><div>· Ms. Laurence Debroux*: 4/4</div><div>· Mr. Edouard Janssen: 14/14</div><div>· Mr. Matti Lievonen: 14/14</div><div>· Ms. Marjan Oudeman: 14/14</div></div> <div><i>*At the Annual Shareholder Meeting of the Company held on May 9, 2023, Ms. Laurence Debroux resigned from her mandate.</i></div>	<div><div>· Mr. Thomas Aebischer (Chair)</div><div>· Mr. Wolfgang Colberg</div><div>· Mr. Melchior de Vogüé</div><div>· Ms. Marjan Oudeman</div></div>

As of December 31, 2023, the composition was as follows:

- Four members
- The CFO is invited to meetings
- All members are non-executive directors, a majority of whom are independent
- All the members fulfill the competency criterion by virtue of the training and the experience they gained in previous functions

Internal rules relating to the Audit and Risk Committee are set out in the Governance Charter.

Report of activities

Over the course of the financial year 2023, the Audit and Risk Committee met 14 times and mainly:

- Reviewed and considered reports from the CFO, the Head of the Group Internal Audit, and the auditor in charge of the external audit, Ernst & Young (represented by Ms. Marie Kaisin)
- Reviewed the independence and effectiveness of the external auditor, Ernst & Young
- Reviewed the proposal of registration and information documents for Solvay and Syensqo in the framework of the Partial Demerger
- Reviewed the quarterly report by the Group General Counsel on significant ongoing legal disputes and reports

4.2.2. The Finance Committee

Composition and functioning

The below table indicates the composition of the Finance Committee before and after the Partial Demerger Date as well as the number of meetings organized respectively during these periods.

	Before the Partial Demerger Date	After the Partial Demerger Date
Number of meetings	The Finance Committee met eight times from January 1-December 8	No meeting December 9- December 31
Composition	<div><div>· Mr. Nicolas Boël (Chair): 8/8</div><div>· Ms. Ilham Kadri: 8/8</div><div>· Mr. Charles Casimir-Lambert*: 3/3</div><div>· Mr. Wolfgang Colberg: 8/8</div><div>· Mr. Hervé Coppens d'Eeckenbrugge: 8/8</div><div>· Ms. Matti Lievonen: 8/8</div><div>· Mr. Gilles Michel: 8/8</div></div> <div><i>*At the Annual Shareholder Meeting of the Company held on May 9, 2023, Mr. Charles Casimir-Lambert's mandate ended and was not renewed and</i></div>	<div><div>· Mr. Pierre Gurdjian (Chair)</div><div>· Mr. Philippe Kehren (CEO)</div><div>· Mr. Thomas Aebischer</div><div>· Mr. Wolfgang Colberg</div><div>· Mr. Melchior de Vogüé</div></div>

As of December 31, 2023, the composition was as follows:

- Five members
- Four non-executive directors and the CEO
- The CFO is invited to meetings
- All the members fulfill the competency criterion by virtue of the training and the experience they gained in previous functions

Internal rules relating to the Finance Committee are set out in the Governance Charter.

Report of activities

Over the course of the financial year 2023, the Finance Committee met eight times and mainly:

- Provided opinions on financial matters. This included the amount of the interim and final dividends, the levels, conditions and currencies of indebtedness, monitoring of the credit strength of the Solvay Group's balance sheet, hedging foreign exchange and risks, the hedging policy for our long-term incentive plans, the content of financial communication and the financing of major investments
- Finalized the preparation of press releases announcing the Solvay Group's results
- Reviewed the proposal for the capital structure and liability management in the context of the Partial Demerger

4.2.3. The Compensation Committee

Composition and functioning

The below table indicates the composition of the Compensation Committee before and after the Partial Demerger Date as well as the number of meetings organized respectively during these periods.

	Before the Partial Demerger Date	After the Partial Demerger Date
Number of meetings	The Compensation Committee met eight times from January 1-December 8	No meeting December 9- December 31
Composition	<div><div>· Mr. Nicolas Boël (Chair): 8/8</div><div>· Ms. Françoise de Viron: 8/8</div><div>· Mr. Pierre Gurdjian: 8/8</div><div>· Ms. Agnès Lemarchand: 2/8</div><div>· Mr. Gilles Michel: 8/8</div><div>· Ms. Aude Thibaut de Maisières: 8/8</div><div>· Ms. Rosemary Thorne: 5/5</div></div>	<div><div>· Mr. Wolfgang Colberg (Chair)</div><div>· Mr. Yves Bonte</div><div>· Mr. Pierre Gurdjian</div><div>· Ms. Marjan Oudeman</div><div>· Ms. Aude Thibaut de Maisières</div></div>

As of December 31, 2023, the composition was as follows:

- Five members
- All members are non-executive directors, a majority of whom are independent
- The Chief People Officer is invited to the meetings as well as the Chief Executive Officer (except for the matters in relation to the Chief Executive Officer personally)
- All the members fulfill the competency criterion by virtue of the training and the experience they gained in previous functions

Internal rules relating to the Compensation Committee are set out in the Governance Charter.

4.2.4. Report of activities

Over the course of the financial year 2023, the Compensation Committee met eight times and mainly:

- Reviewed the remuneration report of the Company for the Corporate Governance Statement in the Annual Report
- Reviewed the remuneration levels for members of the Board and the ELT including the proposed use of the discretion given to the Compensation Committee by the remuneration policy to reward the CEO of Solvay until the Partial Demerger Date for her extraordinary commitment to the completion of the Partial Demerger
- Reviewed the remuneration, both the short- and long-term incentives as well as the performance assessment
- Reviewed the allocation of long-term incentives (performance share units and stock options) to the Company's senior management
- Reviewed the compensation packages of the new Boards and new ELT members of Solvay and Syensqo following completion of the Partial Demerger, and the exit terms of certain members of Solvay's senior management

4.2.5. The Nomination Committee

Composition and functioning

The below table indicates the composition of the Nomination Committee before and after the Partial Demerger Date as well as the number of meetings organized respectively during these periods.

	Before the Partial Demerger Date	After the Partial Demerger Date
Number of meetings	The Nomination Committee met nine times from January 1- December 8	No meeting December 9- December 31
Composition	<div><div>• Mr. Gilles Michel (Chair): 9/9</div><div>• Mr. Nicolas Boël: 9/9</div><div>• Ms. Françoise de Viron: 9/9</div><div>• Mr. Pierre Gurdjian: 9/9</div><div>• Ms. Agnès Lemarchand: 4/9</div><div>• Ms. Aude Thibaut de Maisières: 9/9</div><div>• Ms. Rosemary Thorne: 3/3</div></div>	<div><div>• Ms. Marjan Oudeman (Chair)</div><div>• Mr. Yves Bonte</div><div>• Mr. Wolfgang Colberg</div><div>• Mr. Pierre Gurdjian</div><div>• Ms. Aude Thibaut de Maisières</div></div>

- As of December 31, 2023, the composition was as follows:
- Five members
 - All members are non-executive directors, a majority of whom are independent
 - The Chief Executive Officer is invited to meetings, except in the case of matters that concern the Chief Executive Officer personally
 - All the members fulfill the competency criterion by virtue of the training and the experience they gained in previous functions

Internal rules relating to the Nomination Committee are set out in the Governance Charter.

Report of activities

- Over the course of the financial year 2023, the Nomination Committee met nine times and mainly:
- Led the composition review, succession plans, and the nomination process for any proposed appointment or renewal of appointments to the Board (chair, committee chair and committee memberships), to ELT positions (chair and members), and to general management positions
 - Recommended on the future ELTs of Solvay and Syensqo in the framework of the Partial Demerger
 - Recommended the candidate for the Board of Solvay and Syensqo following completion of the Partial Demerger

4.2.6. The Environmental, Social and Governance (ESG) Committee

Composition and functioning

The below table indicates the composition of the ESG Committee before and after the Partial Demerger as well as the number of meetings organized respectively during these periods.

	Before the Partial Demerger Date	After the Partial Demerger Date
Number of meetings	The ESG Committee met three times from January 1-December 8	No meeting December 9- December 31
Composition	<div><div>• Mr. Matti Lievonen (Chair): 3/3</div><div>• Ms. Françoise de Viron: 3/3</div><div>• Ms. Ilham Kadri: 3/3</div><div>• Ms. Marjan Oudeman: 3/3</div><div>• Ms. Aude Thibaut de Maisières: 3/3</div></div>	<div><div>• Ms. Aude Thibaut de Maisières (Chair)</div><div>• Mr. Thierry Bonnefous</div><div>• Mr. Philippe Kehren</div><div>• Ms. Marjan Oudeman</div><div>• Ms. Annette Stube</div></div>

The ESG Committee was created in 2021 and is continually evaluated and evolving. In this respect, in the framework of the amendments to the Governance Charter following the Partial Demerger, the respective roles and missions of the ESG Committee, the Audit and Risk Committee in terms of ESG KPIs were specified.

- As of December 31, 2023, the ESG Committee was:
- Composed of five members, including the CEO and non-executive directors
 - All the members fulfill the competency criterion by virtue of the training and the experience they gained in previous functions

Internal rules relating to the ESG Committee are set out in the Governance Charter.

Report of activities

- Over the course of the financial year 2023, the ESG Committee met three times and mainly:
- Considered the material ESG issues relevant to the Solvay Group’s business activities
 - Provided guidance and recommendations to the Board on these issues, including for the implementation and potential review of the sustainability strategy and the Solvay Group’s non-financial reporting
 - Advised the Board to be in line with the EU Corporate Sustainability Reporting Directive (CSRD), its implementing laws and regulations and other similar laws and regulations
 - Reviewed the KPI’s following completion of the Partial Demerger
 - Performed periodic reviews of the Solvay Group’s ESG policies, progress and effectiveness

5. EXECUTIVE LEADERSHIP TEAM (ELT)

5.1. ELT before the Partial Demerger Date

Before the Partial Demerger Date, the Executive Leadership Team was composed as follows (the “Pre-Demerger ELT”):

- Ms. Ilham Kadri, (Chief Executive Officer)
- Mr. Marc Chollet (Chief Strategy Officer)
- Mr. Augusto Di Donfrancesco (Chief Transformation and Operations Officer)
- Mr. Dominique Golsong (Group General Counsel and Corporate Secretary)*
- Mr. Karim Hajjar (Chief Financial Officer)
- Mr. Hervé Tiberghien (Chief People Officer)

**Mr. Golsong exercised his function via a SRL/BV.*

The macroeconomic and geopolitical context in 2023 remained challenging, and Solvay teams focused on actions within their control to maintain its competitive edge, to its strengthen differentiated portfolios, focus on its value-based pricing and its unrelenting actions to reduce costs and drive superior performance. Consequently, the Pre-Demerger ELT promoted actions to manage both the short term headwinds while simultaneously investing to support the long-term growth which will set a strong foundation for both future companies.

In addition, these structural savings enabled the Group to invest in projects to support the future growth of both Solvay and Syensqo, like the expansion of sulfone technologies in the US to support healthcare market growth, the new bio-circular highly dispersible silica process, the natural Soda Ash expansion in Green River, Wyoming, the plan to produce Green Hydrogen at the Rosignano site, Italy through a partnership with Sapio, the launch of a new PEEK compound for electric-motors, a polymer collaboration with Zoatfoams to extend the reach of polymers into the aero market.

Progress was made in relation to our Solvay One Planet targets, especially with the validation by SBTi of the climate targets of Solvay before the Partial Demerger. The recent Partial Demerger has triggered the need for a reassessment that will start with SBTi in 2024. In addition, Solvay commits to assess the company’s living wage equity and close any potential gaps before 2030.

The Pre-Demerger ELT met 10 times in 2023 to share information, align priorities, and decide upon activities within its mandate and to align priorities allowing Solvay to deliver excellent performance.

5.2. ELT after the Partial Demerger Date

Following completion of the Partial Demerger, the Board appointed the following members of the Executive Leadership Team (“ELT”):

- Mr. Philippe Kehren (Chief Executive Officer)
- Mr. Alexandre Blum (Chief Financial and Strategy Officer)
- Ms. Lisa J. Brown (Group General Counsel and Corporate Secretary)
- Mr. Lanny Duvall (Chief Operations Officer)
- Dr. Mark van Bijsterveld (Chief People Officer)

The table that follows includes information about the members of the ELT as of December 31, 2023:

✦ Year of appointment	
<div></div> <div>PHILIPPE KEHREN Chief Executive Officer French/Born in: 1971 ✦ 2023 Term of office ends: 2027 Diplomas and main Solvay activities: Master of Science in Chemical Engineering from the University of Wisconsin – Madison (USA) Bachelor in Engineering-Petroleum (Spec. in Refining, Engineering and Gas) from the French Institute of PetroleumSchool – Paris (France) Bachelor in Engineering from École Polytechnique - Paris (France) Chair of the Executive Leadership Team Member of the Finance and ESG Committees</div>	<div></div> <div>ALEXANDRE BLUM Chief Financial and Strategy Officer French/Born in: 1973 ✦ 2023 Term of office ends: 2027 Diplomas and main Solvay activities: Master's degree in Business Administration and Management from HEC (École des Hautes Etudes Commerciales) – Paris (France) Executive Leadership Team member and Chief Financial and Strategy Officer</div>

<div></div> <div>LISA J. BROWN Group General Counsel and Corporate Secretary British/Belgian/Born in: 1978 ✦ 2023 Term of office ends: 2027 Diplomas and main Solvay activities: LL.B. (Hons) Law from the University of Derby (UK) Diploma in Legal Practice from Nottingham Law School (UK) UK Chartered Trade Mark Attorney, London (UK) Executive Leadership Team member and Group General Counsel and Corporate Secretary</div>	<div></div> <div>LANNY DUVALL Chief Operations Officer American/Born in: 1968 ✦ 2023 Term of office ends: 2027 Diplomas and main Solvay activities: Bachelor of Science, Chemical Engineering at the University of Washington, Seattle (USA) Executive Leadership Team member and Chief Operations Officer</div>
<div></div> <div>MARK VAN BIJSTERVELD Chief People Officer Dutch/Born in: 1969 ✦ 2023 Term of office ends: 2027 Diplomas and main Solvay activities: PhD in Business Studies at Radboud University – Nijmegen (the Netherlands) Masters in Organizational Psychology at Leiden University (the Netherlands) Executive Leadership Team member and Chief People Officer</div>	

The role, responsibilities, composition, procedures and evaluation of the ELT are described in detail in the Governance Charter, which is available on Solvay's corporate website. The ELT carries out monthly deep-dives consisting of in-depth reviews on people, strategy, finance, sustainability, innovation and other specific topics, depending on current events.

6. REMUNERATION REPORT

Note to readers

This year's Remuneration Report is unique in the sense that it presents information on two different Board of Directors and Executive Leadership Teams (ELT) that led Solvay during the 2023 financial year. The unique nature of the Remuneration Report is owed to the significant transformation that Solvay underwent to unlock value through a successful Partial Demerger of Syensqo in early December 2023. The Partial Demerger, which saw near full support from our shareholders, will allow each company to optimize its capital allocation priorities, refine its capital structures to ensure efficiency and resilience, prioritize talent attraction and retention strategies to foster a high-performing workforce, enhance operational capabilities to drive efficiency and innovation, and steadfastly advance its sustainability initiatives to create long-term value for all stakeholders.

Following shareholder approval on December 8, 2023, Solvay has a new Board of Directors and Executive Leadership Team (ELT) to deliver on its communicated objectives. To ease the understanding of the Remuneration Report, the remuneration of the new ELT is provided on a blue background during the transitional phase from December 9, 2023, to December 31, 2023.

6.1. Year in overview

Solvay proved resilient in an atypical year

During a period marked by significant changes and challenging conditions, we have demonstrated resilience. Despite facing obstacles such as soft key economies and geopolitical tensions, we have maintained our focus on safeguarding our position. Additionally, we have worked towards ensuring the successful Partial Demerger of Syensqo. Our margins rose to 25%, limiting EBITDA erosion to 4.9%, and we sustained strong cash generation, allowing us to distribute dividends. These results have enabled us to set ourselves apart from our peers. We were among the minority of chemical companies that met guidance without needing to issue a profit warning.

Amidst challenging circumstances, we showcased our innovative spirit and resilience by prioritizing various aspects beyond just financial results. This included expediting the adoption of digital technologies to enhance production efficiency, diligently catering to customer demands, upholding safety as paramount, and implementing price adjustments to sustain margins, all while adhering to disciplined cost and cash management practices.

Thanks to the dedication and work of Solvay employees, we have emerged as a more robust organization across all aspects. Their commitment enables us to embark on a journey of further transformation, equipping us with the readiness to embrace a new chapter filled with opportunities.

Committed to our people

While we were driving a significant transformation of the Company, we remained steadfast in supporting our employees financially, socially, and professionally, as we continue to master the elements essential to our world to create sustainable solutions. The continuous dialogue with the European Works Council (EWC) and social partners was crucial during this transformational period and we are proud to have maintained a strong level of employee engagement of 76%, the highest engagement rate in the last five years.

Financially

At the beginning of 2023, the Executive Leadership Team (ELT) approved the anticipated payment of a portion of the Short-term Incentive (for cadre employees) and the Global Performance Sharing (GPS) bonus (for non-cadre employees), the payments were made in January 2023 supporting our employees to cope in an increasing inflationary environment.

Socially

We further enhanced our Solvay Cares benefits program, by including a new benefit to support employees with caregiving duties. Our employees are now able to take up to five days a year to handle unexpected situations where they must care for a loved one, so as to complement any provisions of local legislation. Furthermore, Solvay created a holiday donation bank with 100 days of leave for employees to use for caregiving purposes. Employees can also donate days off to their fellow colleagues.

Professionally

As we embarked on the transformative project, we continued to invest in the growth and development of our employees, recognizing the learning opportunities inherent in a project of this magnitude. Through the Solvay Career Catalyst Program, employees had the opportunity to engage in introspection regarding their roles, strengths, networks, and acquiring new soft and technical skills. This Program included self-assessments, crafting career visions, and honing skills necessary for advancement, aimed at guiding employees to explore potential career pathways aligned with the Group's transformation.

As of December 2023, we established two industry-leading entities – Solvay and Syensqo – each equipped with robust teams, allocated to facilitate a seamless transition preceding the separation. A comprehensive selection process was undertaken to assemble well-rounded business leaders, experts, and professionals possessing the requisite experience, skills, and diversity, aligning with the distinct strategies of each company.

Remuneration of the new Solvay's Executive Leadership Team after the Partial Demerger

At the May 2022 Ordinary General Shareholders' Meeting, approximately 96% of participating shareholders supported Solvay's Remuneration Policy, a result confirming that Solvay's remuneration philosophy, pay elements, pay mix, variable incentive design, and disclosures were broadly aligned with market expectations. The Board decided that the current Remuneration Policy should remain in place to provide the framework as to how the new ELT and Board members' remuneration is determined.

To determine the remuneration levels of the new ELT members since December 9, 2023, a benchmarking assessment was conducted against a revised peer group. Solvay's updated peer group mirrors the company's redefined scope and executive talent pool, offering a well-rounded selection of companies across diverse countries and industries, encompassing varying sizes and levels of complexity. The results of this benchmarking exercise suggested that discretion is needed to be applied by the Compensation Committee to reduce the award opportunities available for the CEO under both short- and long-term incentives. The Board of Directors does not foresee a revision to the base salary of the CEO and other ELT members in 2024 as it remains aligned with the market median. Details of remuneration payable to ELT members are set out on the following pages.

Our commitment to shareholder alignment with the new Solvay

The Compensation Committee, and the Board as a whole, have taken note of the concerns raised by some of the shareholders and proxy advisors regarding pay decisions made in the lead up to the Partial Demerger to retain key employees as well as recognize tremendous efforts to successfully deliver on communicated objectives. Solvay's new Compensation Committee will gather feedback from its shareholders and proxy advisors to better refine its practices and disclosures.

Solvay's Compensation Committee, and the Board as a whole, will also review the Remuneration Policy in 2024 and assess whether any amendment would be necessary for the Company's remuneration practices and disclosures taking into account the peer practices, global best practice recommendations, as well as direct feedback from shareholders and proxy advisors.

6.2. Remuneration of the Board of Directors

Solvay Directors are remunerated, in line with Solvay's Remuneration Policy, with fixed emoluments, the common basis for which is set at the Ordinary Shareholders Meeting. Any additional remuneration is decided by the Board. The process is based on Article 24 of our Articles of Association (Articles), which states that:

- “Directors shall receive fixed emoluments, the amount and terms of which shall be determined by the General Meeting. The decision of the General Meeting shall stand until otherwise decided.
- The Board of Directors is authorized to grant fixed emoluments in addition to the emoluments provided for in the preceding paragraph to Directors entrusted with special duties, distinct from their directorship.
- The Directors responsible for day-to-day management and the members of the Executive Committee, are also each entitled to a variable remuneration determined by the Board of Directors on the basis of their individual performance and the consolidated performance of the Solvay Group.”

Board fees are determined after considering the roles and responsibilities of each director, and the practices of companies of a similar size and international complexity. An assessment of market practice is conducted on a regular basis and the fees are disclosed in the Remuneration Report each year.

6.2.1. Board of Directors individual remuneration

The Ordinary Shareholders Meetings of June 2005 and May 2012, which introduced membership and attendance fees respectively, approved directors’ pay to be set as follows, starting from the financial year 2005. The Board fees have not been increased since 2005.

Board members that were appointed by the Extraordinary Shareholders’ Meeting of December 8, 2023, will be entitled to the same fees.

Board fees by type	Gross amount
Annual gross fixed remuneration	€35,000
Board meeting attendance fee	€4,000
Audit and Risk Committee Chairperson attendance fee	€6,000
Audit and Risk Committee Member attendance fee	€4,000
Compensation, Nomination, ESG, and Finance Committees Chairperson attendance fee	€4,000
Compensation, Nomination, ESG, and Finance Committees Member attendance fee	€2,500

Additional considerations in relation to the Board of Directors’ remuneration:

- Directors sitting on both the Compensation Committee and the Nomination Committee do not receive double remuneration if the meetings happen on the same date.
- In accordance with the Remuneration Policy, the annual gross fixed remuneration for the CEO is offset in the annual remuneration fees as an ELT member, and the Board meeting attendance fees are paid for the board meetings attended.
- There are no committee attendance fees for the Chairman of the Board, nor the CEO.
- For the Chairman of the Board, the Board used its authorization under Article 24 of its Articles to grant an additional yearly fixed remuneration compensation of €250,000 gross, paid in monthly installments, unchanged since 2012.
- Non-executive directors do not receive any additional remuneration linked to results or other performance criteria. More specifically, non-executive directors are not entitled to annual bonuses, stock options, or performance share units, or to any supplemental pension scheme.
- Solvay reimburses directors’ travel and expenses for meetings related to their Board and Board Committee functions.
- The Group provides administrative support, in the form of an office, and use of the General Secretariat to the Chairman of the Board only. The other non-executive directors receive logistical support from the General Secretariat when needed.
- Solvay also provides customary insurance policies covering the Board of Directors’ activities when they are carrying out their duties.

6.2.2. Share ownership guidelines for the Board

Solvay acknowledges that the Belgian Governance Code recommends that a portion of the remuneration paid to Board members be in shares (Principle 7.6), and that Solvay’s Remuneration Policy does not provide for this. However, the Compensation Committee considers that the current Remuneration Policy complies with the spirit of Principle 7.6 of the Belgian Governance Code, because of the Share Ownership Guidelines applicable to non-executive directors requiring them to hold shares equivalent to 100% of their gross annual fixed board fees. These shares should be held until at least one year after the non-executive director leaves the Board of Directors and, in any case, for at least three years after the shares were acquired. The dividends attached to these shares are paid at the same time as for the other shareholders.

The Compensation Committee regularly reviews Solvay’s remuneration practices, disclosures and market practices to determine whether the Remuneration Policy currently in practice remains appropriate. Any changes to the Remuneration Policy regarding the Board’s remuneration will be submitted to shareholders in accordance with the BCCA.

6.2.3. Amount of remuneration and other benefits granted directly or indirectly to Board members by the Company or by an affiliated company

GROSS REMUNERATION AND OTHER BENEFITS GRANTED TO DIRECTORS

As described in section 2 of the Corporate Governance Statement, in the context of the Partial Demerger, the composition of the Board of Directors of Solvay changed. This section presents the amount of remuneration and other benefits granted directly or indirectly to the members of the Board before and after the Partial Demerger date.

FOR DIRECTORS FROM JANUARY 1, 2023, TO DECEMBER 8, 2023 (BEFORE THE PARTIAL DEMERGER DATE)

in €

	2023						2022		
	Total gross amount including fixed fees	Board fixed remuneration	Board meeting attendance fee	For the role in Finance Committee	For the role in Audit Committee	For the role in Compensation and Nomination Committee	For the role in ESG Committee	Total gross amount including fixed fees	Board of Directors and committee attendance fees
N. Boël									
Fixed emoluments + attendance fees	100,917	32,917	68,000					71,000	36,000
Article 24 supplement Chair Fees	235,110							235,110	
I. Kadri	100,917	32,917	68,000					71,000	36,000
C. Casimir-Lambert	31,928	12,428	12,000	7,500				79,500	44,500
H. Coppens d'Eeckenbrugge	116,917	32,917	64,000	20,000				100,500	65,500
F. de Viron	119,917	32,917	52,000			27,500	7,500	91,000	56,000
R. Thorne	192,417	32,917	68,000		84,000	7,500		107,000	72,000
G. Michel	153,917	32,917	60,000	20,000		41,000		101,500	66,500
M. Oudeman	164,417	32,917	68,000		56,000		7,500	98,500	63,500
A. Lemarchand	82,917	32,917	40,000			10,000		66,500	31,500
M. Lievonon	184,917	32,917	64,000	20,000	56,000		12,000	122,000	87,000
A. Thibaut de Maisières	135,917	32,917	68,000			27,500	7,500	91,000	56,000
W. Colberg	176,917	32,917	68,000	20,000	56,000			112,500	77,500
E. Janssen	148,917	32,917	60,000		56,000			83,000	48,000
L. Debroux	32,428	12,428	4,000		16,000			50,538	28,000
P. Gurdjian	128,417	32,917	68,000			27,500		39,538	17,000
Total	2,106,891	452,772	832,000	87,500	324,000	141,000	34,500	1,575,538	512,538

Increase of total gross amount compared to 2022 is due to the higher number of meetings in 2023.

FOR DIRECTORS FROM DECEMBER 9, 2023 TO DECEMBER 31, 2023, (AFTER THE PARTIAL DEMERGER DATE)

2023

	Total gross amount including fixed fees	Board fixed remuneration	Board meeting attendance fee	For the role in Finance Committee	For the role in Audit Committee	For the role in Compensation and Nomination Committee	For the role in ESG Committee
P. Gurdjian							
Fixed emoluments + attendance fees	6,083	2,083	4,000	-			
Article 24 supplement Chair Fees	14,881			-			
P. Kehren	6,083	2,083	4,000				
M. Oudeman	6,083	2,083	4,000				
A. Thibaut de Maisières	6,083	2,083	4,000				
W. Colberg	6,083	2,083	4,000				
T. Aebischer	6,083	2,083	4,000				
M. de Vogüé	6,083	2,083	4,000				
Y. Bonte	6,083	2,083	4,000				
A. Stube	6,083	2,083	4,000				
T. Bonnefous	6,083	2,083	4,000				
Total	75,714	20,833	40,000				

6.3. Remuneration of the Executive Leadership Team (ELT)

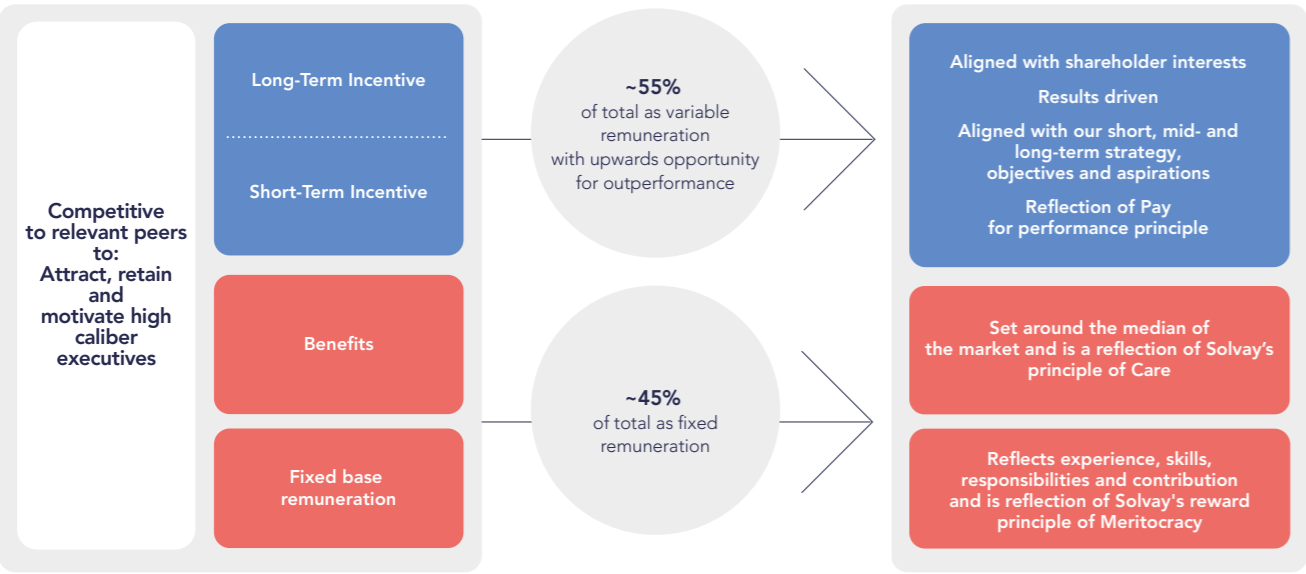
6.3.1. Solvay’s remuneration philosophy and policy

Solvay’s Remuneration Policy is designed to appropriately reward the Executive Leadership Team (ELT) based on their expertise, responsibilities, and individual performance. The Policy emphasizes meritocracy and performance, striving to optimize returns responsibly and sustainably for the benefit of all stakeholders. It aims to attract, motivate, and retain top executive talent, aligning with market standards and the long-term interests of shareholders. These guiding principles also shape the remuneration policies and programs extended to Solvay employees worldwide.

The remuneration structure is designed in line with the following principles, which apply both to ELT members and other senior executives:

- Fixed remuneration aims to provide market-aligned cash income, which is regularly reviewed by the Compensation Committee considering positioning relative to the peer market median, performance, indexation, and role changes.
- Short- and long-term variable remuneration is tied to the achievement of strategic objectives, including driving sustainable performance, and recognizes excellent results once delivered.
- Total remuneration is set at a level that is competitive in the relevant market and sector, in order to attract, retain, and motivate the high-caliber talent needed to deliver the Group’s strategy and drive business performance.
- Remuneration decisions are compliant and equitable, keeping in mind pay levels within the wider workforce, and balance cost and value appropriately.

The following table summarizes the core elements and key principles of Solvay’s Remuneration Policy:



The Compensation Committee retains discretion to adjust performance outcomes under the Short-term Incentive (STI) and Long-term Incentive (LTI) programs based on various factors, including unforeseen circumstances, shareholder experience, and other relevant considerations, with explanations provided in the annual Remuneration Report. Additionally, the Committee may apply discretion to adjust award opportunities, with details as to how discretion was applied to be disclosed in the Remuneration Report for shareholder approval. To this end, the Compensation Committee used its discretionary power to reduce award opportunities under the STI and LTI programs for the new ELT to ensure total remuneration offered remained within the new benchmark.

6.3.2. Use of market data

In alignment with the Remuneration Policy, remuneration of ELT members is benchmarked against a peer group. Although the peer group had generally remained unchanged over the years, in light of Solvay's new scope of activities after the Partial Demerger, a review of the peer group was imperative to select companies that better reflected Solvay's size and business, while also ensuring that it could offer competitive remuneration to attract the relevant talent for the nomination of new ELT members.

Solvay's peer group is built around a selection of relevant European chemical and industrial companies whose international operational footprint and model, as well as annual revenues and headcount, positions Solvay broadly at the median of the peer group. The Compensation Committee aims to position Solvay's remuneration at the market median for all key elements of the package.

Former peer group

The peer group considered for the previous ELT included the following companies until December 8, 2023:

BAE Systems	BASF	Bayer	Covestro
DSM	Evonik	Johnson Matthey	Lanxess
Michelin	Saint Gobain	Umicore	Valeo SA

New peer group

Starting December 9, 2023, the peer group considered for the new ELT underwent a review to mirror Solvay's new scope, to ensure its relevance for remuneration benchmarking. As mentioned earlier, the new peer group positions Solvay at median of the peer group in terms of its attributes, while the Compensation Committee aims to position remuneration offered at market median.

ACEA	Alfa Laval	Arcadis	Covestro
Drax Group	Evonik	Fuchs SE	Holcim Ltd
IMI plc	K+S	Kemira Oyj	Lanxess
OCI	Saint-Gobain	SSAB AB	Umicore SA
Valeo SE	Wacker Chemie AG	Weir Group	

(In blue are companies which have been added to the new Peers Group.)

6.3.3. Pay mix and remuneration opportunities for the ELT members

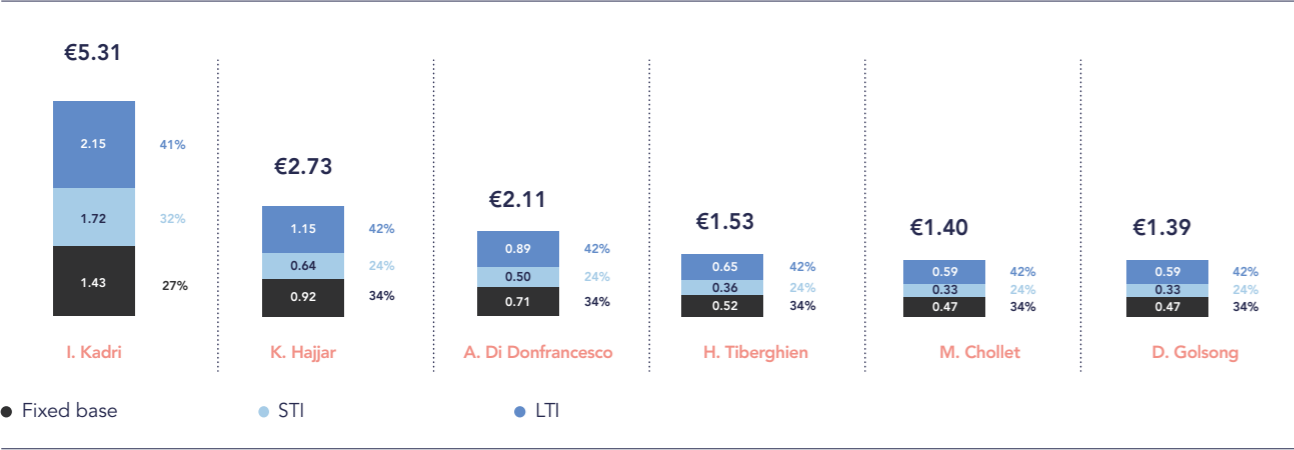
The pay mix of ELT members at the end of the reporting period is outlined below, and displays their Total Direct Remuneration at target. As described in Section 2 of the Corporate Governance Statement, in the context of the Partial Demerger, the composition of Solvay's ELT has wholly changed with a new ELT that is being led by Philippe Kehren, who has been internally promoted and recognized for his successful transformation of the Soda Ash and Bicarbonates business. This Section therefore presents the amount of remuneration of ELT members before and after the Partial Demerger Date.

6.3.3.1 Solvay's ELT before the Partial Demerger Date

Overview

The below table provides the pay mix of the members of the Pre-Demerger ELT, which covers base remuneration and both short-term and long-term incentives at target for the full year 2023 (but excludes, for the avoidance of doubt, any extraordinary items granted in relation to the transformation project). It is also worth highlighting that the below tables display the aforementioned components of the remuneration to which ELT members would have been entitled, at target, for the period from January 1, 2023, until December 31, 2023. The below table does not take into account the ELT's transfer to Syensqo or resignation as ELT members upon completion of the Partial Demerger and any proratisation resulting therefrom. Actual remuneration paid to ELT members before the Partial Demerger Date is described in section 6.3.6.

PAY MIX OF THE ELT MEMBERS
in million of euros



DETAILED TABLE AS ON DECEMBER 8, 2023

in €

	Fixed remuneration (on a comparable full year basis)	Variable remuneration as of December 8, 2023					Total direct remuneration
		Value measurement	STI target	LTI target issued as Performance Share Units	LTI target issued as Restricted Share Units	Total LTI value	
Ilham Kadri CEO and Chair of the ELT	1,435,200	Amount	1,722,240	1,506,960	645,840	2,152,800	5,310,240
		% of Salary	120%	105%	45%	150%	Fixed 27%/Variable 73%
Karim Hajjar CFO and ELT member	926,436	Amount	648,505	810,631	347,413	1,158,045	2,732,986
		% of Salary	70%	87.5%	37.5%	125%	Fixed 34%/Variable 66%
Augusto Di Donfrancesco ELT member	717,600	Amount	502,320	627,900	269,100	897,000	2,116,920
		% of Salary	70%	87.5%	37.5%	125%	Fixed 34%/Variable 66%
Hervé Tiberghien ELT member	520,574	Amount	364,402	455,502	195,215	650,718	1,535,694
		% of Salary	70%	87.5%	37.5%	125%	Fixed 34%/Variable 66%
Marc Chollet ELT member	477,000	Amount	333,900	417,375	178,875	596,250	1,407,150
		% of Salary	70%	87.5%	37.5%	125%	Fixed 34%/Variable 66%
Dominique Golsong ELT member	472,238	Amount	330,567	413,208	177,089	590,298	1,393,102
		% of Salary	70%	87.5%	37.5%	125%	Fixed 34%/Variable 66%

Note: As with other Belgium-based employees, indexation has been applied to ELT members' fixed remuneration under a local Belgian contract in 2023.

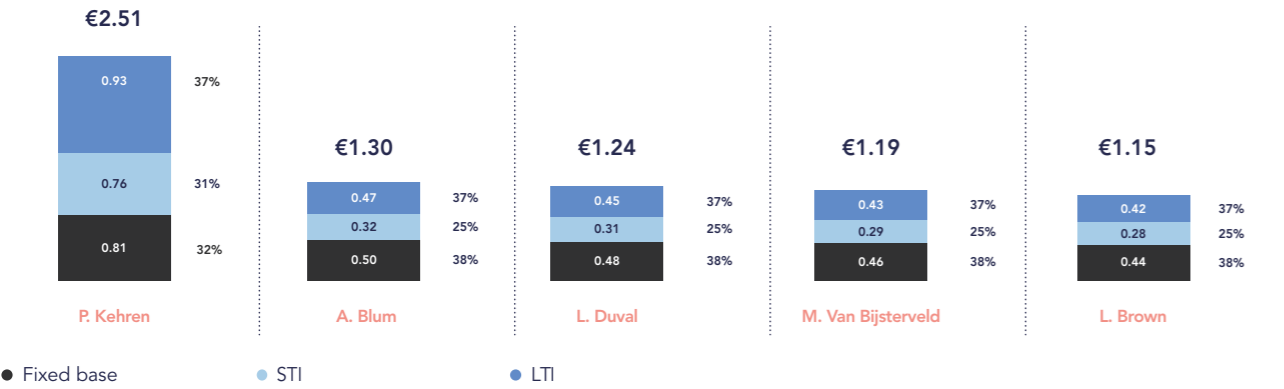
6.3.3.2 Solvay ELT after the Partial Demerger Date

DETAILED TABLE AS OF DECEMBER 31, 2023

Overview

The below table provides the pay mix of the new ELT members appointed effective upon completion of the Partial Demerger, annualized based on their remuneration as of December 31, 2023, covering base remuneration and both short- and long-term incentives at target. It is also worth highlighting that the below tables display the aforementioned components of the remuneration to which ELT members would have been entitled, at target, for the period from January 1, 2023 until December 31, 2023. It does not take into account that they were appointed as ELT members upon completion of the Partial Demerger and any proratisation resulting therefrom, nor any remuneration to which they would have been entitled in their prior roles at Solvay. Actual remuneration paid to ELT members after the Partial Demerger Date is described in section 6.3.6.

REMUNERATION OPPORTUNITY OF THE ELT MEMBERS
(full year with incentives at targets) in million of euros



DETAILED TABLE AS ON DECEMBER 31, 2023
in €

		Variable remuneration as of December 31, 2023					Total direct remuneration
	Fixed remuneration (on a comparable full year basis)	Value measurement	STI target	LTI target issued as Performance Share Units	LTI target issued as Restricted Share Units	Total LTI value	
Philippe Kehren CEO and Chairman of the ELT	810,000	Amount	769,500	652,050	279,450	931,500	2,511,000
		% of Salary	95%	80.5%	34.5%	115%	Fixed 32%/Variable 68%
Alexandre Blum CFO and ELT member	500,000	Amount	325,000	332,500	142,500	475,000	1,300,000
		% of Salary	65%	67%	29%	95%	Fixed 38%/Variable 62%
Lanny Duvall ELT member	480,000	Amount	312,000	319,200	136,800	456,000	1,248,000
		% of Salary	65%	67%	29%	95%	Fixed 38%/Variable 62%
Mark Van Bijsterveld ELT member	460,000	Amount	299,000	305,900	131,100	437,000	1,196,000
		% of Salary	65%	67%	29%	95%	Fixed 38%/Variable 62%
Lisa Brown ELT member	445,000	Amount	289,250	295,925	126,825	422,750	1,157,000
		% of Salary	65%	67%	29%	95%	Fixed 38%/Variable 62%

6.3.4. Base remuneration and benefits

Fixed base remuneration

Fixed base remuneration reflects an individual’s experience, skills, responsibilities, and performance. It is reviewed annually and may be adjusted, taking into consideration a number of factors, including:

- comparable salaries in appropriate comparator groups;
- changes within the scope of the role;
- changes in the Group’s size and profile; and
- inflation following legal requirements in different countries.

Base remuneration, which does not include the value of any benefits offered to ELT Members, is used to calculate targets for variable remuneration. Details of the base remuneration of the CEO and ELT Members are disclosed in sections 6.3.2. and 6.3.6. of this Annual Integrated Report.

- Fixed base remuneration for the new ELT members in 2024.
- The Board of Directors does not foresee, in 2024, increases to the base salary of the CEO and other ELT members, as disclosed in the table above, as it remains aligned with the market median of the new peer group.

Benefits, including pension

In alignment with the Solvay Cares aspirations, benefits are seen as a critical part of Solvay’s remuneration offering and are not dependent on an individual’s performance. Solvay aims to ensure that the nature and level of these other benefits are in line with market practice and what is provided to other executives in the Group.

The CEO of the Company before the Partial Demerger date, Ilham Kadri, was self-employed and had entered into a contractual agreement with the Company, which provided for specific provisions with respect to pension contributions, death-in-service, and disability benefits. Such agreement was transferred to Syensqo as part of the Partial Demerger.

The CEO since the Partial Demerger date, Philippe Kehren, is self-employed and has entered into a contractual agreement with the Company in Belgium. This agreement includes pension contributions, death-in-service, and disability benefits.

The other ELT members can either work under local employment contract as employee of the company, or enter into separate contractual agreements with the Company, giving them self-employed status in Belgium.

- ELT members who are employees under a local contract are granted benefits such as a pension, death-in-service, and disability benefits according to the provisions of the plans applicable in line with home country market practice.
- Self-employed ELT members (other than the CEO) are entitled to the payment of an annual fixed base fee under their contractual agreement with the Company, which also covers pension contributions, death-in-service, disability, and healthcare benefits, as well as certain benefits-in-kind (e.g., company car).

As from the Partial Demerger date, ELT members Alexandre Blum (CFO) and Lisa Brown (General Counsel and Corporate Secretary) have entered into separate contractual agreements with the Company, giving them self-employed status in Belgium. Mark Van Bijsterveld (Chief People Officer) based in the Netherlands, is under a local employment contract. As the change of status from employee to self-employed under a management agreement requires a change in immigration status, the transition from employee status to self-employed for Lanny Duvall (Chief Operations Officer), based in Belgium, will enter into force in the following months once the required documents are granted from the Belgian authorities. In the meantime, Lanny Duvall remains an employee.

6.3.5. Short- and long-term variable play

6.3.5.1. Short-term Incentive (STI) plan

Maximum award opportunities

As per the Remuneration Policy, the STI target is 120% of fixed base remuneration for the CEO and up to 70% of fixed base remuneration for other ELT members. The minimum payout is 0% and maximum is 200% of target STI.

In line with the Remuneration Policy, the target opportunity provided by the STI plan for the CEO before the Partial Demerger date, Ilham Kadri, was 120% of fixed base remuneration, and up to 70% of fixed base remuneration for other former ELT members.

2024 STI award opportunity for new ELT members

The Compensation Committee used its discretionary power to reduce STI award opportunities for ELT members following the Partial Demerger, to align with peer practice to better reflect Solvay's new scope. To this end, the target award opportunity provided by the STI plan for the CEO, Philippe Kehren, since the Partial Demerger Date, is 95% of fixed base remuneration, and 65% of fixed base remuneration for other current ELT members.

Malus and clawback

As per the Remuneration Policy, the Compensation Committee may exercise discretion to activate malus and clawback provisions in exceptional circumstances, such as serious reputational damage, risk management failures, financial errors, misconduct, regulatory breaches, significant losses, or deteriorating financial health, with clawback potentially extending up to three years for awards under the Remuneration Policy.

Setting STI performance objectives

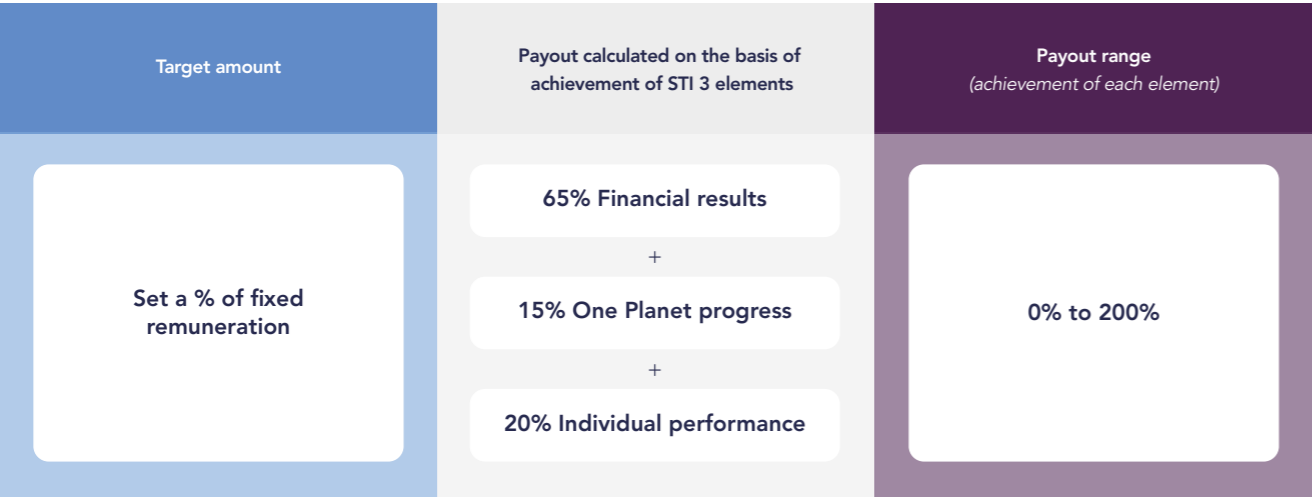
Annually, the Board establishes performance objectives for both the Group and the CEO, a process typically conducted during the February Board meeting. The performance objective-setting aims to establish challenging yet achievable targets, incorporating input from various perspectives within the business while ensuring alignment with Solvay's long-term growth and sustainability goals communicated to the market. Moreover, this process is also mindful of not incentivizing executives to take excessive risks that could jeopardize the company's stability, reputation, and long-term sustainability.

Solvay's strategy for performance objectives tied to Short-term Incentives (STIs) involves establishing ambitious, growth-focused targets for the target award level, while maximum awards are reserved for achieving exceptionally high performance levels, ensuring adherence to the principle of pay-for-performance.

In line with market practice, and due to the commercial sensitivity of disclosing short-term targets prospectively, Solvay discloses the performance objectives set and the performance against them on a retrospective basis only. The next section provides a breakdown of how the CEO performed against the targets set under the STI plan for the 2023 financial year.

2023 STI performance objectives

The STI plan provides a cash opportunity that is based solely on the achievement of pre-determined annual financial, non-financial, and individual objectives.



The STI plan focuses on three broad performance categories with the following weightings for all ELT members:

- Financial objectives (65% of the STI): Underlying EBITDA organic growth and free cash flow (FCF) conversion.
- Solvay One Planet objectives (15% of the STI): Solvay One Planet is structured around the three major pillars of Climate, Resources, and Better Life, and serves as our roadmap toward a sustainable future. Specific KPIs are selected under each major pillar to measure our performance in ways that are material, quantifiable, and relevant to driving long-term value for all stakeholders. More information on Solvay One Planet can be found on our corporate website.
- Individual objectives (20% of the STI): Customized for each ELT member to align with their specific roles and responsibilities within the organization. They may include objectives related to areas such as project milestones, innovation initiatives, leadership development, or any other relevant metrics that measure the ELT member's impact on the Company's success. These objectives are pre-determined, and may be quantitative and/or qualitative. These are defined by the Board for the CEO and then cascaded down to other ELT members by the CEO. The CEO assesses the achievement of individual objectives by ELT members, and this assessment is then reviewed and validated by the Board. The individual performance of the CEO is assessed by the Compensation Committee, and this is then reviewed and validated by the Board. The CEO is absent from the Compensation Committee and Board meetings during all discussions relating to CEO pay. Details of the individual performance of the CEO, including the targets set and their achievement, are explained below.

Group performance 2023

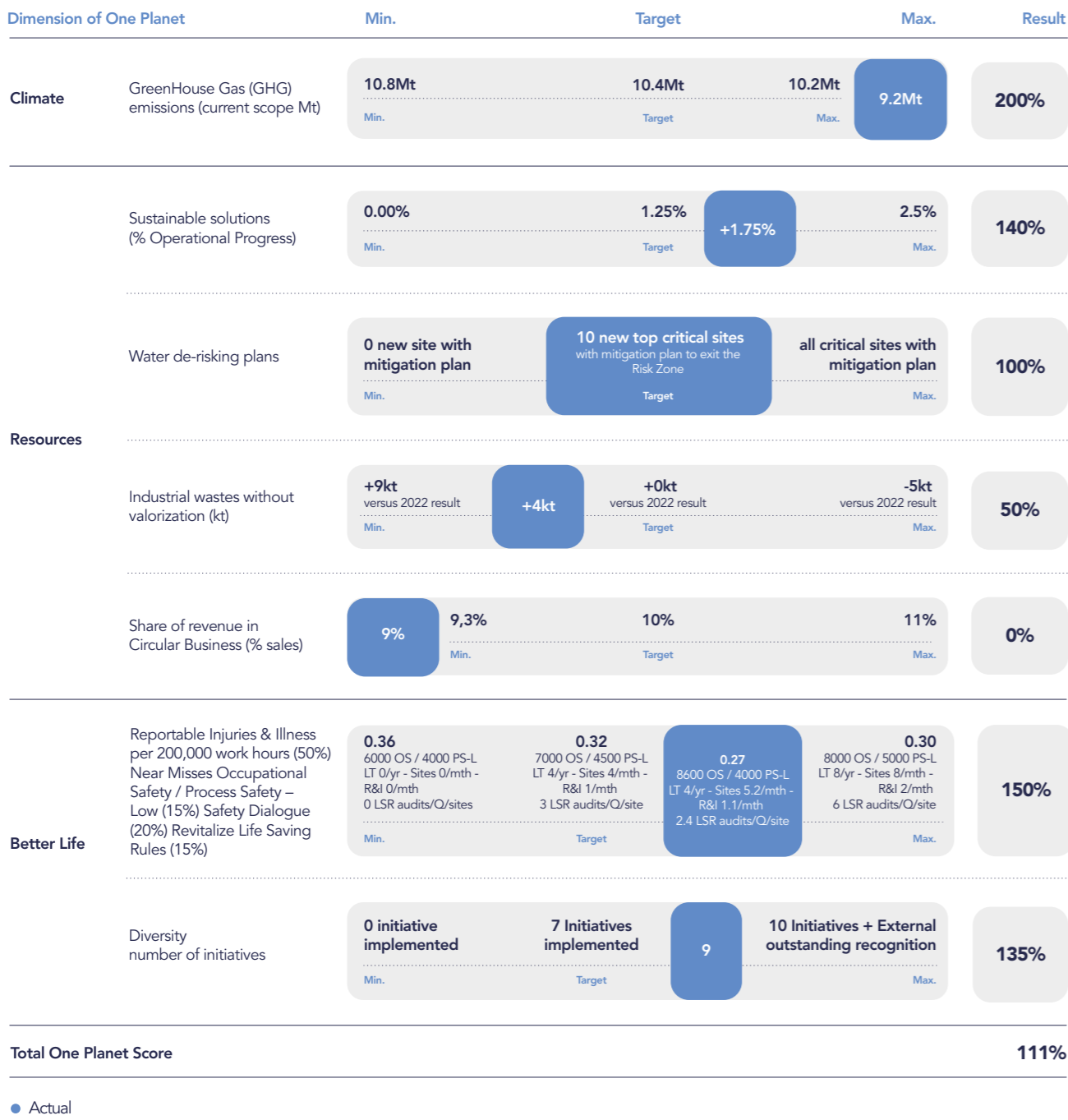
The Group's 2023 performance results are based on the Solvay perimeter prior to the Partial Demerger, which includes the Specialty Businesses presented as "discontinued operations" in the consolidated financial statements. The final scores have been approved by the Board of Directors at the time of the Partial Demerger and based on the best available forecasts of the financial performance.

GROUP PERFORMANCE 2023



● Actual performance

DIMENSION OF ONE PLANET SOLVAY



Despite strong headwinds of stagnating key economies, the business results were broadly in line with market guidance. Following a record 2022, Solvay showcased its resilience and protected its position. Our margins rose to 25%, limiting EBITDA erosion to 4.9% and we sustained strong cash generation and cost discipline, securing dividends distribution, and allowing us to stand out against our peers. Solvay’s strong TSR performance is another external measurement of success that establishes a clear focus for the ELT and has a direct link with the value being delivered to shareholders. More information can be found in the Performance Review section of this Annual Integrated Report.

The Solvay One Planet targets for 2023 apply to the former Solvay scope (before the Partial Demerger). They were composed of seven targets with an equal weight:

- Five quantitative targets measuring the performance in terms of GHG emissions (result 2), sustainable solutions (result 1.4), industrial waste without valorization (result 0), circular business (result 0), and safety (result 1.5).
- Two qualitative targets measuring the progress in the execution of action plans regarding water (result 1) and diversity (result 1.35). The strong performance on GHG is due to emission-reduction projects which started to deliver savings in 2023 as well as some drop of production. We’re progressing as expected with plans to mitigate the risk of water scarcity on critical sites. However, the act of substituting lower-quality coal banned Russian sources and generated more wastes which we were not able to fully valorize in 2023.

The ongoing transformation of our business portfolio significantly increased the share of sustainable solutions in 2023, however it impacted marginally the share of circular businesses. The good performance on safety reflects our continued efforts to deploy a safety culture among Solvay employees and contractors while we’ve been successfully deploying our action plan to promote diversity, equity, and inclusion.

Summary of CEO STI objectives for 2023

The below section provides an overview of the STI objectives set for the CEO before the Partial Demerger date, Ilham Kadri, as the performance achieved against the targets set.

Objectives	Overall weight	KPI	Sub-weight
Financial	65%	EBITDA (70%)	45.5%
		Free Cash Flow (30%)	19.5%
Sustainability	15%	One Planet	15%
Individual non-financial	20%	Solvay 2030	5%
		GROW 2.0	5%
		Pursue Solvay's transformation (culture and structure)	5%
		Be a leading ambassador for the chemical industry and Solvay activities	5%

STI Results in 2023

Category	Objective	Key initiatives delivered as part of the objective	Achievement
Strategy	Solvay 2030 vision: Partial Demerger 5%	<ul style="list-style-type: none">• Manage the PMO and secure successful implementation.• Design two new archetypes and launch Day 1 operating model.• Develop a robust engagement strategy at all levels of the organization, via town halls and webcasts for all employees and retreats with the SLT, to embark, co-create, and develop a change management culture.• Design two new company governances, align with shareholders (including reference shareholders) and implement (including two new high profile boards).• Manage debt, credit rating, and liabilities of the two new companies.	10%
	GROW 2.0 Pursue GROW Strategy and Carbon Neutrality targets 5%	<ul style="list-style-type: none">• Approve and start PVDF USA and pursue PVDF Tavaux (Inovyn agreements in place).• Launch second H2O2 licensing in China.• Industrial: STAR Factory* progress after flagship sites in place (in 2022).• Composites Strategy review and refresh including carbon fiber.• Pursue Soda Ash decarbonization investments in Rheinberg, Dombasle, Green River, and Devnya; relaunch Argo.	10%
Organization	Pursue Solvay's transformation (culture and structure) and instill purpose and values in new Companies 5%	<ul style="list-style-type: none">• Groom/coach successors for top roles.• Decide next chapter of OLT (business leadership) organization.• Manage gaps for Day 1/Day 90 and hire new senior leaders to close gaps.• Define a roadmap to create two companies culture fit for purpose.• Continue promoting our values and behaviors across company (CoBi).• Drive Solvay 160 years celebrations.	10%
	Be a leading ambassador for the chemical industry and Solvay activities 5%	<ul style="list-style-type: none">• Lead a responsible and sustainable fluorochemical industry in ECHA consultation.• Interact with government to support chemical industry and Solvay.• Lead external institutions (WBCSD, CEFIC) to promote a sustainable chemical industry.• Participate in top level meetings in various events (ERT, WEF, ISSB).• Manage controversies.	10%
Total 20% of STI		Final individual performance score	40%

* STAR Factory is about transforming the capabilities and operational efficiencies of our plants to ensure they are best-in-class in all areas.

The overall performance of the CEO, during an unprecedented transformational year, was recognized as exceptional by the Board. Despite strong headwinds of stagnating key economies, the business results were broadly in line with market guidance. This is significant considering a number of key competitors having issued profit warnings during 2023. Ilham Kadri managed to deliver the Partial Demerger on time and with key stakeholder backing. She drove a boost in reputation by engaging with stakeholders on sustainability issues, receiving SBTi validation on the Climate Objectives of Solvay before the Partial Demerger, boosting our Chemscore to rank sixth among 50 peers, marking a gain of nine positions from 2022 and the safety record continued to improve. For this exceptional performance the Board agreed a 200% individual performance factor which is 20% of the target amount, resulting in a bonus award for 2023 of €2,135,000.

STI payout amounts, taking into account the Group and individual performance of each ELT member for the results achieved in 2023, are disclosed in section 5.3.4. Amount of remuneration paid and other benefits granted directly or indirectly to the CEO and other ELT members.

2024 STI objectives for new ELT members			
The Board decided to maintain the same breakdown of performance objectives for new ELT members for the 2024 financial year – 65% based on financial results, 15% on sustainability, and 20% on individual objectives. However, as in previous years, due to the commercial sensitivity surrounding the short-term targets set, Solvay will disclose on a retrospective basis the performance achieved against the specific performance objectives set by the Board.			
CEO'S PERFORMANCE MEASURES AND WEIGHTINGS FOR THE 2024 FINANCIAL YEAR			
Objectives	Performance measures	Weighting	Sub-weighting
Group	EBITDA €	65%	25%
	Free Cash Flow €		25%
	Cost savings €		15%
	One Planet – Diversity progress	15%	5%
	One Planet – Safety (RIIR)		5%
	One Planet – GHG emissions		5%
Individual	Build credibility of the new Solvay on the market	20%	10%
	Achieve the transformation of the Group		10%

6.3.5.2. Long-term Incentive (LTI)

Solvay aims to incentivize its ELT members by implementing a Long-term Incentive (LTI), wherein a substantial portion of equity awards is contingent upon performance criteria aligned with the Company's communicated strategy. This approach fosters alignment with shareholder interests, promoting accountability and driving long-term value creation through strategic execution and performance excellence.

Solvay uses two equity programs to incentivize its ELT members. The first is through the Performance-based Share Units (PSUs) which vest by meeting pre-defined long-term financial and non-financial objectives over a three-year performance period to promote a focus on long-term enterprise value growth and sustainability. The second equity program is comprised of Restricted Stock Units (RSUs) which vests over three years and aims to align ELT members' interests with that of shareholders and foster the retention of key personnel.

As per the Remuneration Policy, LTI grants for ELT members were offered with the following split:

- 70% of the annual grant value delivered in the form of **Performance-based Share Units** (PSU); and
- 30% of the award offered in the form of **Restricted Share Units** (RSU).

2024 LTI structure for new ELT members.
The Board has decided, in line with the Remuneration Policy, to maintain the same split of long-term incentive programs for new ELT members for the 2024 financial year – 70% in the form of PSUs and the remaining 30% in the form of RSUs.

LTI award opportunity

As per the Remuneration Policy, the LTI target is 150% of fixed base remuneration for the CEO and up to 125% of fixed base remuneration for other ELT members. Outcomes range from zero if the minimum targets are not met, to maximum of 150% of target if all plan objectives are achieved.

The CEO before the Partial Demerger, Ilham Kadri, had an LTI grant target of 150% of fixed base remuneration. For all other former ELT members, the grant target value was up to 125% of the fixed based remuneration.

The actual annual grant value, within the limits of the Remuneration Policy as explained above, is determined and approved by the Board.

In February 2023, the Board granted a total of 43,610 PSUs and 18,692 RSUs to ELT members. Approximately 360 executives and high-potential employees also participated in the LTI Plan.

2024 LTI award opportunity for new ELT members
The Compensation Committee used its discretionary power to reduce LTI award opportunities for ELT members following the Partial Demerger to align with peer practice to better reflect Solvay's new scope. The CEO after the Partial Demerger, Philippe Kehren, has an LTI grant target of 115% of fixed base remuneration. For all other current ELT members, the grant target value is up to 95% of the fixed based remuneration.

Performance Share Units (PSUs)

The PSUs determine 70% of the annual LTI grant, which vest three years from the date of grant, subject to the achievement of the pre-set performance objectives. The opportunity varies from a minimum of zero, if the minimum target is not met, to a maximum payout of 150%, if the maximum target is achieved.

Performance objectives are distributed across financial (60% to 80% of the award) and One Planet (20% to 40% of the award) categories, with targets and their respective weights established to align with the Group's mid- and long-term strategy. In addition, when determining the level of vesting for PSUs, an additional performance measure was introduced as of 2023 to compare the performance of the Group to the TSR performance of the Stoxx 600 Index ensuring a clear focus within the ELT to create shareholder value. Where the PSU result is above zero, the TSR measure can decrease the PSU outcome by 25% when the TSR is in the lower quartile of the Stoxx 600 Index, and increase the PSU result by 25% when the TSR is in the top quartile of the Stoxx 600 Index.

The Board assesses the achievement of the targets set, based as a rule on the audited results of the Group.

Every year, the Board determines the budget available for distribution and the total volume of PSUs available is subsequently allocated to the eligible population.

Restricted Share Units (RSUs)

The remaining portion of the LTI grant is in RSUs (30%), where executives receive shares that vest after three years. RSUs feature employment or presence conditions, and dividends accrue solely on vested awards, paid out at the conclusion of the three-year vesting period.

PSUS, RSUS ALLOTTED IN 2023 (UNTIL DECEMBER 8, 2023) TO ELT MEMBERS BEFORE THE PARTIAL DEMERGER DATE				
Country	Name	Function	Number of PSUs (1)	Number of RSUs (2)
Belgium	Ilham Kadri	CEO/Chair of the ELT until the Partial Demerger date	20,295	8,698
Belgium	Karim Hajar	ELT member until the Partial Demerger date	5,898	2,528
Belgium	Augusto Di Donfrancesco	ELT member until the Partial Demerger date	5,898	2,528
Belgium	Hervé Tiberghien	ELT member until the Partial Demerger date	4,302	1,844
Belgium	Dominique Golsong	ELT member until the Partial Demerger date	3,400	1,458
France	Marc Chollet	ELT member until the Partial Demerger date	3,817	1,636
Total			43,610	18,692

(1) PSUs share price for March 2023 grant was €100.89.
(2) RSUs share price for March 2023 grant was €100.89.

No PSUs or RSUs were granted to ELT members between December 9 and December 31, 2023.

The 2023 PSU and RSU plans, among other LTI plans, were adjusted in the context of the Partial Demerger. Such adjustments are described below under the Adjustments to the outstanding SOPs and PSUs and RSUs plans section.

Clawback provisions relating to LTI

Solvay has the right to claim reimbursement of any amounts paid in accordance with the plan from any PSU and RSU plan participant, during a period of three years from the date of the payment, on the basis of erroneous results that were subsequently adjusted or corrected. This clawback clause has not been applied in the past because there have not been any instances where such events occurred.

2020-2022 LTI Performance Share Unit plan performance results

The results of the 2020 PSU grant were calculated in April 2023 and paid in June 2023, based on a three-year performance period ending on December 31, 2022, with a vesting factor of 100% of target.

Performance against the objectives set at the start of the performance period in 2020, for the three years performance under the 2020 plan, is summarized below:

Performance criteria	Weight	Performance year 2020		Performance year 2021		Performance year 2022	
		Target	Result	Target	Result	Target	Result
Underlying EBITDA organic growth	40%	-2%	-14%	5%	27%	5%	29%
ROCE growth (bp)	40%	0	-120bp	+50bp	443bp	+100bp	470bp
CO2 emissions reduction	20%	-200Kt	-1900Kt	-200Kt	900Kt	-200Kt	-600Kt

Based on the performance achieved against the targets set at the start of the performance period, this resulted in a payout of 100% of the PSU value granted in 2020, with the addition of the total dividends, taking into account the number of vested units calculated over three years (€11.65 per unit).

Payouts made in 2023 to ELT members relating to the 2020-2022 PSU plan are disclosed in the section below: 5.3.5 Amount of remuneration paid and other benefits granted directly or indirectly to the CEO and other ELT members.

Stock option plans (SOP)

The historical Stock Option Plan has been replaced by the PSU and RSU plans detailed above. However as of December 31, 2023, stock options remained outstanding under the 2016, 2017, 2018, 2019, 2020, and 2021 SOPs and the rules thereof are reiterated below.

Under Belgian law, unlike most other jurisdictions, taxes on stock options are due at the time of grant. Solvay, like other Belgian companies, had therefore set no additional performance criteria for determining the vesting of stock options. The options have a vesting period of three full calendar years, meaning that options will vest on the first day of the fourth year after the grant year, followed by a four-year exercise period.

When they were granted, the SOPs gave each beneficiary the right to buy Solvay shares at a strike price corresponding to the fair market value of the shares upon grant. Every year, the Board determined the volume of stock options available for distribution, based on an assessment of the economic fair value at grant, using the Black Scholes valuation formula. The total volume of options available was subsequently allocated to the eligible population.

Features:

- Options are granted at money or fair market value.
- They become exercisable for the first time three full calendar years after they are granted.
- They have a maximum term of eight years.
- They are not transferable inter vivos.
- The plan includes a bad leaver clause.

The outstanding SOPs were adjusted in the context of the Partial Demerger with a view to safeguard the interests of the beneficiaries. Such adjustments are described in the Adjustments to the outstanding SOPs and PSUs and RSUs plans section.

In addition, SOPs also remain outstanding under the 2022 SOP, which was approved by shareholders at the May 9, 2023, Annual General Meeting with the following features:

- Stock options were subject to performance conditions – implementation of separation and value creation – and would have been forfeited in full if the Partial Demerger had not occurred by 2025.
- The combined share prices of Solvay and Syensqo following completion of the Partial Demerger had to be above €100 for at least 15 trading days in total (not required to be consecutive days) for the options to become exercisable as from January 1, 2026, and deliver value. If this criteria had not been met, the award would have lapsed.
- The options may be exercised by beneficiaries between January 1, 2026, and December 31, 2027, inclusive, providing presence and performance criteria are met.
- Taxes are paid at the time of the grant in Belgium and cannot be recouped if the options do not vest or upon voluntary departure, demonstrating executives' commitment and belief in the success of the Partial Demerger and value creation for both companies.
- The Exercise Price of each option is €84.34, which was the fair market value of the Solvay share at the time of the grant (August 2022).
- Each stock option entitles its holder to acquire one Solvay share and one Syensqo share against payment of the exercise price (basket option).
- Stock options were determined as a multiple of annual base salary in a range between 50% and 200%, depending on the Board's view of how critical the role of the beneficiary was for the Partial Demerger.

The 2022 SOP plan was not adjusted in the context of the Partial Demerger. Accordingly, the 2022 stock options remain basket options, entitling their holders to acquire one Solvay share and one Syensqo against payment of the exercise price.

Adjustments to the outstanding SOPs, PSUs, and RSUs in the context of the Partial Demerger

Overview

Plan	Plan adjustment	Vesting
PSU 2021 (cash settled)	Payout determined based on Solvay share price from November 17-30, 2023	December 31,2023 Cash payout in June 2024
PSU 2022 (equity settled)	"Shareholder approach" and converted into RSU	December 31, 2024
RSU 2022 (equity settled)	"Shareholder approach"	December 31, 2024
PSU 2023 (equity settled)	"Employer approach" New targets set for 2024 and 2025	December 31, 2025
RSU 2023 (equity settled)	"Employer approach"	December 31, 2025

In the context of the Partial Demerger, most outstanding long-term incentive plans of the Group were adjusted by the Board, upon the advice of the Compensation Committee, to take into account the impact of the Partial Demerger, as follows:

- The 2016-2021 SOPs were adjusted to allow the beneficiaries to receive for each outstanding stock option, giving the right to acquire one Solvay share and the right to acquire one Syensqo share (in addition to the right to acquire one Solvay share). The initial exercise price of the stock options was split between both the Solvay share and the Syensqo share, based, as a rule, on the closing prices of the Solvay share (€20.62) and of the Syensqo share (€98.93) on the first trading day following the Partial Demerger Date (December 11, 2023).
- The 2021 cash-settled PSU plan was adjusted so that (i) the performance for the 2023 financial year would be assessed based on the data available as of the time of the Partial Demerger and (ii) the payout would be determined based on the average of the last ten closing prices of the Solvay share for the period ending on November 30, 2023 (from November 17-30, 2023 included). Payout will occur in June 2024 in accordance with the original plan rules.
- The 2022 PSU plan was adjusted to allow the relevant beneficiaries to receive for each 2022 PSU held, entitling them to receive one Solvay share and one PSU entitling them to receive one Syensqo share (in addition to the 2022 PSU entitling them to receive one Solvay share they already held). In addition, the Board of Directors decided that (i) the performance for year 2024 would be extrapolated from the performance for the years 2022 and 2023, and (ii) the vesting multiplier dependent on Solvay's performance against the median of total shareholders return of the Stoxx 600 Index peer group (TSR) would be measured on the basis of the average closing prices of the Solvay share over the three-month period ending on November 30, 2023. The vesting period and conditions remain unchanged.
- The terms of the 2022 RSU plan were adjusted to allow the relevant beneficiaries to receive for each RSU held, entitling them to receive one Solvay share and one RSU entitling them to receive one Syensqo share (in addition to the RSU entitling them to receive one Solvay share they already held).
- The 2023 PSU plan was adjusted so that the number of PSUs held at the time of the Partial Demerger by participants who would remain employees of Solvay or any of its affiliates following the Partial Demerger, or were former employees of Solvay or any of its affiliates as of the Partial Demerger date, would be multiplied by a factor determined based on the average closing prices of the Solvay share relative to the combined average closing prices of the Solvay share and the Syensqo share over the 30 trading days starting immediately following the completion of the Partial Demerger. In addition, the performance conditions linked to the 2024 and 2025 performance years are being adjusted to reflect the strategy of Solvay and the impact of the Partial Demerger. The vesting period and conditions remain unchanged.
- The 2023 RSU plan was adjusted so that the number of RSUs held at the time of the Partial Demerger by participants who would remain employees of Solvay or any of its affiliates following completion of the Partial Demerger, or were former employees of Solvay or any of its affiliates as of the Partial Demerger date, would be multiplied by a factor determined based on average closing prices of the Solvay share relative to the combined average closing prices of the Solvay share and the Syensqo share over the 30 trading days starting immediately following the completion of the Partial Demerger.

As part of the Partial Demerger, Solvay transferred to Syensqo its rights and obligations under its outstanding incentive plans (including the 2022 stock option grant), in each case to the extent the beneficiaries of such plans (including members of the ELT before the Partial Demerger date) are employed by Syensqo or one of its affiliates following completion of the Partial Demerger. Specific adjustments were made to the 2023 PSU and RSU plans for such beneficiaries.

Stock options and share plans granted and held in 2023 by ELT members

The table below shows the evolution of outstanding balances of stock options, RSUs, and PSUs issued and held by:

- ELT members before the Partial Demerger date as of December 8, 2023, (i.e., before the adjustments described above became effective); and
- ELT members following the Partial Demerger as of December 31, 2023. No new stock options were granted in 2023 (i.e., after the adjustments described above became effective).

ELT members before the Partial Demerger date

Stock options							
Name	Balance on 12/31/2022	Granted in 2023 by December, 2023	Exercised in 2023 by December, 2023	Expired in 2023 by December 8, 2023	Vested	Non vested	Balance on 12/8/2023
Kadri, Ilham	271,572	-	48,537	-	56,632	166,403	223,035
Hajjar, Karim	168,257	-	14,857	10,195	88,811	54,394	143,205
Di Donfrancesco, Augusto	153,444	-	20,211	10,195	68,314	54,724	123,038
Tiberghien, Herve	50,490	-	-	-	16,415	34,075	50,490
Golsong, Dominique	29,454	-	-	-	-	29,454	29,454
Chollet, Marc	83,349	-	12,888	6,526	34,675	29,260	63,935
Total	756,566	-	96,493	26,916	264,847	368,310	633,157

Shares plan (PSU and RSU)				
Name	Numbers of shares	Balance on 12/8/2023	Vested	Non vested
Kadri, Ilham	PSU (phantom shares – PSU 2021)	11,640	11,640	
	PSU (performance shares)	37,221		37,221
	RSU (restricted shares)	15,952		15,952
Hajjar, Karim	PSU (phantom shares – PSU 2021)	2,877	2,877	
	PSU (performance shares)	10,734		10,734
	RSU (restricted shares)	4,601		4,601
Di Donfrancesco, Augusto	PSU (phantom shares – PSU 2021)	2,877	2,877	
	PSU (performance shares)	10,734		10,734
	RSU (restricted shares)	4,601		4,601
Tiberghien, Herve	PSU (phantom shares – PSU 2021)	2,616	2,616	
	PSU (performance shares)	8,320		8,320
	RSU (restricted shares)	3,566		3,566
Chollet, Marc	PSU (phantom shares – PSU 2021)	1,674	1,674	
	PSU (performance shares)	7,537		7,537
	RSU (restricted shares)	3,231		3,231
Total	PSU (phantom shares – PSU 2021)	21,684	21,684	
	PSU (performance shares)	74,546		74,546
	RSU (restricted shares)	31,951		31,951

As described above (Adjustments to the outstanding SOP, and PSU and RSU plans in the context of the Partial Demerger), the SOPs, PSUs, and RSUs were adjusted in the context of the Partial Demerger and the obligations of Solvay under SOPs, PSUs, and RSUs held by members of the ELT before the Partial Demerger date who transferred to Syensqo (i.e., Ilham Kadri, Herve Tiberghien, Marc Chollet, and Augusto Di Donfrancesco) were transferred to Syensqo pursuant to the Partial Demerger.

ELT members after the Partial Demerger date

Stock options								
Name	SOP	Balance on 12/9/2023	Granted in 2023	Exercised between the December 9-31, 2023	Expired between the December 9-31, 2023	Vested	Non vested	Balance on 12/31/2023
Philippe Kehren	Solvay (segregated options) ⁽¹⁾	2,573	-	-	-	-	2,573	2,573
	Syensqo (segregated options) ⁽¹⁾	2,573					2,573	2,573
	Basket options ⁽²⁾	7,616					7,616	7,616
Alexandre Blum	Solvay (segregated options) ⁽¹⁾	16,307		7,370		5,721	3,216	8,937
	Syensqo (segregated options) ⁽¹⁾	16,307		-	-	13,091	3,216	16,307
	Basket options ⁽²⁾	-	-	-	-	-	-	-
Total	Solvay (segregated options) ⁽¹⁾	18,880		7,370		5,721	5,789	11,510
	Syensqo (segregated options) ⁽¹⁾	18,880				13,091	5,789	18,880
	Basket options ⁽²⁾	7,616					7,616	7,616

(1) Options granted under the historical SOPs reflecting the adjustments described above (Adjustments to the outstanding SOP, and PSU and RSU plans in the context of the Partial Demerger) and which, accordingly, entitle their holder to acquire a Solvay share or a Syensqo share against the payment of separate exercise prices.
(2) Options granted under the 2022 Partial Demerger SOP and which, accordingly, entitle their holder to Solvay share and a Syensqo share against the payment of a single exercise price.
None of the other ELT members held any stock options as of December 31, 2023.

EShares plan (PSU and RSU)

Name	Numbers of shares	Balance on 12/31/2023	Vested	Non vested
Philippe Kehren	PSU 2021 (phantom shares)	628	628	
	RSU 2022 (restricted shares) – Solvay ⁽¹⁾	3,402		3,402
	RSU 2022 (restricted shares) – Syensqo ⁽¹⁾	3,402		3,402
	PSU 2023 (performance shares) ⁽²⁾	10,056		10,056
	RSU 2023 (restricted shares) ⁽²⁾	4,311		4,311
Alexandre Blum	PSU 2021 (phantom shares)	785	785	
	RSU 2022 (restricted shares) – Solvay ⁽¹⁾	1,595		1,595
	RSU 2022 (restricted shares) – Syensqo ⁽¹⁾	1,595		1,595
	PSU 2023 (performance shares) ⁽²⁾	4,714		4,714
	RSU 2023 (restricted shares) ⁽²⁾	2,024		2,024
Lanny Duvall	PSU 2023 (performance shares) ⁽²⁾	4,714		4,714
	RSU 2023 (restricted shares) ⁽²⁾	4,270		4,270
Lisa Brown	PSU 2023 (performance shares) ⁽²⁾	10,056		10,056
	RSU 2023 (restricted shares) ⁽²⁾	4,311		4,311
Mark Van Bijsterveld	PSU 2023 (performance shares) ⁽²⁾	10,056		10,056
	RSU 2023 (restricted shares) ⁽²⁾	4,311		4,311
Total	PSU 2021 (phantom shares)	1,413	1,413	
	RSU 2022 (restricted shares) – Solvay ⁽¹⁾	4,997		4,997
	RSU 2022 (restricted shares) – Syensqo ⁽¹⁾	4,997		4,997
	PSU 2023 (performance shares) ⁽²⁾	39,596		39,596
	RSU 2023 (restricted shares) ⁽²⁾	19,227		19,227

(1) RSUs granted under the 2022 RSU Plan reflecting the adjustments described above (Adjustments to the outstanding SOP, and PSU and RSU plans in the context of the Partial Demerger) and which, accordingly, entitle their holder to receive either a Solvay share or a Syensqo share.

(2) PSUs and RSUs granted under the 2023 PSU and RSU Plans reflecting the adjustments described above (Adjustments to the outstanding SOP, and PSU and RSU plans in the context of the Partial Demerger) and which were, accordingly, multiplied by a factor determined based on the average closing prices of the Solvay share relative to the combined average closing prices of the Solvay share and the Syensqo share over the 30 trading days starting immediately following the completion of the Partial Demerger.

Share ownership guidelines

To align executives’ interests with those of shareholders, a requirement to build and maintain a shareholding in Solvay equivalent to 150% of fixed base remuneration for the CEO and 100% of fixed base remuneration for other ELT members is included in the Remuneration Policy. This shareholding should normally be built up over a period not exceeding five years.

Any shares acquired to meet this requirement should be held until at least one year after the ELT member leaves the Group and, in any case, for at least three years after the shares were acquired.

At this stage every ELT member is building his or her shareholding.

6.3.5.3 Extraordinary items

Retention premium relating to the Group Portfolio Transformation

In 2022, the Group announced plans to create two distinct, independent, publicly listed industry leaders. The successful implementation of this project depended on the performance of Solvay’s ELT and key senior executives. As the Solvay Group moved forward with the Partial Demerger it was considered critical by the Board to retain those key leaders.

For this reason, next to an incentive element for the success of the Partial Demerger consisting in a share option plan, and upon recommendation of the Compensation Committee of March 8, 2022, the Board of Directors of March 14, 2022 approved a cash retention plan to Solvay’s ELT members, including the CEO, other executive officers, Global Business Unit (GBU) presidents, and heads of key functions.

The retention plans, crafted in alignment with the Remuneration Policy, were strategically devised to retain pivotal individuals crucial for spearheading the transformation project during a period of significant personal uncertainty. Their retention was considered imperative by the Board to maintain unwavering focus, mitigate distractions, and safeguard business continuity. Importantly, the payout of the retention bonus was contingent upon meeting performance criteria and maintaining active involvement within the Group up to the time of the Partial Demerger.

The premium amount was calculated based on a multiple of the monthly base salary as of April 2022 and the short-term incentive at target for 2022, ranging from 12-18 months.

This retention premium for those who were eligible are disclosed under the table in the section 6.3.6.1.

Exceptional bonus for the CEO before the Partial Demerger date, Ilham Kadri

Upon the recommendation of the Compensation Committee on October 30, 2023, the Board approved an extraordinary bonus of €12,000,000 (gross) for Ilham Kadri. This decision was based on the Board's acknowledgment, afforded through the Remuneration Policy and the spirit of the Corporate Governance Code, of Ilham Kadri's instrumental role in both devising and executing the transformational project, overcoming stringent deadlines, and unprecedented challenges. This transformational project, notable for its scale, underscored a significant leap in sustainable value creation for all stakeholders, marking a historic moment in the Group's 160-year history through the creation of two industry-leading champions in essential and specialty chemical products. Since the announcement of the Partial Demerger on March 25, 2022, Ilham Kadri's steadfast commitment to the Group played a pivotal role in successfully concluding the separation within the allotted time frame, while maintaining high team engagement levels, close to 80%.

During her tenure as CEO of Solvay, Ilham Kadri consistently delivered exceptional performance, navigating the company through a volatile environment marked by inflation, geopolitical tensions, and economic uncertainties. Despite these hurdles, Ilham Kadri's disciplined cost and cash management, alongside her efforts in reducing the company's indebtedness, accelerated the Group's transformation while solidifying its financial position, bolstering a robust balance sheet and industry-leading sustainability credentials. These efforts laid the groundwork for the Partial Demerger which culminated in the emergence of two distinct business entities, achieving a milestone three years ahead of the original schedule outlined in the G.R.O.W. strategy.

Given the direct link between this exceptional bonus and the success of the Partial Demerger, its grant was subject to approval by the Extraordinary Shareholders Meeting held on December 8, 2023, which was approved by shareholders.

6.3.6. Amount of remuneration paid and other benefits granted directly or indirectly to the CEO and other ELT members

According to the Remuneration Policy and based on the Board's assessment of the performance of the Group and ELT members in 2023, the remuneration of the CEO and other ELT members was as follows:

6.3.6.1 Solvay ELT from January 1, 2023, to December 8, 2023 (Before the Partial Demerger date)

The table below presents the payments made, including the extraordinary elements, to the previous ELT.

Name, Position	Fixed Remuneration/Base salary Until December 8 2023	Variable remuneration		Total direct remuneration	Extraordinary items (4)	Benefits		Total remuneration	Proportion of fixed and variable remuneration (excluding extraordinary items)	
		Annual variable pay based on 2023 paid in 2024	The value of vested equity based remuneration 2023 (2)			Pension	Other (3)			
Ilham Kadri, CEO & Chair of the ELT	1,315,971	2,135,000	1,025,982	4,476,953	16,290,000	953,080	274,643	21,994,676	Fixed	45%
									Variable	55%
Karim Hajjar, CFO & ELT member	1,004,513	543,000	297,436	1,844,949	3,819,897	247,502	192,934	6,105,281	Fixed	63%
									Variable	37%
Dominique Golsong, ELT member (1a)	451,114	276,000	0	727,114	895,420	0	0	1,622,534	Fixed	62%
									Variable	38%
Marc Chollet, ELT member	440,758	381,000	190,313	1,012,071	765,000	235,482	14,818	2,027,372	Fixed	55%
									Variable	45%
Augusto Di Donfrancesco, ELT member (1b)	666,632	621,000	297,436	1,585,068	1,759,500	326,881	127,667	3,799,116	Fixed	55%
									Variable	45%
Hervé Tiberghien, ELT member	508,481	472,000	297,436	1,277,917	1,613,285	129,557	143,889	3,164,649	Fixed	50%
									Variable	50%

Under the column Proportion of fixed and variable remuneration, extraordinary items have been excluded from the calculation as they were related to the one-off transformational project relating to the Partial Demerger.

(1a) Acting through and remuneration paid to management company "SRL Dominique Golsong" as such not eligible to any company paid benefits.

(1b) Expatriate assignment in Belgium until the end of March 31, 2023.

(2) PSU 2020-2022 paid in June 2023; overall plan result 100% of 120% as disclosed in the section "2020-2022 LTI Performance Share Unit plan performance results" of this report.

(4) Ilham Kadri: Retention premium (4,290,000 € gross) relating to the Group Portfolio Transformation of 18 months monthly fee and short term incentive fee at target on

(4) Karim Hajjar: Termination indemnity (3,344,288 € gross) of 12 months of total remuneration according to his employment contract as mentioned under section 5.5.Key provisions and other mandatory elements related to the end of contract (holiday pay upon termination, balance of end year premium).

(4) Dominique Golsong: Termination indemnity (120,420 € excl. VAT) of three months (fixed) fee, in compliance with the terms of his service contract. Mr. Golsong shall be entitled to an additional indemnity in an amount of 775.000 € excl. VAT payable in 2024 in consideration for the retention arrangements that were made in 2022.

(4) Marc Chollet: Retention premium (765,000 € gross) relating to the Group Portfolio Transformation of 12 months base salary and short term incentive at target on April 2022 approved by the Board of Directors on March 14, 2022.

(4) Augusto Di Donfrancesco Retention premium (1,759,500 € gross) relating to the Group Portfolio Transformation of 18 months base salary and short term incentive at target on April 2022 approved by the Board of Directors on March 14, 2022.

(targeted for April 2022 approved by the Board of Directors on March 14, 2022).

6.3.6.2 Solvay ELT from December 9-31, 2023 (after the Partial Demerger date)

The table below presents the payments made, where no additional remuneration payouts were provided to the new ELT.

Name, Position	Fixed Remuneration/ Base salary From December 9-31, 2023 (1)	Variable remuneration		Total direct remunera- tion	Extraordi- nary items	Benefits		Total remunera- tion From December 9-31, 2023 (1) Excluding the one-off pension contribution (4)
		Annual variable pay based on 2023 paid in 2024 (2)	The value of vested equ- ity based remunera- tion 2023 (3)			Pension (4)	Other (5)	
Philippe Kehren, CEO & Chair- man of the ELT	48,214	55,084	-	103,298	-	374,361	19,978	138,096
Alexandre Blum, CFO & ELT member	29,762	21,217	-	50,979	-	210,836	13,894	73,690
Lanny Duvall, ELT member	23,777	20,368	-	44,145	-	8,042	8,549	60,736
Lisa Brown, ELT member	26,488	18,883	-	45,371	-	7,752	5,747	58,871
Mark Van Bijsterveld, ELT member	25,449	19,519	-	44,968	-	8,230	4,461	57,659

(1) Remuneration paid for the period related to their ELT mandate in from December 9-31, 2023 (i.e., in their capacity of ELT member).

(2) Annual variable pay based on 2023 paid in 2024 for the time related to their ELT mandate from the December 9-31, 2023.

(3) The PSU 2020-2022 has been paid in June 2023, no payout during the period of December 9-31, 2023.

(4) Include a one-off pension contribution related to the transfer of the provision already accrued in France under the ARS pension to the Belgian pension scheme for Philippe Kehren (amount of 359,541€) and for Alexandre Blum (amount of 202,019€).

(5) Long-term non pension benefits (e.g. death-in-service, disability, and medical benefits) and benefits in kinds (e.g. company vehicle, relocation expenses).

COMPARATIVE INFORMATION ON THE EVOLUTION OF REMUNERATION AND COMPANY PERFORMANCE

The table below shows the change in remuneration of the Board and the ELT in comparison to the Group's performance over a period of five years.

	2019	2020	2021	2022	2023
Remuneration					
Remuneration of the Board (€)	1,645,433	1,687,500	1,620,587	1,575,538	2,182,606
Remuneration of the CEO	3,328,604	3,790,614	4,025,971	5,738,535 ⁽⁸⁾	5,842,772
— Ilham Kadri (€) (CEO until December 8, 2023)	3,328,604	3,790,614	4,025,971	5,738,535 ⁽⁸⁾	5,704,676 ⁽⁹⁾
— Philippe Kehren (€) (CEO as of December 9, 2023)	-	-	-	-	138,096 ⁽¹⁰⁾
Remuneration of ELT members (€)	6,499,400 ⁽¹⁾	7,726,374 ⁽²⁾	7,707,462 ⁽³⁾	8,327,681 ⁽⁴⁾	8,117,104 ⁽¹¹⁾
Average remuneration of employees (€)	69,220	61,945 ⁽⁵⁾	67,990 ⁽⁶⁾	76,588	68,424
Ratio between the remuneration of the CEO and the average remuneration of employees ⁽⁷⁾	48x	61x	59x	75x	85x
Solvay Performance ⁽⁰⁾					
Underlying profit for the period (€ million)	1,113	650	1,081	1,772	1,430
Underlying EBITDA (€ million)	2,322	1,945	2,356	3,229	2923
Free Cash Flow (€ million)	1,072	1,206	1,043	1,255	1041

(0) Solvay Performance - 2023 figures:
- Underlying profit: Calculated as the sum of Solvay's underlying profit for the financial year ending on December 31, 2023 (588m€) and the underlying profit of Syensqo from January 1, 2023 to December 8, 2023 (842m€).
- Underlying EBITDA: Calculated as the sum of Solvay's underlying EBITDA for the financial year ending on December 31, 2023 (1,246m€) and the Underlying EBITDA of Syensqo for the period from January 1, 2023 to December 8, 2023 (1,677m€).
- Free Cash Flow: Calculated as the sum of the Free Cash Flow of Solvay for the financial year ending on December 31, 2023 (561m€) and the Free Cash Flow of Syensqo for the period from January 1, 2023 to December 8, 2023 (480m€).
(1) V. De Cuyper, K. Hajjar, A. Di Donfrancesco, H. Du, H. Tiberghien (4 months), P. Juery (two months), C. Tandeau de Marsac (two months)
(2) V. De Cuyper, K. Hajjar, A. Di Donfrancesco, H. Du, H. Tiberghien
(3) K.Hajjar, A. Di Donfrancesco, H. Tiberghien, V. De Cuyper (three months), H. Du (three months), M. Chollet (nine months), D. Golsong (nine months)
(4) K. Hajjar, A. Di Donfrancesco, H. Tiberghien, M. Chollet, D. Golsong
(5) Impacted by furlough and other cost measures, while variable pay payouts were significantly higher in 2021 than the previous year.
(6) Considers impact of 2020 bonus paid in 2021 above target for all employees and impacted by payroll inflation in 2021.
(7) Ratio will increase in the future considering the performance and vesting of the PSU plan for the CEO (first grant of 2019 will vest in 2022).
(8) Higher short incentive payout related to 2022 due to the exceptional results and accomplishments and 2019 PSU payout in 2022 which increased the total CEO remuneration.
(9) Total CEO remuneration from January 1, 2023 until December 8, 2023 excluding exceptional bonus and Partial Demerger retention premium relating to the Group Portfolio Transformation.
(10) Total CEO remuneration from December 9, 2023 until December 31, 2023 excluding the one-off pension contribution related to the transfer of the provision already accrued in France under the ARS pension to the Belgian pension scheme (amount of € 359,541).
(11) Calculated as the sum of the remuneration of the members total of the ELT remuneration before the Partial Demerger from January 1, 2023 until December 8, 2023, excluding the retention premium relating to the Group Portfolio Transformation (total amount of € 7,865,850, and the remuneration of the members of the ELT after the Partial Demerger from December 9, 2023 until December 31, 2023 (amount of €251,254).

The remuneration of the CEO and the ELT members includes: (1) base remuneration paid in 2023; (2) STI for the results of 2023; and (3) PSU value for the results of the 2020-2022 plan, paid in June 2023 for the ELT members before the Partial Demerger. It does not include: (1) granted or vested value of LTIs during 2023, as SOPs do not represent a value until exercised and PSUs that vest on December 31 are paid the following year, taking into account the performance of the Group over the vesting period; and (3) any one-time payments. Average remuneration of employees is calculated as: “total wages and direct social benefits” divided by the “number of employees on a year-over-year basis for continued operations,” as disclosed in the respective sections of this Annual Integrated Report.

Following the guidance issued by the Belgian Corporate Governance Commission regarding remuneration disclosure, published in November 2020, the ratio of the CEO's pay (highest paid executive in the Group) to that of the lowest paid Solvay employee in Belgium in 2023 is 125x, compared to 114x in 2022, 90x in 2021, and 108x in 2020. The CEO remuneration for 2023 is calculated as the sum of the remuneration of the CEO before the Partial Demerger, Ilham Kadri, from January 1, 2023, until December 8, 2023, and the remuneration of the CEO after the Partial Demerger, Philippe Kehren, from December 9, 2023, until December 31, 2023.

The lowest paid employee is defined as a full-time employee in Belgium who has worked for a full year and holds the lowest base salary at year end. The actual total remuneration received by this employee is considered in the calculation of the ratio.

6.4. Statements of compliance of remuneration for Chairman and ELT members

This report has been prepared by the Compensation Committee.

The remuneration packages of the former and actual CEO and the other former or actual ELT members, are in compliance with Article 7:91 of the Belgian Code of Companies and Associations, which provides that, in the absence of statutory provisions to the contrary or express approval by the Annual General Meeting of Shareholders, at least 25% of the variable remuneration shall be linked to predetermined performance criteria that are objectively measurable over a period of at least two years, and at least another 25% should be based on predetermined performance criteria that are objectively measurable over a period of at least three years.

The remuneration packages are set by the Board, based on recommendations from the Compensation Committee. These remuneration packages are also compliant with the Belgian Code of Corporate Governance (2020).

Variable remuneration consisted of an annual incentive based on the performance achieved relative to the Group's economic and sustainable development performance objectives, and on the performance of the individual as measured against a set of pre-determined individual objectives.

Since 2022, ELT members, including the CEO, receive PSUs and RSUs in the form of shares.

The expenses of the ELT members, including those of its Chairman (the CEO), are governed by the same rules that apply to all senior management staff, namely the justification of all business expenses, item by item. Private expenses are not reimbursed. In the case of mixed business and private expenses, such as cars, a proportionate rule is applied in the same way as to all management staff in the same position.

According to Belgian Law, any changes to our Remuneration Policy need to be submitted to shareholders for approval before implementation.

6.5. Key provisions of Executive Leadership Team members' contractual relationships with the Company and/or an affiliated company, including provisions relating to remuneration in the event of early departure

ELT members, including the Chairman (or CEO), have directorships in Group subsidiaries as a function of their responsibilities. Where such directorships are compensated, they are included in the amounts given above, regardless of whether the position is deemed to be salaried or undertaken on a self-employed basis under local legislation.

6.5.1. ELT members from January 1, 2023 until December 8, 2023 (before the Partial Demerger Date)

The key provisions of the contracts with the members of the ELT of Solvay until December 8, 2023, including those relating to remuneration in the event of early departure, have been reported under section 6.5 of the previous remuneration reports.

In the context of the Partial Demerger, and as announced on November 3, 2023, three members of the ELT of Solvay have joined the ELT of Syensqo: Dr. Ilham Kadri, Mr. Hervé Tiberghien, and Mr. Marc Chollet. Mr. Augusto Di Donfrancesco joined Syensqo after the Partial Demerger, without being a member of the ELT. They have therefore left the ELT of Solvay on December 8, 2023.

As they joined Syensqo as of December 9, 2023, Dr. Ilham Kadri, Mr. Hervé Tiberghien, Mr. Marc Chollet, and Mr. Di Donfrancesco have not received any termination payment when leaving the ELT of Solvay in 2023. However, Mr. Tiberghien received mandatory elements related to the mutual termination of his employment contract (holiday pay upon termination and balance of end year premium) on December 8, 2023, due to his change of status under new standalone Syensqo.

Mr. Karim Hajjar left the ELT of Solvay on December 8, 2023. He received a contractual departure indemnity of 12 months remuneration (computed on his total remuneration), in compliance with Belgian law and the terms of his employment contract, disclosed in the previous report (p. 147).

Mr. Dominique Golsong left the ELT of Solvay on December 8, 2023. He received a contractual departure indemnity of three months (fixed) remuneration, in compliance with the terms of his service contract, disclosed in the previous report (p. 147). Mr. Golsong shall be entitled to an additional indemnity in an amount of € 775.000 (equivalent to nine months remuneration, computed on his total remuneration), payable in 2024.

Solvay waived the non-competition clauses for Mr. Golsong and Mr. Hajjar. Hence, no non-competition payment has been made.

6.5.2. ELT members as of December 9, 2023 (after the Partial Demerger Date)

ELT members of the new standalone Solvay as of December 9, 2023, have been appointed under a self-employed status and have a management agreement of Belgian law with Solvay for a definite period of four years that is tacitly renewed when their mandate is renewed. By way of exception, the CPO (Mr. Mark Van Bijsterveld) has an employment contract of Dutch law and the COO (Mr. Lanny Duvall) has an employment contract of Belgian law, both for an indefinite period (as mentioned above the intention is to move to a self-employment contract when the change in immigration status of Mr. Lanny Duvall will be completed).

The following termination arrangements have been agreed upon with the ELT members of the new standalone Solvay:

For the CEO it was decided to apply a severance fee equivalent to 12 months of remuneration in case Solvay terminates the agreement. This deviates from the provisions of the agreement with the former CEO as set out in the Remuneration Policy which provided for a fee equivalent to 18 months. Despite a technical deviation from the Remuneration Policy, this reduction better aligns to practice under the Belgian Corporate Governance Code.

Additionally, for the new ELT members the following provisions apply:

In the event that Solvay terminates the contract of the CEO (Mr. Philippe Kehren), the CFO (Mr. Alexandre Blum), or the General Counsel (Ms. Lisa Brown), or if their mandate is not renewed at the end of a four-year period, they will be eligible for a contractual termination indemnity equal to six months remuneration (calculated on the basis of the annual fixed fees and the short-term variable fees at target) for a seniority of less than one year within the Solvay Group at the time of the termination, or 12 months for a seniority of more than one year. Their management contracts provide for a non-competition period of 12 months after termination, with an indemnity equal to 50% of the remuneration for the non-competition period unless Solvay waives the application of the clause. This indemnity, if due by the Company, is included in the termination indemnity, from which it shall be deducted.

In the event that Solvay terminates the employment contract of the CPO (Mr. Mark Van Bijsterveld) he will receive a severance package equal to the higher of the statutory transition payment according to Dutch law or 12 months gross salary (the basis for the calculation of this severance package is the annual gross salary and the average of the STIs received in the past three years). His employment contract provides for a non-competition period of 12 months after termination.

In the event that Solvay terminates the employment contract of the COO (Mr. Lanny Duvall), the legal system according to Belgian law applies. A non-competition period of 12 months after termination applies, with an indemnity equal to the higher of (i) 60% of his gross remuneration (including fixed remuneration, non-fixed remuneration, and benefits) and (ii) 80% of the gross fixed remuneration (if Solvay does not waive the application of the clause).

In the event that Mr. Philippe Kehren resigns, he has to respect a notice period of six months. In the event that Mr. Alexandre Blum, Ms. Lisa Brown, and Mr. Mark Van Bijsterveld resign, they have to respect a notice period of three months. In the event that Mr. Lanny Duvall resigns, Belgian law applies.

All ELT members are subject to the non-competition agreements described above in the event of resignation, unless Solvay waives the application of the clauses.

In the event of a change in control over the Company, Ms. Lisa Brown may terminate the management agreement with three months notice to the Company within six months after the occurrence of such change in control. In such event, she will receive a termination indemnity at the same conditions as in case of termination by Solvay (the non-competition indemnity, if due by the Company, is included in the termination indemnity, from which it shall be deducted).

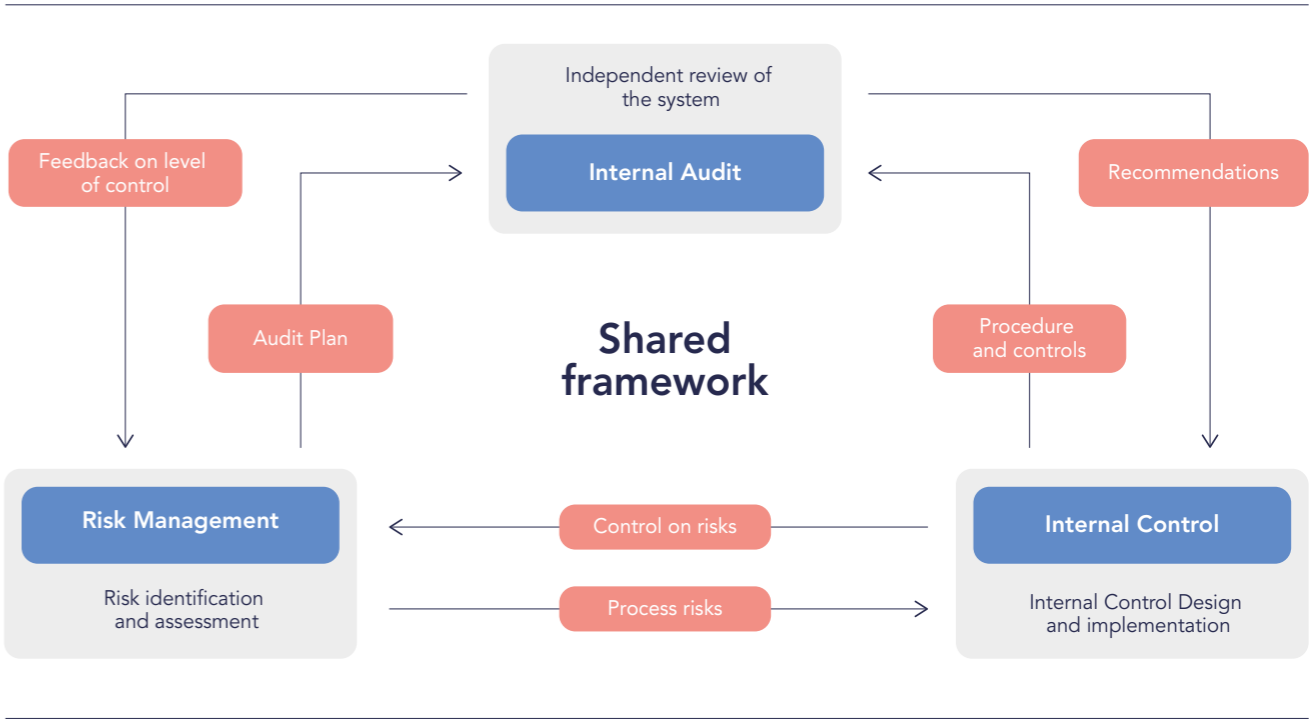
7. MAIN CHARACTERISTICS OF RISK MANAGEMENT, INTERNAL CONTROL AND INTERNAL AUDIT

7.1. Roles and responsibilities

Solvay leaders and managers are accountable for ensuring the adequacy of the risk management and internal control framework in their respective Global Business Units (GBUs) and Functions.

The Internal Audit and Risk Management department (IA/RM) organizes internal audit, internal control and risk management activities in a global assurance function to strengthen the efficiency and effectiveness of the risk management and internal control systems.

The Risk Management and Internal Control teams provide advice and ensure that leaders address the challenges at stake. They are in charge of setting up and maintaining a comprehensive and consistent system for risk management and internal control across the Group, which is independently reviewed by the Internal Audit team.



The extent to which Solvay is willing to take risk in pursuit of the Group's business strategy and the objective to create shareholder value is defined and managed by a number of qualitative and quantitative measures such as limits, triggers and indicators according to its risk appetite. The IA/ RM department communicates directly with the Audit and Risk Committee on a regular basis to ensure that risk management activities by Solvay management are aligned with the Board.

Solvay has set up an internal control system designed to provide reasonable assurance that:

- current laws and regulations are respected;
- policies and objectives set by general management are implemented;
- financial and extra-financial information is accurate; and
- internal processes are efficient and effective, particularly those contributing to the protection of Solvay's assets.

The five components of the internal control system and the role of internal audit as an independent assurance provider are described below.

7.2. The control environment

As the foundation of the internal control system, the control environment reflects the tone from the top, thus promoting awareness and compliant behavior among all employees. Its various elements create a clear structure of principles, rules, roles and responsibilities, while demonstrating management's commitment to compliance.

- The Code of Business Integrity is available on Solvay's website. It refers to underlying policies and procedures. Employees regularly receive training on the Code. More information can be found in the Extra-Financial Statements section of this report.
- An Ethics Hotline, managed by a third party, enables employees to report potential Code of Business Integrity violations if they cannot approach their managers or the compliance organization, or if they wish to remain anonymous. More information can be found in the Extra-Financial Statements section of this report.
- Standardized processes and controls, including delegations of authority and signature rules, as well as the application of the segregation of duties principle, are in place for financial and non-financial activities and transactions.

7.3. The risk assessment process

The Group-wide risk management process takes into account the organization's strategic objectives and is structured into the following phases:

- Risk analysis (identification and evaluation), risk assessment and decision on how to manage the critical risks
- Implementation of mitigation plans with risk owners accountable for delivery
- Monitoring of risk mitigation plans to ensure adequacy and effectiveness

The Audit and Risk Committee meets with the CEO and all other members of the Board once a year to discuss and approve the major risks facing the Group (“Group Risks”). During the year, the Audit and Risk Committee systematically reviews progress and regularly invites the relevant leaders and risk owners to provide overviews of their risk assessments and progress on mitigating actions. In accordance with the defined Group Risks, topics such as industrial safety, physical security, cybersecurity, ESG-related subjects, or ethics and compliance matters are addressed.

More information on Enterprise Risk Management, including a description of the Group's main risks and the actions taken to avoid or mitigate them at different levels in the organization can be found in the Risk Management section of this report.

7.4. Control activities

Solvay uses a systematic approach to design and implement internal control activities for the Group's most relevant processes. It includes a risk assessment step to define the key control objectives for processes at corporate, global shared services platforms named Global Business Services (GBS), Global Business Unit (GBU) and site level to ensure the production of reliable Financial Statements. Under the sponsorship of the CFO, a network of corporate process owners and GBU representatives has been set up to promote an internal control system tailored to the risks of each GBU and corporate function.

Following the risk assessment phase, the controls are designed and described by the corporate process owners with the support of the Internal Control team. The control descriptions are used as a reference for the internal control roll-out and assessment across the Group. At each level in the organization, the manager in charge of the process is responsible for control execution.

Solvay implements policies and processes applicable to all employees in the following financial domains: management control, financing and cash flow; financial control; financial communication; tax and insurance policies. Control activities are defined for all of these financial processes and for major Group-wide projects, like acquisitions and divestitures. Furthermore, an online Financial Reporting Guide explains how the IFRS rules should be applied throughout the Group.

Financial elements are consolidated monthly and analyzed by Controlling teams at all levels in the organization, as well as by Group Accounting and Reporting and the Executive Leadership Team. Elements are analyzed using plausibility and consistency checks, as well as various other methods, such as variance analysis, ratio analysis and comparison with forecasts.

In addition to the monthly reporting analysis, the Executive Leadership Team thoroughly reviews GBU performance every quarter in the context of business forecast reviews.

7.5. Internal control monitoring

The Audit and Risk Committee monitors and assesses the effectiveness of the internal control system. It supervises the work of the Internal Audit and Risk Management team relating to financial, operational and compliance monitoring. It is kept informed of the scope, programs and results of internal control testing, internal control self-assessments, and internal audit work. It also verifies that audit recommendations are properly implemented (for additional information on the work of Internal Audit see section below). The role and responsibilities of the Audit and Risk Committee are detailed in the Audit and Risk Committee Charter included in the Governance Charter.

Besides that, the Ethics and Compliance department coordinates investigations of potential Code of Business Integrity violations. More information on the work of the Ethics and Compliance department can be found in the Extra-financial Statements section of this report.

7.6. Information and communication

Group-wide information systems are operated by the IT department. A large majority of Group operations are supported by a small number of integrated Enterprise Resource Planning (ERP) systems. Financial consolidation is supported by a dedicated tool.

Financial reporting procedures and internal controls ensure that all material information disclosed by Solvay to investors, creditors and regulators is accurate, transparent and timely, and that it fairly represents the Group's most relevant developments, financial fundamentals and performance.

The Group Accounting and Reporting department provides detailed written instructions to all financial actors involved before each quarterly closing.

The publication of the quarterly financial results is subject to various review and approval steps:

- The Investor Relations team designs, develops and issues messages and information about the Group with the needs of financial markets in mind. It does so under the supervision and control of the Executive Leadership Team.
- The Audit and Risk Committee ensures that financial statements and communications by Solvay SA and the Group conform to generally accepted accounting principles (IFRS for the Group, Belgian accounting law for Solvay SA).
- The Board of Directors approves the consolidated periodic financial statements and those of Solvay SA (quarterly, semi-annual and annual) and all related communications.

7.7. Internal Audit

The Internal Audit team provides risk-based, independent and objective assurance to enhance and protect the organization's value. It uses a systematic and methodological approach to evaluate and improve the effectiveness of governance, risk management, and internal control processes and procedures, helping the organization accomplish its objectives.

The team performs internal audit assignments across the entire Group on the basis of its Audit Charter and the risk-based annual internal audit plan approved by the Audit and Risk Committee. The audit plan takes into consideration internal and external data, risk factors and benchmarks. It includes both entity-level audits and group-wide transversal assignments to address the Group's main risks, which are identified as part of the enterprise risk management process. Internal Audit aims to inspect consolidated entities within the Group at least every five years.

The assignments are scoped, planned and defined on the basis of a risk analysis focusing on key risk areas. It is the management's responsibility to ensure that internal audit recommendations are translated into action plans and implemented. The implementation status is monitored by the Internal Audit team and reported to the Executive Leadership Team, senior management, and the Audit and Risk Committee on a regular basis.

In 2023, the Internal Audit team conducted 17 assignments across all Solvay regions relating to the efficiency of operations and internal controls, as well as to governance, compliance, business integrity, ESG, safety of operations, information security and value protection topics.

The Head of Internal Audit and Risk Management reports to the Chief Financial Officer and maintains reporting relationships with the Chair of the Audit and Risk Committee and the CEO. She attends all Audit and Risk Committee meetings and periodically presents an activity report summarizing audit missions performed, the follow-up of recommendations and the annual audit program. She has direct access at all times to the Chair of the Audit and Risk Committee and the CEO.

8. EXTERNAL AUDIT

The audit of the Company's financial situation, financial statements, extra-financial statements and the conformity of these statements – and the entries to be recorded in the financial statements in accordance with the Code of Companies and Associations and the bylaws – are entrusted to one or more auditors. The auditors are appointed at the Annual Shareholders’ Meeting and chosen from among the members, either natural or legal persons, of the Belgian Institute of Company Auditors.

The responsibilities and powers of the auditor(s) are set by law.

- The Annual Shareholders’ Meeting sets the number of auditors and their emoluments in accordance with the law. Auditors are also entitled to reimbursement of their travel expenses for auditing the Company's sites and administrative offices.
- The Annual Shareholders’ Meeting may also appoint one or more alternate auditors. Auditors are appointed for three-year renewable terms, which cannot be revoked by the Annual Shareholders’ Meeting without good reason.
- The Audit and Risk Committee assesses the effectiveness, independence and objectivity of the external auditor with regard to the:
 - content, quality and insights provided in key external auditor plans and reports, in particular those summarizing audit work performed on risks identified by the Company
 - engagement with the external auditor during Committee meetings
 - robustness of the external auditor in their handling of key accounting principles
 - provision of non-audit services

For the year ending December 31, 2023, professional services were performed by Ernst and Young Réviseurs d’Entreprises SRL, duly incorporated and validly existing under the laws of Belgium, whose registered office is at Kouterveldstraat 7b, 1831 Diegem, Belgium, registered in the register of legal entities of Brussels under business registration number 0446.334.711, and their respective affiliates.

The yearly 2023 audit fees for Solvay SA were set at €1.3 million. They include the audit of the statutory and consolidated accounts of Solvay SA. Audit fees for Solvay affiliates in 2023 amount to €2.2 million. Additionally, audit fees for affiliates that were discontinued as a result of the Syensqo Group demerger amount to €2 million. Supplementary non-audit fees of €3.5 million were engaged in 2023 by Solvay SA and affiliates (out of which €0.5 million non-audit services for affiliates that were discontinued as a result of the Syensqo Group demerger) of which:

- Other assurance service missions:
 - Invoiced by the statutory auditor of the Group: €2.8 million.
 - Invoiced by other EY entities: €0.4 million.

- Other services: €0.3 million.

The Ernst & Young mandate has started at the date of the Shareholders’ meeting of May 10, 2022. EY is the statutory auditor of the company for a duration of three years, ending after the Ordinary Shareholders’ Meeting of 2025, which will be called upon to approve the accounts for the year 2024.

9. DEVIATION FROM THE 2020 CODE

The Company deviates from Rule 7.6 of the Corporate Governance Code which recommends that a portion of the remuneration paid to non-executive directors be in shares. The Company considers however that its remuneration practices remain relevant and comply with the spirit of Rule 7.6 because non-executive directors are required to hold a number of Company shares equivalent to 100% of their gross annual fixed board fees.

For further details, please see section 6 of the Corporate Governance Statement.

10. ITEMS TO BE DISCLOSED PURSUANT TO ARTICLE 34 OF THE BELGIAN ROYAL DECREE OF NOVEMBER 14, 2007

According to Article 34 of the Belgian Royal Decree of November 14, 2007, the Company hereby discloses the following items:

Capital structure

As of December 31, 2023, the capital of the Company amounted to €236,583,447.18, represented by 105,876,416 ordinary shares with no designated par value, fully paid up.

All Solvay shares are entitled to the same rights. There are no different classes of shares.

Transfer of shares and shareholders’ arrangements

Solvay’s Articles of Association do not contain any restriction on the transfer of shares.

To the Company’s knowledge, there are no binding agreements among shareholders relating to the Company that may result in restrictions on the transferability of the Company’s shares, or the exercise of voting rights. However, the Company is informed that certain individual shareholders who hold shares directly in Solvay may decide to consult one another when questions of particular strategic importance are submitted by the Board of Directors to the Shareholders’ Meeting. Each of these shareholders, however, remains free to vote as he or she chooses. None of these individuals, either individually or in concert with others, reaches the initial 3% transparency notification threshold (as Solvay has not been notified of any such holding).

Solvay is not aware of any voting agreements among our shareholders or of the existence of a concert between our shareholders.

Holders of securities with special control rights

There are no such securities.

Control mechanism of any employee share scheme where the control rights are not exercised directly by the employees

There is no employee share scheme with such a mechanism.

Restrictions on the exercise of voting rights

Each Solvay share entitles its holder to exercise one vote at shareholder Meetings.

Article 10 of the Company’s Articles of Association provides that the exercise of voting rights and other rights attached to shares that are jointly owned, or of which the usufruct and bare ownership rights have been separated or are pledged, are suspended pending the appointment of a single representative to exercise the rights attached to the shares.

The voting rights attached to the shares in Solvay held by Solvay Stock Option Management, a wholly-owned indirect subsidiary of the company, are, as a matter of law, suspended.

Appointment, renewal, resignation and dismissal of directors

The Articles of Association of the Company provide that the Company is to be managed by a Board of Directors composed of no less than five members, their number being determined by the Shareholders’ Meeting (Article 12). Directors are, in principle, appointed by the Shareholders’ Meeting for four years, and may be reappointed (Article 13).

The Board of Directors submits directors’ appointments, renewals, resignations or dismissals to the Ordinary Shareholders’ Meeting for approval.

The Ordinary Shareholders’ Meeting decides on proposals made by the Board of Directors on this matter by a simple majority.

If a directorship becomes vacant during a term of office, the Board of Directors may appoint a new member, subject to ratification at the next Ordinary Shareholders’ Meeting.

Amendment of Solvay’s Articles of Association

Amendments to the Company’s Articles of Association must be submitted as a resolution to the Shareholders’ Meeting, at which at least 50% of the share capital of Solvay must be present or represented. In principle, amendments must be passed by a 75% majority of the votes cast.

If the attendance quorum is not met at the first Extraordinary Shareholders’ Meeting, a second Shareholders’ Meeting may be convened and will take a decision without any attendance quorum requirement.

For certain other matters, such as amendment of the purpose of the Company, higher voting majorities may apply.

Powers of the Board of Directors

The Company has adopted a “one tier” governance structure whereby the Board of Directors is vested with the power to perform all acts that are necessary or useful for the realization of the Company’s corporate purpose, except for those actions that are specifically reserved by law or the Articles of Association to the shareholders’ meeting.

On December 9, 2023, the Board delegated certain powers to the ELT. Such delegations of powers are reflected in the Governance Charter.

In all matters for which it has exclusive responsibility, the Board of Directors works in close cooperation with the Executive Leadership Team, which, in particular, is responsible for preparing most of the proposals for decisions made by the Board of Directors.

The Extraordinary Shareholders’ Meeting of December 8, 2023, granted the following authorizations to the Board of Directors:

- **Authorized capital:**
 - Authorization to increase the capital pursuant to Articles 7:198 and following of the BCCA, in one or several instances, for a period of five (5) years, up to a maximum of €23,650,000 (excluding any issuance premium).
 - Authorization to increase the capital in the event of a takeover bid on Solvay, in one or several instances, for a period of two (2) years, under the conditions and within the limits set out in the new Article 8 of the Articles of Association and Article 7:202 of the BCCA.
- **Acquisition, disposal and cancelation of own shares:**
 - Authorization to acquire and pledge, for a period of five (5) years, own shares at a unit price which may not be lower than one euro (€1.00) and which may not be higher than ten percent (10%) higher than the highest price of the last twenty (20) trading days preceding the transaction, without Solvay at any time holding more than ten percent (10%) of the total number of shares issued.
 - Authorization to acquire and pledge own shares when such acquisition or pledging is necessary to prevent serious and imminent harm to Solvay, including in case of a public takeover bid on Solvay, for a period of two (2) years, in accordance with Article 7:215, §1, paragraphs four and five of the BCCA.
 - Authorization to dispose of own shares to one or more specified persons other than employees, subject to the conditions and within the limits set out in Article 7:218, §1, 4° of the BCCA.
 - Authorization to dispose of own shares in order to prevent serious and imminent harm to Solvay, including in case of a public takeover bid on Solvay, for a period of two (2) years, in accordance with Article 7:218, §1, 3° of the BCCA.
 - Authorization to cancel, at any time, treasury shares and to amend the Articles of Association to reflect the reduction of the total number of shares of Solvay.

Significant agreements or securities that may be impacted by a change of control of the company

• Separation Agreement dated December 4, 2023

In the context of the Partial Demerger, Solvay and Syensqo entered into a separation agreement governing certain matters relating to the separation of Syensqo from Solvay and prior reorganization transactions, and the relationship of Solvay, Syensqo and their respective affiliates as from the effective date of the Partial Demerger, and implementing certain additional arrangements relating thereto, including certain cross-indemnification undertakings related to environmental liabilities (the “**Separation Agreement**”). Under Section 4.2 of the Separation Agreement, Syensqo has the right to terminate (for the future) its indemnification undertakings towards Solvay for environmental liabilities allocable to Syensqo for which Solvay would remain liable notwithstanding the Partial Demerger, in the event of a change of control over Solvay (defined as the case where a third party reaches or crosses, alone or in concert, the threshold of 25% of voting securities of the Company, irrespective of whether this threshold is reached or crossed as a result of an acquisition of voting securities or otherwise, and subject to certain exceptions relating to Solvac). The change of control clause was approved by the Extraordinary Shareholders’ Meeting of December 8, 2023.

• U.S. Tax Matters Agreement dated October 31, 2023

In the context of the Partial Demerger, Solvay and Syensqo entered into a U.S. tax matters agreement, governing the respective rights, responsibilities and obligations of the Company and Syensqo with respect to certain U.S. tax matters, including with respect to U.S. tax liabilities (including, generally, responsibility and potential indemnification obligations for U.S. taxes attributable to each company’s business and taxes and losses arising, under certain circumstances, in connection with the intragroup spin-off of certain U.S. entities (the “**U.S. Spin-Off**”) and the Partial Demerger (and certain related transactions), U.S. tax attributes, U.S. tax contests and U.S. tax returns (the “**U.S. Tax Matters Agreement**”). Under Section 3.02 of the U.S. Tax Matters Agreement, the Company may be required to indemnify Syensqo or Solvay Holding, Inc. for certain adverse U.S. federal income tax consequences that may result from (i) certain future actions or omissions that could reasonably be expected to cause the Partial Demerger or the U.S. Spin-Off (or certain associated transactions) to fail to qualify for their intended U.S. tax treatment, including actions or omissions which lead to or may lead to a change of control over the Company (within the meaning of Article 1:14 and following of the BCCA), or (ii) the acquisition by one or more persons of a 50% or greater interest (measured by vote or value) in the capital of the Company, including for the avoidance of doubt pursuant to a takeover bid (even if Solvay does not participate in or otherwise facilitate the acquisition). The change of control clause was approved by the Extraordinary Shareholders’ Meeting of December 8, 2023.

Agreements between the Company and its directors or employees providing for compensation if directors resign or are good leavers, or in the case of a public takeover bid

Not applicable.

06

RISK
MANAGEMENT

140	1. Risk management process
140	1.1. Risk analysis and decisions on how to manage critical risks
140	1.2. Risk management in action
141	1.3. Crisis preparedness
142	2. Solvay's main risks
144	2.1. Compliance and business integrity
146	2.2. Security
148	2.3. Operations safety
150	2.4. Climate change
152	2.5. Environmental impact and controversies
153	2.6. Geopolitical impacts on trade and supply chain
153	2.7. Digital and people transformation
154	3. Other risks
154	3.1. Market- and growth-strategic risk
155	3.2. Supply chain and manufacturing reliability risk
155	3.3. Financial risk
157	3.4. IT risk
158	4. Litigation

Risk management

In a context of elevated global economic and geopolitical uncertainty, increasingly volatile market cycles, supply chain constraints, and heightened sensitivity and expectations related to climate change and sustainability, we believe that effectively monitoring and managing risks is key to achieving Solvay’s strategic objectives.

1. RISK MANAGEMENT PROCESS

Value can be created when risk is well understood and managed. Anticipating, mitigating, measuring, and monitoring risks is as important to Solvay as the related activity of identifying, managing, and optimizing opportunities. The extensive risk-related processes that we apply to everyone across the entire organization and value chain, from the Board of Directors and frontline workers to supply chain partners and customers demonstrates this. These processes are outlined below.

1.1. Risk analysis and decisions on how to manage critical risks

We analyze risks in three steps. First, we establish their level of priority for Solvay, which means categorizing them as “main risks” (most critical), “emerging risks,” or “other risks.” Second, we identify in which area the risk would have the most impact: the environment, people, economic, or reputation. And third, we classify risks according to their time horizon: short term (up to one year), medium term (more than one year and less than five), and long term (more than five years).

In accordance with the Task Force on Climate-related Financial Disclosures (TCFD), the EU Taxonomy frameworks and upcoming Corporate Sustainability Reporting Directive (CSRD) requirements, we also assess and categorize our main risks as “Environmental (E),” “Social (S)” or “Governance (G),” where applicable.

1.2. Risk management in action

Solvay’s Enterprise Risk Management methodology, which is inspired by the Committee of Sponsoring Organizations (COSO) principles, requires our Global Business Units (GBUs) and Functions – and the Group as a whole – to prioritize risks, develop and deliver on mitigation plans, and continually scan the environment to assess whether risks and exposures are changing and test whether priorities and plans remain appropriate. This process is closely followed by the Risk Management team, with systematically recorded assessments enabling us to monitor decisions and measure actions and progress.

The process we use is regularly adjusted, in order to constantly improve the identification and classification of risks. In 2023, we generalized the use of a systematic classification process to help us integrate ESG risks into our Enterprise Risk Management methodology, by establishing a catalog of typical ESG risk categories. This tool embeds typical risks for climate change adaptation and climate change mitigation risks following the TCFD framework. It also comprises items from the European Sustainability Reporting Standards, at the time when drafts were available for the risk review exercise in 2023. This enabled us to further improve the completeness of our ESG risk universe.

Critical risks for the Group are closely and systematically monitored by the Group Risk Committee, which ensures that these risks are assessed for materiality and adequately addressed. The Committee is composed of the Executive Leadership Team (ELT), establishing a direct link between the Group’s strategy and the risk management process, the Chief Sustainability Officer, the Senior Vice President of Communication and Public Affairs, and the Capital Markets Director. Group Risk Committee meetings are facilitated by the Head of Internal Audit and Risk Management.

Global Business Unit and Function leaders integrate risk management into decision-making to support delivery of objectives

Leaders of GBUs and Functions are responsible for identifying, monitoring, and managing the key risks in their scope of responsibility. Risk management is embedded in the day-to-day operations of each entity, and operational managers are expected to anticipate and react rapidly when circumstances change. The GBU risk matrices and follow-up actions needed to mitigate any critical risks are formally presented to the ELT.

Group risks are overseen at Executive Leadership Team level

Group-level risks are managed and monitored at the top level. The Group Risk Committee contributes to identifying and assessing risks and the ELT members act as risk sponsors contributing to risk treatment and response. Board Members also provide independent input based on their broad expertise. Additional input may be provided by the Corporate Internal Audit and Risk Management Department, which scans external sources, such as the World Economic Forum Global Risks report, the Risk in Focus report from the ECIIA¹, the AXA Future Risks Report, or the Economist Intelligence Unit Risk Outlook for relevant information. In principle, this input is reviewed and validated by the ELT once a year, while risk-mitigating initiatives are presented at least twice a year. More frequent updates are prepared and reviewed when necessary.

1. European Confederation of Institutes of Internal Auditing

The Audit and Risk Committee meets with the CEO and CFO as well as all other members of the Board once a year to discuss the major risks facing the Group. During the year, the Audit and Risk Committee systematically review progress and regularly invite the relevant leaders and Risk Owners to provide overviews of their risk assessments and progress on mitigating actions. In accordance with the defined Group risks, topics such as industrial safety, physical security, cyber security, ESG-related subjects, or ethics and compliance matters are addressed.

SOLVAY’S RISK MANAGEMENT PROCESS

	Risk analysis and decision	Implementation	Monitoring
Board	Gather input through periodic survey on Group risks	–	· Annual Group risk assessment and approval
Audit and Risk Committee	Gather input through survey or dedicated session on Group risks	–	· Assess effectiveness of risk management · Quarterly presentations by risk owners · Periodic review (minimum biannually) and assessment of Group risks (minimum annually)
Group Risk Committee*	· Contribute to identifying and addressing risks. · Decide upon definition of Group risks	–	· Annual Group risk assessment and review of mitigating actions based on Group risk dashboards
Executive Leadership Team (ELT)	Provide input on Group risks establishing a direct link between the Group strategy and the risk management process	· Oversee progress as individual risk sponsors · Ad-hoc risk sessions and biannual review of mitigating actions based on Group risk dashboards	
GBUs and Functions	· Define risks at business and function levels · Escalate critical risks to Group level	· Mitigation plan developed with risk owners accountable for delivery · Ongoing systematic progress update · Regular update (minimum twice per year) and disclosure to ELT (at least annually)	

* The Group Risk Committee comprises the Executive Leadership Team (ELT), the Chief Sustainability Officer, the Senior Vice President of Communication and Public Affairs and the Capital Markets Director.

Management of major projects linked to Solvay’s transformation

An appropriate risk assessment methodology is applied to significant transformation initiatives. This was, amongst others, the case for the successful Partial Demerger project, splitting the Group into the two independent publicly traded companies Solvay and Syensqo, for which a distinct organization and governance structure had been implemented and a dedicated risk identification, mitigation, and monitoring process had been established.

Internal control

Internal control is a key aspect of risk management. The Corporate Governance chapter of this report provides a detailed description of Solvay’s risk management and internal control system (see chapter 6).

1.3. Crisis preparedness

There is a structured network within the Group to ensure crisis preparedness. Members of this network perform tasks and implement programs in order to ensure that their business units and functions are prepared for specific crisis situations. These programs include crisis simulations, media training for potential spokespersons, maintenance of key databases, and analysis of relevant internal and external events. The risks identified using our Enterprise Risk Management methodology influence the scenarios used in our simulations.

2. SOLVAY’S MAIN RISKS

The Group Risk Committee assesses the risks against two dimensions: the level of impact and the level of control.

Level of Impact

To assess the impact, we use a four-level scale: low, medium, high, or very high.

Impact	Low	Medium	High	Very high
Economic	Less than €10 million	€10 million to €50 million	€50 million to €100 million	€100 million or more
Injury to people	Nuisance (noise, smoke, odor)	One or multiple first aid injuries or shelter-in-place	One irreversible injury or multiple reversible injuries	One or multiple fatalities or multiple irreversible injuries
Reputation	A specific impact scale is used for reputation since 2023 - see details below			
Environment	Non-reportable operating permit limits exceeded	<ul style="list-style-type: none">Damages limited to the immediate vicinity of the siteMinor impact on plants or animals around the site	<ul style="list-style-type: none">Reversible damages off-siteMajor impact on plants or animals around the site	<ul style="list-style-type: none">Long-term damages off-site (greater than or equal to ten years)

A specific Reputation Impact Scale has been established following the type of stakeholders involved, grouped here as risk factors:

Risk factors	Potential impact	Low	Medium	High	Very high
Shareholders perception	<ul style="list-style-type: none">Loss in value / share priceActivism	<ul style="list-style-type: none">Point of time loss	<ul style="list-style-type: none">Lower share price for a periodActivism without large shareholder base support	<ul style="list-style-type: none">Continued share price undervaluationHigh profile activism	<ul style="list-style-type: none">Continued share price undervaluationShareholders' assembly challenge
Government/ political intervention/ Regulators, Supervisory Authorities, Judiciary	<ul style="list-style-type: none">Obstacles to operations or projectsRegulatory scrutinyLitigation/Fines	<ul style="list-style-type: none">Minor delay to projectsLocal authority reminder of rulesAmount at stake < €10 million	<ul style="list-style-type: none">Impairment to operations or projects with by-pass solution possibleLocal authority challenge€10m < Stake < €50m	<ul style="list-style-type: none">Significant impairment to operations or significant delay of projectNational level litigation€50m < Stake < €100m	<ul style="list-style-type: none">Ban on operationAsset seizureNational or multinational litigationStake> €100m
International organizations	<ul style="list-style-type: none">Negative reportingBlack lists	<ul style="list-style-type: none">Mention in a report	<ul style="list-style-type: none">Negative depiction of the company	<ul style="list-style-type: none">Named and shamed at international level	<ul style="list-style-type: none">Blacklisting
General public	<ul style="list-style-type: none">Protests, blockadesCompensations	<ul style="list-style-type: none">Limited social media negative item, without physical protests	<ul style="list-style-type: none">Large and long lasting social media noiseShort or small number of physical protests	<ul style="list-style-type: none">Extended social media impact (national)Demonstrations blocking operations	<ul style="list-style-type: none">Extended social media impact (international)Demonstrations with attack on our people or assets.
NGO and media	<ul style="list-style-type: none">Negative campaigningPR costs	<ul style="list-style-type: none">Isolated newsLimited social media	<ul style="list-style-type: none">Local NGO campaign or media newsLarge social media noise	<ul style="list-style-type: none">National NGO campaign or media newsExtended social media impact	<ul style="list-style-type: none">Global media/ campaign
Business partners, contracting parties	<ul style="list-style-type: none">Termination or rejection of cooperation	<ul style="list-style-type: none">Minor cooperation delayed	<ul style="list-style-type: none">Significant cooperation delayed	<ul style="list-style-type: none">Significant cooperation stopped	<ul style="list-style-type: none">Major deal broken
Financing partners	<ul style="list-style-type: none">Limitation or loss of financing	<ul style="list-style-type: none">Minor issues with suppliers	<ul style="list-style-type: none">Significant issue with supplier or bank still with financing access	<ul style="list-style-type: none">Significant loss of financing	<ul style="list-style-type: none">Major loss of financing

The impact assessment considers all relevant types of potential consequences and retains the highest level, which becomes applicable to the risk.

Level of control

The Group Risk Committee reviews and acknowledges the level of control over the main Group risks on the basis of a Group risk dashboard review by considering the following questions:

- Are key actions and controls clearly identified?
- Was the effectiveness of key actions and controls assessed?
- Was the level of control adequate and proportionate to the risk?
- Are additional mitigation actions appropriate?

Solvay's main risks

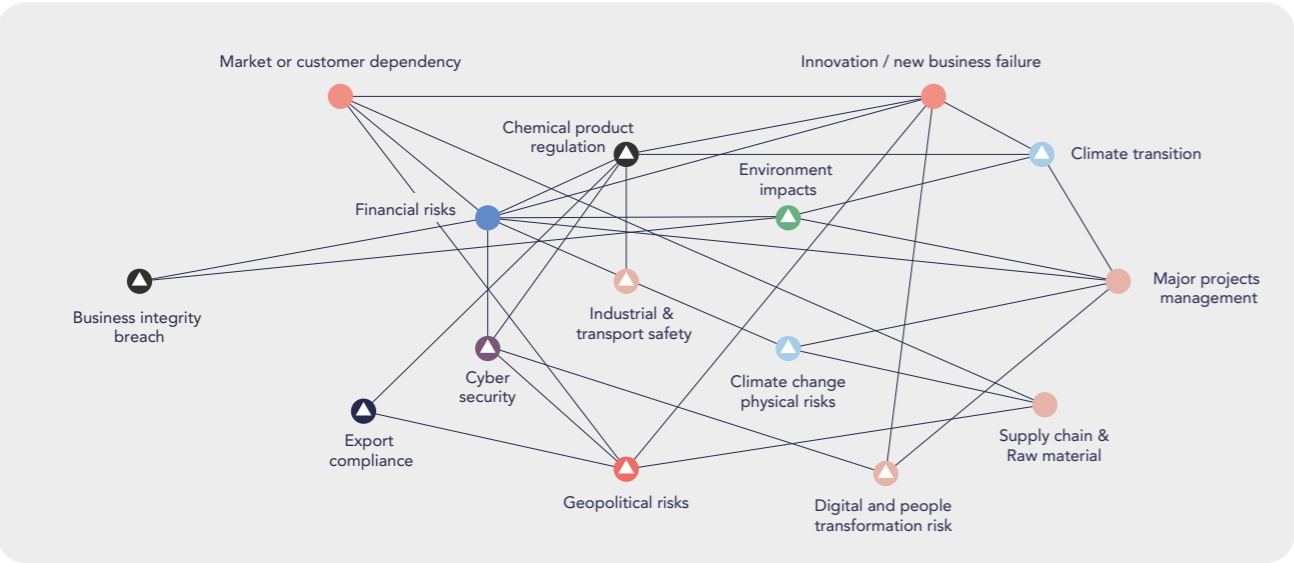
To determine how critical a risk is, we combine the two dimensions described above, i.e. the level of impact and the level of control. All risks with a very high impact are considered to be critical, independently from their level of control.

Level of impact	ESG	Risk	Time horizon	Trends of level of control	Link with high materiality sustainable development aspects
	G	Compliance and business integrity	Short to medium	Stable	<ul style="list-style-type: none">Management of the legal, ethics and regulatory frameworkProduct quality and safety
	N/A	Security	Short	Stable	Data security
	S	Operations safety	Short	Stable	<ul style="list-style-type: none">Critical incident risk managementEmployee health and safetyHazardous materials managementCommunity relations
	E	Climate change	Short to long	Stable	<ul style="list-style-type: none">Greenhouse gas emissionsPhysical impacts of climate change
	E	Environmental impact and controversies	Short to long	Stable	<ul style="list-style-type: none">Critical incident risk managementAir qualityWaste and wastewater management
	N/A	Geopolitical impacts on trade and supply chain	Short to medium	Stable	
	S	Digital and People Transformation	Short to medium	Under review (new risk)	<ul style="list-style-type: none">Employee engagement, diversity, and inclusionLabor practices

Short term ≤ 1 year < Medium term ≤ 5 years < Long term

The risks relevant to Solvay and the Group’s risk-reduction actions are listed below. The mitigation efforts described do not guarantee that risks will not materialize or impact the Group, but they show how we proactively manage our exposure to risk.

RISK CORRELATION



Risks of different categories are often inter-connected, and these correlations are identified during the risk management exercises at GBU and Group level.

Using such correlation analysis, it is possible to obtain a wider view of the potential consequences, and thus of the impacts of the risks, as well as having a better grasp of the causes of the risks, and design more adequate mitigation strategies.

The chart above displays the correlation between the most relevant risks as presented in the following section of the annual report.

Risk categories

● Climate risks

● Compliance and business integrity

● Financial risks

● Risks on operations

● Market and growth

● Environment

△ Main risk

2.1. Compliance and business integrity

RISK HORIZON: SHORT TO MEDIUM TERM
TREND: IMPROVEMENT

2.1.1. Risk description

Non-compliance (competition law, export control, anti-bribery, industrial) causes major financial and reputational damages.

A major violation of Solvay business integrity standards, linked to its operations and value-chain, leads to economic and/or reputational damages.

A forbidden or inappropriate use of our products creates personal or environmental damages, or major disturbances in downstream uses, leading to legal consequences, financial losses, or loss of reputation.

Solvay adopts a zero-tolerance approach in relation to non-compliance with its Code of Business Integrity. Solvay's activities require that the following risk categories - among others - be considered in relation to compliance and business integrity:

- Failure to comply with governmental laws and regulations in jurisdictions in which Solvay operates.
- Failure to comply with Solvay's Code of Business Integrity, including:

- intentional misconducts;
- corruption, misappropriation;
- by-passing corporate controls, and fraud.

- Human rights violations.
- Failure to implement good governance in a joint venture.

- Failure to comply with chemical product usage standards, such as:
 - Inappropriate use of a Solvay product by Solvay personnel or customers, which can lead to adverse health and environmental impacts, property damage and resulting litigation.
 - Production of faulty products, which can result in exposure to liability for injury, health impairment and damage, or product recalls. Product liability risk is generally higher for products used in medical devices, healthcare, food contact and feed applications, and sensitive applications in general.
 - Failure to comply with chemical and market regulations in countries where a product is sold. There are a lot of regulatory activities worldwide, in particular, we are closely monitoring the upcoming European Union Chemical Strategy for Sustainability (CSS) regulatory framework, including its possible impact on our business and operations and potential opportunities stemming from it. The U.S. Administration is also developing a stricter regulatory framework for chemicals, as well as a framework relating to environmental justice.

2.1.2. Prevention and mitigation actions

Solvay's Code of Business Integrity, policies, and procedures

Our Code of Business Integrity includes a wide range of topics, among those listed above. It applies to all employees and majority-owned joint venture partners. Our Supplier Code of Business Integrity applies to suppliers.

We introduced training courses which all employees are required to attend and obtain a certificate of completion. We require that all employees certify through an annual acknowledgement integrated in the Code of Business Integrity training that they have read and understood the Code, that they are in compliance with its requirements, and that they have nothing to report. We have created increased awareness through training courses and communication to address specific behavioral risks. These include:

- a culture of business integrity;
- anti-bribery and anti-corruption;
- anti-competitive activity;
- confidential and proprietary information;
- data protection and privacy;
- reporting non-compliance with human rights in business policy;
- use of a gifts and entertainment tracking system;
- use of third-party reporting hotlines and a Group-wide "Speak Up" program to report non-compliance;
- sanctions and export control.

Before entering into a business relationship, our suppliers are required to sign our Supplier Code of Business Integrity and commit to its principles.

In addition, we are increasing our oversight on third parties and suppliers in the field of human rights, anti-bribery and corruption, and environmental breaches through proactive screening by third-party service providers. Human rights has now been integrated in our Ethics Helpline as a matter type and is also open to the employees of our suppliers.

Product and markets regulated risks

- Solvay Safety Data Sheets (SDS) ensure harmonized content by implementing a common worldwide SAP system for the Group. This SAP system is fully implemented across the company.
- SDS are constantly maintained for all products and are distributed worldwide to all customers, in compliance with local regulations and in the local language. Our GBUs ensure that SDS are revised at least once every three years for all the products they sell.
- All GBUs perform an annual inventory of Solvay – Substances of Very High Concern (Solvay – SVHC) – defined by Solvay, in the marketed products and in raw materials. A risk assessment and analysis of any available safer alternatives is being performed for each Solvay - SVHC identified in the inventory of marketed products. Solvay also takes a phase-out approach on top of the analysis of safer alternatives.
- Recall procedures are developed and deployed as prescribed by the product stewardship programs.
- Insurance reduces the financial impact of a product liability risk, including first-party and third-party product recalls.

2.1.3. Main developments in 2023

Business integrity

Mandatory annual training and certification ensures all Solvay employees know our Code of Business Integrity. We measure performance not only by what people deliver, but also on how they deliver, in line with the Group's values and behaviors.

In 2023 our training focused on protecting a culture of integrity at Solvay, on speaking up and listening, on non-retaliation, on data privacy, and on gifts, entertainment, and charitable donations. All employees are required to take the training and to certify that they have read the Code of Business Integrity and will apply it.

We continued increasing awareness about speaking up and raising concerns when people notice a potential breach of regulation, our policies, or our Code of Business Integrity, without fear of retaliation. Our Ethics Helpline was further upgraded and made more accessible in 2023, ensuring that incidents can be easily reported and investigated as required. Fraud was added as a new topic to our Ethics Helpline. The Speak Up program was also part of the annual mandatory training for all our employees, and we raised awareness amongst employees that they can speak up about the full spectrum of topics referenced in the Code of Business Integrity. This resulted in a continued increase of reported incidents and increased our ability to detect, identify, and address issues and risks at an early stage. The increase in reported incidents does not imply that there were more incidents in 2023 than before, but shows that employees reach out more to report potential breaches, enabling us to investigate and address those breaches, identify root causes, adapt processes, or take disciplinary actions when necessary. Specific training modules for managers increased awareness on their role in a culture of integrity and how to listen and act on employees' concerns.

To tackle human rights and environmental impacts across our upstream value chains, Solvay further improved our ESG risk management approach for our supply chain. It provides a systematic approach for identifying risks and assessing their severity in more than 60 upstream value chains, and triggers risk mitigation action plans. In 2023, we increased our efforts towards our suppliers to identify the human rights risks based on an internal analysis by country and value chain and we started to work with an external provider to screen against adverse media. This allowed us to categorize our suppliers in high, medium, and low risk clusters. Ensuring compliance with social and environmental standards, including respect for human rights, in our supplier network is important to us.

We developed a new external Ethics and Compliance website that was launched in 2023, ensuring that information on the program, the Code of Business Integrity, ethics and compliance policies, as well as our Ethics Helpline are available and easily accessible to employees and externals. This increases awareness of Solvay's culture of integrity and the detection, identification, and addressing of potential issues and risks, as concerns or potential breaches that relate to our supply chain can be reported by any third party, including by the employees of our suppliers, also on Human Rights and Environmental violations. Reported incidents are investigated and preventive and corrective actions implemented when required.

In 2023, we also conducted an internal audit exclusively focused on ESG matters where we reviewed the commitment of our suppliers to our Supplier Code of Business Integrity and also conducted a compliance audit on business integrity, bribery and corruption, and travel and expenses in APAC.

Product and markets regulated risks

The Solvay Product Safety Management Process (PSMP) identifies risks relating to products marketed by Solvay. All GBUs use this process, which involves prioritizing the required risk assessments in the product portfolio and carrying out risk assessments for the most sensitive product applications.

More information on this can be found in the Extra-financial chapter of the report: 5.5 Hazardous materials.

2.2. Security

RISK HORIZON: SHORT TERM
TREND: IMPROVEMENT

2.2.1. Risk description

Certain security threats can have negative consequences for our business. These include terrorism, crime, violence, vandalism, theft, and cyberattacks, which impact employees or other stakeholders, sites, assets, critical information, or intellectual property.

Solvay is exposed to physical security risks because it has 45 industrial sites, a large part of which have a high Seveso level (number of sites considered post Partial Demerger). A number of our products, if mishandled, can cause severe damage.

For more information on this, see the Extra-financial statements section of the report: 5.5 Hazardous materials.

We also have sites located in countries where security concerns are rated high by International SOS. Forty-five industrial and fourteen administrative and R&I sites (number of sites considered post Partial Demerger) have undergone a Security Vulnerability Self-Assessment (SVSA) and only one industrial site has been assessed as having the highest level of security risk – Level 1 – since the previous SVSA.

Solvay's exposure to cyber risk, as for most major companies, stems from our extensive use of information and communication technologies and the gradually increasing automation level of our sites. Following the Partial Demerger, Solvay is also exposed to this risk in connection with major group transformations and reorganizations, as well as the services it provides to Syensqo under the Master Transition Services Agreement (MTSA). Like most multinationals, Solvay experiences cyber incidents and actively responds to those incidents to limit the impact. The Solvay management team is not aware of any incident that would have significant consequences for our financial statements or our business.

2.2.2. Prevention and mitigation actions

Solvay has a risk-based security approach to protecting sites, information, and people.

- A Chief Security Officer (CSO) coordinates all security activities globally in order to ensure efficient security risk mitigation. A Chief Information Security Officer (CISO), reporting to the Chief Security Officer, coordinates all related cyber security activities.

Three governance bodies lead the security risk management effort:

- A Security Board, chaired by an ELT member, which provides strategic direction for the Group's security risk mitigation.
- A Cyber Security Leadership Committee, chaired by the Chief Information Security Officer, which oversees all cyber security activities and provides budget and priority recommendations to the Security Board.
- A Security Coordination Working Group, chaired by the Chief Security Officer, which runs a continuous security threat monitoring program and an optimized security program for the Group.

Solvay management provides updates on information security to the Board at least once a year and even more frequently to the Audit Committee and Risk Committee.

Cyber security program

The three governance bodies leading the security risk management effort also supervise our cyber security program, which includes:

- The use of assessments conducted by external experts.
- The use of penetration tests and internal phishing simulations.
- Substantial training for all Solvay Global Business Services and Digital Technology (DT) professionals, and mandatory security training for all employees.
- The regular publication of cyber security tips to increase employee awareness.
- Some significant improvements in security posture, which have been achieved by deploying enhanced security technology across the network. This includes controls such as endpoint detection and response, multi-factor authentication, immutable back-ups and a stronger network segregation.

A significant cyberattack could negatively impact Solvay in many ways, including people, operations and results, and services we deliver to Syensqo under the MTSA entered into in connection with the Partial Demerger, as well as know-how and intellectual property. We will therefore continue to solidify our cyber defenses so that we are able to manage the evolving cyber threat landscape.

Insurance

Solvay is insured against the potential financial impact of a cyberattack. This insurance covers damage to assets, business interruption, ransomware, and third-party liability in case of loss of confidential third-party information. Solvay is also a founding member of MIRIS (Mutual of Cyber Insurance) that provides exclusive additional capacity and loss prevention advice to their members.

2.2.3. Main developments in 2023

Our commitment to managing the security-related risks remains solid, guided by efficiency and by the belief that proactive measures are vital in safeguarding our assets and ensuring the resilience of our operations.

As we navigate the evolving threat landscape, we acknowledge the need for a security governance model that is aligned with the new organization. Therefore, in anticipation of the challenges that lie ahead, we have defined a new governance model that is meticulously crafted to seamlessly integrate with our business strategy, ensuring that security is not a standalone function. The collaboration is at the heart of our approach, encouraging a culture where expertise from various facets of security converges to create a robust defense strategy.

Moreover, the year 2023 provided us with a unique opportunity to review and fortify our network segregation and access rights as well as revamping our security awareness strategy.

In terms of personnel security, we ensured a greater visibility on business travel and set up active monitoring for all medium- and high-risk countries where Solvay employees travel to in order to better anticipate threats and be able to alert accordingly. This was enabled by working on our reporting tools as well as by reaching out to travelers individually to ensure that they have the necessary tools to receive live alerts in the unfortunate event of a security-related incident.

Direct lines of communication have also been opened between Group Security and site managers, making an early warning system possible, and ensuring greater reactivity at site level as well as at the Group Security level.

In 2023, Solvay kept the commitment of the previous years to enhance physical security measures, recognizing the importance of safeguarding our assets and sensitive sites. We prioritized standardization to ensure a robust and consistent security infrastructure across all our facilities. Our dedicated projects aimed at elevating security levels involved the integration of advanced surveillance systems, access control mechanisms, and intrusion detection technologies. We tailored our strategies and investments to create a layered defense that not only deters potential threats but also promptly responds to any security incidents.

2.3. Operations safety

RISK HORIZON: SHORT TERM
TREND: STABLE

2.3.1. Risk description

A major accident on site (occupational, process) or a chronic exposure of employees (industrial hygiene) causes fatalities, irreversible injuries, environmental damages, or asset damages.

An accident off site (transportation, warehousing, tolling) causes fatalities/irreversible injuries or environmental damages.

The safety of our people is a core value for Solvay, as is specified in our Solvay One Planet sustainability roadmap. A major accident – whether occupational, process, or transport related – that is linked to our internal or outsourced activities may cause human, environmental, or asset damages, lead to significant exposure or cause injuries or fatalities. Solvay's industrial sites, like most industrial operations, carry out high pressure and high temperature processes. We also use chemical substances that have risks associated with their chemical composition.

For more information about Solvay's management approach, see the Extra-financial chapter of the report: 6.1 Employee Health and Safety, 6.2. Critical incident risk management (process safety), 5.5 Hazardous materials.

We have identified four major operational safety risks:

- An occupational safety incident which results in a fatality or irreversible (life-altering) injury.
- A severe process safety incident which results in fatalities, irreversible injuries, environmental harm, and/or loss of physical assets.
- Chronic exposure to occupational agents – chemical, physical, biological or psychological – known to cause work-related disease.
- A severe transport accident in connection with hazardous chemical transportation which results in irreversible injuries, fatalities, or environmental damages.

2.3.2. Prevention and mitigation actions

Solvay issued a new set of minimum requirements to create a shared understanding and approach to mitigating major operational safety risks. As part of this approach, we also introduced a new way of working, including a more collaborative and supportive approach to health, safety, and the environment (HSE) across the Group.

Our HSE strategy is based on the following four levers:

- **Culture:** Promoting a culture of safety for all employees and contractors.
- **Continuous improvement:** Utilizing networking, scaling best practices, common methods and tools, Solvay HSE minimum requirements, external monitoring, and benchmarking to improve our HSE performance. Sites are audited on Group HSE procedures at least once every five years.
- **Competency:** Ensuring all employees have the right level of knowledge and skills to put in place the HSE minimum requirements starting with those working in key positions.
- **Compliance:** Detecting and mitigating regulatory and non-regulatory compliance issues, with a focus on priority risks, both in our operations and commercialized products.

Occupational safety

Solvay has consistently prioritized occupational safety. Our efforts to create a safety culture where all employees work together and care for one another are based on:

- Solvay's Safety Plan, which involves and engages all Solvay employees. It includes activities such as Safety Days, Leadership Safety Visits, Behavior-Based Safety programs, Safety dialogues, and Safety Culture training.
- The Solvay HSE minimum requirements for the Solvay Life Saving Rules (SLSR).
- The Creating Safety program for leadership teams, aimed at changing mindsets and behavior.
- A monthly review of occupational safety results by the relevant GBUs and at the Executive Leadership Team level.

Industrial hygiene and occupational health

Solvay has implemented a comprehensive approach to reducing risks in the workplace. Our approach includes:

- Risk assessments and risk-based medical surveillance, using both qualitative and quantitative methodologies, with a focus on chemicals;
- Pandemic preparedness and mitigation plans;
- Human biomonitoring, when warranted;
- Improving and adapting working conditions;
- Deployment of a well-being at work program;
- Promoting general physical and mental health;
- Setting more conservative in-house exposure limits for critical substances.

Process safety management

Solvay has created and uses a Process Safety Management System. Among other things, this system includes:

- A preventative risk-based approach founded on systematic Process Hazard Analyses (PHA), and the identification of critical scenarios for which mitigation action must be implemented in a committed time frame;
- Management of changes (MOC);
- A team of process safety experts trained to apply the PHA methodologies.

Transport safety

We have put in place a number of tools and procedures that allow us to identify and take action to mitigate transport-related risks. These include:

- Qualification standards for carriers of dangerous goods;
- Enhanced training where appropriate;
- Implementation of safety procedures and guidelines;
- Collection and sharing of lessons learned;
- Providing emergency response hotlines worldwide and in many languages.

Environment

To mitigate environmental risks, the following minimum requirements must be respected:

- The discharge of substances, wastewater, and atmospheric emissions from our plants must meet all applicable emission limit values.
- Waste must be disposed of using appropriate technologies and qualified companies.
- For the long-term release of potentially dangerous chemicals, risk assessments must be carried out on a periodic basis to ensure that the impact on the environment or on the neighboring population falls within strict limits, determined by environmental quality standards or by exposure limits.

2.3.3. Main achievements in 2023

Occupational safety

- Successful implementation of Solvay Life Saving Rules at site level.
- Continuing deployment of our Safety Culture program (training and sharing). For example, training to avoid complacency and over-confidence has been rolled out this year and in 2022.
- Systematic tracking and analysis of High Severity Potential (HSPo) events. These events, as well as other types of significant incidents in process or transport safety, are subject to a root cause analysis.

More information can be found in the Extra-financial statements section of the report: 3.3. Health, safety and environment management and 6.1 Employee health and safety.

Industrial hygiene

We continued to roll out SOCRATES (Solvay Occupational Risk Assessment Tool for Employees), reaching an 85% deployment rate in 2023. This tool:

- provides easy access to industrial hygiene (IH) methods, tools, and databases;
- enables consistent documentation of IH assessments;
- enhances the traceability of potential exposure throughout a person's working life.

More information can be found in the Extra-financial statements chapter of the report: 3.3. Health, safety and environmental management and 6.1 Employee health and safety.

Process safety

- Application of Process Safety Management Audit protocol at 20 sites (number of sites considered in post partial demerger scope).
- Process Hazard Analyses carried out for 98% of all units, at all sites, within the last five years (Group requirement).
- All detected high-risk situations are treated within one year, with any extensions having to be duly authorized. Only three situations at one site have been granted such an extension and with compensating measures implemented in the interim.
- Investigation of a selection of Process Safety Incidents and lessons learned shared with all sites.

More information can be found in the Extra-financial statements chapter of the report: 6.2. Critical incident risk management.

Transport safety

- Improvement of our Group processes on qualification/vetting and selection of logistics service providers for dangerous goods, including tolling and storage operations has been finalized.
- Continued application of a global Transport Emergency Response covering Level 1, Level 2, and Level 3 in all countries.
- Continued development of expertise in transport safety through the following activities:
 - Global Transport Safety Network;
 - feedback on transport accidents;
 - regular training of people involved in the transportation of dangerous goods with connection to supply chain, global business units, and corporate, following best international practices.

More information can be found in the Extra-financial statements chapter of the report: 6.2. Critical incident risk management.

Environment

- Detailed annual reporting of environmental emissions (air and water), water management, and waste. We focus on emissions of Substances of Very High Concern (SVHC) in particular, which are tracked and used for regular exposure assessments. We have also defined internal emission reduction targets for SVHC emissions in air and water.
- Reporting of all types of environmental non-compliance, including any occasions in which we have exceeded emission limits due to a process issue or process safety incident.
- Assessing potential climate change impact on our operations due to flooding, water scarcity, hurricanes, and other environmental events, through the application of best-in-class models and collaboration with external experts. See more detailed information in the following section 2.4 Climate Change – physical risk

More information can be found in the Extra-financial statements chapter of the report: 5.3. Air quality, 5.1. Water and wastewater, 5.2. Waste.

Occupational health

Deployment of a global program for health and well-being at work that includes:

- Monitoring indicators;
- End-of-year survey on well-being at work to help us set action plans;
- Quarterly pulse surveys to help us understand the psychological climate at Solvay;
- Training on resilience offered to all employees;
- Training for managers on “Leading on well-being mindset;”
- Stress management training facilitated by internal trainers;
- Communication campaigns on Health Promotion;
- Inclusion of health and well-being in site Health and Safety Days.

More information can be found in the Extra-financial statements chapter of the report 6.1 Employee health and safety.

2.4. Climate change

RISK HORIZON: SHORT, MEDIUM, AND LONG TERM
TREND: IMPROVEMENT

2.4.1. Risk description

The Group strategy to address climate-related risks, as defined by the Task Force on Climate-related Financial Disclosures, could be ineffective and damage the environment, the lives of current and later generations, and Solvay's reputation. This, in turn, could cause business losses, undervaluation and difficulties in attracting long-term investors. The possible risks to Solvay that we have identified are as follows:

A - Transition risks:

- As we embark on a transition path, more transition risks will materialize which will have strategic implications for the Group. Solvay's energy mix (which uses coal, our raw materials (including petrochemicals) and our end markets (including the automotive, aerospace, and building and construction industries) mean that it is exposed to risks and opportunities as part of the energy transition. These transition risks include the following:
- Policies and legal context: regulations and actions to limit CO₂ emissions, such as increasing carbon taxes, barring internal combustion engines, mandating the use of certain fuel types, and tightening environmental standards;
 - Technology: unsuccessful investment in new, lower-emission technologies;
 - Markets: failure to adapt to changing customer behavior;
 - Financial: inability to cope with the influence of climate change on investors’ and lenders’ decisions;
 - Changed climate: failing to adequately anticipate the impact of upcoming changes on industrial operations and in the value chain or the tightening of environmental standards;
 - Reputation: negative stakeholder attitudes caused by failing to address stakeholder climate change concerns effectively.

B - Physical risks:

If we do not contain climate change, more physical risks will materialize. Those risks concern our assets and operations and will influence our investment decisions.

Acute

- Sites in flood zones;
- Sites in drought zones;
- Sites in cyclones and hurricanes regions.

Chronic

- Sites in water scarcity regions

More information on Transition risks and Physical risks can be found in the Extra-financial section 4.1 Climate risks analysis.

2.4.2. Main developments and results in 2023

A - Transition risks:

The Sustainable Portfolio Management (SPM) global and systematic assessment helps alert our businesses to sustainability market signals, in particular on climate risk and opportunities, to anticipate their impact and develop the right answers in a timely manner. SPM is a robust, fact-based, future-oriented compass that allows us to take a snapshot of products’ sustainability risks and opportunities in their business environment.

SPM informs us about the contributions Solvay's products make to sustainability along the value chain considering both:

- their environmental manufacturing footprint and the associated risks and opportunities – vertical axis – with a quantitative assessment using 21 impact indicators; and
- how their applications bring benefits or face challenges from a holistic market perspective – horizontal axis – with a qualitative assessment of social and environmental topics covering four main themes, namely health and safety, climate change, resources, and opinion leaders.

For more details about SPM, see section 7.1 Product design and life cycle management and the SPM guide published on Solvay's website.

Climate change is one of the focus areas for SPM assessment. This involves identifying if a product in a given application brings a climate change benefit or challenge. Product-Application Combinations (PACs) that lead to benefits are identified as "climate solutions," while those that pose challenges are considered "climate challenges."

Solvay's SPM tool classifies a sustainable solution as a product in a given application that makes a significant climate change contribution to the customer's performance while also demonstrating a lower carbon impact in its production phase. The SPM methodology is also used to identify eligible enabling activities, requested under the Taxonomy's Delegated Act 2021.

For more details about Taxonomy reporting, see section 7.3 EU Taxonomy.

SPM is a key tool for enabling Solvay to integrate the sustainability dimension into strategic and operational decision-making in key business processes, such as strategy, research and innovation, investment, marketing and sales, and mergers and acquisitions. We also apply the SPM tool to strategic projects, using the same logic as for our portfolio, to make sure that these projects are heading toward business solutions that support growth and value creation. This makes SPM a key tool for Solvay to identify if an investment or a strategic or innovation project can be considered a climate transition opportunity for Solvay.

Climate emissions reduction actions are described in detail in the Extra-financial section of the Annual Integrated Report. Among the numerous actions taken is the following:

- In Devnya, Bulgaria, we have adapted one of the existing boilers to increase its co-combustion rate with non-recyclable biomass. Powered by 30% biomass fuel from a variety of sources, including locally-sourced sunflower husk pellets, it reduces our plant’s CO₂ emissions by 20% from 2023.

See other examples and details in Greenhouse gas emissions section , 4.2.4 Key achievements of the Extra-financial statements.

B - Physical risks:

The current risk linked to floods and hurricanes is assessed annually with our insurers. This exercise identifies sites in risk areas with a maximum foreseeable loss greater than \$10 million. Five Solvay sites (number of sites considered in post Partial Demerger scope) are located in high frequency (2% chance per year) flood areas, with a loss expectancy range of \$15-168 million. Nine Solvay sites (number of sites considered in post Partial Demerger scope) are located in low frequency (0.2% chance per year) flood areas, with a loss expectancy range of \$15-208 million. One site is located in a wind-exposed area, with a loss expectancy of \$16 million. Solvay has a damage insurance program in place to cover catastrophic risks, while covering smaller losses through self-insurance.

A lot of prevention efforts have been deployed to protect sites against flood risks. These efforts have been concentrated on improving the human procedure in case of flood (risk assessment, flood emergency response) but also in physical protection. The Torrelavega site that was one of the most exposed is now out of the list thanks to a strong levee now surrounding the site. A plan has been developed for all sites to solve key exposures.

Sites in areas of water scarcity have been identified, and the risks have been assessed based on their water consumption and maximum foreseeable loss. Fourteen Solvay sites (number of sites considered in post Partial Demerger scope) are located in areas subject to hydric stress, of which four have been identified as having a high business impact. The highest annual business interruption value is €152 million.

More information can be found in the Climate change section , 4.1.2 Physical risks of the Extra-financial statements.

2.5. Environmental impact and controversies

RISK HORIZON: SHORT, MEDIUM, AND LONG TERM
TREND: IMPROVEMENT

2.5.1. Risk description

Failure to meet evolving regulatory obligations and growing societal expectations related to human health and the environment, may lead to significant reputational damages, third-party claims, and liabilities.

Solvay's activities impact the environment through:

- our use of raw materials based on fossil or non-renewable resources and our consumption of energy;
- our access to scarce resources, including water;
- our management of waste, by-products, emissions, and effluents.

Solvay manages or remediates historical soil contamination at all sites for which we are responsible, including divested or discontinued operations (including, under the Separation Agreement entered into between Solvay and Syensqo, with respect to certain sites that became part of the Syensqo group upon completion of the Partial Demerger), ensuring continuous compliance with the applicable environmental legislation. More information can be found in the Extra-financial section of the Annual Integrated Report.

These impacts on the environment, in turn, create the following risks:

- Challenges and expenses related to meeting increasingly strict regulatory standards and changing customer expectations, standards, and purchasing decisions;
- Changes in investor sentiment and preferences as a result of the changing investor environment;
- Impact on our ability to recruit employees due to negative public perceptions of environmental issues.

2.5.2. Prevention and mitigation actions

Since 2021, an Environmental SteerCo meets quarterly and addresses all environmental topics, including remediation, operations, and potential risks. Prevention and mitigation activities include:

- Careful monitoring and management of sites with a history of soil contamination by a dedicated expert team. We follow up on approximately 150 locations across the world.
- Rolling out a risk characterization approach at every affected site, when relevant.
- Regulatory monitoring to proactively assess and address upcoming changes in legislation.
- Our Group strategy for managing chemicals of concern and developing alternatives with a reduced human and environmental impact, or phasing them out completely.

We have also implemented a comprehensive program to reduce workplace chemical exposure using:

- chemical risk assessments and risk-based medical surveillance, using both qualitative and quantitative methodologies;
- pandemic preparedness and mitigation plans;
- human biomonitoring, when warranted;
- improving and adapting working conditions;
- promoting general physical and mental health;
- setting more conservative in-house exposure limits for critical substances.

We regularly review and update standards governing discharge from plants and we use our Sustainable Portfolio Management (SPM) tool to help identify substances that can deliver the needed results but with a more limited environmental impact. We revise our materiality analysis on a yearly basis to align with evolving stakeholder expectations, including environmental impacts.

Solvay is insured up to €200 million per claim and in the annual aggregate for unknown gradual pollution and sudden and accidental pollution. Coverage includes defense costs, clean-up costs, and third-party liability.

2.5.3. Main developments in 2023

We continued to execute our Solvay One Planet sustainability roadmap in 2023, featuring programs that:

- identify substances of concern and develop alternatives, with a focus on Product Stewardship and industrial environmental emissions;
- ongoing carbon neutrality ambition, with energy transition projects either completed or underway (more details in the extra-financial report for Greenhouse Gas emissions section 4.2 and Energy section 4.3);
- focus on improving our investment portfolio with regard to water consumption, to meet our 2030 ambitions;
- systematically collect fines and settlements received at our sites and quarterly reporting to the ELT;
- approve sustainable investment projects using a Solvay One Planet profile review;
- identify and launch R&I projects that tackle potential risks;
- reduce our pressure on biodiversity by 30% by 2030, which includes assessing our impact on climate change, terrestrial acidification, water eutrophication, and marine ecotoxicity;
- address the Solvay sites most at risk of drought;
- roll out the STAR Factory program site roadmaps (50% completed), which include a sustainability pillar.

2.6. Geopolitical impacts on trade and supply chain

RISK HORIZON: SHORT TO MEDIUM TERM

2.6.1. Risk description

Geopolitical rivalries can cause trade wars, supply chain constraints, and regulatory deadlocks, leading to an inability or impairment to trade and develop our businesses across the key regions of the world.

2.6.2. Prevention and mitigation actions

The geographical balance of our Group activities across the major regions of the world, and the fact that in many of our global businesses we serve our customers locally, mitigate these risks up to a certain point, but this is nevertheless limited by the characteristics of our business supply chains.

2.6.3. Main actions in 2023

The consequences of the war that erupted in Ukraine in 2022, continued to be felt in 2023. The Group continued to take action on several topics:

- Ensuring the safety of the few Solvay employees based in Ukraine.
- Ensuring the continuity of raw material supply by selecting alternative sources to Russia.
- Implementing contingency plans for energy restrictions in Europe, including restrictions to access natural gas. Every European site has developed a contingency plan.
- Ensuring that we comply with the export controls and sanctions enforced by the EU, the U.S. and other countries.

In 2023, new geopolitical events had the potential to impact our business.

China reopening after the end of the zero-COVID policy created expectations that global demand would be driven up, but for the most part this failed to materialize. At the same time, tensions between U.S. and China contributed to an increased polarization of the world, triggering an initial internal assessment of its long term implications for Solvay. Our relatively small exposure to China, as well as the fact that many of our customers are served locally from plants located in each region, provided a relative protection from the situation in the short term.

The terror attacks in Israel and the ensuing war with Hamas created another source of instability and tension for the world but the direct impact on our business was relatively limited. The more recent attacks of Houthis in the Red Sea may have more impactful consequences if the induced increase in shipping costs does not abate quickly. In the meantime, the short-term impact is somewhat positive as those higher shipping costs protect some of our markets from low-cost Chinese competitors' products.

2.7. Digital and people transformation (new risk)

RISK HORIZON: SHORT TO MEDIUM TERM

2.7.1. Risk description

Failure to achieve our digital transformation and attract, retain, and diversify human capital may jeopardize our competitive edge.

Solvay, like the rest of the chemical industry, is undergoing significant changes due to technology evolution which result in important investments in digitalization to further enhance operational efficiency, support sustainability standards, promote business resilience, and create competitive advantages. However, the implementation of these transformation initiatives, may sometimes not occur at the envisaged pace and/or their full potential may not always lead immediately to the desired results. In addition, the required changes could potentially influence employment trends and lead to shifts in job profiles due to automation and artificial intelligence (AI). This will make it even more necessary to rethink talent attraction, retention, and diversification strategies.

2.7.2. Prevention and mitigation actions

- Deployment of the STAR Factory program as a response to the fast-changing world to transform our manufacturing sites into industry benchmarks. Successfully launched in 2021 and based on a pilot approach at two sites, the program is being rolled out to all Solvay sites. A "Forum & Field" approach is used to support the sites in their journey and to roll out STAR Factory in a harmonized way across the company. This will further be supported by a STAR Academy to provide dedicated learning and sharing.
- Dedicated training and development initiatives as well as regular best practice sharing to ensure that our employees actively engage in our digital initiatives and remain at the forefront of digital competencies.
- Systematic talent development initiatives at all levels in the organization based on an early identification process, quarterly performance reviews, dedicated training modules for subject-matter experts and first-line managers, as well as for more senior managers, Young Professionals Network, Future Top-leader Community (FTL community), bonding sessions with senior leaders in the organization, and internal and external mentoring programs.
- Active monitoring of key employee attrition rates and implementation of appropriate measures, such as incentive and retention plans, as well increased management involvement in maintaining an active dialogue with employees.

- Succession planning for critical positions and capabilities: The leadership team leads a yearly identification of business-critical roles within the organization, mapping talent and expert other resources to ensure business continuity planing. Possible gaps in short- and middle-term capabilities are addressed through action plans.
- Customized DEI training modules to further strengthen awareness across the organization and proactively address any implicit bias.
- Employee well-being program preventing and addressing, among other things, physical and mental health issues, accompanying employees in periods of change and helping them to navigate uncertainty.

2.7.3. Main actions in 2023

- Completion of the detailed STAR Factory program roadmaps for 50% of all sites.
- Creation of a dedicated STAR Factory community to facilitate exchanges and share best practices, lessons learned, guides and training.
- Provision of an Industrial Analytics training module through our global online Training Academy platform.
- Group-wide webinars on how to make the most of generative AI based on concrete examples and pilots.
- Creation of a platform composed of Solvay's most senior female leaders to foster DEI in general and promote career development opportunities for female leaders in particular.
- Comprehensive well-being and change management program by HSE specialists and a network of ambassadors from all GBUs and Functions to accompany our employees during the Partial Demerger process and prepare them for their new roles.

Additional mitigation and prevention actions are currently being defined for this new risk.

3. OTHER RISKS

3.1. Market- and growth-strategic risk

RISK HORIZON: MEDIUM TO LONG TERM

3.1.1. Risk description

Solvay is exposed to a wide range of end markets and as a result targets a growth more or less in line with GDP. The ability to capture that growth relies on our relative cost competitiveness and on having production capacity available to supply the market. Strategic risks related to markets and growth concern Solvay's exposure to cyclical or phasing out applications or our competitive environment (for example, exposure to high energy or raw materials costs), and the risk of making erroneous strategic decisions (for example, failing to invest at the right time or in the right geographies, selection of new business development opportunities), etc.

3.1.2. Prevention and mitigation actions

- Continuous investment in innovation and process improvement to achieve and/or defend benchmark performance. This is what we do, for instance, with the introduction of the next generation soda ash process, eSolvay.
- Long-term contract agreement with large global or regional customers to secure stable market positions and prices.
- Built-in energy component in our price mechanisms to hedge our exposure to energy costs.
- Continuous cost improvement projects (STAR Factory program, operating model optimization) to improve and defend our cost competitiveness.
- Capture new applications opportunities for our products (for instance, sodium bicarbonate used for flue gas treatment or rare earths for permanent magnets applications) in fast-growing end markets.
- Introduction of sustainable offers to differentiate from competitor's products (for instance, investment in rice husk-derived Silica or in biobased solvents).
- Adaptation of our operations to new energy and CO₂ markets leveraging third parties to reduce cost and optimize investment efficiency.
- Systematic and formal analysis of markets and marketing challenges with respect to investments and innovation project ramp-ups.
- Rigorous allocation of our capex and strong focus on cash generation.
- Adjustment of our production capacity to adapt to market demand and balance offer when needed (for instance, reduction of production capacity of soda ash in Torrelavega).

3.2. Supply chain and manufacturing reliability risk

RISK HORIZON: SHORT TERM

3.2.1. Risk description

There are several risks related to raw materials, energy, materials and equipment for construction and maintenance, suppliers, production, storage units, and inbound and outbound transportation. These include:

- Inability of suppliers to deliver contracted volumes or capacities in line with required specifications, due to force majeure, for example, or because the supplier has insufficient access to Logistic Service Provider capacities.
- Insufficient contracting of volumes or capacities, from both a volume and delivery timing perspective, to fulfill our demand.
- Delayed delivery of volumes or capacities.

3.2.2. Prevention and mitigation actions

In order to ensure manufacturing reliability, we:

- Ensure our production units are distributed across the world.
- Use Process Safety Management.
- Define equipment and materials as critical elements to be ordered ahead for projects and maintenance.
- Organize regular performance reviews with our key suppliers.
- Establish the Group property loss prevention program, which focuses on the prevention and mitigation of damage to assets and loss of profit due to fire, explosion, accidental chemical release, and other adverse events, like natural catastrophes.

To mitigate risks in our supply chain we:

- Use third-party corporate social responsibility assessments and ask that our suppliers adhere to the Solvay Supplier Code of Business Integrity.
- Continuously focus on improving our planning processes to help us anticipate demand, both in terms of volume and timing.
- Maintain contingency plans for the most critical suppliers.

3.2.3. Main developments and results in 2023

With uncertainty and volatility continuing to prevail, supply chains need to continue their transformation toward additional agility using end-to-end process revision and the implementation of new tools.

Based on our experience in 2022, we have tested several options which would give us increased flexibility in sourcing, providing us with opportunities should risk materialize. Our inventory management has also improved toward a more segmented approach better visibility with better end-to-end alignment. Additional efforts are planned in 2024.

More information can be found in the Extra-financial chapter of the report: 3.4. Supply Chain and Procurement.

3.3. Financial risk

RISK HORIZON: SHORT TO MEDIUM TERM

3.3.1. Risk description

We face various different types of financial risk. These include:

- Liquidity risk (see note F32 in the consolidated financial statements : Financial instruments and financial risk management).
- Foreign exchange risk (see note F32 in the consolidated financial statements: Financial instruments and financial risk management).
- Interest-rate risk (see note F32 in the consolidated financial statements: Financial instruments and financial risk management).
- Counterparty risk (see note F32 in the consolidated financial statements: Financial instruments and financial risk management).
- Pension obligation risk (see note F30 in the consolidated financial statements: Employee benefits).
- Tax litigation risk (see note F31 in the consolidated financial statements: Provisions).

3.3.2. Prevention and mitigation actions

A prudent financial profile and conservative financial discipline

Investment grade status: BBB-/A3 (stable outlook) by Standard & Poor's as of the Partial Demerger that occurred on December 11, 2023. Before completion of the Partial Demerger, Solvay's rating by Standard & Poor's was BBB/A-2. While Solvay's long-term senior debt has been assigned an investment grade rating by Standard & Poor's, no assurance can be given that Solvay will be able to receive or maintain such a rating. A decrease in the ratings assigned to Solvay by a rating agency may negatively impact Solvay's access to the debt markets and increase its cost of borrowing.

Solvay promotes transparency of information and engages in regular discussions with credit rating agencies.

Strong liquidity reserves

As of the end of 2023, the Group had €0.6bn in cash and cash equivalents other current financial instruments, as well as €1.5 billion of committed credit facilities (a multilateral revolving credit facility of €1.1 billion and an additional €0.3 billion from bilateral revolving credit facilities with key international banking partners), which were all undrawn at the end of 2023.

In connection with liability management transactions carried out prior to the completion of the Partial Demerger, Solvay has also secured a €1.5 billion Bridge Term Loan ending in October 2024, the amount has been fully drawn. The company has an unconditional right to extend two times the maturity by 6 months, until October 2025. The Group has access to a Belgium Treasury Bill program for €1 billion, unused at the end of 2023.

Currency hedging policy

- Solvay monitors the foreign exchange market closely and takes hedging measures to:
- Limit the fluctuation of the Group's forecasted gross margin caused by currency volatility for material exposures.
 - Mitigate the foreign exchange transactional risk at Group level by limiting the profit and loss (P&L) impact of rate fluctuations between the time of invoicing and the time of cash settlement.

Interest rate hedging policy

The Group locks in the majority of its net indebtedness at fixed interest rates. Solvay monitors the interest rate market closely and enters into derivative instruments (interest rate swaps and zero cost collars) whenever they are deemed appropriate.

Energy and CO₂ hedging policy

Solvay hedges energy prices – gas and electricity – based on the net exposure of our sales not indexed on energy prices. This policy includes multiyear hedging transactions. The Group net exposure to carbon pricing is managed through hedging transactions spanning the time horizon of the European Union Emissions Trading Systems.

Monitoring of Group counterparties' ratings

For our treasury activities, Solvay works with banking institutions of high creditworthiness (investment grade, selected based on major rating systems) and minimizes the concentration of risk by limiting our exposure to each of these banks to a predefined threshold. We regularly monitor trends in credit default swaps to assess changes in bank creditworthiness and take rapid action if required.

For our commercial activities, Solvay's external customer risk and cash collection is monitored by a professional network of credit managers and cash collectors located in the Group's various operating regions and countries. Their controls are supported by a set of detailed procedures and managed through Corporate and GBU Credit Committees. These loss mitigation measures have led, over the past few years, to a record low rate of customer defaults.

Pension governance and pension plan optimization

With regard to pension governance, Solvay engages proactively and constructively with trustees and stakeholders to ensure that funding, liability management, and investment policies are appropriate, in line with best practices and in full compliance with domestic regulatory expectations and laws.

In terms of pension plan optimization, we reduce the Group's exposure to defined benefit plans by either converting existing plans into pension plans with a lower risk profile for future services or closing them to new entrants.

For each of the main Group pension plans, which represent about 90% of the Group's gross or net pension obligations, Asset Liability Management (ALM) analyses are performed at least once every three years to identify and manage corresponding risks.

Control processes for tax regulation compliance and transfer pricing policies

Our control processes for tax regulation compliance involve monitoring procedures and systems, which we carry out through internal reviews and audits performed by reputable external consultants.

Our transfer pricing policies, procedures, and controls are aimed at meeting the requirements of the authorities.

Solvay's Tax Department pays close attention to the correct interpretation and application of new tax rules. This ensures compliance with applicable rules and regulations and avoids tax and future litigation risks.

3.3.3. Main actions in 2023

- Successful liability management exercise before completion of the Partial Demerger to implement the target, post-spin-off capital structure of Solvay and Syensqo.
- Set up of new liquidity reserves following the execution of the Partial Demerger.
- Further contribution in the Solvay UK pension funds of €11 million in Q2 and a contribution in France of €18 million in Q4 in the AXA pension fund for Rhodia Chimie.
- Compliance for IBOR-transition rates to risk-free rates and adjustments of financial documentation.

3.4. IT risk

3.4.1. Risk description

- Ensure the continuity of digital technology services to business; support business continuity.
- Deliver cyber security services and roadmap within IT portfolio; handle data security and non-compliance risk, supplier sustainability and security.
- Support major group transformations and deliver timely transformation initiatives, while being bound to provide IT systems and infrastructure services under the Master Transition Services Agreement (MTSA) entered into between Solvay and Syensqo for a period of up to two years ending in December 2025.

3.4.2. Prevention and mitigation actions

- Close monitoring of major transformation initiatives.
- Timely definition and implementation of Post-Demerger roadmaps to ensure the exit of the IT Transition Service Agreements between Solvay and Syensqo by December 2025.
- Close monitoring of security and performance indicators.
- Close monitoring of workforce and talent management.
- Ad hoc actions to boost recognition, motivation, and support well-being and caring.
- Increased security requirements from third parties.
- Globally, close monitoring of IT/Digital Technology (DT) risks.
- Annual IT audit program to ensure compliance with group security policies.
- ISO 27001 and ISO 9001 certification.

3.4.3. Main developments in 2023

In 2023, the main challenge was to leverage IT best practices (in the fields of change management, security, etc.) while delivering a very demanding initiative portfolio required to support the group transformation.

More than 300 major transformations orchestrated and synchronized with the Solvay transformation in 2023.

Command Center

- Set up of a Command Center organization.
- Deployment of ITIL (Information Technology Infrastructure Library) practice in the field of incident management, change management, problem management, etc.
- Set up a SIEM (Security Information and Event Management) service.
- Close monitoring of critical services.
- All application portfolios reassessed.

Security

- Security in projects: Security by design process has been running for more than a year.
- Security standards deployment.

Process improvement

- Improvement of end-to-end services like onboarding of employees.
- Automation of identity and access management.
- Resource/capacity planning.

Areas of practice

- Set up of areas of practice (service owners, service delivery managers, initiative owners, etc.).

DT risk management

- Digital technology risks are monitored on a monthly basis together with the DT Leadership team.
- Digital technology risks were reassessed in September 2023.
- Synchronization with operational risk management has been reinforced (risks in projects, third-party risks, cyber-security risks, etc.).
- High implementation rate of audit action plans has further improved and been sustained in 2023.

Litigation section

INTRODUCTION

As a result of the diverse nature of its activities, and the geographic footprint of its operations, the Solvay Group is exposed to legal risks, particularly in the areas of product liability, contractual relations, antitrust laws, patent disputes, tax assessments and health, safety and environment (HSE) matters.

In this context, litigation is a normal recurring feature of the Solvay Group's operating businesses, both to protect against claims, some of which we believe to be without merit, and to defend the rights and interests of the Solvay Group.

Ongoing legal proceedings involving the Solvay Group that are currently considered to potentially involve significant risks are outlined below. The legal proceedings described below do not constitute an exhaustive list.

The proceedings summarized below represent the material matters pending against Solvay or its subsidiaries regardless of the merits of the claims and the strengths of Solvay's defenses. There can be no assurance regarding the outcome of any proceeding described below; the Solvay Group will continue to vigorously defend itself based on the merits of its defenses while opportunistically seeking consensual resolution in appropriate cases.

For certain cases, we have created reserves or provisions in accordance with appropriate accounting rules and policies, to cover financial risk and defense costs. Please refer to Notes F8, "Discontinued Operations", F31 "Provisions" and F36 "Contingent Assets, Liabilities and Financial Guarantees" to Solvay's consolidated financial statements for the year ended December 31, 2023 for additional information regarding such reserves or provisions. In doing so, we do not ordinarily disclose the extent to which provisions are made in relation to individual proceedings, because to do so would be prejudicial to Solvay's interests. In addition, we maximize all available insurance coverage. Adverse outcomes of material contested matters, individually or in the aggregate, could exceed the amounts of applicable provisions or insurance coverage, and could have a material adverse effect on the revenues and earnings of the Group.

ANTITRUST PROCEEDINGS

In Brazil, CADE (the Brazilian antitrust authority) levied fines against subsidiaries of Solvay and other third parties in May 2012, relating to hydrogen peroxide activities, and in May 2016, relating to sodium perborate activities. Solvay's aggregate share of these fines amounts to €29.6 million and €3.99 million respectively. We have since brought a lawsuit before the Brazilian Federal Court to contest these administrative fines.

HSE-RELATED PROCEEDINGS

- Asbestos Cases: Twenty-nine civil proceedings have been brought before Italian courts by past workers and relatives of deceased workers at Solvay sites seeking damages, currently estimated at approximately €32 million, in relation to diseases allegedly caused by exposure to asbestos. Thirteen proceedings are still pending before courts of first instance, Courts of Appeal and the Supreme Court (Corte di Cassazione) whilst the remaining 16 proceedings definitively ended as a result of dismissals, court settlements, and condemnations to pay damages.
- Rosignano site: The Public Prosecutor's Office of the Criminal Court of Livorno, Italy initiated preliminary criminal investigations in 2019 regarding the alleged contamination of certain water tables outside our site and in our former landfill of Rosignano, Italy site. These investigations are still ongoing.

BULGARIA

In Bulgaria, Solvay Sodi AD, a subsidiary of Solvay, is subject to certain state-imposed obligations for emergency oil stocks (reserves) for 2021 through 2023, for which it was not able to comply. As a result, the competent Bulgarian authority imposed fines for 2021 and 2022 on Solvay Sodi AD of approximately €15 million for our share of the penalties which were fully provisioned. For 2023, the order is suspended and as a result no fine is imposed and therefore no provision has been recorded.

Should this suspension be lifted, an additional penalty of €9 million may be imposed on Solvay Sodi AD. Solvay Sodi AD has brought a lawsuit to contest these fines and is seeking relief through national authorities pleading that the existing Bulgarian emergency stocks system is not compatible with the EU law.

PHARMACEUTICAL ACTIVITIES (DISCONTINUED)

The contractual arrangements for the sale of our pharmaceutical activities in February 2010 established the terms and conditions for the allocation and sharing of liability arising out of activities carried out before the sale. Subject to limited exceptions, Solvay's exposure for indemnification to Abbott for liabilities arising out of sold activities is limited to an aggregate amount of €500 million, with limited duration. All post-closing indemnification claims made against Solvay have now been resolved except liabilities arising from private civil antitrust claims made against the buyer of the business. Solvay's potential exposure is limited to a possible clawback of up to the €300 million received by Solvay as an additional purchase price based on post-closing ANDROGEL® sales.

SPECIALTY BUSINESSES TRANSFERRED TO SYENSQO AS PART OF THE PARTIAL DEMERGER (DISCONTINUED)

On December 8, 2023, the Extraordinary Shareholders' Meetings of the Company and Syensqo SA/NV ("Syensqo") approved the partial demerger of the Company whereby the shares and other interests the Company held in the legal entities operating the so-called "Specialty Businesses", its rights and obligations under the agreements entered into with those legal entities, as well as certain other assets and liabilities were transferred to Syensqo (the "Partial Demerger"), with 99.53 % of positive votes. The Partial Demerger was completed on December 9, 2023.

With effect from December 9, 2023, as a result of the Partial Demerger, Syensqo owns certain legal entities which were involved in ongoing proceedings prior to the Partial Demerger. Accordingly, as part of the deconsolidation of the Specialty businesses of Solvay (including the legal entities transferred to Syensqo as part of the Partial Demerger) as from December 9, 2023, the provisions booked in Solvay's consolidated financial statements, prior to completion of the Partial Demerger, in respect of proceedings involving legal entities transferred to Syensqo are no longer reflected in Solvay's consolidated financial statements. For additional information, please refer to Section 1 of the consolidated financial statements and Notes F8, "Discontinued Operations" and F40 "List of Companies included in the Consolidation Scope" for the year ended December 31, 2023. Proceedings involving legal entities transferred to Syensqo included, in particular, the following:

- US PFAS-related proceedings, including West Deptford site: Solvay Specialty Polymers USA, LLC (Specialty Polymers), a former subsidiary of Solvay transferred to Syensqo as part of the Partial Demerger, owns and operates the West Deptford, New Jersey site. In 2023, Specialty Polymers was a defendant in 36 separate lawsuits in the United States relating to such subsidiary's alleged use of per- and polyfluoroalkyl substances (PFAS). Of these 36 cases, 15 reached resolution in 2023 and are expected to be dismissed in 2024, including the litigation filed by the New Jersey Department of Environmental Protection (NJDEP). On June 28, 2023, Solvay Specialty Polymers USA, LLC and the NJDEP announced they reached a settlement resolving certain PFAS-related claims in New Jersey. As a result of this settlement, Solvay increased its existing provision by around \$250 million as of June 30, 2023, with \$175 million cash out in 2024 and the balance over a 30-year period. This additional provision was included within discontinued operations in the Consolidated Income Statement for the year ended December 31, 2023. [As noted above, as a result of the deconsolidation of the Specialty businesses of Solvay as from December 9, 2023, the amounts provisioned in respect of the abovementioned PFAS-related proceedings are no longer reflected in Solvay's consolidated financial statements.]
- Edison-related proceedings: Syensqo received compensation of €91.6 million after decisions by the International Chamber of Commerce, Commerce's Arbitration Court, the Swiss Supreme Court, and the Milan Court of Appeal, all of which ruled in favor of Solvay Specialty Polymers Italy S.p.A. The compensation relates to losses, damages and costs incurred up to the end of 2016 in relation to certain environmental issues at the Spinetta Marengo and Bussi sites, previously owned and operated by (Mont)Edison S.p.A. and Ausimont S.p.A. The compensation received in 2023 was included within discontinued operations in the Consolidated Income Statement.

07

EXTRA-FINANCIAL
STATEMENT

162	1. Overview of the consolidated extra-financial statements	199	5. Nature
		199	5.1. Water and wastewater
		201	5.2. Waste
		201	5.3. Air quality
		203	5.4. Biodiversity
		206	5.5. Hazardous materials
164	2. Basis of preparation	208	6. Better life
164	2.1. Reporting frameworks	208	6.1. Employee health and safety
165	2.2. Reporting scope and boundaries	212	6.2. Critical incident risk management
166	2.3. Materiality analysis	214	6.3. Labor practices
175	3. Governance	217	6.4. Diversity and inclusion
175	3.1. One Planet	220	6.5. Recruitment, development, and retention
176	3.2. Management of the legal, ethics, and regulatory framework	223	6.6. Corporate citizenship
182	3.3. Health, safety and environmental management	225	7. Sustainable portfolio
183	3.4. Supply chain and procurement	225	7.1. Product design and life-cycle management
185	3.5. Main partnerships	227	7.2. Circular economy
187	3.6. Membership and advocacy	228	7.3. EU taxonomy activities
189	4. Climate	236	8. GRI content index
189	4.1. Climate change	236	8.1. Statement of use and GRI 1 used
191	4.2. Greenhouse gas emissions	236	8.2. GRI 2: general disclosures 2021
196	4.3. Energy	238	8.3. GRI 3: material topics 2021

Extra-financial statements

1. OVERVIEW OF THE CONSOLIDATED EXTRA-FINANCIAL STATEMENTS

Past figures are restated to the 2023 scope.

R: Reasonable assurance

L: Limited assurance

Mt: Million metric tons

Mm3: Million cubic meters

PJ: Peta Joules

CLIMATE

		Units	2023	2022
PRIORITY ASPECTS				
Greenhouse gas emissions				
R	Scope 1	Mt CO ₂ eq.	6.7	7.8
R	Scope 2 – gross market-based	Mt CO ₂ eq.	0.6	0.7
R	Total Scope 1+2	Mt CO ₂ eq.	7.3	8.5
R	Scope 3 – all categories	Mt CO ₂ eq.	14.0	15.5
	Total scopes 1+2+3	Mt CO ₂ eq.	21.3	24
Biodiversity				
R	Pressure of Solvay products on biodiversity	Number	63	56
HIGH MATERIALITY ASPECTS				
Energy				
	Primary energy purchase for consumption (1)	PJ	71.9	79.4
	Secondary energy purchase for consumption (2)	PJ	17.2	18.9
	Energy sold (3)	PJ	19.0	19.6
L	Energy consumption* (1)+(2)-(3)	PJ	70.1	78.7
L	Renewable energy consumption	PJ	6.9	6.0
R	Phase-out of coal use in total energy production	PJ	24	28

*A change in the reporting scope took place, with the exclusion of all emissions in the joint-venture in Zhenjiang, China, and Tavaux, France, sites in our reporting scope.

NATURE

		Units	2023	2022
PRIORITY ASPECTS				
R	Product portfolio assessed	%	92	91
R	Sustainable solutions – % Group sales	%	44	43
Circular economy				
L	% of sales aligned with circular economy principles	%	4	5
Water				
R	Total freshwater withdrawal	Mm ³	223	244
	Freshwater withdrawal in water-stressed areas	Mm ³	33	37
L	Chemical oxygen demand (COD)	Metric tons	1,970	1,848
L	Persistent organic pollutants (POP)	Metric tons	0	1.6E-05
Waste				
R	Non-hazardous industrial waste	1,000 tons	1,365	1,460
R	Hazardous industrial waste	1,000 tons	26	35
R	Total industrial waste	1,000 tons	1,392	1,495
R	Industrial non-hazardous waste not treated in a sustainable way	1,000 tons	17	11
R	Industrial hazardous waste not treated in a sustainable way	1,000 tons	5	6
R	Total industrial waste not treated in a sustainable way	1,000 tons	23	16
R	Mining waste	1,000 tons	432	600
HIGH MATERIALITY ASPECTS				
Air quality				
L	Nitrogen oxides (NOx)	Metric tons	4,324	4,954
L	Sulfur oxides (SOx)	Metric tons	2,047	2,363
L	Non-methane volatile organic compounds (NMVOC)	Metric tons	2,341	1,743
L	Ozone-depleting substances (ODS)	Metric tons	0.7	1.6
L	Persistent organic pollutants (POP)	Metric tons	4.3E-08	3.6E-08
HAZARDOUS MATERIALS				
L	All Solvay-Substance of Very High Concern (Solvay-SVHC) present in marketed products	Number	26	24
L	% of completion of Analysis of Safer Alternatives program for marketed substances	%	94	68

BETTER LIFE

		Units	2023	2022
PRIORITY ASPECTS				
Employee health and safety				
R	Reportable Injury and Illness Rate (RIIR) employees and contractors	per 200,000 hours	0.27	0.27
R	Lost Time Injury and Illness Rate (LTIIR) employees and contractors	per 200,000 hours	0.18	0.18
R	Fatal accidents – employees and contractors	Number	0	0
Diversity and inclusion				
R	Women in senior and middle management	%	26.3	28.8
R	Women in Solvay's workforce	%	24	24
R	Total headcount		9,105	9,379
HIGH MATERIALITY ASPECTS				
L	Coverage by collective agreements	%	100	100
Critical incident risk management				
L	Process safety incident rate	Medium or higher severity incidents per 200,000 hours worked	0.42	0.82
L	Process safety incident (M, H, C) with environmental consequences (M, H, C) of which with reportable operating permit limit exceedance and with a chemical release (L, M)	Number	5	14

2. BASIS OF PREPARATION

2.1. Reporting frameworks

- The main reporting frameworks used to prepare the Annual Integrated Report are:
- Global Reporting Initiative (GRI): The GRI standards are the main reference for Solvay’s sustainability reporting; the latest edition of the standards is used, including the new GRI-1 and GRI-2 universal standards.
 - 2014/95/EU: Solvay uses the GRI Standards to comply with Directive 2014/95/EU of the European Parliament and of the Council of October 22, 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information. The Directive was transposed into Belgian law in September 2017.
 - EU Taxonomy: A first estimate of eligible activities as defined by the EU Taxonomy in the delegated act of April 2021 is presented in 7.3. EU Taxonomy.
 - United Nations Global Compact: The information provided serves as a progress report on implementation of the United Nations Global Compact’s 10 principles.
 - Task force on Climate-related Financial Disclosures (TCFD): Solvay reports on our alignment with the 11 recommendations of the TCFD.
 - Responsible Care®: Solvay is a signatory to the International Council of Chemical Associations’ (ICCA) Responsible Care Global Charter®.
 - Integrated Reporting Framework: Solvay adheres to the principles and content elements of Integrated Reporting, as described in the “International Framework” published by the IFRS Foundation.
 - Sustainability Accounting Standards Board (SASB): Solvay aligns our materiality analysis with the SASB approach to prepare the SASB Materiality Map™. For more details, see the Materiality Analysis section of this chapter.
 - United Nations Sustainable Development Goals: Solvay has identified the nine Sustainable Development Goals on which it can have the most impact, through its operations or across the value chain, in line with the materiality analysis.
 - World Business Council for Sustainable Development (WBCSD): Solvay’s report aligns with the WBCSD ESG Disclosure Handbook guidance in terms of process and content selection.

Solvay also monitors developments in the European Sustainability Reporting Standards (ESRS), included in the new European Union Corporate Sustainability Reporting Directive, as well as the IFRS Sustainability Standards.

2.2. Reporting scope and boundaries

GRI DISCLOSURES 2-2 2-3 2-4 2-7

Unless stated otherwise, the environmental and social reporting boundaries are consistent with the financial reporting scope and boundaries, as described in the “List of companies included in the consolidation scope” in the financial statements. In other words, in line with the approach described in the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard, sustainability indicators consolidation include fully consolidated companies (subsidiaries), and companies that qualify as joint-operations. Apart from exceptions listed below, joint operations are consolidated in line with the Group contractual share of the joint operations’ assets, liabilities, revenue, and expenses, which is generally aligned with the ownership interest in the joint operations. Companies consolidated by applying the equity method of accounting (joint-ventures and associates) are excluded from the environmental and social reporting boundaries.

More specifically, indicators linked to operations (greenhouse gas emissions, energy, air, water, waste, and critical incident risk management) are covering only production and research and innovation sites on which Solvay has operational control or exercises joint control that qualify as joint operation.

As an exception to the above rules, air, water, and waste indicators:

- for Zhenjiang company (fully integrated in Syensqo but in which Solvay has a minority share), have been split based on actual emissions by Syensqo and Solvay workshops; and
- for Devnya, Bulgaria, have been consolidated at 75%.

Employee health and safety indicators encompass all sites on which Solvay has operational control, regardless of the site’s company consolidation method. The data is calculated on a monthly basis.

Critical incident risk management indicators encompass all industrial functions and sites at which Solvay has operational control, regardless of the site’s company consolidation method. The data is calculated on a monthly basis.

The other Better Life social indicators include all Solvay employees (regardless of the employee’s company consolidation method) who have an employment contract with Solvay and are classified as active, as they have a position in the organizational chart on December 31, 2023.

Employee health & safety indicators encompass all sites on which Solvay has operational control, regardless of the site’s company consolidation method.

The other Better Life social indicators include all Solvay employees (regardless of the employee’s company consolidation method) who have an employment contract with Solvay and are classified as active, as they have a position in the organizational chart.

Collective agreements cover all Solvay employees in companies in which Solvay has a majority stake.

Solvay uses the “rolling base year” approach described in the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard to calculate target achievements.

Unless stated otherwise, past years have not been restated for extra-financial indicators, with the major exception of Solvay-Syensqo impact, where 2022 and 2023 data have been split with Solvay scope and boundaries. Other exceptions are documented in the KPI section.

Before the December 2023 spin-off, Solvay Group was including Syensqo perimeter. Therefore, indicators related to the pre spin-off period have been split between Syensqo and the remaining Solvay Group, based on the following simplified approach inspired by the approach used for the combined financial statements:

- Each business unit was allocated 100% to either Solvay or Syensqo.
- Corporate and shared Research and Innovation services were allocated 100% to Syensqo (except for the Paulinia site, allocated to Solvay).
- Digital Technology Function and Shared Business Services were allocated 100% to Solvay (those Solvay teams are engaged in the Transition Service Agreement with Syensqo).
- The remainder (mainly Corporate and Business Services perimeter not covered above, or elements that were not tracked by business units) was allocated 39.55% to Solvay and 60.45% to Syensqo. This allocation rule was also applied for Citizen Days participation (participation to Citizen Days is in 6.6. Corporate Citizenship).

Those rules may cause a rounding error on indicators without decimals (for instance the Speak Up program, or number of accidents). The actual indicator before the split may differ by one unit from the consolidation of Solvay and Syensqo split indicators.

There is an exception to the above rules for sites shared between Solvay and Syensqo. In 2023, both Tavaux and Zhenjiang plants are allocated fully to Syensqo, except for air, water, waste, process safety, speak-up claims, and employee health and safety indicators, which are split based on actual workshops allocation.

Administrative sites that are part of greenhouse gas emissions and energy reportings are split as follows: Watford site and Brussels campus in Neder-Over-Heembeek are included in Solvay perimeter; while Aubervilliers, St-Fons Research and Innovation center, Bristol, and Butte sites are allocated to Syensqo.

2022 Solvay Group headcounts have been restated from 22,047 to 21,998 (i.e., -49 headcounts), due to retroactive employee data changes performed in 2023 (inactive headcount departure, new hires, terminations). This 49 headcount gap has been allocated to Syensqo (60.45%, i.e., -30 headcounts) and the new Solvay (39.55%, i.e., -19 headcounts).

2.3. Materiality analysis

GRI DISCLOSURES: 3-1 3-2

Solvay adopts sustainability priorities based on a materiality analysis. This approach identifies economic, environmental, and social aspects which can impact Solvay, or on which Solvay has the most impact, positive or negative.

- Solvay uses two external references for our materiality analysis:
- Global Reporting Initiative (GRI) for the materiality analysis process, and
 - SASB Standards (now part of IFRS Foundation) for the list of aspects and for prioritization criteria.

2.3.1. Materiality table

Category	Not material for reporting purposes	Material for reporting purposes
Governance	<ul style="list-style-type: none">• Customer privacy• Selling practices and product labeling• Systemic risk management• Business model resilience	<ul style="list-style-type: none">• Management of the legal, ethics, and regulatory framework• Data security• Business ethics
Climate		<ul style="list-style-type: none">• Physical impacts of climate change• Greenhouse gas emissions• Energy
Nature	<ul style="list-style-type: none">• Supply chain and procurement• Materials sourcing and efficiency	<ul style="list-style-type: none">• Air quality• Water and wastewater• Waste• Biodiversity• Hazardous materials
Better life	<ul style="list-style-type: none">• Access and affordability• Customer welfare	<ul style="list-style-type: none">• Employee health and safety• Labor practices• Employee engagement, diversity and inclusion• Human rights and community relations• Product quality and safety• Critical incident risk management• Product design and life-cycle management

2.3.2. Materiality analysis process

Solvay's Sustainable Development Function coordinates materiality analysis with an internal network of Sustainability Champions in the Global Business Units and Functions. Experts in each Corporate Function review the analysis of each aspect, paying particular attention to ensuring consistency with the Group's risk analysis. These assessments are then reviewed and validated by the relevant business leadership teams, which is a critical step in ensuring that business priorities and decisions reflect sustainability matters appropriately.

Identification of aspects	Use of the SASB list of sustainability-related risks and opportunities as presented on the SASB Standards website.
Prioritization of aspects	<ul style="list-style-type: none">• Use of the SASB Materiality Map prioritization criteria:<ul style="list-style-type: none">- Demonstration of interest, for Solvay and/or for Solvay stakeholders, including evidence of potential impacts.- Demonstration of financial impact, actual or potential: sales, profit, return or risk profile.- Forward-looking adjustment.• The network of Sustainability Champions and internal experts for each high materiality aspect was involved in the prioritization analysis.• In addition to the SASB prioritization criteria, an additional focus on external impacts has been included in the assessment since the publication of Solvay's Purpose in 2019. This led to the review of the materiality analysis, which led to the publication of the Solvay One Planet sustainability ambition in 2020.• In 2023 the alignment with Solvay's risk analysis was added, in a first step to align with the Corporate Sustainability Reporting Directive definition of double materiality: if a risk has been identified as a group main risk, as described in the Risk Management chapter of this report, the corresponding sustainability topics are considered financially material.
Validation	Review of the analysis by the Executive Committee and the Global Business Units and Corporate Functions leaders. The review includes verifying consistency with the analysis of the Group's main risks, and a comparison with the Value Reporting Foundation – SASB Materiality Finder for the chemical sector.
Review	A review led by the Sustainable Development Function takes place annually, based on feedback from stakeholders and Solvay experts. The findings inform and contribute to the prioritization review in the next reporting cycle.
Stakeholder inclusiveness and sustainability context	Indirectly taken into account through: <ul style="list-style-type: none">• the exhaustive list of aspects in the SASB's Materiality Map;• the "Demonstration interest criteria," which includes the analysis of documents from representatives of stakeholder groups, with emphasis on written evidence; and• identification of the main impacts.
Report	The high materiality aspects are included in Solvay's dashboards and reported in the annual report, with assurance from corporate auditors.

2.3.3. 2023 updates

- In 2023, a review of the materiality analysis has been performed in order to anticipate some of the provisions of the EU Corporate Sustainability Reporting Directive (CSRD):
- Alignment to the CSRD double materiality definition, as described in the "EFRAG implementation guidance for the materiality assessment" published in August 2023, and in particular, better alignment with Solvay's risks analysis as described in the Risk Management chapter of this report. This led to an increased focus on potential impacts (economic, social, and environmental) in addition to existing impacts.
 - Stricter alignment to the "SASB list of sustainability-related risks and opportunities" as presented on the SASB Standards website.
 - Preliminary assessment focusing on the new Solvay scope of activities on the basis of our perception of impact severity.

- The following corrections have been made compared to the 2022 materiality table:
- "Data security" has been identified as material, as it is part of one of Solvay's main risks (security – physical and information).
 - "Physical impacts of climate change" has been identified as material, as it is part of one of Solvay's main risks (climate change).
 - "Product quality and safety" has been identified as material, as it is part of one of Solvay's main risks (products and regulated market risks).
 - "Customer Welfare" was considered not material, as the elements covered under this SASB topic are already covered under "Product quality and safety" for a chemical company.

The analysis was carried out by Solvay's Sustainable Development team, involving in-house experts of each topic. It is considered a preliminary analysis, as stakeholders have not been engaged yet. The analysis was presented to Solvay's Executive Leadership team in September 2023.

2.3.4. Why is it material?

The tables below summarize Solvay's assessment of high materiality aspects for each category. The corresponding United Nations Sustainable Development Goals (SDGs) are used to describe what impacts are considered, where they may occur, and how they may be caused. For more information about these goals see <https://www.globalgoals.org/>.

GOVERNANCE

Topic	Scope and boundaries	Demonstration of impact on Solvay	Demonstration of impact on people and the environment	Material for reporting purposes
Business ethics	Operations value chain	Compliance and business integrity is identified as a main risk	Severe reaction from stakeholders expected in case of breach	Material; combined into "Management of the legal, ethics and regulatory framework"
Competitive behavior	Operations value chain	Compliance and business integrity is identified as a main risk	Severe reaction from stakeholders expected in case of breach	Material; combined into "Management of the legal, ethics and regulatory framework"
Customer privacy	Downstream value chain			Not material
Data security	Operations value chain	Data security is identified as a main risk		Material; combined to Security group Risk
Management of the legal & regulatory environment	Operations value chain	Compliance and business integrity is identified as a main risk	Potential environmental or social impacts in own operations in case of lower standards selection	Material; combined into "Management of the legal, ethics and regulatory framework"
Selling practices & product labeling	Downstream value chain			Not material
Systemic risk management	Operations value chain			Not material
Business model resilience	Operations value chain			Covered under "Product design and life-cycle management"

CLIMATE

Topic	Scope and boundaries	Demonstration of impact on Solvay	Demonstration of impact on people and the environment	Material for reporting purposes
Energy management	Operations upstream value chain SDG-13 SDG-7		<ul style="list-style-type: none">CO₂ emissionsSolid fuels exposure, possible reaction from stakeholdersForward looking adjustment: yes, growing importance	Material
GHG emissions	Operations value chain SDG-13	Climate change is identified as a main risk	<ul style="list-style-type: none">Material for the chemical industryHigh intensity of CO₂e emissionsSF₆ sales, potential impact on Scope 3Forward looking adjustment: yes, growing importance	Material
Physical impacts of climate change	Operations value chain SDG-13	Climate change is identified as a main risk	<ul style="list-style-type: none">Potential social and environmental impacts of extreme climate events on own operations and the value chain	Material

NATURE

Topic	Scope and boundaries	Demonstration of impact on Solvay	Demonstration of impact on people and the environment	Material for reporting purposes
Air quality	Operations SDG-3 SDG-15	Environmental impact and controversies is identified as a main risk	<ul style="list-style-type: none">Material for the chemical industryHigh intensity of NOx and SOx emissions	Material
Materials sourcing & efficiency (=management of impacts on supply chain)	Upstream value chain			Not material
Hazardous materials management (in raw materials/intermediates/end product/emissions/effluents)	Operations value chain SDG-3 SDG-6 SDG-12 SDG-14 SDG-15	Operations safety is identified as a main risk	<ul style="list-style-type: none">Hazardous materials are one of the potential causes of harm to people or the environmentChronic exposure to occupational agents – chemical, physical, biological, or psychological – known to cause work-related diseaseSoC emissions in air and water	Material
Biodiversity	Operations value chain SDG-13 SDG-14 SDG-15		<ul style="list-style-type: none">High reputational impact: international news headlines, activity on social mediaPotential pressure on biodiversity through supply chain and own operations' environmental impactsLimestone quarries operations may affect local biodiversityForward looking adjustment: yes, growing importance	Material
Waste management (including hazardous wastes)	Operations SDG-3 SDG-6 SDG-12 SDG-14 SDG-15	Environmental impact and controversies is identified as a main risk	<ul style="list-style-type: none">Material for the chemical industryHigh intensity of waste productionRosignano controversy	Material
Water & wastewater management	Operations SDG-3 SDG-6 SDG-14 SDG-15	Environmental impact and controversies is identified as a main risk	<ul style="list-style-type: none">Material for the chemical industryHigh intensity of water intake	Material

BETTER LIFE

Topic	Scope and boundaries	Demonstration of impact on Solvay	Demonstration of impact on people and the environment	Material for reporting purposes
Access & affordability			No impact on or from Solvay's products	Not material
Community relations	Local communities Society at large SDG-17	Security is identified as a main risk	<ul style="list-style-type: none">Seveso sitesPotential high impacts on people and the environment in case of action against production sitesOngoing controversies (Rosignano)	Material
Critical incident risk management (process safety)	Operations Local communities SDG-3 SDG-12 SDG-13	Operations safety is identified as a main risk	<ul style="list-style-type: none">Potential impacts of process accidents or security risks on people and the environment	Material
Employee engagement, diversity and inclusion (including recruitment, retention, development)	Operations SDG-8	Growing interest on diversity impacts	<ul style="list-style-type: none">Potential social impacts in case of major restructuring or site closure	Material
Labor practices	Operations		<ul style="list-style-type: none">Potential social impacts in case of breach of social standards or human rights aspectsLabor relations is part of the company DNA since Ernest SolvayPotential social impacts in case of restructuring	Material
Employee health & safety	Operations Contractors SDG-3	Operations safety is identified as a main risk	<ul style="list-style-type: none">Material for the chemical industryAccidents may cause fatalities or irreversible injuries	Material
Product quality & safety		Products and regulated market risks is identified as a main risk		Material
Product design & life-cycle management (including Business Model Resilience) for sustainable portfolio	Operations value chain	Market and growth – strategic risk (but not a main risk)	<ul style="list-style-type: none">Multiple positive or negative impacts throughout the value chain assessed through the Sustainable Portfolio Management methodologyPositive impacts: silica for green tires, bio-circular silica, new soda ash manufacturing processSF6 recycling	Material

2.4. Task Force on Climate-related Financial Disclosure

The Financial Stability Board Task Force on Climate-related Financial Disclosures (TCFD) developed voluntary, consistent, climate-related financial risk disclosures, which can be used by companies to provide information to investors, lenders, insurers, and other stakeholders.

The Task Force structured its recommendations around four themes that represent key aspects of how organizations operate: governance, strategy, risk management, and metrics and targets.

This section addresses the disclosures, with links to the relevant sections of the Annual Integrated Report, and provides a self-assessment of Solvay's level of alignment with the TCFD recommendations.

TCFD recommendation	Implementation	Reference
GOVERNANCE		
Disclose the organization's governance around climate-related risks and opportunities.		
a. Describe the Board's oversight of climate-related risks and opportunities.	<ul style="list-style-type: none">The Charter of Corporate Governance describes how the Board of Directors manages sustainability-related topics and is available on the Solvay website. The Board devotes at least one meeting per year to an update on trends in global sustainable development issues, including climate change risks and opportunities. The ESG Committee considers the material ESG issues relevant to the Group's business activities and provides guidance and recommendations to the Board.	5. Corporate governance statement
b. Describe management's role in assessing and managing climate-related risks and opportunities.	<ul style="list-style-type: none">A Climate Risks Officer has been appointed at the Executive Committee level. The person in charge of ensuring that climate-related aspects are adequately considered in the Group's strategy and operations.	6. Risk management process
STRATEGY		
a. Describe the climate-related risks and opportunities the company has identified over the short, medium, and long term.	<ul style="list-style-type: none">Long-term-horizon assumptions are presented in the description of megatrends in the Sustainable value creation section of this Annual Integrated Report. Medium-term assumptions (in the coming five years) are explained in the description of Solvay's main markets. Short-term assumptions (one year) are presented in the Group's outlook.The presentation of the Group's main risks includes timescales (short-, medium- or long-term horizons). Quantification of impacts is not disclosed.	2. Business environment and strategy Performance: 4. Outlook 6. Solvay's main risks
b. Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	<ul style="list-style-type: none">Climate-related risks and opportunities were reviewed in 2022-2023. On transition risks, a new climate transition scenario analysis was performed in 2023, in line with the TCFD's updated recommendation for scenario analysis. Two scenarios were considered: the 2021 International Energy Agency "Stated Policies Scenario" and the "Net Zero Emissions by 2050" scenario.Acute physical climate risks linked to droughts, floods, and hurricanes are assessed annually with our insurers.Chronic climate physical risks focus on water scarcity: sites in areas of water scarcity have been identified, and the risks have been assessed based on their water consumption and maximum foreseeable loss.	6. Solvay's main risks Extra-financial statements: 4.1. Climate change
c. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	<ul style="list-style-type: none">Solvay's climate transition risk scenario analysis was updated in 2023, in line with the TCFD's 2020 guidance. The result of this analysis is described in a new section of this Annual Integrated Report.	Extra-financial statements: 4.1. Climate change
RISK MANAGEMENT		
a. Describe the organization's processes for identifying and assessing climate-related risks.	<ul style="list-style-type: none">The risk management process, the main risks, and the process used to rank them are described in the Risk management chapter.	6. Risk management
b. Describe the organization's processes for managing climate-related risks.	<ul style="list-style-type: none">Analysis of value chain sustainability-related risks and opportunities is done through the Sustainable Portfolio Management methodology, for each product in each application or market, and includes climate change transition risks.Greenhouse gas emissions (GHG) have been identified as a priority in the Group's materiality analysis. Climate transition risks have been identified as part of the Group's main risks. Links between main risks and high materiality issues are part of the materiality analysis process.	Extra-financial statements: 2.3. Materiality analysis Risk management: 6. Solvay's main risks 7.2. Product design and life-cycle management 4.1. Climate change
c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	<ul style="list-style-type: none">The Sustainable Portfolio Management tool is a requirement in key group processes and, in particular, in the assessment of capital expenditure projects, research and innovation projects, and acquisition and divestiture projects.	Extra-financial statements: 7.2. Product design and life-cycle management 4.1. Climate change

METRICS AND TARGETS		
a. Disclose the metrics used by the company to assess climate-related risks and opportunities in line with its strategy and risk management process.	<div><div></div><div>The strategic objectives used to drive sustainable value creation are described in the Performance chapter.</div></div>	3. Sustainable value creation
b. Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	<div><div></div><div>Greenhouse gas emissions, energy consumption, and Sustainable Portfolio Management metrics and targets are reported in the Extra-financial statements chapter. Solvay has a 2030 objective to reduce Scope 1 and 2 greenhouse gas emissions by 30% in line with a “well below 2°C” trajectory and targets carbon neutrality before 2050. Solvay will also not build new coal-powered plants and has committed to coal phase-out in energy production by 2030 wherever renewable alternatives exist. Solvay has also set a 2030 target to reduce by 20% Scope 3 greenhouse gas emissions from its Focus 5 categories both upstream and downstream in the value chain.</div></div>	Extra-financial statements: 4.2. Greenhouse gas emissions 7.1. Product design and life-cycle management
c. Describe the targets used by the company to manage climate-related risks and opportunities and performance against targets.	<div><div></div><div>Scope 1, 2, and 3 greenhouse gas emissions are fully reported and audited. The scope of emissions reporting is consistent with financial reporting.</div></div>	Extra-financial statements: 4.2. Greenhouse gas emissions

2.5. United Nations Sustainable Development Goals

In 2015, the United Nations established a set of goals to end poverty, protect the planet, and ensure prosperity for all. Each of these 17 Sustainable Development Goals (SDGs) include specific targets to be achieved by 2030. Achieving the SDGs requires efforts by governments, the private sector, civil society, communities, and individuals.

Nine leading chemical companies, including Solvay, and two industry associations formed a working group dedicated to the SDGs, convened by the World Business Council for Sustainable Development (WBCSD). This working group took a leadership role in piloting and refining the three-step framework described in the WBCSD's SDG Sector Roadmap Guidelines.

As part of this exercise, Solvay identified the Sustainable Development Goals on which we could have a material impact, positive or negative. We then integrated these sustainable development goals into our materiality analysis as the official agenda of the “Planet” (Governments and NGOs) stakeholder group.

This preliminary list was reviewed in 2019, within the context of the Solvay One Planet sustainability ambition, with an increasing focus on the impact of products and operations.

Solvay's main areas of impact can be grouped into three categories: climate, nature, and better life. The corresponding list of SDGs on which Solvay can have the most impact, positive or negative, through our operations and the products we sell, is as follows:

- Climate, which includes the Group's energy consumption and greenhouse gas emissions, but also products that may impact customers’ energy consumption or greenhouse gas emissions:

- SDG 7: Affordable and clean energy

- SDG 13: Climate action
- Nature, which includes the Group's raw material consumption, water consumption, effluents, emissions and waste generation, management of hazardous materials, and other emissions or effluents that put pressure on biodiversity:

- SDG 14: Life below water

- SDG 15: Life on land
- Better life, which includes the Group's management of people, process and product safety, social dialogue initiatives, and potential social impacts of our product portfolio:

- SDG 3: Good health and well-being

- SDG 6: Clean water and sanitation

- SDG 8: Decent work and economic growth

- SDG 17: Partnership for the goals
- Sustainable portfolio, which includes products’ life cycles and end-of-life management social impacts of our product portfolio:

- SDG 12: Responsible consumption and production

Solvay discloses impact indicators for the SDGs in the corresponding sections of the Annual Integrated Report:

United Nations Sustainable Development Goals	Reference
CLIMATE	
SDG 7: Affordable and clean energy	Extra-financial statements: 4.3. Energy
SDG 13: Climate action	Extra-financial statements: 4.1. Climate change 4.2. Greenhouse gas emissions 4.3. Energy 5.4. Biodiversity 7.1. Product design and life-cycle management 7.2. Circular economy 6.2. Critical incident risk management
NATURE	
SDG 14: Life below water	Extra-financial statements: 4.2. Greenhouse gas emissions 5.4. Biodiversity 5.1. Water and wastewater 5.2. Waste 5.5. Hazardous materials
SDG 15: Life on land	Extra-financial statements: 4.2. Greenhouse gas emissions 5.4. Biodiversity 5.3. Air quality 5.1. Water and wastewater 5.2. Waste 5.5. Hazardous materials
BETTER LIFE	
SDG 3: Good health and well-being	Extra-financial statements: 3.3. Health, safety and environment management 6.1. Employee engagement and well-being
SDG 6: Clean water and sanitation	Extra-financial statements: 5.1. Water and wastewater 5.2. Waste 5.5. Hazardous materials
SDG 8: Decent work and economic growth	Extra-financial statements: 6.1. Employee engagement and well-being 6.3. Labor practices 6.4. Diversity and inclusion 6.5. Recruitment, development, and retention
SDG 17: Partnership for the goals	Extra-financial statements: 3.5. Main partnerships 3.6. Memberships and advocacy 6.6. Corporate citizenship
SUSTAINABLE PORTFOLIO	
SDG 12: Responsible consumption and production	Extra-financial statements: 7.1. Product design and life-cycle management 7.2. Circular Economy 5.1. Water and wastewater 5.2. Waste 5.5. Hazardous materials

2.6. Sustainability Accounting Standards Board (SASB)

Solvay discloses most of the sustainability disclosure topics and accounting metrics listed in the SASB Chemicals Sustainability Accounting Standard (October 2018).

Topic	SASB - CHEMICALS disclosure topics	Reference
Greenhouse gas emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Extra-financial statements: 4.2. Greenhouse gas emissions
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Extra-financial statements: 4.2. Greenhouse gas emissions
Air quality	Air emissions of the following pollutants: (1) NOX (excluding N2O), (2) SOX, (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	Extra-financial statements: 5.3. Air quality Hazardous air pollutants not disclosed
Energy management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable energy, (4) total self-generated energy	Extra-financial statements: 4.3. Energy
Water management	(1) Total water withdrawn, (2) total water consumed, (3) percentage of each in regions with high or extremely high baseline water stress	Extra-financial statements: 5.1. Water and wastewater
	Number of incidents of non-compliance associated with water quality permits, standards and regulations	Extra-financial statements: 6.2. Critical incident risk management
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Extra-financial statements: 5.1. Water and wastewater
Hazardous waste management	Amount of hazardous waste generated, percentage recycled	Extra-financial statements: 5.2. Waste
Community relations	Discussion of engagement processes to manage risks and opportunities associated with community interests	Extra-financial statements: 6.6. Corporate citizenship
Workforce health and safety	(1) Total recordable incident rate (TRIR), (2) fatality rate for (a) direct employees and (b) contract employees	Extra-financial statements: 6.1. Employee health and safety
	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	Extra-financial statements: 6.1. Employee health and safety
Product design for use-phase efficiency	Revenue from products designed for use-phase resource efficiency	Extra-financial statements: 7.1. Product design and life-cycle management
Safety and environmental stewardship of chemicals	(1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances, (2) percentage of such products that have undergone a hazard assessment	Extra-financial statements: 5.5. Hazardous materials
	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	Extra-financial statements: 5.5. Hazardous materials
Genetically modified organisms	Percentage of products by revenue that contain genetically modified organisms (GMOs)	Not disclosed
Management of the legal and regulatory environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Extra-financial statements: 3.6. Membership and advocacy
Operational safety, emergency preparedness and response	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	Extra-financial statements: 6.2. Critical incident risk management
	Number of transport incidents	Extra-financial statements: 6.2. Critical incident risk management
Activity metric	Production by reportable segment	Solvay cannot share information that can be considered competitively sensitive for antitrust compliance reasons

3. GOVERNANCE

3.1. One Planet

GRI DISCLOSURES 2-24

3.1.1. Definition

One Planet is our roadmap for a sustainable future that provides shared value for all. Solvay has always been best-in-class regarding its ESG initiatives and ESG will remain at the core of our business. We remain committed to the actions we started since we launched ONE Planet in 2019, tailored to the remaining business of the new Solvay.

One Planet is sorted per impact category, namely climate, nature, and better life, and for each category we describe:

- What we are talking about, why it is important, and the main legislation, where relevant.
- What we want to achieve: Internal definitions which are relevant for the category, our footprint, our actions and ambitions, and key contacts.

3.1.2. Management approach

An effective governance is in place at different levels and covers the three pillars: Climate, Nature and Better life. It involves integrating environmental, social, and governance factors into decision-making processes, ensuring accountability, transparency, and ethical behavior throughout the organization. To do so, we have set up three steering committees including members of the ELT, governing each pillar of our ESG strategy: Climate Steering Committee, Nature Steering Committee, and Better Life Steering Committee.

On top we have the Ethics and Compliance Board and the Safety monthly review by the ELT. We further describe their respective governance in §3.2.2. and §3.3.2.

Our ELT chaired by our CEO, defines the ESG orientations and sets sustainability targets for the Group. Additionally, it oversees annual reporting and disclosures as well as the company culture and values.

Being strategic for the Group we have set up at the Supervisory Board level an ESG Committee. The ESG Committee considers the material ESG issues relevant to the group’s business activities; provides guidance and recommendations to the board, including in the context of the implementation and potential review of “One Planet” sustainability strategy and the Group’s non-financial reporting; and ensures the implementation of the new Corporate Sustainability Reporting Directive (CSRD), when applicable. The ESG Committee meets three times a year.

The management approach and metrics have been deployed in all entities of the Group. Each Global Business Unit (GBU) president is accountable for the progress of One Planet in their business, and delegates the coordination of the roadmap to a senior executive in their leadership team.

A network of Sustainability Champions and correspondents ensures that the Guide is deployed in all Solvay sites, GBUs, and Corporate Functions. They inform their entity about any changes to the strategy and objectives, ensure necessary training is organized, and develop an annual and multi-year roadmap to meet final objectives. They are then responsible for implementing the roadmap in their entity, though the leaders of every entity take full ultimate responsibility for performance, also taking into account that progress relative to targets impacts the variable remuneration of all senior staff in the entity.

Definitions, management approach, indicators and targets, and main actions specific to each topic are described in the corresponding sections of the Extra-financial statements. The management approach is adjusted each year based on the following elements:

- feedback from employees, suppliers, and customers;
- knowledge gained from performance and progress in relation to strategic commitments;
- challenges orchestrated by the Executive Leadership Team, facilitated by the Sustainable Development Function, taking into account changes in the marketplace and higher expectations from Solvay executives;
- the evolution of frameworks and reporting standards, such as GRI Standards;
- the auditors’ report on high materiality aspects;
- feedback from practitioners;
- feedback from sustainability rating agencies; and
- feedback received on the Annual Integrated Report, such as the World Business Council for Sustainable Development’s “Reporting Matters” yearly analysis.

3.1.3. Indicators and targets

Performance is monitored through a dashboard with the results of One Planet for the entire group.

- We look to be leading when it comes to climate, with bold commitments. We aim at:
 - carbon neutrality (Scope 1 & 2) by 2050;
 - reducing Scope 1 & 2 emissions by 30% by 2030 and Scope 3 by 20% by 2030 (Focus 5 categories); and
 - phasing out coal by 2030 when renewable alternatives are possible.
- Additionally, since the creation of Solvay, we have pioneered social welfare. We aim to remain outstanding on better life with:
 - zero accidents;
 - gender balance in top and mid management within 10 years; and
 - a living wage to 100% of the workforce by 2026.

3.2. Management of the legal, ethics, and regulatory framework

GRI DISCLOSURES 2-26 2-27 3-3 205-2 205-3 406-1 412-1 412-2 415-1
MATERIALITY: HIGH

Management of the legal, ethics, and regulatory framework encompasses business ethics, namely human rights, anti-corruption, non-discrimination, and anti-competitive behavior.

3.2.1. Commitments and policies

Solvay's Code of Business Integrity

Solvay's Code of Business Integrity and the policies and procedures adopted to enhance good governance apply to all employees wherever they are located. In addition:

- third parties are expected to act within the framework of the Code of Business Integrity;
- all core suppliers must confirm that they adhere to the principles set out in the Solvay Supplier Code of Business Integrity;
- majority-owned joint-ventures are held to the Solvay Code of Business Integrity, or to a separate code adopted based on similar principles;
- Solvay's Code of Business Integrity and Solvay's Supplier Code of Business Integrity are available on Solvay's website; and data security.

Anti-Bribery and Anti-Corruption Policy and Policy on Gifts and Entertainment

Solvay's Code of Business Integrity expressly states that the Group prohibits bribery in any form. Solvay and our employees do not use gifts or entertainment to gain competitive advantage. Facilitation payments are not permitted by Solvay and disguising gifts or entertainment as charitable donations is also a violation of the Code of Business Integrity.

The Code is supported by more detailed policies. At the end of 2020, Solvay split its Gifts, Entertainment, and Anti-Bribery Policy into two separate policies: an Anti-Bribery and Anti-Corruption Policy and a Policy on Gifts, Entertainment, Charitable Donations, and Sponsorship.

The Group employs an internal tracking system to record gifts and entertainment that exceed the acceptable reasonable value as indicated in the Policy, as well as charitable donations and sponsorship with charitable purpose, and requires managerial approval for accepting or giving them. Ethics and Compliance Department analysis and prior approval is also required when the gift or entertainment is to be offered to a Government Official, as well as for charitable donations exceeding a defined threshold, ensuring adherence to the policy and compliance with the law. The use of the Gift and Entertainment Tracking System (GETS) is part of Solvay's Internal Audit review process.

Solvay is also a member of Transparency International Belgium.

Human Rights in Business Policy

Solvay's Human Rights in Business Policy, published on our website, sets out Solvay's commitment to respecting human rights and acting with due diligence to avoid any infringement of human rights or any adverse impact on or abuses of such rights. The policy emphasizes Solvay's commitments to our stakeholders, namely our employees and business partners, the communities and environment in which we operate, and children. Solvay's policies on human rights are under review to ensure it is reflecting Solvay's commitment to the evolving regulatory standards.

Human rights due diligence and risk assessment

Human rights risks at Solvay sites are assessed with a main focus on our business partners, namely suppliers and contractors identified according to the risk associated with the country they operate in.

To assess human rights risks and impacts across our upstream value chains, Solvay developed an ESG risk management approach for our supply chain. This provides a systematic approach for identifying risks and assessing their severity in more than 60 upstream value chains. Using the results of this exercise, Solvay has subscribed to a third-party risk management platform for adverse media screening in order to monitor and identify risks and impacts related to different matters such as modern slavery and human rights (including forced labor and child labor); anti-bribery and corruption; and environmental, social, and governance. This provides transparency through its value chain, enabling Solvay to develop risks mitigation action and remediation plans.

In addition, the Internal Audit team gathers assessments to determine if the site has established policies and processes for addressing impacts on value chain workers. This includes evaluating engagement, decision-making, remediation of negative impacts, and the presence of channels for worker concerns. The assessment also covers planned actions and the percentage of suppliers committed to the Supplier Code of Business Integrity.

Competition Law Policy

Solvay's goal is to conduct business ethically and not to enter into any business arrangements that eliminate or distort competition. Solvay develops and maintains a culture of compliance to keep the company and our people on the right side of the law. Solvay has a formal Competition Law Policy that stresses the importance of strict adherence to all competition laws. It has been approved by Solvay's Executive Committee and is published on Solvay's intranet, to which all our employees have access. Any violation of this policy may result in disciplinary action, subject to, and in conformity with, applicable laws.

Implementation of the Competition Law Policy

Solvay has put in place a Competition Law Compliance Program that has a zero-tolerance approach to competition law infringements. As part of our Competition Law Compliance Program, we provide a competition law toolkit on the Solvay intranet that includes up-to-date guidelines on specific areas of competition law, including guidance on dealing with competitors, dawn raids, information exchange on mergers and acquisitions transactions, swaps, price announcements, and vertical relationships.

To minimize cartel risks, Solvay has put in place a computer-based system that tracks all contacts relevant employees have with competitors through a procedure based on managerial approval.

3.2.2. Resources and responsibilities

Solvay set up a compliance organization to reinforce a group-wide culture based on ethics and compliance. The Ethics and Compliance Department operates under the leadership of the Group General Counsel and Corporate Secretary General. It consists of Regional Compliance Officers who are located in the regions in which the Group operates, reporting to the Chief Compliance Officer. This department is responsible for fostering Solvay's culture of integrity, overseeing the implementation of Solvay's Ethics and Compliance Program, providing guidance and advice to the Group leadership and operations, and investigating, either alone or with the assistance of other departments, all reports that are brought to its attention. The Chief Compliance Officer chairs the Business Ethics Board and reports annually to the Audit Committee of Solvay's Board of Directors on general ethics and compliance matters and on trends and data related to the Speak Up Program in accordance with confidentiality standards.

Solvay has a dedicated team of legal experts for competition law within the General Counsel Function. They are responsible for implementing the Competition Law Compliance Program and are in charge of providing competition law advice and guidance, as well as deploying effective and regular communication and training on subjects related to competition law.

3.2.3. Grievance mechanisms

Employees have various internal channels through which they are encouraged to report suspected violations or concerns. These include line management, Ethics and Compliance, the General Counsel Function, Internal Audit, Human Resources, and employees' representatives.

A group-wide Speak Up program is in place and overseen by the Audit Committee of the Board of Directors. An external, third-party helpline, active 24 hours a day, 365 days a year, allows employees to ask questions, raise concerns, or file reports. The helpline is open to internal and external parties, available in 19 languages covering Solvay's locations. The helpline can be found in the Ethics and Compliance section of Solvay's website.

The following table shows the types of reports made from January to December 2023 through Solvay's Speak Up program.

SOLVAY’S SPEAK UP PROGRAM

In line with paragraph 2.2 ("Reporting scope and boundaries"), we applied distribution keys to allocate the Speak Up program reports between Solvay and Syensqo. When this split resulted in decimal numbers, the KPIs were adjusted to whole numbers to be displayed in the report. This rounding caused negligible distortions between totals and breakdowns in below tables.

Reports in process respective to functions not allocated between Solvay and Syensqo were not split according to the distribution key for Speak Up program reports of paragraph 2.2 ("Reporting scope and boundaries"), but attributed to the company actually managing the report after the separation.

Number of reports	2023	2022
Misconduct or inappropriate behavior	16	12
Discrimination	3	2
Harassment including retaliation	12	6
Previously: Discrimination including harassment and retaliation		
Conflict of interest	5	6
Computer, email, internet use, and social media	1	2
Previously: Computer, email, internet		
Environmental, health, or safety	1	2
Previously: Environmental, health, or safety law		
Accounting, auditing matters, finance and banking	3	2
Previously: Auditing matters, financial records and banking, accounting or auditing		
Bribery/Corruption	2	1
Antitrust/Competition	1	0
Previously: Anti-bribery		
Confidentiality and misappropriation	0	4
Previously: Confidentiality/Misappropriation		
Data privacy	2	2
International trade/Trade compliance	1	0
Previously: International trade compliance		
Substance abuse	0	2
Embezzlement, theft, robbery	1	0
Previously: Theft		
Violence or threat	0	0
HR matters	10	10
Diversity, equity, and inclusion	5	5
Human rights violations	1	0
New category: Fraud	1	0
Other	4	3
Total	69	59

Through the Speak Up program, any concerns relating to a breach are followed-up on and investigated as appropriate by Ethics and Compliance. In keeping with our commitment to transparency, the Ethics Helpline is used to report progress on investigations and give feedback to those concerned as appropriate. The Ethics Helpline is easily accessible through Solvay’s website, a toll free number, or a QR-Code, and is available to employees and third parties.

We continued increasing awareness about speaking up and raising concerns without fear of retaliation when people notice a potential breach of our Code of Business Integrity. Speak Up was also part of the annual mandatory training for all our employees, in order to raise awareness that speaking up applies to the full spectrum of topics referenced in the Code of Business Integrity. This led to a continuous increase in reported incidents, as reflected in the overview, improving our ability to detect, identify, and address breaches. The increase in reported incidents does not imply that there were more incidents or issues in 2023 than before, but shows that employees report concerns or potential breaches, enabling Ethics and Compliance to investigate and address them. A new topic, Fraud, was added to our Ethics Helpline.

The Board’s Audit Committee oversees the Speak Up program and reviews the effectiveness of the process and the outcomes.

In 2023:

- 69 cases opened:
 - 13 cases still in progress
 - 56 cases resolved. These include:
 - 23 substantiated cases,
 - 14 unsubstantiated cases,
 - 6 insufficient information,
 - 1 misdirected, and
 - 11 referred/transferred.

Definitions:

- Substantiated: The allegation or at least one of the allegations are considered founded.
- Unsubstantiated: None of the allegations are considered founded.
- Misdirected: A case has been reported to Ethics and Compliance but does not fall under Ethics and Compliance’s scope.
- Referred/transferred: A case has been reported to Ethics and Compliance but needs to be addressed by another department.
- Insufficient information: If a reporter has not provided sufficient information and/or Ethics and Compliance is unable to collect sufficient information to conclude whether an allegation is substantiated or unsubstantiated.

RESOLVED CASES

	Cleared of involvement	Termination	Final written/Legal warning letter	No action necessary	Policy/ Process review
Substantiated	0	2	1	0	1
Unsubstantiated	0	0	0	12	2

	Performance improvement plan	Training	Training/ Coaching required	Verbal feedback/ Warning	Written/ Feedback warning
Substantiated	0	2	1	12	3
Unsubstantiated	0	0	0	0	0

3.2.4. Communication and training

Solvay’s Code of Business Integrity

Mandatory Code of Business Integrity training, both in person and web-based, is organized for all employees to ensure a strong culture of integrity at Solvay, to understand and address behavioral risks, such as bribery and corruption, conflict of interest, and harassment. As part of this training, employees are also trained on the Speak Up culture and Ethics Helpline. Specific training modules are tailored to the leadership, including Listening Up. In the period 2022-2023, 99.6% of the target population was trained on the Code of Business Integrity, which is available in 18 languages. To complete the training, employees must certify that they are in compliance with the Code of Business Integrity, understand their role in protecting a culture of integrity, and can report any violations to the available channels and Ethics Helpline. Internal Audit regularly reviews the implementation and completion rate of training modules as part of their audit engagements.

Competition law and antitrust

Solvay has a concrete Competition Law Compliance Action Plan, designed to mitigate the specific risks the Group has identified in this field of law. It has been in force since 2003 and is updated yearly. In 2023, it covered e-learning on competition law in general, on competitive intelligence gathering, and on the use of the above-mentioned computerized tracking system of meetings with competitors. We also organized ad hoc training for specific high-risk target population. The participation rate of the relevant training campaign in 2023 was above 95%.

Anti-bribery and anti-corruption

Anti-bribery and anti-corruption web-based training is carried out on a two-year cycle for a pre-identified target population, which includes all employees grade S15 and above. The most recent online training course, available in 16 languages, took place in 2023; 98.68% of the target population was trained. The training will be rolled out again in 2025.

Public policy

Solvay pursues a constructive dialogue with governmental and political stakeholders, both to ensure and improve our license to operate and as part of our commitment to developing sustainable solutions with partners. This exchange helps us to understand societal trends and anticipate legislative and regulatory expectations and developments as well as to advocate for and communicate our views in support of Solvay’s interests. These include:

- Promoting sustainable solutions to act on climate change and facilitate the energy transition: Solvay supports the UN Paris Climate Agreement and contributes to implementing it. We therefore argue for the development of a clear and predictable legislative framework that promotes sustainable growth while maintaining industry competitiveness and ensuring a balanced transition to a low-carbon economy.
- Competitiveness: Solvay advocates for a regulatory system that fosters entrepreneurship and industrial innovation by safeguarding or improving competitiveness, and that creates highly skilled jobs worldwide.
- Environmental and chemical policy: Solvay collaborates with trade associations, public authorities, and other stakeholders to develop science- and risk-based regulations and standards that promote a more sustainable industry and products.
- Promoting global trade: As an international company, Solvay recognizes the importance of free trade based on a multilateral and rules-based trading system. Reducing trade barriers is essential for economic growth and thus for industrial activity.
- Geopolitical assessment: Solvay assesses the geopolitical situation in order to better understand the potential impact, in relation to trade, logistics, investments and security, on our businesses.

Solvay’s Government Affairs and Country Management Function is responsible for coordinating our relations with government and political officials. In line with Solvay’s Code of Business Integrity, and with the aim of ensuring the best possible business environment, the Government Affairs and Country Management team works to foster long-term partnerships with public authorities and other relevant stakeholders. They do this by building a transparent and constructive dialogue that supports company strategy.

In our relations with government officials, we commit ourselves to responsible, honest, and transparent action based on our values and principles. We are committed to ensuring that our dialogue and advocacy complies with our Code of Business Integrity and the rules and principles set out in our policies. Employees involved in relations with government officials have to take mandatory training on business integrity, competition law, and antitrust and anti-corruption. In addition, we welcome initiatives for greater transparency in the area of interest representation and are listed as a company in the Lobby and Transparency registers of the European Commission, the United States, France, and Germany.

Solvay’s public policy activities include participation in industry and trade associations, as outlined in section 3.6. Membership of associations. We aim to conduct political relations and advocacy with our own staff resources, meaning that relevant contacts and meetings between Solvay and political stakeholders are made and held by Solvay representatives in person, and not by agency or partner staff acting on behalf of Solvay.

The Group does not take part in political party activities, nor do we make corporate donations to political parties or candidates, as indicated in the Group’s Policy on Gifts, Entertainment, Charitable Donations, and Sponsorship. We engage in constructive debate with public authorities on subjects of legitimate interest to Solvay, where necessary, but only those employees specifically authorized to do so may carry out such activities.

Solvay respects the freedom of our employees to make their own political decisions. Any personal participation or involvement by an employee in the political process must be done on an individual basis, on the employee’s own time, and at the employee’s personal expense.

Ethics and Compliance website

Solvay has implemented and launched in 2023 an Ethics and Compliance section on its website. The pages provide information on Solvay’s Ethics and Compliance program, including its four pillars structure and alignment with our Core Beliefs, make the Code of Business Integrity and additional Ethics and Compliance policies available and accessible, and provides information on the Ethics Helpline, as well as the link for employees and externals to access the third-party helpline through which questions, concerns, or reports can be registered.

3.2.5. Animal testing

Solvay provides innovative products for a wide variety of uses and a large number of users. The Group must have a proper understanding of the hazards of our products in order to carry out our activities and protect users, the general public, Solvay personnel, and the environment. With society continually pushing for new, better, and safer chemicals and plastics, there is growing demand from both regulatory authorities and the public for product risk and hazard assessments. These require testing, both with and without the use of animals.

Testing

To comply with new and existing chemical regulations, or to further consolidate safety data, Solvay commissioned animal tests in 2023. Solvay avoids animal testing whenever possible, but in cases in which animal testing is required we commit to conducting studies that treat animals humanely, giving them the best care possible, and using all animals responsibly, with great regard for their welfare. In compliance with European cosmetic regulations, Solvay does not perform specific testing solely to support cosmetic uses.

Substance-based testing for multiple applications

Solvay carries out tests required for all regulations and applications relating to a given substance just once. We avoid the need for new studies by actively advocating for the reuse of data from studies conducted within a given framework, such as REACH, for other registration systems.

Ethical compliance

Solvay’s policy, outlined in the Solvay Animal Care and Use Procedure, is to apply the “3R principles” (Replacement, Reduction, and Refinement) in each case and to comply with all applicable regulations. All of our studies comply with international standards, such as Organization for Economic Cooperation and Development (OECD) guidelines. The AAALAC accreditation is one of our selection criteria for labs performing toxicological studies. For labs performing only ecotoxicological studies (with fish as vertebrates) this is not common. This worldwide organization sets quality standards for testing laboratories and ensures responsible and humane treatment of laboratory animals. Before they start, all studies commissioned by Solvay are subject to an ethical assessment at local or national level by the laboratory conducting the study.

Once a study is underway, Solvay staff monitor the execution and quality of the studies and maintain a continuous qualification and evaluation program for the laboratories. A dedicated Solvay corporate committee reviewed the animal testing activities commissioned by Solvay during 2023, verifying conformity with the principles and mandatory elements of Solvay’s Animal Care and Use Procedure.

VERTEBRATE ANIMAL TESTS COMMISSIONED BY SOLVAY IN 2023

	Number of studies	Number of vertebrates (*)
Registration obligations (EU, China, Korea, US)	10	4,236
Additional product safety questions (toxicity, classification)		
Total	10	4,236

(*) Includes all animals, including control animals not being exposed to test substances and used as reference.

Regulatory testing

In 2023, 100% of the vertebrate animals were used to address mandatory requirements from authorities. In total, 4,236 vertebrate animals (96% rats, 4% rabbits) were used. Solvay did not commission any studies on dogs, cats, pigs, or non-human primates. Most vertebrate animals (95%) were used in tests required by the EU REACH Regulation, although these studies will also be valid for demonstrating compliance with chemical regulations elsewhere in the world. The number of vertebrate animals used in 2023 was at a similar level as previous year with the same scope (without Syensqo).

Drivers for the future

While studies are needed for regulatory and scientific purposes, Solvay continues to strengthen its capabilities and understanding of alternative methodologies that do not involve vertebrate animals. In addition, QSARs and Read-across approaches are applied to avoid new studies on vertebrate animals to be launched.

However, the higher tier animal studies requested by authorities, which required the largest number of animals in 2023, will continue to be the major driver for animal tests in the near future. A significantly higher number of these studies is already ongoing and it is therefore expected that the number animals in 2024 will increase in comparison with 2023.

Advances in the implementation of non-animal methods and alternative hazard identification strategies are crucial if a reduction of animal use in hazard assessment is to be achieved. For instance, with the upcoming information requirements for endocrine disruptors and aquatic chronic toxicity, more, rather than less, animal testing appears to be required in Europe.

3.3. **Health, safety and environmental management**

GRI DISCLOSURE 2-25
MATERIALITY: PRIORITY
SDG 3, 6, 7, 12, 14, 15

3.3.1. **Definition**

Solvay's health, safety, and environment (HSE) management system is aligned with ISO 45001 and ISO 14001 definitions and our Responsible Care Policy.

Through our Responsible Care Policy, we commit to safeguarding people and the environment, by continuously improving our environmental, health and safety performance, the security of our facilities, processes, technologies, and chemical product safety and stewardship throughout the supply chain. This reflects Solvay's position as a signatory to the ICCA's Responsible Care Global Charter®.

3.3.2. **Management approach**

Solvay's HSE strategy relies on the following:

- An approved HSE management system, which is implemented at every industrial (manufacturing and research and innovation) site. This includes a Responsible Care Policy and a set of risk-based procedures that apply to all areas, including health monitoring, industrial hygiene, occupational safety, process safety, transport safety, and environment and product safety. For each domain, a network is organized at group level to ensure implementation of the procedures, compliance with regulations and sharing of good practice.
- A Product Safety Management System (PSMS), applied in every Global Business Unit.
- A safety culture approach, which ensures people's safety, health, and well-being. It relies on a safety leadership style, where managers act as mentors and demonstrate genuine care for all.
- A reporting process used to evaluate performance, analyze events, and define short- and long-term improvement plans.

Safety is supervised by the ELT as part of its monthly session agenda. Performance is reviewed including the analysis and learnings of most recent events and ELT provides its orientations.

Industrial sites

Each industrial site:

- Implements at least one approved health, safety and/or environment management system, in compliance with Solvay's Responsible Care Policy.
- Sets up a dedicated, systematic regulatory watch mechanism.
- Undergoes a compliance audit conducted by an internal or external third party at least once every five years, addressing both regulatory and internal requirements.
- Addresses all identified risks, areas for improvement and gaps in compliance.

Environmental rehabilitation

Solvay's HSER Department is responsible for managing the environmental liabilities resulting from the Group's industrial and mining activities. HSER helps the sites and GBUs manage their environmental legacy, whether historical or recent, providing them with technical expertise and cash management through environmental provisions. Where local regulations allow, a risk-based approach is used to define management actions. For our operational sites, HSER collaborates with the local HSE team. Our closed sites are managed directly by the HSER team on behalf of the relevant legal entities. HSER is also responsible and accountable for managing group environmental provisions.

3.3.3. **Indicators**

Approved HSE management systems at sites

Of our 45 sites, 91% have a management system in place and have been audited by a third party in the past five years. Sites with fewer than 10 people or that are not under Solvay's operational control are excluded.

Twenty-four of our sites are certified by ISO 45001, 32 are certified by at least one of ISO 14001 and ACC RCMS 14001, and 26 are certified and have implemented both ISO 45001 and ISO/RC 14000 systems.

Twenty-eight of our sites have another approved management system in place:

- The Responsible Care Program by Asociación Nacional de la Industria Química (ANIQ) in Mexico.
- The Responsible Care Program by Associação Brasileira da Indústria Química (ABIQUM) in Brazil.
- The Occupational Safety and Health management system (GB/T 33000-2016) in China.
- The Occupational Safety and Health Administration Voluntary Protection Programs (OSHA VPP management system) in the US.

Regulatory Watch

Solvay has installed a systematic process for monitoring regulation in all domains – health and safety, process safety, environment, and transport safety – at 85% of our sites.

3.4. **Supply chain and procurement**

GRI DISCLOSURES 308-1 308-2 407-1 414-1
MATERIALITY: MODERATE

3.4.1. **Definition**

Our supply chain organization accounts for about 850 people. Almost all of them are located in the GBUs, where they are in charge of planning, customer care, logistics operations, and improvement projects. We also have programs in place to foster continuous improvement in the value chain performance of our GBUs, while also contributing positively to cost and cash management, as well as fulfillment at the service of customers.

Our procurement organization consists of about 450 people, located in Corporate Procurement and the Purchasing Service Line support teams. Their mission is to source products and services leveraging scale and expertise, and to secure sustainable value creation and supply security to directly support Solvay's strategy and One Planet agenda.

3.4.2. **Management approach**

Solvay integrates our Corporate Social Responsibility (CSR) principles and One Planet ambition into our procurement processes and strategies in order to create sustainable business value in collaboration with our suppliers.

Procurement strategy

Procurement resources and capabilities are shared across an international network of category and sourcing managers, and individuals responsible for site procurement, all of whom follow a common way of working known as the Solvay global procurement process.

Our procurement strategies are defined by category experts in collaboration with the GBUs. These strategies are then executed and deployed at global, regional, or local level, depending on the category specifics and suppliers' market structure. Our strategies include ESG elements and criteria.

Core suppliers

Solvay applies supplier segmentation in order to identify key suppliers, which we refer to as core suppliers. Core suppliers encompass three categories:

- Strategic Alliances: Strategic suppliers at group level that contribute to Solvay's growth, market differentiation, and innovation.
- Strategic Partners: Suppliers that deliver strategic materials or services to Solvay that can have a possible business impact.
- Bottlenecks: Suppliers that represent a high potential risk to Solvay or the business.

This approach enables Solvay to focus on managing performance, mitigating supply risk, and improving relationships, while also forming the basis for collaboration and stimulating innovation.

Actions to be performed, such as carrying out a supplier evaluation survey, or requesting a mandatory third-party sustainability assessment, are defined according to the type of supplier. Key Account Managers are appointed for some of our core suppliers, allowing us to generate additional value and mitigate risk through strategic relationships. We have identified 232 suppliers as core suppliers and 92% of them are currently covered by a third-party sustainability assessment.

Together for Sustainability initiative

Solvay is a founding member of Together for Sustainability (TfS), a global procurement-driven initiative that aims to improve the sustainability performance of chemical companies and their suppliers.

The TfS program is based on the UN Global Compact and Responsible Care® principles. It provides a framework and tools – TfS Assessments and TfS Audits – that enable TFS member companies to assess, drive, and improve the sustainability performance of chemical supply chains through a shared infrastructure. TfS assessments are carried out by the initiative's key partner EcoVadis, a global service provider specialized in sustainability performance assessments. For audits, TfS cooperates with TfS-approved audit companies.

Since last year TfS also provides Product Carbon Footprint (PCF) Guidelines which enable chemical companies and our suppliers to share and develop high-quality carbon footprint data, which is an essential tool to drive decarbonization initiatives in the industry.

In the meantime, in 2023, the TfS Academy, which was rolled out the previous year, extended to more than 390 capability building courses in 11 languages.

Furthermore, membership in TfS grew to 50 by the end of 2023. This increased the reach and impact on the sustainability performance of chemical supply chains, covering over €500 billion of combined spend and over €800 billion of global turnover.

ESG risk in the supply chain

To tackle human rights and environmental impacts across our value chains and to comply with the dynamic regulatory landscape, Solvay has developed an ESG risk management approach for our supply chain. The aim is to comply with the existing and upcoming ESG regulations, especially on environment and human rights (e.g., EU Mandatory Human Rights and Environmental Due Diligence Legislation and the German Supply Chain Due Diligence Act). This requires corporate governance practices to better integrate risk management and risk mitigation in their processes. Our policy for ESG Risk Management (build and maintain overall ESG risk matrix and supplier risk management) provides a systematic approach for risk identification and risk severity assessment of more than 60 upstream value chains and triggers risk mitigation action plans. In addition to the internal risk management framework, we have also incorporated a third-party risk management tool for adverse media screening on:

- environmental, social, and governance;
- anti-bribery and corruption; and
- human rights.

We have already incorporated around 5,000 suppliers in the tool. The suppliers were screened and are monitored on a permanent basis. We will extend the suppliers number in 2024 and the following years. The suppliers we have selected are our core suppliers and the ones we consider under high ESG risk.

Furthermore, thanks to our due diligence process, 20 suppliers conducted a TFS audit in 2023 and 1,600* suppliers performed an EcoVadis assessment.

Supplier Code of Business Integrity

Our Supplier Code of Business Integrity is key for the implementation of our Responsible Procurement Policy. It is fully aligned with Solvay's Code of Business Integrity and inspired by the UN Global Compact principles and Responsible Care® practices.

All written procurement contracts must make reference to the Supplier Code of Business Integrity or an acceptable alternative. Suppliers or partners are invited to report any breach of Solvay's ethical policies or Supplier Code of Business Integrity through the [Solvay Ethics Helpline](#). Every report is carefully reviewed by the Ethics and Compliance team, who review the case and conduct an investigation as appropriate.

Solvay is concerned that the trade in tantalum, tin, tungsten, gold, and the metals known as 3TGs that are refined from such minerals and mined in certain conflict-affected and high-risk regions, such as the Democratic Republic of the Congo and neighboring countries, may be contributing to human rights abuses. We are continuously working to improve our overview on 3TGs included in products, components, and materials supplied to Solvay. Consistent with Solvay's Supplier Code of Business Integrity, we require the cooperation of our suppliers in the implementation of Solvay Policy on Conflict Minerals. As part of that process, we conduct due diligence concerning the necessary conflict minerals in the products it manufactures or contracts to manufacture in accordance with the Organisation for Economic Co-operation and Development's Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (the "OECD Guidance").

We continue to work to verify the integrity of our sourcing, and to support the actions of governments, our customers, and suppliers toward achieving this aim globally. If our suppliers fail to meet our expectations in this regard, we will take these factors into consideration when making future business and sourcing decisions.

Renewable Raw Materials Platform

In 2023 we launched the Eiffel database – a collaborative online platform which allows everyone at Solvay to find renewable alternatives to conventional raw materials. It helps us to speed our transition towards a more sustainable and circular raw materials portfolio. Switching to mass balance, bio-based, recycled, or CO₂ derived raw materials is key to help us develop lower carbon footprint solutions. The platform enables us to find renewable alternatives that could be of interest in both the short and long term. It features an interactive and user-friendly dashboard with key information such as the type of material and feedstock, certification details, suppliers, the region it is sourced from, how long Solvay has been sourcing it, and the end product it is used in.

One Buyer One Project

In 2023 we also launched the One Buyer One Project initiative aimed at reinforcing sustainability culture at Solvay and promoting best practices. This ambition encourages each buyer to initiate and lead at least one sustainability project. Currently, there are 120 projects at different stages of maturity and impact. The projects are related to different areas in sustainability – from CO₂, water, or waste reduction to renewable energy to circular economy, biodiversity, etc. Many of these projects are replicable. We continue ramping up the projects and leveraging the initiative.

3.4.3. Indicators

EcoVadis assessment

One of our main priorities for 2023 was to assess our core suppliers and suppliers identified via ESG risk management. During the year, a total of 1,600* Solvay suppliers were assessed through EcoVadis. These assessments currently cover 215 of our 232 core suppliers.

Raw materials

As a large chemical manufacturer, Solvay uses raw materials from a range of suppliers and sources: the overall volume purchased in 2023 was over 2.86 million metric tons.

NON-BIOSOURCED AND BIOSOURCED RAW MATERIALS – MATERIAL PURCHASED

		2023	2022
Mineral products	1,000 metric tons	2,056	2,182
Biosourced products	1,000 metric tons	10	13
Natural gas	1,000 metric tons	537	621
Petrochemical	1,000 metric tons	247	309
Other raw materials	1,000 metric tons	15	17
Total	1,000 metric tons	2,865	3,141

Product Carbon Footprint (PCF)

One of our main priorities in 2023 was the collection of PCFs from our most GHG emitting raw materials' suppliers. We have contacted 34 suppliers who together emit around 80% of the CO₂ in our upstream Scope 3 raw materials GHG emissions targeted scope as per secondary data. With an objective to collect 35% of the product carbon footprint of the targeted scope, we have outperformed our target by reaching 54%.

To make further progress in reaching our Scope 3 target, in Q4 2023 we called on some of our top materials' suppliers to share their climate strategy and actions towards decarbonization so that we could understand how their plans would positively impact the carbon footprint of our products. The first wave consisted of eight suppliers. A second wave of requests is planned for 2024.

Procurement Sustainability Training

Three hundred and thirty Sustainability Training sessions have been followed by our procurement organization employees. Every new hired employee in Procurement follows all Procurement Sustainability Training modules. In 2024 we will update the training modules and launch a new training campaign.

**Due to the split of the company, this number is based on an assumption (55% of the total number of evaluated suppliers before the split).*

3.5. Main partnerships

25. SDG 17

IndustriALL Global Union

Building on 20 years of strong industrial relations between IndustriALL and Solvay, we signed an improved Global Framework Agreement (GFA) on March 31, 2022. The content of the agreement was strengthened around several important areas, including:

- Telework rights
- C190
- EU due diligence and UN binding treaty – supply chain oversight
- Just transition
- Conflict resolution
- Maintaining the agreement following the upcoming split of the company
- Workers' rights to health and safety
- Skills transfer
- Battery supply chain
- US Taskforce Agreement renewed for the duration of the GFA

The four-year agreement includes serious commitments on due diligence along the supply chain. Taking note of the different international standards on this issue, including the upcoming EU Directive on corporate sustainability due diligence, the agreement establishes a new working group of workers and management to investigate supplier respect for core labor rights and seek remediation where problems are found. Solvay commits to suspend contracts with suppliers that fail to remedy human rights and environmental abuses following warnings.

Wildlife Habitat Council

In 2021 we joined the Wildlife Habitat Council (WHC), an international NGO that works with businesses to encourage, promote, and certify biodiversity conservation. The partnership helps us to better focus our efforts on biodiversity and identify areas for improvement, both at our sites and in collaboration with our customers.

WHC is the only international conservation NGO focused exclusively on the private sector and is a leader in taking bold action for biodiversity conservation through partnerships and education. WHC provides a framework for voluntary conservation action on a wide variety of corporate lands, promoting a collaborative and comprehensive approach to conservation activities around the world.

Membership in the WHC helps us to implement conservation projects that are locally relevant, practical and adaptable to any regulatory requirements, but which don't conflict with operations. As part of our partnership, we work to mainstream biodiversity across sectors, in collaboration with our partners and sites, taking concrete actions to protect species and habitats, and deliver impact through biodiversity restoration and enhancement at a local level.

Entreprises pour l’Environnement

Entreprises pour l’Environnement (EpE) is the French partner of the World Business Council for Sustainable Development (WBCSD). Solvay is part of the founding members of the association created in 1992 and gathering French and international companies committed to the ecological transition. Solvay is active in the Biodiversity and Climate Change commissions. In 2023 Solvay sponsored and participated in the publication of the report “2030 Milestone for the Ecological Transition.” This survey conducted with partners in climate and ecological transition provides a global view of the actions required to put France on a credible ecological transition trajectory by 2030, in line with the European commitments on climate and biodiversity. The study findings opened the way to new business models structured around frameworks for actions. Solvay is already committed with climate and Nature priorities, for example with the “act4nature International” engagements.

CSR Europe

CSR Europe is the leading European business network for Corporate Sustainability and Responsibility. With our corporate members, National Partner Organizations (NPOs), and Associated Partners, we unite, inspire and support over 10,000 enterprises at local, European, and global level. CSR Europe supports businesses and industry sectors in their transformation and collaboration towards practical solutions and sustainable growth. They are for systemic change. Following the SDGs, CSR Europe wants to co-build with the European leaders and stakeholders an overarching strategy for a sustainable Europe 2030.

Society of Environmental Toxicology and Chemistry

SETAC is a global scientific organization (5,000 members) established in 1979, promoting research in environmental sciences and use of the research results in policies. SETAC is an organization with a tripartite participation (academia, industry and authorities) in all its committees. Solvay is actively participating in several committees (awards and science) and interest groups in the European branch of the association. As a member of the SETAC EU board, Solvay participates to strategic decisions for the organization like the recent recognition of the organization at the International Platform on Chemicals, Waste and Pollution (IPCP). As such, SETAC plays an important role in the evolution of environmental and chemical policies (e.g., Green Deal, CSRD, etc.). Finally, Solvay is actively participating in EU annual meetings, for example with the organization of a session on biodiversity.

Solvay toxicologists are also recognized scientists with participation in the Scientific Committee of the Belgian Association of Toxicologists (BelTox), the French Society of Toxicology (SFT) and three Solvay experts are registered under the European Register of Toxicologists.

CERN: Fostering interest in STEM and STEM careers

As part of our efforts to get children and young people involved in science, technology, engineering, and mathematics (STEM) subjects, Solvay has partnered with CERN, the European Laboratory for Particle Physics, to launch a three-year education program for high school students.



At CERN, physicists and engineers of more than 100 nationalities study nature’s tiniest building blocks, the fundamental particles, to find out how our world and the universe work. They use the world’s largest and most complex scientific instruments, driving progress in a range of cutting-edge technologies. Part of CERN’s mission is to inspire and train future generations of scientists and engineers to carry on this journey of exploration. Every year, thousands of students and teachers, from all over the world, participate in CERN’s education and outreach program.

The CERN-Solvay Education Programme was launched in January 2022. Designed to foster interest in STEM and STEM careers, the program combines both online and onsite learning at CERN, starting with education content aimed at a global online audience and progressing to an opportunity for students to engage more deeply with research at CERN.

It is part of the education portfolio of Science Gateway, CERN’s new flagship project for science education and outreach.

The program has three levels – Level 1: Online social media education content; Level 2: Online course for high school students; Level 3: Onsite CERN-Solvay student camps for high schoolers.

Main KPIs for Level 3: 797 applications started; 607 applications completed; 72 nationalities; and 82 binational applicants.

 SCOPE	 KPI'S (CERN)
worldwide +	1.3 millions views
90 countries	10.000 online students
44% female applicants	30 residentially for summer camps

Well-being at work

Workplace Options

We have a single global contract since December 2021 with Workplace Options, which ensures our Employee Well-being Support program worldwide. All the employees and their family members have access 24/7 to confidential mental health support by psychologists in their own language. Apart from this assistance, they can be contacted for additional services such as coaching, work-life services, individual mindfulness, managers’ development, or training.

Empreinte Humaine

This is an international consultant company for well-being at work and prevention of psycho-social risk factors. We have been collaborating with them since 2018 for training on well-being at work, including workshops for managers and employees, webinars and e-learning. In 2023, they provided face-to-face workshops for managers “Leading with a well-being mindset” in 13 languages and 18 countries.

University Jaume

Since 2021 we have been collaborating with Dr. Salanova, Chair of Organizational Psychology in the University Jaume I (Spain) and an international reference in Positive Organizational Psychology. She is involved with a similar approach in the European H-Work Project aiming to promote mental health in small and medium-sized enterprises and public workplaces, drawing on funding from the European Union’s Horizon 2020 research and innovation program. With her, we deployed at Solvay a model of Healthy and Resilient Organization (HERO), starting with a pilot phase, and following with a global HERODEI survey at the end of 2022. This helped us to assess which risk factors we need to address for well-being at work, as well as the positive factors that we can build on to create a sustainable better life at work, at Group and site level. Action plans were defined and integrated in STAR Factory as a consequence.

Diversity, equity, and inclusion

Catalyst

Solvay has partnered with Catalyst, a global nonprofit, to help build workplaces that work for women through advocacy, research, and education. The organization focuses on five key areas: (1) advancing women, (2) women and the future of work, (3) lead for equity and inclusion, (4) MARC – Men Advocating Real Change, and (5) the Frontline Employee Initiative. Since 1962, Catalyst has conducted a wealth of research to support companies’ DEI initiatives to make change, measure impact, and accelerate progress for women through workplace inclusion.

Disability:IN

Disability:IN is a leading global nonprofit resource for business disability inclusion. The organization’s network of over 500 businesses expands opportunities for people with disabilities around the world. Disability:IN’s head office and 25 affiliates serve as a collective voice effecting change in business for people with disabilities. Initiatives include focusing on digital accessibility, hosting an employer roundtable for neurodiversity at work, and running a next generation leadership program for college students and recent graduates with disabilities. Solvay first partnered with Disability:IN in 2021 and we continue to participate in their Disability Equality Index, an annual benchmarking of corporate disability inclusion policies and programs in which we have continued to improve on.

Out & Equal

Through their worldwide programs and events and Fortune 500 partnerships, Out & Equal helps LGBTQ+ individuals flourish, supporting organizations in creating a culture of belonging for all and establishing LGBTQ+ workplace equality. Solvay has partnered with Out & Equal to work on LGBTQ+ workplace equity, inclusion, and belonging. Among the Out & Equal programs are DEI education in the workplace, inclusion frameworks with a regional focus on LGBTQ+ community engagement groups, and their annual Summit, the largest LGBTQ+ workplace inclusion event in the world where we had three employees represent Solvay to participate in meaningful discussions, panels, and workshops and to discuss actions to advance LGBTQ+ inclusion and well-being in the workplace.

3.6. Membership and advocacy

GRI DISCLOSURES 2-28

The Group maintains a dialogue with stakeholders and is a member of several associations at global, regional, and national levels. Trade associations adopt policy positions as close as possible to a consensus. Member companies can still express their specific positions in a number of ways, including discussions within working groups or public stances that may differ from those of the trade associations.

According to internal rules, memberships should be aligned with our business strategy and our company interests. The association should support Solvay’s business and company interests, and should be in alignment with Solvay’s public policy interests. The memberships are reviewed on a regular basis, to check whether positions taken by associations are still aligned with Solvay’s interests.

Senior Solvay representatives sit on the steering boards of many of the associations we are a member of. We also participate in working groups, and policy coordination groups. The major association memberships in the regions and countries where Solvay is present are listed below.

3.6.1. International Council of Chemical Associations

Solvay is a member of the International Council of Chemical Associations (ICCA). Through Responsible Care®, which is an essential part of the ICCA’s contribution to the Strategic Approach to International Chemicals Management (SAICM), global chemical manufacturers commit to pursuing safe chemical management and performance excellence worldwide.

3.6.2. European Chemical Industry Council

The European Chemical Industry Council (Cefic) is the forum and the voice of the chemical industry in Europe. The association facilitates dialogue that allows the industry to share its technical expertise with policymakers and other stakeholders. Solvay experts provide input on energy, industrial, environmental, and research policy, as well as on issues relating to product stewardship. Solvay representatives also work with the different Cefic sector groups on specific issues related to individual substances or groups of substances. In addition, we play an active role within Cefic in leading a proactive industry response to the need for a more innovative and sustainable chemical industry. In 2023, Cefic decided on joining the Science Based Targets initiative (SBTi) standards for the chemical industry. Solvay also participated on behalf of Cefic in the EU Commission high-level roundtable on the EU Chemicals Strategy, an active stakeholder platform with business representatives, NGOs and academics, and has been closely involved in developing a policy response to competitiveness challenges in Europe for the chemical industry.

3.6.3. France Chimie

France Chimie represents chemical sector companies in France in front of public authorities at national, European, and international level. Solvay France Délégué Général François Pontais is a Member of France Chemie's Board and ExCom. The association integrates 12 regional federations, representing 1,300 companies nationwide, and provides expertise and support relating to technical, economic and fiscal legislation, and social and labor affairs. Solvay representatives contribute to all key commissions. This includes those concerning competitiveness, with two Solvay sites rated among a pool of sites at “competition risk” in France; energy and logistics, which focuses on the decarbonization subsidy plan; and health, safety, and environment (HSE). In 2023, Solvay actively supported France Chimie positions to further decarbonize the chemical industry and promote the use of renewable energy sources. Solvay also supported water management approaches through the French “Water plan” launched in the spring and through participation to the board of the Agence de l'Eau Rhône Méditerranée Corse and the “Comité de Bassin.”

3.6.4. Federchimica

Federchimica is the Italian chemical industry association. Our Country Manager in Italy is Vice President of the association's Board. Federchimica facilitates dialogue with regional and national policymakers and government bodies, by sharing technical expertise and knowledge with policymakers and other stakeholders. Solvay experts participating in Federchimica provide input on energy, industrial, environmental, and research policy, as well as issues relating to product stewardship.

3.6.5. American Chemistry Council

The American Chemistry Council (ACC) represents a diverse set of companies engaged in the chemistry business. Solvay sits on the Executive Committee, as well as on several Board-level committees that contribute to setting the association's strategy. Solvay representatives contribute their expertise to the ACC's work on transportation, energy, environment, sustainability, chemical management, process safety, trade, and product stewardship issues. Solvay experts also provide technical input for activities that focus on product-related issues relevant for Solvay businesses, such as advanced materials and sustainable technologies. In 2023, Solvay actively supported ACC-led advocacy efforts and participated in the development of policy positions in key areas of interest. ACC continues to work diligently to demonstrate, to elected officials and the public, the importance of industry partnership in building a cleaner, safer and more sustainable future. Solvay's engagement on tax, trade, rail, and environmental regulations increased awareness of the complex ways chemistries support our everyday lives.

3.6.6. Brazilian Chemical Industry Association

Solvay works with the Brazilian Chemical Industry Association (ABIQUIM) and its other members to help make Brazil's chemical industry more competitive and sustainable. Solvay's representative in the Board of Directors has taken over the ABIQUIM Presidency in 2023. Solvay is also represented in all of ABIQUIM's key commissions and supported activities. These cover topics such as the Chemical Industry Parliamentary Coalition, Responsible Care management, energy and climate change, product stewardship, community dialogue, labor, international trade and trade remedies, logistics, supply chain, and innovation. In 2023, the entity's advocacy initiatives in the face of the new Federal Administration were a priority to review the ancillary anti-dumping regulation and to enable the implementation of transitional tariff measures within the scope of Mercosur, in view of the surge in imports throughout the year and aiming preserve chemical industrial chains and competitiveness.

3.6.7. China Petroleum and Chemical Industry Federation

The China Petroleum and Chemical Industry Federation (CPCIF) is a comprehensive national industry organization and the official representative of the Chinese chemical industry in the International Chemical Industry Association (ICCA). The CPCIF speaks up for the interests of the industry, while also serving as a bridge between businesses and the government in China. Solvay sits on the Executive Board of the Committee of Multinationals (MNC) of the CPCIF, which is a CPCIF sub-committee representing nearly 70 multinational companies in China. Solvay is a founding member of this committee, which was set up in 2013. Key interests of the committee include, but are not limited to, industrial policies, regulatory demands, chemical management, carbon trade, sustainability, and innovation. In 2023, Solvay worked together with peer companies in CPCIF's MNC, actively promoting sustainability for the chemical industry. Solvay participated in dialogues, organized by CPCIF, with governments and authorities who managed chemical parks, for development of chemical parks and companies in the parks targeting carbon reductions and neutrality as well as environmental standards such as in the framework of the Yangtze River Protection Law. Solvay also contributed expertise to the CPCIF to prepare input on the central government's National Development and Reform Commission, aimed at developing China's carbon system in line with international standards.

3.6.8. Association of International Chemical Manufacturers

The Association of International Chemical Manufacturers (AICM) represents nearly 70 major multinational companies in the Chinese chemical industry active in the manufacture, transportation, distribution, and disposal of chemicals. Together with other leading international chemical players in China, Solvay helps promote Responsible Care® and other globally recognized chemical management principles among all stakeholders, advocates cost-effective, science- and risk-based policies to policymakers, and strengthens the contributions made by the chemical industry to the economy.

3.6.9. BusinessEurope

BusinessEurope is the leading European business trade association. Its direct members are national business federations, but selected companies may participate in BusinessEurope through the Advisory and Support group (ASG). BusinessEurope and its members campaign on the issues that most influence the business performance and growth of European companies, in Europe and globally. Solvay provides input through participation in working groups dealing with energy, environment and research, as well as trade policy. Solvay's position on climate is more ambitious than the federation position.

3.6.10. European Round Table of Industrialists

The European Round Table of Industrialists (ERT) is a forum that brings together around 50 CEOs of European companies. Among its activities, the ERT advocates policies to improve European competitiveness, growth, and employment. In particular, Solvay actively participates in the working groups dealing with energy, trade, competitiveness and innovation, jobs and skills, and finance, as well as competition policies. In the ERT, Solvay focused in particular on promoting the human skills agenda, supporting the creation of new jobs through the transition to a more sustainable economy, as well as participated in a study on decarbonization and competitiveness for the energy intensive industry.

4. CLIMATE

4.1. Climate change

GRI DISCLOSURES 3-3 305-1 305-2 305-3 305-4 305-5
MATERIALITY: PRIORITY
SDG 13 14 15

4.1.1. Transition risks and opportunities

If we embark on a transition path, more transition risks and opportunities will materialize which will have strategic implications for the Group. With Solvay's energy mix, which uses coal; our raw materials which include petrochemicals; and our end markets, which include the automotive, building and construction industries; means that we are exposed to risks and opportunities:

- Policies and legal context: Regulations and actions to limit CO₂ emissions, such as increasing carbon taxes, banning internal combustion engines, mandating the use of certain fuel types, and tightening environmental standards.
- Technology: Investment in new, lower-emission technologies.
- Markets: Adaptation to changing customer behavior.
- Financial: Ability to cope with the influence of climate change on investors' and lenders' decisions.
- Changed climate: Impact of upcoming changes on industrial operations and in the value chain.
- Reputation: Stakeholder attitudes caused by ability to address stakeholder climate change concerns effectively.

Mapping transition risks and opportunities

The Sustainable Portfolio Management (SPM) global and systematic assessment helps alert our businesses to sustainability market signals, in particular on climate risk and opportunities, to anticipate their impact and develop the right answers in a timely manner. SPM is a robust, fact-based, future-oriented compass that allows us to take a snapshot of products' sustainability risks and opportunities in their business environment.

SPM informs us about the contribution Solvay's products make to sustainability along the value chain considering both:

- their environmental manufacturing footprint and the associated risks and opportunities – vertical axis – with a quantitative assessment using 21 impact indicators; and
- how their applications bring benefits or face challenges from a holistic market perspective – horizontal axis – with a qualitative assessment of social and environmental topics covering four main themes, namely health and safety, climate change, resources and opinion leaders.

For more details about SPM, see section 7.1 Product design and life-cycle management and the SPM guide published on Solvay's website.

Climate change is one of the focus areas for SPM assessment. This involves identifying if a product in a given application brings a climate change benefit or challenge. Product-Application Combinations (PACs) that lead to benefits are identified as "climate solutions," while those that pose challenges are considered "climate challenges."

Solvay's Sustainable Portfolio Management tool classifies a sustainable solution as a product in a given application that makes a significant climate change contribution to the customer's performance while also demonstrating a lower carbon impact in its production phase. The SPM methodology is also used to identify eligible enabling activities, requested under the Taxonomy's Delegated Act 2021. For more details about Taxonomy reporting, see section 7.3 EU Taxonomy Eligible Activities.

SPM is a key tool for enabling Solvay to integrate the sustainability dimension into strategic and operational decision making in key business processes, such as strategy, research and innovation, investment, marketing and sales, and mergers and acquisitions. We also apply the SPM tool to strategic projects, using the same logic as for our portfolio, to make sure that these projects are heading toward business solutions that support growth and value creation. This makes SPM a key tool for Solvay to identify if an investment, or a strategic or innovation project, can be considered a climate transition opportunity for Solvay.

Scenario analysis

- In 2022 and 2023, we revised our scenario analysis under the following scope:
- Focusing on the three business units (Soda Ash and Derivatives, Peroxides, and Special Chem) representing 73% of Solvay's 2022 sales.
 - Two International Energy Agency (IEA) scenarios: 1.5°C Scenario (IEA Net Zero Emissions Scenario 2021) and 3°C Scenario (IEA Stated Policy Scenario 2021).
 - Using a leading audit, tax and consulting service company's tool for climate scenario analyses.
 - Assumptions of price and cost changes, volume changes, and adaptation potential (cost pass-through) were taken from the consultant's models. This included price trajectories up to 2050 for oil, coal, gas, CO₂, electricity, and energy usage in transport, in our own operations and upstream.
 - Analysis of the market dynamics and identification of the essential characteristics of individual sites was based on the consultant and Solvay sector and climate expertise, considering products sold in main markets, namely construction, packaging, automotive, oil and gas, home and personal care, food and feed, and electronics.

The conclusions of the scenario analysis confirm the robustness of our business portfolio supported by positive drivers overcoming the negative ones as summarized below with impacts quantified from (-3) to +3:

Financial impact drivers		1.5°C scenario	3°C scenario
Technology	Green hydrogen	(-2)	0
	Coal phase-out	+2	+1
	Oil and gas	+1	(-2)
Market	Electronics	+2	+2
	Automotive	(-2)	+1
	Buildings	+2	+1
Policy	CO ₂ price	(-3)	(-2)
Reputation	CO ₂ emission reduction	+2	+1
	Supply chain engagements	+1	+1

4.1.2. Physical risks

Acute risks

- Solvay sites in areas currently exposed to natural hazards, with loss expectancy, calculated by our insurers, of higher than €10 million (physical damage and contribution margin loss):
- Five Solvay sites are located in 100-year frequency (2% chance per year) flood areas, with a loss expectancy range of €15-168 million.
 - Nine Solvay sites are located in 500-year frequency (0.2% chance per year) flood areas, with a loss expectancy range of €15-208 million.
 - One site is in a wind exposed area, with a loss expectancy of €16 million.

Solvay has a property damage and business interruption insurance program in place to cover catastrophic risks, and covers smaller losses through self-insurance.

The risk is continually assessed throughout the year, with the support of Solvay's Property insurer FM Global and reinsurers, like Swiss Re, based on their proprietary flood modeling. Each site with reported insured values greater than €50 million is visited by FM Global loss prevention engineers and benchmarked with FM Global's resilience index, which takes into account inherent risks and completion of any recommendations.

Each site has received a list of recommendations to prioritize to reduce the risk. Recommendations can be related to procedural improvements, like developing a flood, drought, freeze, or wind response plan, or physical improvements, like installing flood barriers or improving levees. The Torrelavega site was one of the most exposed to flood and has made significant improvements by raising the level of their flood dike.

Chronic risks

- Solvay uses the database from Hoekstra et al. (2016), in conjunction with QGIS, a Free and Open Source Geographic Information System, to identify areas subject to water scarcity.
- Of the 45 production sites, 14 are in areas subject to water stress. These sites withdraw a total of 36.8 million cubic meters of water, out of a total of 247.5 million cubic meters (14.5 %) withdrawn by Solvay sites.
 - Four sites have been prioritized based on a risk analysis combining three criteria: location, freshwater intake, and business interruption value.

Scenario analysis

On top of the annual risk assessment carried out with our insurers, a climate physical risks scenario analysis focusing on future climate impacts has been performed in 2023:

- Considering two scenarios: >4°C of global warming (corresponding with the IPCC's RCP 8.5 and SSP-5.85) and 3°C of global warming (corresponding with the IPCC's RCP 4.5 and SSP-2.45), corresponding to a "business as usual" reference scenario.
- Time horizons: 2030, 2050 and 2100.
- Qualitative analysis considering own operations countries: All countries in which Solvay has a site; procurement countries: top 25 by procurement amount (EUR) and headquarter country; market countries: top 25 by revenue.
- Considering changes in hazard frequency in the scenarios for 2030, 2050 and 2100 per country, versus a 2020 basis, using the World Bank Knowledge Portal and scientific papers.
- Using a leading audit firm's tool for climate scenario analysis, which allows to include an external perspective and challenge Solvay's assumptions.
- Using sector vulnerabilities to each hazard as assessed by the leading audit firm based on literature review.
- Computing Risk scores based on the statistical global distribution per hazard. The thresholds for each risk category are hazard specific.
- Quantitative analysis focusing on the sites with the highest contribution margin (including impacts on other sites): Green River (US), Linne Herten (NL), Paulinia (BR), Devnya (BG)

- The main conclusions of the analysis are:
- The difference between the 3°C scenario and the >4°C scenario for the selected sites is marginal.
 - Solvay's main physical risks lie mainly around flooding, particularly in Brazil.
 - Flood and convective storms might cause the highest damages until 2090.
 - Flood damage increase compared to today is minimal.
 - Tropical cyclone and wildfire do not pose a considerable financial impact across all locations.
 - Overall risk levels are moderate:
 - Paulinia is the most impacted site.
 - The other sites are significantly less impacted by both asset damage and business interruption with values ranging below 5% of the site value or contribution margin, respectively.
 - Business interruption in absolute terms is generally lower than asset damage.

4.2. Greenhouse gas emissions

4.2.1. Definitions

GRI DISCLOSURES 3-3 305-1 305-2 305-3 305-4 305-5
MATERIALITY: PRIORITY
SDG 13 14 15

- Solvay uses the following references to address greenhouse gas emissions:
- The Guidance for Accounting and Reporting Corporate Greenhouse Gas Emissions (GHG) in the Chemical Sector Value Chain published by the World Business Council for Sustainable Development.
 - The Greenhouse Gas Protocol Corporate Accounting and Reporting Standard.
 - The Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Standard.
 - The Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC) for global warming potentials on fluorinated greenhouse gasses (European Regulation (EU) No 517/2014).

- To better reflect our sustainability policy, we decided to use the market-based method to calculate CO₂ emissions associated with purchased electricity (Scope 2). To comply with Global Reporting Initiative requirements, we apply the following criteria, listed in decreasing order of priority, when selecting the CO₂ emission factor of each electricity supply contract:
- Energy attribute certificates: Emission factors resulting from specific instruments, such as green energy certificates.
 - Contract-based: The emission factor obtained from contract agreements on specific sources for which there is no emission of specific attributes.
 - Supplier or utility emission rates: The emission factor disclosed as a result of the supplier's retail mix.
 - Residual mix: If a residual mix is unavailable, grid-average emission factors are used as a proxy.

Location-based: If none of the above factors are available, we use the national emission factor published by national authorities or the International Energy Agency. Based on a World Resources Institute (WRI) recommendation, Emissions and Generation Resource Integrated Database (eGRID) emission factors published by the United States Environmental Protection Agency are used for the US, instead of the state emission factor. Similarly, grid emission factors published by the Ministry of Ecology and Environment are used for China, instead of the state emission factors.

4.2.2. Management approach

Following the spin-off of Syensqo in December 2023, Solvay has confirmed its commitment to reduce its CO₂ emissions. Our new baseline has shifted from 2018 to 2021 while maintaining a goal of a 30% reduction on Scope 1 and 2 emissions and a reduction of 20% of Scope 3 (upstream and downstream) emissions by 2030. We also pursue our objective to phase out coal by 2030 wherever an alternative exists. In addition, carbon neutrality by 2050 remains an overarching objective.

Solvay joined SBTi in October 2020, receiving a formal approval from the Initiative in early 2023 for its climate targets. The spin-off of Syensqo has triggered the need for a reassessment that will start with SBTi in 2024.

Our current objectives are supported by a global energy transition roadmap made of already validated and financed projects (with a strong delivery anticipated in 2025), as well as a portfolio of projects (still under validation process) clustered by typology:

- Energy transition project for which a significant investment is necessary to use less emitting primary source of energy.
- Energy efficiency project which allows to consume less energy per production unit.
- Decarbonized sourcing consisting of the substitution of current fossil energy by a renewable one or low carbon one.

An externally verified greenhouse gas emission reporting system and responses to rating agencies, such as the Carbon Disclosure Project, help the Group align our efforts with the magnitude of the greenhouse gas challenges we face.

In 2023, four new projects have been validated. Overall, we have more than 26 projects around the world that are either completed or underway.

In terms of methodology, STAR Factory program deployment at site level enables identification of energy transition opportunities through collaboration between a dedicated team of experts in energy transition and site operational industrial teams.

These opportunities are then evaluated, challenged and prioritized by business from an affordability point of view, including an internal carbon price of €100 per metric ton of CO₂ to all greenhouse gas emissions.

The execution of roadmaps depends on the category of the projects. Energy efficiency projects are managed at site level whereas energy transition and renewable sourcing projects are managed at central level.

4.2.3. Indicators

Solvay targets to reduce Scope 1 and 2 greenhouse gas emissions by 30% by 2030, compared to the 2021 baseline, and to reach carbon neutrality by 2050. Solvay also targets to reduce Scope 3 emissions (focus five categories) by 20% by 2030.

GREENHOUSE GAS EMISSIONS (SCOPE 1 AND 2)

Total greenhouse gas emissions (Scope 1 and 2) in 2023	Mt CO ₂ eq	7.3
Total greenhouse gas emissions (Scope 1 and 2) in 2022	Mt CO ₂ eq	8.5
Total greenhouse gas emissions (Scope 1 and 2) in 2021 – as published	Mt CO ₂ eq	9.0
Variation due to changes in reporting scope (structural changes)	Mt CO ₂ eq	-0.1
Variation due to changes in methodology or improvements in data accuracy	Mt CO ₂ eq	0
Emissions increase or reduction at constant scope year on year	Mt CO ₂ eq	-1.2
Cumulative emissions increase or reduction since 2021 at constant scope	Mt CO ₂ eq	-1.7
Percentage increase or reduction since 2021 at constant scope (reference 2021: 9.0 Mt CO ₂ eq)	%	-19
		-1.1

The cumulative emissions reduction since 2021 at constant scope is -1.6 Mt CO₂eq.

Decreased emissions of 1.2 Mt CO₂eq in 2023, as compared to 2022, can be explained by lower activity (-0,9 Mt CO₂eq), new GHG reduction projects (-0.3 Mt CO₂eq), including biomass consumption in Devnya in substitution to coal, better mine gas usage in Green River, and Voikkaa's 100% renewable electricity consumption.

The GHG emissions in 2022 do not consider the changes in the scope of Tavaux and Zhenjiang, unlike 2023. This change has an impact on Scope 1 and 2 of 2022 (-0.1 MtCO₂eq), mainly on Scope 2. Variation due to changes in reporting scope (structural changes) is explained by Tavaux and Zhenjiang consolidated at 100% for Syensqo.

GREENHOUSE GAS EMISSIONS (CO₂ AND OTHER GHG)

	Units	2023	2022	2021
Direct and indirect CO ₂ emissions (Scope 1 and 2)	Mt CO ₂	6.5	7.4	8.0
Other greenhouse gas emissions according to Kyoto Protocol (Scope 1)	Mt CO ₂ eq	0.8	1.1	1.0
Total greenhouse gas emissions according to Kyoto Protocol	Mt CO ₂ eq	7.3	8.5	9.0
Other greenhouse gas/CO ₂ emissions not according to Kyoto Protocol (Scope 1)	Mt CO ₂ eq	<0.1	<0.1	<0.1

DIRECT GREENHOUSE GAS EMISSIONS (SCOPE 1)

	Units	2023	2022	2021
Methane – CH ₄	Mt CO ₂ eq	0.80	1.07	0.99
Nitrous oxide – N ₂ O	Mt CO ₂ eq	0.01	0.02	0.02
Sulfur hexafluoride – SF ₆	Mt CO ₂ eq	0	0	0
Hydro fluoro carbons – HFCs	Mt CO ₂ eq	0	0	0
Perfluorocarbons – PFCs	Mt CO ₂ eq	0	0	0
Nitrogen trifluoride – NF ₃	Mt CO ₂ eq	0	0	0
Total other greenhouse gas emissions	Mt CO ₂ eq	0.82	1.10	1.02
Carbon dioxide – CO ₂	Mt CO ₂	5.8	6.7	7.1
Total direct emissions	Mt CO ₂ eq	6.62	7.80	8.12

In 2023, direct emissions were 1.18 Mt CO₂eq lower than in 2022. This improvement in the reduction of GHG emissions is mainly due to lower activity compared to 2022 and better mine gas usage in Green River.

INDIRECT CO₂ EMISSIONS (SCOPE 2)

	Units	2023	2022	2021
Gross market-based				
Electricity purchased for consumption	Mt CO ₂	0.3	0.3	0.4
Steam purchased for consumption	Mt CO ₂	0.3	0.4	0.4
Total indirect CO ₂ – gross market-based	Mt CO ₂	0.6	0.7	0.8
Gross location-based				
Electricity purchased for consumption	Mt CO ₂	0.4	0.4	0.5
Steam purchased for consumption	Mt CO ₂	0.3	0.4	0.4
Total indirect CO ₂ – gross location-based	Mt CO ₂	0.7	0.8	0.9

Since implementing the market-based method, we carry out a detailed review of emissions factors for purchased electricity at all of our sites every year. In 2023, indirect emissions were 0.1 Mt CO₂eq lower than in 2022.

OTHER INDIRECT GREENHOUSE GAS EMISSIONS (SCOPE 3)

	Units	2023 ⁰¹	2022 ⁰²	2021 ⁰³
Purchased goods and services	Mt CO ₂ eq	3.6	1.7	1.7
Capital goods	Mt CO ₂ eq	1.1	0.9	0.8
Fuel- and energy-related activities	Mt CO ₂ eq	1.0	1.0	1.0
Upstream transportation and distribution	Mt CO ₂ eq	Included in Purchased goods and services		
Waste generated in operations	Mt CO ₂ eq	Included in Purchased goods and services		
Business travel	Mt CO ₂ eq	0.002	0.002	0.001
Employee commuting	Mt CO ₂ eq	0.014	0.015	0.016
Upstream leased assets	Mt CO ₂ eq	0	0	0
Downstream transportation and distribution	Mt CO ₂ eq	0.3	0.4	0.4
Processing of sold products	Mt CO ₂ eq	2.1	2.9	3.1
Use of sold products	Mt CO ₂ eq	3.0	5.1	5.4
End-of-life treatment of sold products	Mt CO ₂ eq	2.7	3.1	4.6
Downstream leased assets	Mt CO ₂ eq	0	0	0
Franchises	Mt CO ₂ eq	0	0	0
Investments	Mt CO ₂ eq	0.2	0.4	0.4
Total Scope 3 emissions	Mt CO ₂ eq	14.0	15.5	17.4
Total Focus 5 categories ⁰⁴ Scope 3 emissions ⁰⁵	Mt CO ₂ eq	12.4	13.8	15.8
Variation due to changes in methodology or improvements in data accuracy ⁰⁶	Mt CO ₂ eq	-1.1		
Variation due to change in methodology in category 1	Mt CO ₂ eq	1.0		
Variation due to change in methodology in category 10, 11 and 12	Mt CO ₂ eq	-2.1		

Total Scope 3 greenhouse gas emissions indicator is in the scope of the reasonable assurance report from our independent auditor while Scope 3 Focus 5 categories greenhouse gas emissions indicator is not in the scope of our independent auditor.

Note: Solvay will continue working on aligning its methodology with the Scope 3 GHG Protocol for scope 3.1 (purchased goods and services), scope 3.4 (upstream transportation and distribution) and scope 3.5 (waste generated in operations) and disaggregating emissions in its inventory for these categories by end of 2024. Emissions reported herein under category 3.1 (purchased goods and services) include emissions from categories 3.4 (upstream transportation and distribution) and 3.5 (waste generated in operations). They are calculated by the difference between the cradle-to-gate emissions of our products (including manufacturing) and on the Scope 1, Scope 2, and emissions from category 3 (fuel and energy-related activities). We have identified a limit in the accuracy of the methodology with the reconciliation between energy bill of materials in life cycle assessments and energy in Scope 1 and 2 emissions which affects the categories of emissions scope 3.1, scope 3.4, and scope 3.5 (purchased goods and services, upstream transportation, distribution, and waste generated in operations). The revision of the methodology for the three categories will include their direct determination (based on raw materials quantities purchased x emission factor), address the identified limitation in accuracy and increase the use of suppliers’ specific emission factors.

01. 2023 values adjusted with the new methodology (rf. note).
02. Values as stated in annual integrated report in 2022.
03. Values as stated in annual integrated report in 2021.
04. The focus five categories are Purchased goods and services, Fuel and energy related activities, Processing of sold products, Use of sold products, and End-of-life treatment of sold products.
05. After impact of the new methodology the Focus 5 categories of 2022 and 2021 are 12.2Mt, and 14.8Mt respectively.
06. Net impact due to changes in methodology in category 1 (Purchased goods and services), and categories 10, 11, and 12 (Processing of sold products, Use of sold products, End-of-life treatment of sold products).

Scope 3 greenhouse gas emissions are estimated as follows:

1. Purchased goods and services: We carry out a cradle-to-gate Life Cycle Analysis (LCA) for most of our products, representing 94% of our total net sales. The calculated greenhouse gas emissions are extrapolated to reach the totality of our purchases. They include all emissions related to raw material extraction and precursor processing, indirect emissions from energy use for these operations, and transport between suppliers and to our plants.

Note: In 2023, a change in methodology has taken place for emissions reported in category 3.1, which includes emissions in categories 3.4 and 3.5, by excluding emissions related to energy sales to third parties from Scope 1, Scope 2, and Scope 3.3, thereby aligning with the boundary for cradle-to-gate LCA emissions of products. It has induced + 1 MT_CO₂ eq.
2. Capital goods: We have used the emission factors of the WBCSD Guidance for Accounting and Reporting Corporate GHG Emissions in the Chemical Sector Value Chain, assuming that capital goods are a mix of concrete and steel.
3. Fuel-and energy-related activities not included in Scope 1 or Scope 2: They represent GHG emissions that occur during the extraction and transport of energy.
4. Upstream transportation and distribution: This is included in category 1 (see above), purchased goods and services.
5. Waste generated in operations: This is included in category 1 (see above).
6. Business travel: Business travel undertaken by Solvay employees is recorded by our travel agency and monitored by our purchasing department. For air and rail travel, travel mileage is recorded. This covers more than 95% of our air and rail travel. The calculated greenhouse gas emissions are extrapolated to represent the totality of our travel. For each transportation mode, mileage is converted into CO₂ equivalent using emission factors from Ecoinvent.
7. Employee commuting: The estimation is based on assuming that Solvay employees based in industrial sites commute every day in an average diesel or petrol car. Employees at administrative and R&I sites commute three times per week (i.e., home office two days per week).
8. Upstream leased assets: This is not applicable as we have no upstream leased assets.
9. Downstream transportation and distribution: Greenhouse gas emission during transportation of our products from our plants to our customers are reported and monitored by our supply chain excellence department. Emissions factors from the European Chemical Industry Council (Cefic) are used to calculate total emissions.
10. Processing of sold products: 11. Use of sold products; and 12. End-of-life treatment of sold products: the computation principles for these three categories are the same. The emissions due to product processing and transformation by third parties subsequent to sale by Solvay are calculated according to product chemical composition and expected chemical reactions likely to generate emissions during the transformation, the usage, and end-of-life of our product.

Note: The methodology, developed in 2018, for the accounting of SF6 impacts in categories 3.10, 3.11, and 3.12 has been revised. It aligns with the change in business good practices (best estimates or latest standards of the emission factors during the processing, use, and end of life of the equipment filled with SF6 and update of the market segmentation based on interviews with the most representative customer) and in the regulatory environment. Global warming potentials are taken from the reference table used in the current version of the European Regulation on the fluorinated greenhouse gases (Regulation EU No 517/2014), meaning the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (AR5). It has induced -0.8 MT CO₂eq in category 3.10 and -1.3 MT CO₂eq in category 3.11.
13. Downstream leased assets: This is not applicable as Solvay has no leased assets.
14. Franchises: This is not applicable as Solvay has no franchises.
15. Investments: Scope 1 and 2 emissions from non-consolidated entities (that are not consolidated in Solvay's Scope 1 and 2) are reported according to Solvay's financial interest in these entities, to ensure consistency with our financial statements.

4.2.4. Key achievements

In 2023, the roll-out of the STAR Factory program (which started in 2022) led to an acceleration of initiatives identification through deployment on about half of the sites.

The structural GHG reduction of 0.3 Mt CO₂eq in 2023 are mainly due to following achievements:

- Energy transition (0.1 Mt CO₂ eq)
 - At our soda ash Devnya, BG, site, an existing boiler has been adapted to increase its co-combustion rate with non-recyclable biomass.
 - In Torrelavega, we started from the second quarter of 2023 to operate a small biomass co-firing boiler with coal (3% mass or 1.4% energy substitution).
- Energy efficiency (0.2 Mt CO₂ eq)
 - Among 60+ projects implemented, Green-River site from soda ash business significantly improved its mine gas usage (reducing direct CH4 emission in the atmosphere).
 - Another soda ash site, Bernburg, worked on the optimization of energy production and consumptions.
- Decarbonized sourcing
 - Voikkaa, F.I., production site, began operating on 100% renewable electricity in 2023. This is a significant step in decarbonizing the production of hydrogen peroxide at Voikkaa.

In Scope 3:

- We have active collaboration with our most GHG-emitting raw materials suppliers to collect data on the product carbon footprint (PCF) of the raw materials they supply to us – a preliminary step that enables us to track and manage progress in our purchased goods and services emissions (category 1). In 2023 we collected more than 50% of the PCF coverage of our raw materials.
- Looking to engage its own employees in the reduction of Scope 3 emissions linked to business travel (category 6), from January 2023, a monetary amount based on the entity's travel footprint calculated at €100 per ton of CO₂ is charged to each GBU to finance a Travel Carbon Fund. It will be used in 2024 for sponsoring sustainability projects with a carbon-offset focus wherever feasible.

4.3. Energy

GRI DISCLOSURES 3-3 302-1 302-2 302-3 302-4
MATERIALITY: PRIORITY
SDG 7 13

4.3.1. Definitions

The different components of Solvay's energy consumption are converted into primary energy sources as follows:

- fuels, using the net calorific values;
- steam purchased, taking into account the boiler efficiency reference value for the type of fuel used to generate the steam, for example 90% efficiency based on the net calorific value for natural gas; and
- electricity purchased, assuming an average efficiency of 39.5% for all types of power production except for nuclear power (33%), hydro (100%), solar (100%), and wind (100%), based on net calorific value (source: International Energy Agency – IEA).

4.3.2. Management approach

Solvay considers it particularly important to swiftly transition our energy consumption toward zero- or low-carbon sources without compromising on competitiveness or supply security.

In order to avoid conflicts of interest, the Sustainability team who sets the Group's guidelines and targets is separated from the Energy team which is in charge of the execution.

Different expertises are in place to accelerate projects execution:

- Energy department
 - Energy sourcing with long-term partnerships and medium- to long-term contracts, and price-hedging protection mechanisms when needed.
 - Market intelligence and direct access to energy markets.
 - Dedicated services aimed at optimizing energy purchasing and helping Global Business Units manage energy and greenhouse gas emissions.
 - Energy transition roadmap execution.
- Industrials sites expertise
- Technological expertise in processes and process innovation

- Public affairs
- Legal
- Procurement
- Finance

Periodic reviews are in place to follow the projects validation and execution, including monthly project steering committees, quarterly roadmap reviews for each business unit, a quarterly Group climate steering committees.

4.3.3. Indicators

PRIMARY ENERGY PURCHASE FOR CONSUMPTION FROM NON-RENEWABLE AND RENEWABLE SOURCES

	Units	2023	2022	2021
Solid fuels (1)	PJ	24.4	28.3	27.2
Liquid fuels	PJ	0.2	0.3	0.3
Gaseous fuels	PJ	41.4	45.7	51.8
Total non-renewable energy sources	PJ	65.9	74.7	79.3
Renewable energy sources (2)	PJ	6.9	6.0	5.9
Total fuel consumption	PJ	71.9	79.4	85.2

Note: The accounting methodology was adapted in 2020. Coke and anthracite used as raw materials in chemical reactions have been removed from classification as solid fuels. High purity coke or anthracite are required in the chemical reactions of the soda ash production process, as a source of CO2. Historical figures have been restated retroactively.
(1) Solid fuels only apply to coal and petcoke. Anthracite and coke are raw materials.
(2) Primary renewable energy sources and renewable electricity purchase.

We set the target to phase out coal usage in energy production where renewable alternatives exist by 2030. The decrease of 3.9 PJ (14%) in 2023 compared to 2022 results mainly from the activity decrease. Over a longer period, our solid fuels consumption decreased by 2.8 PJ (11%) from 27.2PJ in 2021 to 24.4 PJ in 2023.

Total fuel consumption decreased in 2023 by 10%, this variation is explained mainly by lower activity.

SECONDARY ENERGY PURCHASED FOR CONSUMPTION

	Units	2023	2022	2021
Electricity	PJ	10.1	11.5	12.4
Heating	PJ			0
Cooling	PJ			0
Steam	PJ	7.1	7.3	7.5
Total	PJ	17.1	18.8	19.9

Secondary energy purchased for consumption decreased in 2023, largely due to lower activity.

ENERGY SOLD

	Units	2023	2022	2021
Electricity	PJ	11.7	12	15.1
Heating	PJ	0	0	0
Cooling	PJ	0	0	0
Steam	PJ	7.2	7.7	9.2
Total	PJ	18.7	19.7	24.3

In 2023, the sale of self-generated secondary energy decreased due to the lower activity.

TOTAL RENEWABLE ENERGY

	Units	2023	2022	2021
Energy produced from renewable energy sources	PJ	5.9	5.1	5.9
Renewable electricity purchased	PJ	1.0	0.9	1.0
Renewable electricity sold	PJ	0.0	0.0	0.0
Total renewable energy	PJ	6.9	6.0	6.8

Energy produced from renewable energy sources which is total Biomass

4.3.4. Key achievements

In 2023, the roll-out of the STAR Factory program (which started in 2022) led to an acceleration of initiatives identification through deployment on about half of the sites.

Thanks to a standardized methodology, 60+ projects have been implemented saving fossil-based heat and electricity for a total CO₂ savings of 300 ktCO₂ which leads to 1 PJ fossil energy savings. Replacement of dysfunctional steam traps which started in 2022, continued in 2023. In some other plants, operations on distillation columns have been improved. Electricity consumptions have been reduced thanks to process control actions and installation of variable frequency drives.

In 2023, 100% of our operations in China are still supplied by renewable electricity - 0.2 PJ.

The substitution of coal by biomass in our Devyna and Torrelavega soda ash plants has an impact of 0.6 PJ in 2023.

5. NATURE

5.1. Water and wastewater

GRI DISCLOSURES 3-3 303-01 303-02 303-03 303-4 303-5
MATERIALITY: PRIORITY
SDG 3 6 12 15

5.1.1. Definitions

Water management encompasses the management of water flows and water quality, from extraction from the natural environment to restitution in the same or another part of the environment.

Freshwater withdrawal, measured in millions of cubic meters per year, is the amount of incoming freshwater purchased from third parties, such as drinking water from the public network, or pumped by Solvay from freshwater systems, such as rivers and lakes, and from groundwater sources, such as aquifers, or supplied from the public network (drinking water).

Freshwater consumption, also measured in millions of cubic meters per year, is calculated as the sum of water lost through evaporation, leakage, and exportation of products and waste. Water purchased or pumped for third parties are included in freshwater withdrawals. For example, water that is taken from a river for cooling and returned after use counts as freshwater withdrawal but not as freshwater consumption. Solvay’s main areas of water consumption are in production, or what is known as industrial water.

Areas subject to hydric stress are identified using the Aqueduct database, a Free and Open Source Geographic Information System.

Chemical Oxygen Demand (COD) is the amount of oxygen-reducing substances, mainly dissolved organic matter, discharged into aqueous receivers. COD is expressed as metric tons of oxygen. In addition to nitrogen and phosphorus compounds, COD also contributes to aquatic eutrophication.

Persistent Organic Pollutants (POPs) are toxic chemicals that are persistent in the environment and able to last for several years before breaking down (UNEP/GPA 2006a). POPs circulate globally and chemicals released in one part of the world can be deposited at far distances from their original source through a repeated process of evaporation and deposition. Persistent organic pollutants (POP) expressed in grams per year, are the summed emissions from substances included in lists A, B, and C under The Stockholm Convention. For Solvay, POP in 2023 are specifically dioxins and furans and are expressed in ton-equivalent toxicity per year (see chapter 5.3.3). POPs are reported by sites, according to their permit.

5.1.2. Management approach

Solvay has a company-wide approach to water that includes limiting freshwater withdrawal and consumption, particularly in locations subject to hydric stress, and ensuring that the water quality remains good in bodies of water in which effluents are discharged, so that the impact on downstream users and natural biota is minimized. Specifically, we focus on reducing the impact of freshwater withdrawal and Chemical Oxygen Demand releases.

The water balance of the Group for 2023 is shown in the table below.

Water input from (Mm ³)		Water discharge to (Mm ³)	
Surface water (freshwater)	187	Surface water (freshwater)	164
Surface water (other water)		Surface water (other water)	
Groundwater (freshwater)	19	Groundwater (freshwater)	0.1
Groundwater (other water)	0.6	Groundwater (other water)	
Sea water	72	Sea water	79
Third party (freshwater)	20	Third party (freshwater)	21
Third party (other water)	7	Third party (other water)	30
Other sources	12	All losses	26
TOTAL	318	TOTAL	319

5.1.3. Indicators

FRESHWATER WITHDRAWAL

	Units	2023	2022
Freshwater withdrawal	Million cubic meters	223	244
Total water withdrawal*	Million cubic meters	318	349
Water used for process*	Million cubic meters	106	119
Water used for cooling (once-through)*	Million cubic meters	195	213
Water used for cooling (closed-loop)*	Million cubic meters	902	902
Water used for other uses (including domestic)	Million cubic meters	1.6	1.9

(*) Sum of freshwater and non-freshwater.

The total freshwater withdrawal at group level for 2023 is significantly lower than in 2022 (-21 million cubic meters or -9%) at constant scope and methodology. The freshwater intake for our own operations decreased from 207 million cubic meters in 2022 to 186 million cubic meters in 2023 (-10%). This decrease is thanks to improvement initiatives deployed across our production sites (e.g., water reuse/recycling and cooling tower optimization) but mostly due to a reduction in production volumes. From this 186 million cubic meters, 26 million cubic meters (7%) is lost: 16 million cubic meters through evaporation from industrial cooling towers and eight million cubic meters through exportation with aqueous end products, such as hydrogen peroxide. The remaining volume is lost with exported wastes or through leakages from underground piping networks.

The table below shows the number and percentage of sites located in areas subject to hydric stress and gives the freshwater withdrawal and freshwater consumption for these in 2023 compared to the areas not subject to hydric stress.

2023	Units	Areas subject to water stress	Areas not subject to water stress	All areas
Number of sites	Number	14*	31	45
Percentage of industrial sites under operational control	%	31%	69%	100%
Freshwater withdrawal	Million cubic meters	33	190	223
Freshwater consumption	Million cubic meters	5	21	26

(*) For 2023, the sites in areas subject to hydric stress have been determined using the Aqueduct tool included in WWF Water Risk Filter. Only sites with a scarcity score of 4 or 5 have been taken into account.

The chemical oxygen demand in wastewater increased from 1,848 tons O2 in 2022 to 1,970 tons O2 in 2023. This increase was mainly due to a new COD monitoring and increase in monitoring frequency in Devnya, which leads to more precise data compared to 2022. The persistent organic pollutants (POP) in wastewater decreased from 1.6E-05 metrics tons in 2022 to a non-detectable emission in 2023. This POP is a chlorinated aromatic no more used/produced in a Solvay European platform. The emission value for this substance has been permanently decreasing since 2018.

CHEMICAL OXYGEN DEMAND AND PERSISTENT ORGANIC POLLUTANTS

	Units	2023	2022
Chemical oxygen demand (COD)	Metric tons O ₂	1,970	1,848
Persistent organic pollutants (POP)	Metric tons	Below detection limits	1.6E-05

5.2. Waste

GRI DISCLOSURES 3-3 306-1 306-2 306-3 306-4 306-5 416-1
MATERIALITY: PRIORITY
SDG 3 6 12 14 15

5.2.1. Definitions

Industrial waste is defined as the waste resulting from our regular manufacturing and research activities. It does not include domestic waste or waste from demolition or construction projects. Mining waste, which results from the prospecting and extraction of minerals, is reported separately from industrial waste. All our waste volumes are expressed as dry matter.

For EU sites, Hazardous Industrial Waste (HIW) is defined according to Appendix III of the Waste Framework Directive (2008/98/EC). For non-EU countries, classification follows local legislation.

Non-sustainably treated waste comprises waste that is landfilled or incinerated without energy recovery. It includes the waste with unknown final treatment at the time of reporting.

5.2.2. Management approach

For industrial waste, and hazardous industrial waste in particular, Solvay's focus is on switching to more sustainable disposal methods that avoid landfill or incineration without energy recovery and therefore promote material or thermal recovery.

For non-hazardous waste, mostly mineral, Solvay is launching material recovery initiatives aligned with our ambition to contribute to the circular economy.

5.2.3. Indicators

WASTE PRODUCTION

	Units	2023	2022
Non-hazardous industrial waste	1,000 tons*	1,365	1,460
Hazardous industrial waste	1,000 tons*	26.2	35.2
Total industrial waste	1,000 tons*	1,392	1,495
Hazardous industrial waste not treated in a sustainable way	1,000 tons*	5.2	5.6
Non-hazardous industrial waste not treated in a sustainable way	1,000 tons*	17.4	10.6
Total industrial waste not treated in a sustainable way	1,000 tons*	22.6	16.2
Mining waste	1,000 tons*	432	600

* Metric tons of dry waste.

Despite significant waste reduction initiatives initiated in 2022, the total non-sustainable industrial waste has increased from 16.2 kt in 2022 to 22.6 kt in 2023.

The non-sustainable waste increased by 6.5 kt and is mainly due to the following changes:

- +4.8 kt due to higher volumes of non-valorized DeSOx residues in our Dombasle and Torrelavega sites, linked to the transition towards an alternative source of coal, with higher sulfur content, as a consequence of the conflict in Ukraine and the ban of Russian coal.
- +2.4 kt due to the partial excavation and maintenance of the evaporation ponds in our Parachute site.
- -0.7 kt in our Tavaux site for a decrease in suspended material in the effluent from our Special Chem operations.

5.3. Air quality

GRI DISCLOSURES 3-3 305-6 305-7
MATERIALITY: HIGH
SDG 3 15

5.3.1. Definitions

Nitrogen oxide (NOx) emissions, conventionally expressed as nitrogen dioxide (NO₂), comprise the emissions of nitrogen monoxide (NO) and nitrogen dioxide (NO₂). NOx are reported due to their impact on acidification. NOx emissions from Solvay's operations result mainly from the combustion of fossil fuels. Emissions of nitrous oxide (N₂O) are excluded from this definition, as they have no impact on acidification. The impact of our N₂O emissions is taken into account when assessing Solvay's contribution to climate change.

Sulfur oxide (SOx) emissions, conventionally expressed as sulfur dioxide (SO₂), comprise the emissions of sulfur dioxide (SO₂) and sulfur trioxide (SO₃). SOx emissions arise mainly from the combustion of solid fuels (coal, anthracite).

According to the EU Solvent Directive 1999/13/EC, Volatile Organic Compounds (VOCs) are compounds with a standard boiling point below or equal to 250°C. Non-methane volatile organic compounds (NMVOCs) include all VOCs other than methane. The impact of main methane emissions from Solvay's mining activity at Green River, Wyoming, in the US, is therefore not included here, but is taken into account when calculating our contribution to climate change.

Ozone-depleting substances (ODS) are expressed as their summed CFC-11 equivalent, which is defined as the metric tons of ODS weighted by their Ozone Depletion Potential (ODP), updated with the WMO 2022 characterization factors.

5.3.2. Management approach

Air quality is managed through the health, safety, and environment management systems deployed by our sites, in line with their regulatory requirements. Sites report at minimum on the substances they are allowed to emit according to their exploitation permit. Solvay works in close cooperation with local stakeholders to improve air quality at local and regional levels.

5.3.3. Indicators

ABSOLUTE AIR EMISSIONS

	Units	2023	2022
Nitrogen oxides – NOx	Metric tons	4,324	4,954
Sulfur oxides – SOx	Metric tons	2,047	2,363
Non-methane volatile organic compounds – NMVOC	Metric tons	2,341	1,743
Ozone-depleting substances – ODS	Metric tons	0.7	1.6
Persistent organic pollutants – POP	Metric tons	4.3E-08	3.6 E-08

Persistent Organic Pollutants (POPs) are toxic chemicals that are persistent in the environment and able to last for several years before breaking down (UNEP/GPA 2006a). POPs circulate globally and chemicals released in one part of the world can be deposited at far distances from their original source through a repeated process of evaporation and deposition.

In 2023 nitrogen oxides emissions decreased by 630t (13%) and sulfur oxides decreased by 316t (13%) mainly due to boiler operation optimization, a partial switch from coal to natural gas and biomass and an overall reduction in energy production in our soda ash plants.

Non-methane volatile organic compounds (NMVOC) emissions increased by 602t in total (35%) mainly due to a restatement of the methodology for the emission measurements in the Coatis Paulinia plant by an external university (old factors from 2012 have been underestimated) (+866 tons), compensated by a significant decrease of emissions from the mining activity in Green River (-205 tons). Other changes are minor at the Group level.

The emission of ozone-depleting substances (ODS) emissions more than halved in 2023 compared to 2022 mainly thanks to the optimized abatement of N₂O in the Coatis Paulinia plant.

The value of persistent organic pollutants (POP) emitted to air is related to dioxin and the measured value is close to the detection limit. The emission of persistent organic pollutants (POP) increased from 3.6E-08 metric tons in 2022 to 4.3E-08 metric tons in 2023.

5.4. Biodiversity

GRI DISCLOSURE 3-3 304-1 304-2 304-3 304-4
MATERIALITY: PRIORITY
SDG 13, 14, 15

5.4.1. Definitions

Biodiversity around our sites

To assess the sensitivity of Solvay sites toward biodiversity, we use two international reference tools that help us understand and assess biodiversity-related risks at Solvay's operational locations:

- The Integrated Biodiversity Assessment Tool (IBAT), a web-based map and reporting tool developed by the IBAT Alliance (BirdLife International, Conservation International), UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), and the International Union for Conservation of Nature (IUCN). The IBAT tools provide integrated access to three of the world's most authoritative global biodiversity datasets:
 - The World Database on Protected Areas (WDPA). The IUCN defines a Protected Area as a “clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.”
 - Key Biodiversity Areas (KBAs), which are sites recognized as contributing significantly to the global persistence of biodiversity in terrestrial, freshwater, and marine ecosystems.
 - The IUCN Red List of Threatened Species. Vulnerable, endangered, and critically endangered species are considered to potentially be on the path to global extinction.
- The Worldwide Fund for Nature (WWF) Biodiversity Risk Filter (BrF), a web-based tool covering physical and reputational biodiversity-related risks that may affect our operational sites. These risks are evaluated through databases that provide 33 different indicators covering several aspects of biodiversity. A final score is then calculated for each location, ranging from zero (very low risk) to five (very high risk).

Measurement of a global impact on biodiversity

The calculation of the Solvay Group's pressure on biodiversity is performed along the value chain, from cradle-to-gate (from resource extraction to the factory gate, before it is transported to the consumer), for our portfolio of products. This is a global approach that is based on a Life Cycle Impact Assessment (LCIA) methodology. This method translates emissions and resource extractions into a limited number of environmental impact scores through what are known as “characterization factors.”

The first step in this method is using emissions from environmental reporting that are linked with the following “midpoint impact categories”:

- global warming, e.g., from CO₂ and greenhouse gas emissions;
- water use;
- freshwater ecotoxicity;
- freshwater eutrophication;
- photochemical oxidation;
- terrestrial acidification;
- terrestrial ecotoxicity;
- marine ecotoxicity; and
- land use.

The potential damage to nature is then calculated by connecting the midpoint indicator to an endpoint factor using the method ReCiPe 2016 Damage to freshwater, marine, and terrestrial species refers to the aggregated local loss of species. The unit for measuring impact on biodiversity is a theoretical number of potential species affected in respective ecosystems, measured over space and time.

5.4.2. Management approach

Local biodiversity

We screened 45 operational sites with both the IBAT and BrF tools to assess their biodiversity risks.

On the basis of the screening exercise, and considering other criteria such as climate change, environmental impact, and strategic dimensions, 16 sites were prioritized for the development of biodiversity roadmap. The first step consists in identifying a vision for the site based on the long-term goals it wants to achieve. In a second step, the site identifies possible actions that would support nature conservation and the restoration of biodiversity. This involves identifying the stakeholders supporting each action, such as employees, local communities, nature conservation associations, and universities. Timeline, indicators, and associated budget are characterized as well. Each action is linked with an objective and when possible a method to monitor progress. Finally, governance and planification are key milestones to establish before the implementation phase.

The local assessment of the biodiversity-related risks related to Solvay's operations is integrated into the STAR Factory program. Priority sites involved in STAR Factory are developing a biodiversity roadmap as part of the sustainability workstream of the program.

The partnership with the Wildlife Habitat Council is providing efficient support to the sites in their local projects, connecting with actionable and science-based actions.

Global biodiversity

Using the environmental profiles of our products, and looking at their life cycle from raw materials to the gate of our manufacturing sites, we were able to identify the areas of our portfolio that put the most pressure on biodiversity. We found that greenhouse gas emissions, freshwater eutrophication, marine ecotoxicity, and soil acidification represent 90% of the drivers affecting biodiversity.

With the adoption of the “Global Biodiversity Framework” at COP 15 in December 2022, the parties set an ambitious program of targets and recommendations relating to biodiversity conservation and restoration where the private sector has an important role to play. Solvay’s activities on nature are willing to support the implementation of the Framework.

As part of our efforts to contribute to biodiversity preservation, Solvay is a founding member of Entreprises pour l’Environnement (EpE), which was created in 1992. This is a think tank and platform for expertise, bringing together around 60 large French and international companies from all sectors of the economy to work together to better integrate the environment into both their strategies and their day-to-day management. Within the EpE, Solvay is an active member of the Commission on Biodiversity and is committed to act4nature International.

Finally, Solvay is connected with scientific organizations working on Biodiversity like IPBES07 and IUCN by participating in the IUCN Leaders Forum in Geneva, in October 2023. The Forum was a great opportunity to connect with decision makers and CEOs to further integrate biodiversity conservation into our strategy. The program included meetings with the Young Changemakers bringing a message of hope that demonstrates the importance of empowering the next generation through business engagement.

5.4.3. Indicators

Local biodiversity

Assessing our 45 operational sites for biodiversity risks using the IBAT and BrF tools revealed that:

- 36 were within 5 km of a protected area;
- eighteen sites were within 5km of a Key Biodiversity Area; and
- more than 3,700 vulnerable, endangered, and critically endangered species are potentially present within 50 km of our sites.

IBAT AND BRF RESULTS FOR 16 PRIORITY SITES

Site	Number of protected areas within 5 km	Number of key biodiversity areas within 5 km	Number of endangered species within 50 km	BrF biodiversity-related risk score (0-15)
Anan	4	1	160	7.1
Bad Wimpfen	13	2	86	7.9
Bernburg	8	0	63	8.7
Devnya	6	1	67	8.3
Dombasle	1	0	55	8.3
Gunsan	0	2	103	8.9
La Rochelle	8	1	92	9.0
Linne Herten	3	3	64	8.4
Livorno	17	1	140	9.0
Map Ta-Phut	0	0	187	8.2
Paulinia	1	0	59	8.2
Rheinberg	39	1	57	9.1
Rosignano	8	0	135	9.0
Torrelavega	2	0	121	7.8
Włocławek	3	1	41	8.5
Zandvliet	16	2	80	9.4

07. IPBES: Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

Global biodiversity

GLOBAL PRESSURE ON BIODIVERSITY

	Units	2023	2022
Species potentially affected (*)	Number	63	56
Of which:			
Global warming potential	%	47	53
Marine ecotoxicity	%	20	15
Eutrophication	%	14	15
Acidification	%	10	13
Other (land use, water, etc.)	%	9	5

(*) Calculated on volume of sales.

The increase of the impact calculated in 2023 is mainly explained by the upgrade of the life cycle assessment methods and databases (the database was updated from ecoinvent 3.8 to 3.9.1, it is an incremental change, mainly to adapt to the database update including new flows and new regionalized data). Nevertheless, Solvay has been able to decrease by 19.9% its impact along the value chain in reference to 2018 this is still in line with the ambition to decrease the impact by 30% by 2030.

5.4.4. Key achievements

Our Paulinia site in Brazil was awarded the Wildlife Habitat Council's (WHC) Gold Certificate in 2021. This is the highest level of certification awarded by the WHC, which is an international organization that promotes biodiversity conservation practices in the private sector. Following several decades of work to promote harmonious coexistence with nature, the site has become a hub for wildlife in the region. The certification has given the site a boost to continue increasing biodiversity protection and restoration. In 2022, a biologist was hired to conduct two inventories of species. These inventories led to the identification of 183 native fauna species, including reptiles, amphibians, insects, mammals, and birds. Endangered species were also identified, allowing us to plan conservation actions. For example, the puma which was specifically studied in order to help us protect its habitat.

Our efforts to restore the Cuchia Quarry in Spain received a Cefic⁰⁸ recognition in 2021. The quarry supplied our site in Torrelavega with limestone for almost 80 years – from 1927 to 2006. Restoration efforts have been underway for the last 30 years, including when the quarry was still in operation.

Biodiversity roadmap development and implementation has progressed well at two other European sites.

At Dombasle, a site located Eastern of France in the “Lorraine” industrial emblematic area, several projects have been launched to protect species: the great horned owl in a quarry, fish and flora species in proximity with salt mines, and reptiles and amphibians on the production plant. A comprehensive project to restore an ecological corridor through several actions has also started. This includes biodiversity restoration around a water storage pond, management of invasive species and vegetation to allow migratory bird nesting in reed beds, planting hedges, and building wildlife shelters. The actions are going beyond compliance requirements and they are representing a great opportunity to sensitize employees, local communities, and to allow them to become actors of their natural environment.

Regarding the Rosignano site located in the Tuscany region of Italy, pursuant to the September 5, 2022, cooperation and settlement agreement entered into between Solvay and one of its partner, Solvay undertook to publicly report on the implementation of its action plan regarding its soda ash operations at least annually, through its annual report or otherwise.

The action plan announced on September 6, 2022, to reduce limestone residues released into the sea from Solvay Chimica Italia's soda ash production in Rosignano, as part of the Group's efforts to continually optimize the efficiency and sustainability of its operations, and in line with the IPPC* permit renewed in January 2022:

- Represents an estimated €15 million investment in new technical and process solutions, some of which will require approval by the authorities. The plan will include targeted improvements at different steps of the production process, as well as an optimization of the limestone granulometry and quality.
- By 2030, Solvay's objective is to lower by 20% the maximum volume of discharge currently set by its IPPC permit. Solvay will provide biannual progress updates to the authorities.
- By 2040, Solvay's ambition is to reduce the discharge of limestone to 40% versus IPPC permit, through investment in research and innovation, in collaboration with the relevant stakeholders, subject to permit granting and public interest priorities.

08. Cefic: European Council of Chemical Industry Federation.

Summary of the status sent to the Italian Ministry of Environment on February 8, 2024:

- All the actions taken are advancing, some of them are concluded and some in progress, and the results are in line with the objective to achieve -20% by 2030.
- The CAPEX expenses are for the moment at the level of more than 10% of the global investment.
- In terms of suspended solid discharge for the year 2023, we are already at -20% and we need to consolidate these results in the next coming years considering the evolution of limestone quality and the progress of the action plan.

On top, Rosignano biodiversity roadmap includes 35 different actions, with a total budget estimated at €5 million. Implementation of the roadmap started with several projects on the site and its surroundings, including reshaping and vegetation of a storage area, planting programs around the site, supportive actions towards several nature protection associations, and training/sensitization activities for the employees.

In addition, the Santa Luce Lake built in the 1960s to provide water to the plant has become a natural reserve. Certified as a Natura 2000 protected area, the reserve is also used for educational and scientific projects, including studies by the LIPU bird protection association. The reserve is fully connected with the local community in Santa Luce, which recognizes the importance of this reserve for economic, environmental, and social activities. The project was chosen to test the IUCN⁰⁹ Nature-based Solution standards – a tool used for projects providing environmental, economic, and social benefits.

5.5. Hazardous materials

GRI DISCLOSURES 2-23 3-3 403-7 416-1
MATERIALITY: HIGH
SDG 3 6 12 14 15

5.5.1. Definitions

Product stewardship means managing risks throughout a product’s entire life cycle, from the design stage to end of life. Risks include the possibility of injury or impact on health for a third party or damage to third-party property arising from the misuse of Solvay products in a customer’s plant or use in an application for which the product is not designed. Risk management is particularly important for products used in sensitive applications like healthcare or food and feed.

5.5.2. Management approach

Solvay’s Responsible Care policy requires the Group to:

- Maintain a comprehensive understanding of each product’s hazards, risks, and impacts related to all life-cycle steps and intended applications.
- Manage product knowledge so as to comply with local requirements on product information, while ensuring worldwide consistency.
- Keep records of all necessary and required product safety information to ensure availability throughout the full life cycle, beyond the commercialization period.
- Send standardized product safety data sheets to customers along with the first delivery and when required by local regulations. This key information is consistently maintained and distributed worldwide for all products to all customers, in compliance with local regulations and in the local languages.

In line with our Responsible Care commitment, we are constantly improving our knowledge of how Solvay products are used and the associated risks. The extensive knowledge this represents allows Solvay to characterize and manage risks related to product handling and to prioritize mitigation actions related to potential inappropriate use. The management of Safety Data Sheets reflects this commitment to ensuring the information on hazards associated with our products is readily available to our employees and customers.

Solvay ensures that our product portfolio complies with all the relevant regional and national chemical regulations such as REACH (Registration, Evaluation, Authorization and Restriction of Chemical Substances¹⁰) in the European Union, UK REACH in the United Kingdom, K-REACH in South Korea, Chinese MEE order N°12 in China, KKDIK in Turkey, and TSCA in the US.

In addition, Solvay has a strategy to decrease the use of Substances of Very High Concern (SVHC) in marketed products and more broadly throughout the entire value chain. We consider the SVHCs on the EU REACH authorization list (annex XIV) and EU REACH candidate list, but we also go beyond this by including several lists coming from other countries (e.g., POP Stockholm Convention or Harmful Substances Prohibited from Manufacturing - ISHA, Korea), following an internal process in our operations worldwide. Specifically, we have set up our own reference list of SVHCs, the Solvay-SVHC and Substance Requiring Attention (SRA). This was established in 2015 and includes three categories:

- Black list Solvay-SVHCs: Already undergoing a regulatory phase out process with a known deadline in at least one country or zone, or a restriction for uses relevant to Solvay.
- Red list Solvay-SVHCs: Currently included in regulatory lists of substances that could enter into a process of special authorization or restriction in the medium term.
- Yellow list S-SRAs: Substances requiring specific attention, such as substances under scrutiny by authorities, NGOs, scientists, and industries due to their known hazardous properties or potential effects.

Risk studies and Analysis of Safer Alternatives (ASA) for red and black Solvay-SVHCs placed on the market are underway, and substances are replaced with safer alternatives where feasible.

New ASA covering newly identified listed SVHC are being performed within one year. All current Analysis of Safer Alternatives are being reviewed every three years.

5.5.3. Indicators

SAFETY DATA SHEETS

Solvay currently places over 1,000 products on the market and produces safety data sheets (SDS) in 41 languages, as well as specific SDS for 63 countries. Product Stewardship programs give adequate information and technical assistance to customers, ensuring a good understanding of products and how to safely use and handle them. Each of our Global Business Units are responsible for ensuring that SDS are revised at least once every three years, or every time a substance undergoes significant modifications. Solvay manages product information centrally and as legislation continues to evolve the Group learns more about the conditions under which products are used, so as to record and assess any associated risks.

To make sure that customers are receiving new and updated Safety Data Sheets, and to limit the quantity of paper printed, Solvay uses an automatic system to send SDS by email. In 2023, this automated shipping function was activated for 100% of Solvay sales. This automatic delivery of the SDS was successful for 97.8% of shipments, where SDS were available for the delivery country and the customer’s email address was also available. When errors occur, corrections are done and the SDS are automatically or manually sent.

PRODUCT REGISTRATION

REACH is an advanced European framework regulation requiring companies to have detailed knowledge of substances, their hazards, and risks during use. This knowledge must be collected and organized into reliable and systematic safety information that includes all uses and risks incurred along the value chain. Solvay fully complies with the extensive REACH requirements for product registrations. We have registered 233 dossiers and are the lead or sole registrant for 95 substances. In accordance with the Cefic Action Plan program, we are also dedicated to improving the quality of REACH dossiers.

Regular updates of dossiers are performed according to REACH obligations, either as new information becomes available or at the request of the European Chemical Agency (ECHA). We have carried out 20 REACH dossiers updates in 2022 and 19 in 2023.

In addition, Solvay continues to adapt to new product regulations in many countries, notably to cope with emerging, REACH-like regulations in non-European countries. More specifically we have:

- registered 22 in 2021 for TIER One in the framework of Korean REACH and registered eight dossiers in 2023 for the next registration deadline in 2024 (TIER Two);
- reported 64 substances or polymers to be registered in the framework of KKDIK Reach Turkey by December 31, 2023 (active dossiers), and registered 11 lead dossiers;
- for UK REACH, Solvay successfully completed one new registration and 253 Downstream User Import Notifications (DUIN); and
- submitted two substances in the framework of the new Chinese MEE order N°12 in 2023.

Safer alternatives for marketed products: beyond legislative requirements

Solvay is closely monitoring the Solvay-SVHCs on several worldwide relevant lists (banishment, restriction, etc.) including EU candidate list and EU authorization list by identifying all marketed products containing a concentration above 0.1% of those substances, sold not only in the EU but worldwide.

We go beyond what is required by regulation, screening our own broader internal reference list of substances of very high concern (Solvay-SVHCs, as described above) for our products marketed worldwide.

	Units	2023	2022
All Solvay-SVHCs ⁽¹⁾			
present in marketed products above 0.1% on a worldwide scope	Number	26	24
Analysis of safer alternatives required ⁽²⁾	Number	17	19
Of which completed	%	94	68
Of which effective replacement achieved	%	13	15

(1) According to the black and red Solvay-SVHC lists. SVHCs manufactured by, or forming part of, the composition of products sold by Solvay worldwide. Reference period for the analysis: April 2022-March 2023.

(2) Analysis of Safer Alternatives (ASA) for potential substitution for an SVHC. A substance may be present in more than one product. One ASA can cover several substances (Grouping by the same concern).

09. IUCN: International Union for Conservation of Nature.
10. Candidate list released on January 17, 2023, and authorization list on April 13, 2022.

Analysis of safer alternatives is required and planned for a total of 17 combinations of products and applications. Of the 16 analyses of safer alternatives completed as of December 31, 2023, since the start of the program:

- two have led to effective replacement, either through SVHC substitution or reduction below required threshold, or through stopping production.
- two are ongoing, meaning that an alternative has been identified and discussed with customers for implementation.
- twelve have resulted in no available alternatives, either because no substitute is available, there are regulatory obligations to use SVHC for some applications, or because an alternative has not been requested due to the application in the final product.

There is only one substance listed on the EU candidate list (Bisphenol A). It appears on the Solvay-SVHCs inventory because the analysis is done worldwide. However, it is neither marketed nor sold in the EU.

Solvay’s ambition to phase out substances of very high concern

Solvay aims to phase out the Solvay substances of very high concern (Solvay SVHC) present in marketed products at a quantity of more than 0.1%, whenever feasible.

6. BETTER LIFE

6.1. Employee health and safety

GRI DISCLOSURES 2-25 3-3 403-1 403-2 403-3 403-4 403-5 403-6 403-7 403-8 403-9 403-10
MATERIALITY: PRIORITY
SDG 3

6.1.1. Definitions

Employee health and safety management encompasses occupational safety, industrial hygiene, and occupational health.

Occupational safety is about preventing work-related injuries. Accidents are mostly linked to falls at the same level, human energy, such as pushing, pulling or striking an object, and exposure while opening a line or system.

Industrial hygiene management encompasses the assessment, monitoring, and management of workers’ potential exposures to ergonomic, chemical, and physical hazards.

Occupational health includes all the preventive actions undertaken in order to protect and promote physical and psychological health at work, both collectively and for each individual Solvay employee.

In mid-2020, Solvay began using the OSHA definitions of occupational accidents in order to comply with GRI and enable comparisons outside Solvay. These are as follows:

- Occupational accident: A work-related unexpected and undesirable event resulting in damage or harm, namely injury or illness. Accidents on the way to or from home are not considered work-related unless the worker was traveling for Solvay at the time of the accident.
- Lost Time Injury or Illness (LTII): A work-related injury or illness that results in a work interruption of one or more days, not including the day of the accident.
- Lost Time Injury and Illness Rate (LTIIIR): The number of LTIIIs resulting from an accident per 200,000 work hours.
- Reportable Injury and Illness (RII): Work-related injury or illness resulting from an accident with severity above first aid, according to US OSHA 29 CFR 1904.
- Reportable Injury and Illness rate (RIIR): The number of reportable injuries or illnesses per 200,000 work hours.

6.1.2. Management approach

Solvay requirements for implementing management systems on our sites are covered under section 3.3. Health, safety, and environment management. The occupational health and safety management systems cover all Solvay employees, while external visitors, parcel delivery people, and transport drivers not performing loading or unloading on-site fall outside the scope. In addition, our safety management system applies to contractors.

Hazard identification and risk assessments are performed according to group procedures, which define minimum requirements for methods and the hierarchy of controls. They cover the following topics or activities:

- chemical hazard communication;
- chemical risk assessment and management;
- hearing conservation (noise exposure management);
- prevention of legionellosis;
- managing asbestos in buildings and facilities;
- respiratory protection equipment;
- Group requirements for occupational health;

- minimum safety requirements for lifting;
- working at height;
- working on powered systems;
- line breaking;
- working in confined spaces;
- working in an explosive atmosphere;
- lifting;
- excavation;
- traffic;
- personal protective equipment (PPE);
- work permits;
- management of change (MOC); and
- contractor management.

All procedures contain training requirements, guidelines, and on-boarding presentations for use in implementation on our sites. Quality, evaluations, and process improvements are ensured through the sites’ management systems. Site reporting processes identify unsafe situations, near-misses, incidents, or accidents, as well as those cases with potentially high severity, and also set guidelines for investigating incidents and taking corrective actions.

Risk assessments are performed in collaboration with occupational health experts. Occupational physicians perform risk-based medical surveillance, provide advice on improving and adapting working conditions, and promote physical and mental health. All these processes contribute to managing and minimizing risks at work.

On the shop floor, workers collaborate with industrial hygienists on risk assessments using SOCRATES (Solvay Occupational Risk Assessment Tool for Employees). This tool gives widespread, easy access to IH methods, tools and databases, consistently performs and documents IH risk assessments, and enhances traceability of an individual’s potential exposures throughout their working life. Workers are informed of their work-related risks by supervisors, industrial hygienists, and occupational physicians or nurses.

Formal joint management–worker health and safety committees are established on our sites according to country legislation. Solvay also contributes to complementary health insurance, for which the terms vary according to the country.

Initiatives to promote health are taken at site level, in collaboration with local physicians and nurses. Examples of such initiatives include nutritional advice, cardiovascular prevention programs, general check-ups, and fitness sessions led by trainers.

6.1.3. Indicators

The occupational health and safety indicators result from the safety culture approach implemented to protect everyone working at Solvay. This approach is explained in the Risk Management chapter of this Annual Integrated Report.

Solvay started recording reportable injuries and illnesses on July 1, 2020.

The reporting scope covers all sites under Solvay’s operational control for which the Group manages and monitors safety performance. This includes our manufacturing, research and innovation, and administrative sites, as well as a series of closed sites with limited activities, and covers Solvay employees and contractors working on these sites.

NUMBER OF ACCIDENTS

	Units	2023	2022
Fatal accidents – Employees	Number	0	0
Fatal accidents – Contractors	Number	0	0
H-RII – Employees	Number	7	7
H-RII – Contractors	Number	4	4
H-RII – Employees and contractors	Number	11	11
RII – Employees	Number	27	25
RII – Contractors	Number	18	22
RII – Employees and contractors	Number	45	47
LTII – Employees	Number	17	14
LTII – Contractors	Number	12	17
LTII – Employees and contractors	Number	30	31

Note: RII was introduced in mid-2020. In previous years, definitions of reportables were specific to Solvay and therefore cannot be compared.

HOURS WORKED

	Units	2023	2022
Work hours – Employees	1,000 hours	19,918	21,248
Work hours – Contractors	1,000 hours	13,493	13,141
Work hours – Employees and contractors	1,000 hours	33,411	34,389

Employees’ work hours are based on the sum of the monthly active internal workforce (headcount) multiplied by the coefficient of 2,000 hours for all countries and sites. Contractors’ actual work hours are reported monthly by all sites.

ACCIDENT FREQUENCY RATES

	Units	2023	2022
H-RIIR – Employees	Accidents per 200,000 hours worked	0.07	0.07
H-RIIR – Contractors	Accidents per 200,000 hours worked	0.06	0.06
H-RIIR – Employees and contractors	Accidents per 200,000 hours worked	0.07	0.06
RIIR – Employees		0.27	0.24
RIIR – Contractors		0.27	0.33
RIIR – Employees and contractors		0.27	0.27(1)
LTIIIR – Employees	Accidents per 200,000 hours worked	0.17	0.13
LTIIIR – Contractors	Accidents per 200,000 hours worked	0.18	0.26
LTIIIR – Employees and contractors	Accidents per 200,000 hours worked	0.18	0.18

Note: RIIR was introduced during 2020, making 2021 the first full year of application of the OSHA metrics.
(1) 2022 RIIR - Employees and contractors is different than the value published in “supplement of the information document of Solvay in November 2023” due to changes for the 2022 headcount figures and in the rules of split between Syensqo and the “new” Solvay Group as explained in the section 2.2 basis of preparation.

The Group objective of an RIIR below or equal to 0.32 for 2023 was achieved. The 0.27 performance is the result of the following actions implemented in 2023:

- Interactive safety dialogues in the field.
- Site leadership spending more time in the field.
- Near misses reporting.
- Process safety reporting including low events and actions.
- Solvay Life Saving Rules improvement initiatives with a focus on the top three based on incidents and audit findings to focus efforts on management of change, work on powered systems, and line breaking. Engage everyone at the site level.
- Field check assessment on a quarterly basis.
- Interactive workshops on these three Solvay Life Saving Rules to discuss each identified Solvay Life Saving Rules.

Industrial hygiene (IH)

A key aspect of our approach to protecting health is the systematic assessment and management of workers’ potential exposure to ergonomic, chemical, and physical hazards. Global industrial hygiene (IH) procedures define minimum requirements for Solvay’s IH risk assessments and management strategies, including the hierarchy of controls. The IH program encompasses:

- Comprehensive chemical inventories established and reviewed at site level, with screening and priority ranking of substances that carry potential health impacts.
- Solvay Acceptable Exposure Limits (SAELs) developed internally for insufficient or outdated established Occupational Exposure Limits (OELs).
- Occupational Exposure Banding (OEB) in cases where no established OEL exists or there is limited toxicological data. Solvay’s OEB approach provides a simple, quick, and easy-to-understand hazard ranking.
- Implementation of SOCRATES, a global tool at identified sites, ensuring:
 - widespread and easy access to IH methods, tools, and databases;
 - consistent performance and documentation of IH risk assessments; and
 - enhanced traceability of an individual’s potential exposures throughout their working life.
- Established KPIs that allow for identification and tracking of the completion of site chemical and noise risk assessments.

Occupational health

Key indicators for occupational health are:

- Occupational diseases: The incidence rate and causes of disease are used to define preventive and corrective actions.
- Advanced risk-based medical surveillance rate: Used to assess that our medical surveillance is effective.
- Human biomonitoring indicators: Used where applicable to assess chemical exposure and suggest preventive actions.
- Stress prevention and well-being at work (see chapter 6.2.2. of this Annual Integrated Report): Used to identify main causal factors and launch action plans at site and group levels.
- Health promotion: Promoting a healthy lifestyle at work and beyond.

RECOGNIZED OCCUPATIONAL ILLNESSES

	Units	2023	2022	2021
Occupational illness frequency rate (OIFR)	per million hours worked	0.25	0.33	0.50

OIFR is the total number of occupational illnesses recognized each year per million hours worked by Solvay employees. The number of occupational illnesses covers Solvay workers who are active, retired, or have left the company. In 2023, four of the five recognized occupational diseases were in retired workers, related to past asbestos exposure. One case of hearing loss was found in an active worker.

The figures of 2022 and 2021 have been recalculated for the new Solvay Company.

The majority of the recognized Occupational Illnesses from previous years (2022 and 2021) have been allocated to the perimeter of the new Solvay Company, while the number of hours worked concerns only the new Solvay Company. That is why the OIFR for previous years could seem artificially higher than what was published before the spin-off of Syensqo.

RECORDABLE OCCUPATIONAL ILLNESSES BY TYPE

	Units	2023	2022	2021
Hearing disorders	Number	3	2	0
Musculoskeletal diseases	Number	2	3	2
Other non-carcinogenic diseases	Number	2	1	1
Asbestos-related diseases and cancers	Number	20	27	20
Other cancers	Number	0	1	1
Not specified/Unknown	Number	0	0	0
Total	Number	27	34	24

The figures in the table above relate to recordable work-related illnesses contracted by Solvay employees who are active, retired, or have left the company.

The figures of 2022 and 2021 have been recalculated for the new Solvay company.

Advanced Risk-Based Medical Surveillance

A site is considered as performing Advanced Risk-Based Medical Surveillance if all the following criteria are fulfilled:

- The Chemical Risk Assessment completion rate is at least 70%. This is the ratio of the total number of Chemical Risk Assessments, both inhalation and dermal, completed by the site within the last five years, to the total number of Chemical Risk Assessments to be conducted based on the Chemical Risk Assessment List established by the site. Until 2022, we considered at least 30% for this criteria.
- The site regularly communicates identified potential occupational risks to the medical service provider.
- At least 70% of the employees scheduled for Risk-Based Medical Surveillance during the year have completed their medical visit.
- In 2023, 51% of our manufacturing and research and innovation sites fulfilled all the above criteria.

Human biomonitoring of exposure

Human biomonitoring (HBM) of exposure involves measuring the concentration of a substance or its metabolites in human fluids, such as blood or urine. It can be used to assess exposure to specific chemicals and helps to verify whether protective measures are effective.

In 2023, 14 sites performed HBM of exposure, for 25 different chemicals (substances or groups of substances).

HUMAN BIOMONITORING (HBM) OF EXPOSURE

	Units	2023	2022	2021
Sites performing HBM of exposure	Number	14	10	9
Sites with at least one result above the Biological Limit Value (BLV)	Number	0	0	0

The figures of 2023, 2022, and 2021 have been calculated for the new Solvay company.

Health promotion

In 2023, at 89% of our sites, health and well-being topics were covered during our Health and Safety Days events. In addition, survey results show that 96% of our sites report active promotion and support for the health and well-being activities listed in the following table:

	2023
Health and well-being topics during the Health and Safety Days	89%
Permanent multidisciplinary committee that sets and follows actions on well-being at work	73%
Training sessions on well-being at work for employees	73%
Training sessions on well-being at work for leaders	53%
Promotion of physical activity	71%
Promotion of balanced nutrition	53%
Promotion of good sleep and recovery	36%
Prevention of cardiovascular risk	33%
Prevention of tobacco consumption	27%
Prevention of addictions	27%
Prevention and screening for cancer	38%
Seasonal flu annual campaign	84%

6.1.4. Key achievements

In relation with well-being at work, two key achievements were made (see details in chapter 6.3.2. of this Annual Integrated Report):

- Well-being at work training has been provided to 1,438 managers on leading with a well-being mindset.
- A diagnosis on well-being at work and Diversity, Equity, and Inclusion (DEI) was made at company and site level. Seventy sites received their own report allowing them to make an action plan. This was also included in the STAR Factory project.

6.2. Critical incident risk management

GRI DISCLOSURE 2-27 3-3 307-1
MATERIALITY: HIGH
SDG 3 12 13

6.2.1. Definitions

Solvay's reporting of Process Safety Incidents is aligned with the globally harmonized metrics from the ICCA (International Council of Chemical Associations) and Cefic (European Chemical Industry Council). The Process Safety Incident rate (PSI rate) corresponds to the number of Process Safety Incidents per 100 employees, including both employees, assuming 2,000 working hours per worker, per year, and contractors. This rate is monitored and enables benchmarking with peers.

Chemical release:

Low and medium process safety events involve a release of chemicals from a chemical process which meets the consequence thresholds as defined by ICCA Globally Harmonized Process Safety Metrics.

Transport safety incidents are incidents occurring during the movement of a chemical product such as:

- loading or unloading at a Solvay site;
- circulating inside a Solvay site in a vehicle, on the way in or out of the site;
- circulating on public roads, rail, air, inland waterways or sea; and
- loading or unloading at an off-site location, if Solvay or a logistics provider contracted by Solvay is performing the loading or unloading.

6.2.2. Management approach

Process safety

Process Safety Management is a management system for designing and operating industrial processes that handle large quantities of hazardous chemicals. The topic applies to production sites and research and innovation center sites under operational control where a process risk may be identified. This is an operational perimeter excluding all sites that are not in the process scope: administrative sites, business, engineering, corporate, environmental rehabilitation, etc., but also external warehouses, quarries, and mines, among others. For preventing and controlling incidents in industrial processes, Solvay applies the Process Safety Management PSM Principles on all industrial sites, regardless of whether the site is covered by regulatory requirements.

Key elements are:

- Completion of Process Hazard Analyses to identify high-risk situations. These are performed on each unit with a unique risk matrix to quantify the risk level of every potential accidental scenario, combining severity and probability factors.
- Activation of an Emergency Response Plan in case of severe incidents on site. Relevant internal and external parties are informed through the application of Solvay's crisis management procedure. If needed, the Corporate Crisis Cell (crisis alert duty 24/7) is also activated.
- Systematic analysis of each incident is carried out as soon as possible, in order to identify root causes and implement preventive actions to avoid similar incidents in the future.
- Central reporting of Process Safety Incidents. The incident severity – medium, high, or catastrophic – is assessed by applying internal criteria, including consequences on-site or off-site, damage to the immediate vicinity, and quantity of spilled material.
- Publication of process safety bulletins for significant incidents, distributed to all sites. These bulletins are used by the sites as support materials for safety talks to increase the process safety knowledge of employees.

Transport safety

The major goal of the Transport Safety Management system is a reduction in incidents that could lead to catastrophic consequences. The main elements are:

- regulatory watch and compliance with applicable transport regulations;
- training;
- selection process for Logistics Service Providers, based on hazard and risk assessment;
- operational management of day-to-day transport operations, including loading and unloading;
- emergency preparedness and response for levels 1, 2 and 3;
- incident reporting and investigation; and
- auditing.

Indicators

Process safety

Solvay's target is to avoid any high, medium, or catastrophic severity incidents and to reduce the Process Safety Incident rate. In the dashboard you can see the situation with medium and high severity.

	Units	2023	2022
Process Safety Incident rate	Medium or higher severity incidents per 200,000 hours worked	0.42	0.82
Process safety incidents (medium, high, catastrophic) ¹	Number	50	95

High or catastrophic severity: reversible injuries off-site, or irreversible injuries on-site, or reversible environmental damage off-site, or damage to equipment with direct cost above €2 million. Medium severity incident: first aid injuries off-site, reversible injuries on-site, or operating permit limits exceedance, fire, explosion, rupture of a piece of equipment with damage above €2,500, or chemical release with amount above the ICCA thresholds.

Employees' work hours are based on the sum of the monthly active internal workforce (headcount) multiplied by the coefficient of 2,000 hours for all countries and sites. Contractors' work hours are reported monthly by all sites.

	Units	2023	2022
Process safety incidents (medium, high, catastrophic) with environmental consequences (medium, high, or catastrophic)	Number	7	14
Process safety incidents (M, H, C) with environmental consequences (M, H, C) of which with reportable operating permit limit exceedance and with a chemical release (L, M)	Number	5	10
of which without permit exceedance	Number	2	4

This consolidated data is aligned with the scope for headcount for all operational sites, including research and innovation centers with significant chemical process risks, but excluding mines, quarries, and laboratories without pilot plants.

Transport safety

All medium, high, and catastrophic transport safety incidents must be reported in the corporate reporting tool, with a detailed description and classification. Root cause analysis, including actions to prevent recurrence and lessons-learned bulletins are mandatory for all high and catastrophic severity incidents, and for medium severity incidents resulting in a fire or an explosion, as well as for HSPos (High Severity Potential) Incidents. These are low or medium severity incidents or near misses that might have been worse (high or catastrophic) if the circumstances had been slightly different.

TRANSPORT SAFETY INCIDENTS

	Units	2023	2022
Medium severity	Number	4	4
High severity	Number	1	0
Catastrophic	Number	0	0

6.3. Labor practices

GRI DISCLOSURES 2-30 3-3 401-2 403-4 407-1
MATERIALITY: HIGH
SDG 3 8

6.3.1. Definitions

Employee engagement is the level of commitment, passion, and loyalty an employee has toward their work, team, and company. Solvay believes that engagement increases performance through higher productivity and employee retention and that engagement is fostered by fair labor practices and well-being at work.

A constructive relationship with employees and their representatives, built on trust, is considered the basis of fair labor practices at Solvay. This relationship reflects the Group’s commitment to respect employees’ fundamental human rights and guarantee their social rights.

Well-being at work is a holistic concept which relates to all aspects of the quality of working life that ensure workers are safe, physically and mentally healthy, satisfied, engaged, and efficient. It addresses recognition and support, work-life balance, employee growth and development, and good communication and collaboration, based on International Labor Organization and World Health Organization definitions.

6.3.2. Management approach

Pulse surveys

Employee engagement is measured through confidential surveys open to all employees. This includes global surveys as well as local initiatives, such as “Voice of the People” surveys. The results of our surveys enable the Group, local management, and all operational managers to identify strengths and areas where the working environment and employee experience can be improved.

In 2023 we continued our series of short Pulse surveys. Two surveys took place in March and September 2023. Available in 14 languages, the Pulse surveys enable us to listen to the feedback and opinions of Solvay employees around the world. This not only promotes a feedback culture, where everyone can safely share their opinions and have open conversations with their team and leaders, but also helps to improve employee experience at work. Our objective was to equip leaders at all levels in the organization with insights about the well-being and experience of their team, foster open dialogue, and ensure continuous improvement throughout the year.

In November 2022, we conducted a survey for a diagnosis on well-being at work and DEI in collaboration with the University Jaume I. The data was analyzed in 2023, group and site reports were done, and actions were defined accordingly. More detail is provided in the next section “Better Life at work.”

Better Life at Work

Since October 2016, a multidisciplinary Committee on Better Life at Work (BLAW) has been in place to define and promote a well-being at work (WBAW) program. It includes occupational physicians and psychologists, human resources experts, health, safety, and environment experts, Global Business Unit representatives, and sustainable development experts, representing all regions.

In 2021, a new Better Life at Work strategy was launched, focused on three pillars:

- Governance: A multidisciplinary Better Life at Work Steering Committee, including representatives from our Human Resources (HR), Occupational Medicine, Health, Safety, and Environment (HSE), and Sustainable Development Functions, and an employee representative. Solvay’s Chief People Officer serves as the Sponsor.
- Observatory: The Better Life at Work Observatory includes (1) indicators gathered from HR and HSE data (absenteeism, accidentability, turnover, and diversity) displayed in the Better Life dashboard, (2) the quarterly Pulse surveys, (3) diagnosis and assessment on well-being at work and DEI (HERO-DEI, see below), and (4) the Burnout Observatory. Managers can consult the indicators in the dashboard.
- Positive actions: These are defined using the information gathered through the Observatory. In 2023, training sessions on well-being at work were provided to employees and managers (see below). Solvay offers mental health support for employees thanks to a global contract with WorkPlace Options, also covering employees’ family members, and the global network of occupational physicians and nurses.

For diagnosis and assessment on well-being at work we have collaborated with the University of Jaume I in Spain since 2001. They are involved with a similar approach in the European H-Work Project aiming to promote mental health in small- and medium-sized enterprises and public workplaces, drawing on funding from the European Union’s Horizon 2020 research and innovation program.

After a pilot phase, we carried out a HERODEI survey in November 2022, which included a diagnosis on well-being at work (HERO model) and DEI (Diversity, Equity, and Inclusion). This helps us to assess which risk factors we need to address for well-being at work, as well as the positive factors that we can build on to create a sustainable Better Life at Work. The participation rate was 64.7%. The results at company and site level were analyzed at the beginning of 2023.

- Each site with a participation rate above 40% received its own report in order to set their action plan. This is also included in our project STAR Factory. Seventy sites of the new Solvay received their report. In each report there was a benchmark with Solvay, an identification of the key drivers for engagement and burnout risk, and recommendations by priorities. Several explicative and sharing sessions were organized, as well as support.
- At company level the main drivers impacting well-being were:

1) Positive drivers (Resources): Support to individual development, Recognition from the leader, Inclusive leader; and

2) Negative drivers (Demands): Role ambiguity, Mobbing risk, Emotional dissonance.

Recommended actions were mainly oriented on Positive and Inclusive leadership, and on increasing Engagement and decreasing Burnout risk by acting in the main drivers mentioned above. That is why we decided to put a focus on leaders, offering worldwide training about “Leading with a well-being mindset.”

Between October 2022 and May 2023, workshops on leading with a well-being mindset were provided to leaders in all countries in collaboration with Empreinte Humaine. In total, 1,438 leaders were trained, in 150 sessions, 13 languages, and 18 countries, being the majority of them presential (these figures also include Syensqo). They covered topics such as healthy work, healthy leadership, and providing healthy support to collaborators. More than 75% of leaders rated the workshop very useful.

Solvay Global Forum

Regarding labor relations, discussions and activities are held at four levels: site, country, European, and global.

In 2015, Solvay created a global employee representative body, the Solvay Global Forum, composed of employee representatives from the main areas where Solvay operates, namely Europe, the US, Brazil, and China. Video conferences are held quarterly, bringing together the Solvay Global Forum and the Group’s top management to comment on and discuss the Group’s quarterly results and to keep everyone informed of the main new projects, like the Partial Demerger project. Two agreements have been signed with the Solvay Global Forum: Global Performance Sharing 2023 and Solvay Cares, the latter of which extended maternity and co-parent leave to 16 weeks. An ad hoc spin-off committee has also been set up, bringing together members of the Solvay Global Forum and the European Works Council to cover this major project.

European Works Council

We have been in permanent dialogue with our European Works Council (EWC) for more than 20 years. In 2023, the EWC met physically on several occasions and the EWC Secretariat met on a monthly basis, either virtually or physically, with senior group management, to help steer Solvay’s evolution. The main topics discussed were the Partial Demerger project and Solvay’s and Syensqo’s new operating models, actions taken by the Group to face the consequences of the Ukraine war, the energy crisis, the support given to employees to cope with high inflation, the Group Sustainable Development strategy, and Solvay’s financial results.

Solvay Cares

In February 2017 Solvay signed a global agreement guaranteeing a minimum level of welfare and healthcare protection for companies in which Solvay SA owns a share, directly or indirectly, of more than 50%. Solvay Cares was fully deployed in 2019 and aims to provide four major benefits:

- full income protection during parental leave, with 16 weeks for both parents;
- a minimum coverage of 75% of medical fees in the event of hospitalization or severe illness;
- disability insurance in the event of lasting incapacity; and
- life insurance, including coverage for the family or partner.

An addendum to the agreement was signed in December 2021, introducing more flexibility for parents to enjoy parental leave according to family needs, and adding the Employee Well-being Support program, through which we committed to giving all employees access to confidential mental health support as of December 2021. Since January 2023, globally aligned standards of the Employee Well-being Support Program have been applied, ensuring coverage not only for the employee, but also for all members of the employee's household. In 2023, a task force has been set up to initiate a Fair Living Wage program with a pilot in three countries: US, China, and UK. The initiative will be continued in 2024 and extended to other countries with a commitment to cover 100% of Solvay employees by 2026. In 2023, we have also introduced the caregiver leave: a maximum of five days to support or care for a loved one.

The IndustriALL Global Union Framework Agreement

On December 17, 2013, Solvay signed a Corporate Social and Environmental Agreement for the whole group with IndustriALL Global Union. This agreement is based on International Labor Organization standards and the principles of the United Nations Global Compact. It is a tangible expression of Solvay's determination to ensure that basic labor rights and the Group's social standards in the areas of health, safety, and environmental protection are respected at all of our sites.

In March 2022, we renewed our Global Framework Agreement with IndustriALL. We strengthened the content of the agreement in several important areas, including teleworking rights, EU due diligence and UN binding treaty relating to the supply chain, just transition, skills transfer, and workers' rights to health and safety.

With this renewed and strengthened agreement, Solvay commits to respecting the international social standards defined by the International Labor Organization and the principles of the UN Global Compact, including in countries that have not ratified it, as well as the OECD Guidelines for Multinational Enterprises.

The four-year agreement includes serious commitments on due diligence along the supply chain. The agreement establishes a new working group of workers and management to investigate suppliers' respect for core labor rights and seek remediation where problems are found. Solvay commits to suspend contracts with suppliers that fail to remedy human rights and environmental abuses following warnings.

In 2023, IndustriALL representatives, together with Solvay management, visited three of our German subsidiaries in order to assess labor relations. It was an opportunity to confirm the positive working atmosphere, safety situation and industrial relations, and to identify areas for improvement.

6.3.3. Indicators

In 2023, two Pulse surveys were launched in March and September to measure employee engagement worldwide. An average of 6,000 responses were gathered with a response rate of around 67%.

Each survey asked ~15 questions measuring several topics important to the organization such as well-being, motivation, performance and recognition, safety, ethics and compliance, and organizational transformation.

Additionally, employees were asked how they were feeling with over 77% on average feeling "OK or better" which is slightly better than last year. In addition to our Employee Assistance Program, Solvay has put together a guide for managers to help them better support their teams and a flier for all employees, available in multiple languages. These provide guidance and suggestions about where to turn for help and encouragement, in order to better support individuals who have reported feeling "less than OK."

DURING THE LAST FOUR WEEKS, IN GENERAL, HOW HAVE YOU BEEN FEELING?

	Units	March 23	Sept. 2023
OK or better	%	77	78
Less than OK	%	23	22

We also include two engagement questions in our Pulse survey annually. This revealed that about 76% of employees were satisfied with Solvay as an employer and that about 72% would recommend the company as a great place to work.

Employee Representation Indicator

All Solvay employees are covered by a collective agreement. This is the IndustriALL Global Union Framework Agreement which is behind the creation of the Solvay Global Forum, and a signatory to agreements such as the Solvay Care Agreement and the Solvay Profit Sharing plan.

Trade unions are present at a majority of Solvay sites around the world. Union membership is estimated at 30% in Europe, 25% in South America, 6% in the US, 40% in Mexico and 45% in APAC (AU, JP, KR) with the exception of China (99%).

6.3.4. Key achievements

First Employee Share Purchase Plan launched with high level of subscription

In December 2021, the Group launched a Global employee shareholding initiative that the Solvay Global forum wished to be an inclusive, simple, and meaningful way to create sustainable shared value for all. The Solvay Shares program is now operational to employees around the world, irrespective of their position or grading (excluding executive management). Employees get one free share on registration, then one free share for every two shares purchased. For every two shares they own after a lock-in period. Of our employees, 38% from 22 countries have subscribed to these shares, and get the same rights as every other shareholder. This program should increase employees' understanding of the Group's performance, as well as their sense of belonging.

2023 Solvay Cares Agreement: A new commitment that supports caregiving

In 2023, Solvay CEO and Solvay Global Forum Coordinator have signed a new Solvay Cares Agreement. In addition to the current benefits, Solvay now supports employees with caregiving duties. Employees can take a maximum of five days a year to handle unexpected situations where they must care for a loved one.

Solvay opened a bank of days off and offered 40 days off to launch the program. Employees can also donate days off to their colleagues.

Solvay Cares already offers a minimum level of protection in terms of welfare and healthcare for all its employees worldwide. This protection includes major healthcare costs, disability leave, maternity leave, paternity leave, adoption leave, support of the family in the case of the death of an employee, and employee well-being support – and now caregiving is included. One of the key measures we took recently was to broaden our Solvay Cares benefits by providing 16 weeks of parental leave to all co-parents employed by the company regardless of gender.

6.4. Diversity and inclusion

GRI DISCLOSURES 3-3 405-1 405-2
MATERIALITY: PRIORITY
SDG 8

6.4.1. Definitions

Solvay defines diversity, equity, and inclusion in the following way:

- Diversity: The representation of various identities and differences of individuals in a group.
- Equity: Creating equal access to opportunity by recognizing the existence of advantages for some and barriers for others, promoting justice, impartiality and fairness within procedures, processes and distribution of resources by institutions and systems.
- Inclusion: Actively and intentionally engaging people with different identities and enabling them to feel valued, able to fully contribute, and be welcomed within a given setting.

Management categories are defined on the basis of the Hay Job Evaluation Methodology:

- Senior management: Hay points 924 and above.
- Middle management: Hay points from 531 to 923.
- Junior management: Hay points from 304 to 530.

For the Diversity and inclusion indicators, the active internal workforce on the December 31, 2023, has been considered.

6.4.2. Management approach

We have identified nine action plans to foster diversity, equity, and inclusion:

- Diversity
 - Accelerate gender parity at all mid and senior levels.
 - Make our workplace more accessible for people with disabilities.
 - Develop Employee Resource Groups (ERGs) to create both a diverse work environment and an inclusive culture within the organization.
- Equity
 - Assess if there are undesired pay gaps and close them.
 - Ensure fair recruitment: all mid and senior level job openings to have a shortlist comprising 50% of under-represented groups, including women.
 - Ensure equitable access to career opportunities and development: set up mentor/mentee programs starting with under-represented groups.

- Inclusion
 - Build an inclusive employee experience: set up an inclusion index, monitor progress, and continuously improve.
 - Development program for Solvay leaders to grow and nurture an inclusive mindset.
 - Build a culture in which individuals feel empowered to speak out or speak up when they experience or witness non-inclusive behaviors.

6.4.3. Indicators

At group level, we have identified five areas of focus for diversity, which receive specific attention and monitoring to ensure consistent improvement across the organization:

- 1) Improving the gender mix at all levels of the organization.
- 2) Leveraging the generational mix to optimize learning, knowledge, and experience.
- 3) Developing national and cultural talent that mirrors growth opportunities.
- 4) Enriching the team mix by leveraging experiences and backgrounds.
- 5) Measuring the ratio of base salary of women to men by management categories in our largest countries of operation.

Country- and site-specific actions are also crafted in response to the local context, through Solvay’s sustainability network and best practices.

WOMEN IN SENIOR AND MIDDLE MANAGEMENT

	Unit	2023	2022
Senior and middle management	%	26.3	28.8

With the spin-off of Syensqo, the population of mid and senior management at Solvay shrank by -4.3%, resulting in a drop of the proportion of women in mid and senior management from 28.8% (end of 2022) to 26.3% (end of 2023) without changing Solvay’s dedication to gender parity within 10 years.

GENDER DIVERSITY BY EMPLOYEE CATEGORY

	Units	2023	2022
Women in senior management	%	23	21
Women in middle management	%	27	30
Women in junior management	%	38	38
Women in non-managerial positions	%	20	19
Total women in Solvay	%	24	24

AGE GROUP BY EMPLOYEE CATEGORY

	Units	2023	2022
Senior management	Headcount	105	114
Percentage under 30 years old	%	0	0
Percentage between 30-49 years old	%	27	34
Percentage 50 years old and older	%	73	66
Middle management	Headcount	975	1,014
Percentage under 30 years old	%	0	0
Percentage between 30-49 years old	%	45	47
Percentage 50 years old and older	%	55	52
Junior management	Headcount	1,768	1,864
Percentage under 30 years old	%	6	7
Percentage between 30-49 years old	%	66	67
Percentage 50 years old and older	%	28	26
Non-managerial	Headcount	6,257	6,387
Percentage under 30 years old	%	14	14
Percentage between 30-49 years old	%	53	54
Percentage 50 years old and older	%	33	32

SOLVAY’S WORKFORCE BY AGE

	Units	2023	2022
Under 30 years old	Number	971	1,002
Between 30-49 years old	Number	4,962	5,221
50 years old and older	Number	3,170	3,155
Total headcount	Number	9,105	9,379*

**2022 Solvay Group headcounts have been restated from 22,047 to 21,998 (i.e., -49 headcounts), due to retroactive employee data changes performed in 2023 (inactive headcounts departure, new hires, terminations). This 49 headcount gap has been allocated Syensqo (60.45%, i.e., -30 headcounts) and the new Solvay (39.55%, i.e., -19 headcounts).*

According to the above table, the age structure is currently:

- 34% older than 50;
- 56% between the ages of 30 and 49; and
- 11% younger than 30.

Solvay performs regular employee surveys to take the pulse of its workforce. Once per year, the survey is dedicated to measuring the feeling of inclusion and well-being; however, due to the Solvay spin-off in 2023, the next inclusion and well-being survey was postponed to 2024.

Employees have the ability to self-identify, allowing the identification of any inclusion experience gaps. Based on the 2022 survey, which was answered by 64.6% of Solvay’s workforce:

- 4% of respondents self-identified as having a disability (visible or invisible, such as mental health challenges);
- 2% of respondents self-identified as LGBTQ+; and
- 8% of respondents self-identified as a member of an ethnically under-represented group in the country that they live in.

RATIO OF BASIC SALARY OF WOMEN TO MEN BY MANAGEMENT CATEGORY

The table below represents the ratio of unadjusted (without correction for seniority) average pay between male and female employees where the average pay of male employees is 1.00:

Country	Junior management	Middle management	Senior management
Belgium	1.19	0.94	0.66
Brazil	1.00	1.05	1.07
China	1.11	0.97	ND
France	0.97	0.98	0.62
Italy	0.96	0.89	ND
US	1.00	1.01	ND

***Not Disclosed (ND): Too few data points in one or two measurement groups to make a statistically meaningful measurement.*

We created a statistically-sound model for computing an “expected salary” by country and job class, against which we measured pay gaps. On that basis a pay gap review was conducted for 951 employees that were identified as priority for manual analysis. When the pay gap could not be objectively justified by performance, seniority, or another objective reason, it led to an off-cycle salary increase, performed in January 2023. This exercise was conducted in a gender neutral manner.

6.4.4. Key achievements

Driving momentum and engagement through our Employee Resource groups (ERGs)

This year, we had a total of nine employee resource groups (ERGs) led and driven by our employees to create a network and community for the diversity of our company. The Voice of Asia ERG, aimed at establishing mutual understanding between Asian and Western cultures, officially launched, sharing their mission with individuals with the company. In addition, our LGBTQ+ Alliance ERG created the Transgender and Gender Non-Conforming Support group and spearheaded a new partnership with The GenderCool Project, a US non-profit helping replace negative stereotypes and misinformation about being transgender and non-binary, presenting the world with positive stories about young non-binary and transgender people who are thriving.

Co-sponsored by the LGBTQ+ Alliance ERG, our site in Anan, Japan, collaborated with the Japan LGBT Association to further engage employees on DEI. A seminar was held in which over 70 participants attended both on-site and virtually. In addition, the Japan LGBT Association welcomed a member of the LGBTQ+ Alliance to speak on their radio show to discuss Solvay and its DEI activities.

Lastly, Solvay’s ADAPT ERG celebrated Disability Awareness Month for the first time, kicking-off with a Disability Awareness Panel featuring our Chief People Officer, Disability:IN, and one of Solvay’s sponsored paralympians. Other events from the month included a session with Lingvano to bring awareness on sign language and its importance to the community. At the end of last year, we also partnered with Wipro to launch a diagnostic of our digital accessibility practices to ensure employees can thrive in the workplace.

6.5. Recruitment, development, and retention

GRI DISCLOSURES 2-7 2-8 3-3 401-1 401-2 404-1 404-2 404-3
MATERIALITY: HIGH
SDG 8

6.5.1. Definitions

Recruitment, development and retention provide data linked to talent management. This relates to how Solvay is attracting, retaining, and developing talent and includes details on career management and access to training, coaching, and mentoring that enables each employee to take the lead in developing their career and reaching their full potential.

Headcount refers to employees that have a contract with Solvay and are classified as active, as they have a position in the organizational chart. Full-Time Equivalent (FTE) corresponds to the working time capacity of active employees. Apprentices, trainees, and students are excluded from our figures.

6.5.2. Management approach

Recruitment and retention

Of the 983 positions recruited externally in 2023, 526 were filled by employees aged below 30. The Group also welcomed 76 apprentices and 167 trainees.

Onboarding newcomers

Of all newcomers who joined Solvay in 2023, 92% were satisfied with the hiring process and their decision to join the Group.

Learning and development

AVERAGE HOURS OF TRAINING PER EMPLOYEE

By management level	Units	2023	2022
Executive manager	Hours	11:57	13:37
Senior manager	Hours	14:08	15:36
Middle manager	Hours	14:26	11:28
Junior manager	Hours	17:27	16:17
Non-managerial	Hours	13:34	08:21

AVERAGE TRAINING HOURS

By gender	Units	2023	2022
Women	Hours	16:42	16:26
Men	Hours	12:58	12:22
Total		14:04	13:23

Performance and development cycle

The performance and development cycle applies to the entire managerial population. It is also used by about 1,035 non-managerial employees, representing 33% of the non-managerial population. Local performance and development tools and processes are available for the population not covered by the performance and development cycle online tool.

6.5.3. Indicators

In 2023, Solvay’s total headcount was 9,105 active employees. The number of Full-Time Equivalent (FTE) employees was 9,043.4. Apprentices, trainees, and students are excluded from this figure.

SOLVAY’S WORKFORCE BY REGION

	Units	2023	2022
Europe	Number	5,524	5,616
Women	%	25	25
Permanent staff	%	97	97
Asia-Pacific	Number	1,195	1,297
Women	%	32	32
Permanent staff	%	84	77
North America	Number	883	963
Women	%	20	18
Permanent staff	%	100	100
Latin America	Number	1,503	1,504
Women	%	18	18
Permanent staff	%	99	97
TOTAL HEADCOUNT	Number	9,105	9,379
Women	%	24	24
Permanent staff	%	96	94

SOLVAY’S WORKFORCE

	Units	2023	2022
By contract and by gender			
Permanent contract	Number	8,738	8,854
Of which women	%	24	24
Temporary contract	Number	366	526
Of which women	%	36	33
By employment type			
Full-time contract	Number	8,869	9,144
of which women	%	23	23
Part-time contract	Number	236	235
Of which women	%	63	62
By employment category			
Senior manager	Number	104	114
Middle managers	Number	975	1,014
Junior manager	Number	1,768	1,864
Non-managerial	Number	6,257	6,387
TOTAL HEADCOUNT	Number	9,105	9,379

HIRINGS

	Units	2023	2022
By region			
Asia-Pacific	Number	91	127
Europe	Number	586	745
North America	Number	124	145
Latin America	Number	184	234
By gender			
Male	Number	600	797
Female	Number	350	438
By age			
<30	Number	526	605
30-49	Number	370	570
>49	Number	57	62
TOTAL HIRINGS	Number	984	1,251

ALL LEAVES

	Units	2023	2022
By region			
Asia-Pacific	Number	109	118
Europe	Number	468	589
North America	Number	78	112
Latin America	Number	142	183
By gender			
Male	Number	550	668
Female	Number	247	335
By age			
<30	Number	169	193
30-49	Number	301	426
>49	Number	327	384
TOTAL LEAVES	Number	797	1,003

VOLUNTARY LEAVES

	Units	2023	2022
By region			
Asia-Pacific	Number	51	69
Europe	Number	181	213
North America	Number	32	50
Latin America	Number	36	59
By gender			
Male	Number	195	260
Female	Number	106	131
By age			
<30	Number	83	98
30-49	Number	176	239
>49	Number	41	54
TOTAL VOLUNTARY LEAVES	Number	301	391

6.5.4. Key achievements

In 2023, Solvay made a significant push towards DEI, through different initiatives such as the collection of information from candidates and employees – on a voluntary and self-declaration basis – to better understand the strengths and room for actions. Additionally, two major partnerships were built with major DEI associations to better diffuse inclusion culture within the Group and promote our engagement on this important matter.

On the recruitment angle, the Group started to develop an in-depth workforce needs planning, to accelerate both internal movement, and offer more opportunities to our people, as well as external hiring to secure attracting the best talent on the market.

As a recognition of our people strategy, Solvay has been awarded as a Great Place to Work® for three of our most important countries around the globe. This recognition is granted following a survey conducted among all local employees, assessing various angles of our HR practices.

Linked with our Partial Demerger roadmap, special care was provided for employees in order to mitigate the changes and impact, while ensuring business continuity, through access to dedicated well-being moments, peer-to-peer sessions, and deepened HR support. This was also a major opportunity for many colleagues to take part of once-in-a-lifetime projects and acquire new skills.

One of the most powerful enablers for employees has been the rollout of our STAR Factory massive investment program. Aiming to reshape the future of our manufacturing sites, it has proven to be a unique learning experience for hundreds of people at all levels, discovering new skills, enhancing digital capabilities, and opening new career paths.

Over the past year, our organization has made remarkable progress in advancing the skills and knowledge of our team. The Sales Academy launched 15 extensive courses, blending e-learning with instructor-led sessions, attracting 424 unique participants for a total of 1,035 course completions, highlighting our commitment to ongoing learning and professional growth.

Our Leadership Academy's journey saw 222 leaders participate, reflecting our dedication to cultivating leadership excellence. The involvement of eight ambassadors significantly enhanced our global presence and organizational growth. The Career Catalyst Program, offering self-reflection and career development resources, engaged 172 employees in 2023. Additionally, language development through Rosetta Stone was utilized by 718 employees and their families, covering 14 languages.

In 2023, our workforce at Solvay dedicated 4,771 hours to skill enhancement via the digital platform, averaging 2.3 hours per person. This substantial commitment to skill development projects demonstrates Solvay's focus on nurturing a knowledgeable and adaptable workforce ready to meet the dynamic demands of the industry.

6.6. Corporate citizenship

GRI DISCLOSURES 3-3 413-1
MATERIALITY: HIGH
SDG 17

Solvay's Corporate Citizenship program is our guide to making a positive impact on society at large, and our stakeholders, partners, employees, investors, local communities, customers, and others. The contributions we make are derived from our technologies, solutions, and innovations, as well as our spirit of service and giving. Disclosure of Solvay's indirect economic impact is provided in this section.

6.6.1. Definitions

Solvay remains deeply committed to philanthropic endeavors through our contributions to worldwide societal challenges, supporting projects in three distinct areas: Protecting the Planet, Nurturing Innovation, and Fostering Education. Our initiatives in each of these three categories are closely aligned with our business, including our active involvement in several flagship endeavors that truly reflect the way we partner with our stakeholders.

6.6.2. Management approach

The Corporate Citizenship Steering Committee is composed of five members and chaired by Solvay's Chief Executive Officer. The Committee gathers three times a year, approves budgets, and decides on projects costing €50,000 or more.

Business Programs for Social Needs are programs that generate business value through addressing social needs. These programs fall under the governance of the relevant GBU.

Site directors are accountable for developing and implementing each site's societal actions plan. This involves assembling a dedicated working group including the site director, HR manager, communication manager, local sustainability correspondent, and employee representatives. Employee initiatives are encouraged and supported. An example of this is our Citizen Day actions: the concept is proposed by the Corporate Citizenship committee, but implemented by the individual sites.

6.6.3. Indicators

Citizen Day 2023

Citizen Day gives employees around the world the opportunity to engage in actions with local communities. The event was created in 2019 to encourage employees to act for the planet and local communities.

Citizen Day 2023 focused on our 160th anniversary celebration. Over the course of the year, we've taken a closer look at the early days of Solvay, the role of women in Solvay's history, and our commitment to science, social responsibility, and sustainability, and the spirit of mentorship.

Citizen Day 2023 saw employees across all sites worldwide take action to create a better future through mentorship, hosting open days with local communities, hosting a webcast with a top expert on the chemistry of cooking, and organizing workshops and games for employees to re-discover and celebrate Solvay's major milestones. Citizen Day activities took place at global, site, team, and individual levels, and in both virtual and in-person formats.

Key figures from Citizen Day 2023 include:

- 6,900 participations, of which 2,600 external people from local communities taking part in our open days, volunteering or mentoring events;
- more than 40 activities across the board; and
- 21 participating sites.

Local societal actions in 2023

Solvay defines societal actions as a volunteer activity developed by our sites, extending beyond our established boundaries, with the goal of generating positive impact on society or addressing social and environmental challenges. These actions are carried out and designed to promote well-being, contribute to the betterment of communities, and align with one or more of the United Nations Sustainable Development Goals (SDGs).

In 2023, on the basis of voluntary reporting, 35 sites reported that more than 4,000 participants had participated in societal actions, while noting that an employee may have participated in several actions.

The total amount donated through societal actions is around €400,000, on the basis of voluntary reporting.

Societal actions invested in education, mentoring, and training for students and children. Sites opened their doors to the community, offered students training programs, and training to raise awareness on sustainable development. Societal actions supported local communities through investments in accessibility and landscaping, food donations, blood donations, clothing collections, and essential goods distributions.

6.6.4. Major projects

CERN: Fostering interest in STEM and STEM careers

The CERN-Solvay Education Programme was launched in January 2022. Designed to foster interest in science, technology, engineering, and mathematics (STEM) and STEM careers, the program combines both online and on-site learning at CERN, starting with education content aimed at a global online audience and progressing to an opportunity for students to engage more deeply with research at CERN.

The program is part of the education portfolio of Science Gateway, CERN's new flagship project for science education and outreach. The program has three levels:

- Level 1: Online social media education content.
- Level 2: Online courses for high school students.
- Level 3: On-site international Solvay camp.

XperiLab

The Foundation Enterprise Institute was set up by the Royal Institute of Natural Sciences in Belgium and Solvay to help raise awareness of science among young people and to provide teachers with tools they do not always have in the classroom.

Since 2010, the Foundation has been running the XperiLab project. It consists of a 16-meter long, 32-tonne truck that unfolds into a laboratory capable of accommodating a complete class of 10-14-year-old students, giving them an opportunity to experience science in a positive way, encouraging them to consider scientific and technological careers as a serious option. The laboratory truck goes from school to school, getting young people in Belgium involved in science. The approach is supported by the Ministers of Education of the three Belgian communities and the objective is to welcome three classes to the truck per day.

7. SUSTAINABLE PORTFOLIO

7.1. Product design and life-cycle management

GRI DISCLOSURE 3-3 416-1
MATERIALITY: PRIORITY
SDG 12, 13

7.1.1. Definitions

Solvay's Sustainable Portfolio Management (SPM) focuses on sustainable business solutions. The SPM methodology is designed to boost Solvay's business performance and deliver higher growth, by letting decision makers know how our products contribute to sustainability with regard to two factors:

- The environmental footprint related to their production and associated risks and opportunities, based on cradle-to-gate Life Cycle Assessments (from resource extraction to the factory gate, before it is transported to the consumer).
- How their applications create benefits or challenges from a market perspective, based on a qualitative assessment using a cradle-to-cradle scope.

Life Cycle Assessment (LCA) is a tool for compiling inputs and outputs, along with an evaluation of the potential environmental impacts of a product system throughout its life cycle. LCA methodologies follow international standards, namely ISO 14040, ISO 14044, and ISO 14046 norms.

A sustainable solution is defined by Solvay's Sustainable Portfolio Management tool as a product in a given application that makes a greater social and environmental contribution to the customer's performance and, at the same time, demonstrates a lower environmental impact in its production phase.

7.1.2. Management approach

SPM assessments are performed every year in order to capture the most recent signals from the market and cover more than 80% of group revenue. Since its implementation in 2009, the Sustainable Portfolio Management tool has been widely adopted by Solvay Global Business Units and Functions to integrate sustainability into their key processes:

- The Sustainable Portfolio Management profile is an integral part of strategic discussions between Global Business Units and the Executive Committee.
- The SPM tool is used to evaluate merger and acquisition projects, to determine whether an investment is feasible in light of Sustainable Portfolio targets.
- Investment decisions (capital expenditure above €4 million and acquisitions) made by the Executive Committee or the Board of Directors include a sustainability aspect that involves an exhaustive SPM analysis of the potential investment.
- All research and innovation projects are evaluated using SPM.
- SPM is used in marketing and sales to engage customers on fact-based sustainability topics, such as climate change action, renewable energy, recycling, and air quality, with the goal of differentiating and creating value for Solvay and the customer.

Solvay Life Cycle Assessments are managed by a dedicated corporate team with direct links to all business units and services. Having a dedicated LCA team makes it possible to maintain a high level of staff competency and coordinate updates of the main methodologies used based on best practice. Core LCA activity is based on recognized tools, software, and databases, and we also have our own database, specific to Solvay business and innovation segments.

The LCA team is also called upon to support business activity concerning customer relations, by sharing environmental and LCA data on products to enhance understanding and environmental impact assessments along the value chain, from cradle-to-grave or recycling. Examples include the automotive sector, the construction sector, and Product Carbon Footprint declarations for our customers.

Taking part in world class Life Cycle Assessment platforms

- To maintain a high level of LCA expertise, we participated in 2023 in the following collaborative platforms:
- International Reference Centre for the Life Cycle of Products, Processes and Services (CIRAIG): Solvay joined CIRAIG in 2012 as an industrial partner, ensuring access to high level research and expertise on Life Cycle Assessment methodologies.
 - Association Chimie du Végétal: Solvay is a member of this association in France focused on the use of bio-sourced materials in chemistry.
 - SCORE Life Cycle Assessment platform: This platform was created in March 2012 to promote collaboration between industrial, institutional, and scientific actors, and to foster positive developments in environmental quantification methods, particularly in Life Cycle Assessments, to be shared and recognized at European and international levels.
 - Roundtable for Product Social Metrics: This association of industry representatives and consultants establishes guidelines for assessing the social impacts of industrial product life cycles.
 - SETAC: Solvay has been a member of the SETAC LCA steering committee, an incubator for developing life cycle assessment (LCA) to advance the science, practice, and application of LCAs to reduce the resource consumption and environmental burdens associated with products, packaging, processes, or activities.

7.1.3. Indicators

In 2023, we continued to perform cradle-to-gate Life Cycle Assessments to cover our new products and the product changes. LCA team manages a product database which is continuously updated to include the most recent industrial or innovation data.

REVENUE BREAKDOWN BY SPM HEAT MAP CATEGORIES

	Units	2023	2022
Solutions	%	44	43
Potentials	%	15	15
Transitions	%	23	26
Challenges	%	10	8
Not evaluated	%	8	9

In 2023, the proportion of net sales from sustainable solutions improved by one percentage point. Although the net sales decreased about 12% between 2022 and 2023, our sales of products in Solutions decreased only by 9%, explaining this increase and showing that those products are offering a unique solution in the market. This is driven by the automotive market with Silica, the air and water treatments with Soda Ash and Peroxides, and better market alignment of our solutions toward sustainability with Peroxides.

Last year, we substituted the Neutral category with two new categories: Transitions and Potentials. The Potentials category mirrors the potential to join the Solutions category by acting on the manufacturing environmental footprint which do not have negative nor outstanding sustainability performance, if any. These are products that consumers need, but which environmental footprint can be improved. The Transitions category identifies low negative sustainability.

Starting in 2024, the SPM tool will be reviewed in order to help us to track and follow new ESG material risks and opportunities. All the analysis and results will also help to support the Group strategy.

External validation

Since 2009, with the exception of 2019 and 2020, Arthur D. Little (ADL), our partner in developing and improving our SPM methodology, has performed an in-depth verification of our market alignment results. In 2022, ADL screened every Product Application Combination in the database and 70 PACs were selected for deeper review, covering about 15% of the global net sales. In 2023, there was no review performed by Arthur D. Little (ADL).

7.2. Circular economy

SDG 12, 13

7.2.1. Definitions

- Circular economy is a sustainable approach to business that aims to decouple economic growth from consumption of natural resources. Solvay's Circular Economy Business Solution Program is underpinned by a transition to renewable energy sources. It is based on three principles:
- Shifting our product portfolio to bio-based feedstocks, recycled-based feedstock, and CO₂-captured based feedstock.
 - Retaining the value of the products and materials currently in use by enabling product recycling (process additives and technology) or recyclability by design.
 - Designing products that increase the longevity of reusable materials.

- We use the following definitions:
- Renewable resources: Materials that are continually replenished at a rate equal to or greater than the rate of depletion. This includes plant-based materials from cultivation and animal-based materials from breeding. To fit in a circular economy, the material should be produced from food waste or using regenerative production practices.
 - Renewable energy: Energy produced from renewable resources, namely solar, wind, hydroelectric power, biomass, or geothermal. Energy provided by technological waste, such as solid recovered fuels, is not considered. Sales of energy to third parties are not included.
 - Products enabling increased durability: Products designed to increase the longevity and durability of other products further down in the value chain in such a way that encourages longer use than the industry standard and at scale, without compromising circularity at the end of the product's functional life.
 - Products enabling recycling: Products designed to increase the recycling yield, with regard to quality and quantity.

The measurement of products based on recycled or renewable materials and renewable energy is weighted by applying a factor of 85% to renewable materials and 15% to renewable energy, according to the average manufacturing cost weight. A similar approach has been defined at the research and innovation level to monitor the contribution of innovation projects to Solvay's circularity ambition.

7.2.2. Management approach

- We define circular revenues as revenues generated with products and solutions that meet the following specific requirements:
- made of bio-based, recycled-based, and CO₂ captured carbon based raw materials, or produced with renewable energy;
 - designed to increase the lifespan of end-products in such a way that encourages longer use than the industry standard in practice and at scale (e.g., marketing repair rather than replacement, timeless design with durable material choices) and in such a way that does not compromise circular treatment at the end of functional life; and
 - innovative with regards to the recycling of materials in closed and open loops, and business models: designed to increase the recycling yield (quantity and quality) of the customers products.

The transformation of Solvay into a circular economy model is embedded in our business strategy. We are working individually and with customers, suppliers, and partners to identify opportunities where we can leverage our capabilities.

Chemistry, as a science and an industry, is a tremendously relevant and powerful enabler of material transformation and re-use.

Indicators

We monitor our progress in circular sales in accordance with the three principles of Solvay's circular business solutions, outlined above.

	Units	2023	2022
Sales of products contributing to the circular economy (% Group sales)	%	4	5
Sales of products based on recycled or bio-based resources or produced with renewable energy (% Group sales)	%	3	3
Sales of products increasing longevity (% Group sales)	%	2	1
Sales of products enabling recycling (% Group sales)	%	0	0

These indicators were deployed in 2022. Solvay notably measures final products' circularity based on their renewable content. As of now, we calculate the renewable content using the mass of renewable reactants (as shown in our bills of materials) over the mass of the final product. This approach has been reviewed by Ellen MacArthur Foundation's Circulytics team and has been applied consistently over the years. We identified limits in accuracy to this approach as the cumulated mass of all reactants might be higher than the final mass of products for some products (due to evaporation processes, waste, and by-product generation) leading to a potential uncertainty of the final renewable content. Therefore, for 2024, if we keep the same KPs, we will review the approach in order to bring the accuracy of renewable content measurement to the highest standard and better reflect our contribution to circularity in our supply chain.

The Circularity KPI “share in circular revenues” is calculated by adding:

- sales of products increasing longevity in the use phase downstream in the value chain;
- sales based on recycled or renewable materials (85%) and renewable energy (15%); and
- sales enabling recycling at the end-of-life downstream in the value chain.

Potential double counting is avoided by considering the above mentioned order of priority.

7.2.3. Key achievements

To meet the unmet needs of our customers and to address the transition of our strategic markets in a circular economy, we accelerated our transformation.

At the Torrelavega site we used to send bottom ashes to a landfill. Four years ago, we started discussions about byproduct circularity. We stopped thinking about the ashes as a waste and we started thinking about them as an opportunity for value creation. We needed to create an external collaboration to develop a second life for our byproducts. We did so with a cement plant partner, with whom we worked closely to sort, adapt, and upgrade our ashes in order to meet their needs and quality specifications. Today it results in a win-win situation that is possible thanks to transparency, flexibility, and agility.

We launched our new SOLSYS® Bio Etac solvent. To advance sustainability in the field of oxygenated solvents, Solvay has developed SOLSYS® Bio Etac, an ethyl acetate made entirely from renewable sources with the raw material being ethanol derived from sugarcane. The ethanol used is sourced in Brazil, where SOLSYS® Bio Etac is produced and is obtained without causing deforestation.

We achieved the SCS Global Services certification for our Recycled Polymers. Solvay, a leader of high-performance and sustainable polyamide 6.6 polymers, continues to drive innovation in its portfolio with the introduction of a new, specialized grade of Rhodianyl, made of 100% pre-consumer recycled polyamide, which is produced at its Santo Andre plant in Brazil. The product has achieved SCS Recycled Content Certification, reaffirming Solvay's commitment to circular economy. The internationally recognized third-party certification body SCS Global Services performed a rigorous audit to verify the traceability of the Group's entire manufacturing process, including scrap management and the cutting-edge depolymerization reaction, which generates the final 100% recycled polymer.

Solvay is investing at its Livorno site, in Italy, to launch the company's first unit of circular highly dispersible silica (HDS), made with bio-based sodium silicate derived from rice husk ash. This new breakthrough silicate process provides a circular solution as it gives a second life to rice husk in a local value chain. Coupled with renewable energy integration at the plant, it will allow Solvay to achieve a 50% reduction in CO₂ per ton of silica. This will make the Livorno site Europe's best-in-class silica production site in terms of CO₂ footprint. Production is expected to start by the end of 2024.

7.3. EU taxonomy activities

The EU taxonomy (2020/852) is a classification system, establishing a list of environmentally sustainable economic activities. It is intended to play an important role in helping the EU scale up sustainable investment and implement the European Green Deal. The EU taxonomy would provide companies, investors, and policymakers with appropriate definitions under which economic activities can be considered environmentally sustainable.

In order to be taxonomy-eligible, an economic activity must contribute substantially to at least one of the six environmental objectives – climate mitigation, climate adaptation, water, circular economy, pollution prevention, and biodiversity – and do no significant harm to the others.

As such, the taxonomy only addresses a limited number of Solvay activities.

In order to be taxonomy-aligned, an economic activity needs first to be eligible as described above, and then fulfill the following criteria:

- The economic activity must make a substantial contribution to one or more of the climate and environmental objectives relevant to that activity.
- The activity should do no significant harm to the other remaining objectives.
- The activity should fulfill the minimum social safeguard standards based on OECD and UN guidelines.

Our calculation of the share of 2023 Solvay sales eligible for, or aligned with the EU taxonomy, is based on our best interpretation of the EU taxonomy texts, including the 2023 version of Technical Annex of the Taxonomy Report.

Figures reported for soda ash correspond to our Soda Ash and Derivatives business, which is a mono-technology business, as described on Solvay's website.

Enabling economic activities, as referred to in Article 10(1), point (i), of Regulation (EU) 2020/852, do not substantially contribute to climate change mitigation on their own. Such activities play a crucial role in the decarbonization of the economy by directly enabling other activities to be carried out at a low carbon level of environmental performance.

We identified eligible enabling activities using our Sustainable Portfolio Management methodology, taking into account product and application combinations identified as “climate solutions,” as described above. This enables us to avoid double counting, as double counting is neutralized in the Sustainable Portfolio Management reporting of solutions for each impact category, as described above. Possible double counting between transition activities and enabling activities are detailed in the table.

Some of our activities, such soda ash for glass in double glazing, may be eligible both as transitional and enabling activities. For calculating the total eligible activities and avoiding double counting, the eligible enabling activities related to eligible transitional activities are only counted once.

The basis on which the sales, capital expenditure, and operating expenditure were calculated is explained in the Financial Statements chapter of this report, note F1: revenue and segment information.

Capital expenditures and operating expenditures corresponding to enabling activities are not yet available. The eligible share of investments depends on the estimation of the corresponding eligible share of future sales. The allocation rules chosen mean that we estimate that 1% of sales required 1% of capital expenditure and 1% of operational expenditure.

We also believe that the share of group capital expenditure dedicated to research and innovation should be considered as eligible as it aims to improve our product portfolio to become more sustainable. This means that our total eligible capital expenditures is the sum of eligible capital expenditures from transition activities, the capital expenditures estimated for enabling activities, and the amount dedicated to the capital expenditures spent on research and innovation. Similarly the total eligible operating expenses are calculated as the sum of eligible operational expenditure from transition activities, the operational expenditures estimated for enabling activities, and the amount dedicated to the operational expenditures spent on research and innovation.

Regarding reporting on our aligned activities, our only manufacturing activities eligible as "transition activities" is soda ash, and it is not considered aligned for their sales as it does not meet the technical criteria. The activities eligible as “enabling activities” were also not considered for their sales as we cannot demonstrate that they fulfill the “do no significant harm” criteria for water, biodiversity, circular economy, or pollution. However, Solvay has launched our STAR Factory Program, which aims to fully implement our Solvay One Planet at site level. STAR Factory will progressively be deployed in all our plants and we believe that it will gradually deliver the required data to qualify our activities as aligned.

About the calculation of the share of capital expenditures aligned with the EU taxonomy, we consider the capital expenditures spent on decreasing the environmental footprint of our soda ash production plus the amount spent on research and innovation.

Following a similar reasoning, the calculation of operational expenditures aligned with the EU taxonomy mainly considers the share of operational expenditures spent on research and innovation.

The Group works hard to constantly improve our share of economic activities considered eligible for, or aligned with, the EU taxonomy. We believe that STAR Factory and other major programs will deliver on these objectives in the coming years.

EU TAXONOMY INDICATORS: 2023 CAPITAL EXPENDITURES

Economic activities	NACE codes	Capital expenditures	Proportion of capital expenditures	Climate change mitigation	Climate change adaptation	Water & marine resources	Circular economy	Pollution	Biodiversity & ecosystems	Minimum safeguards	Proportion of taxonomy aligned capital expenditures
		Million €	in %	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	in %
A. TAXONOMY LISTED ACTIVITIES											
A.1 Eligible as transitional activities											
Manufacture of soda ash	C20.13	245	54.4%	Yes	Yes	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Yes	0
Research & Innovation		0.7	0.2%								0.2%
Total eligible as transitional activities		245	54.4%	Yes	Yes	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Yes	0.2%
A.2 Eligible activities as enabling activities											0
3.1 Manufacture of renewable energy technologies	C25 C26 C27 C28	15	3.4%	Yes	Yes	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Yes	0
Of which soda ash		11	0.8%	Yes	Yes	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Yes	0
3.4 Manufactures of batteries	C27.2	10	0.5%	Yes	Yes	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Yes	0
3.6 Manufacture of renewable energy technologies	C22.1.1	24	10.0%	Yes	Yes	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Yes	0
SUM A.1 + A.2		294	68.3%								
B. TAXONOMY NON-ELIGIBLE ACTIVITIES											
Capital expenditures from non-eligible activities		156	31.7%								
TOTAL		450	100.0%								

EU TAXONOMY INDICATORS: 2023 OPERATIONAL EXPENDITURES

[illegible]

8. GRI CONTENT INDEX

8.1. Statement of use and GRI 1 used

Solvay has reported in accordance with the GRI Standards for the period January 1, 2023 to December 31, 2023.

GRI 1 used: GRI 1 Foundation 2021.

Applicable GRI Sector Standards: not applicable.

This report has been prepared in accordance with the GRI Standards. The GRI content index service was performed on the English version of the report.

8.2. GRI 2: general disclosures 2021

THE ORGANIZATION AND ITS REPORTING PRACTICES

Disclosure	Location	Omission
2-1 Organizational details	Financial statements: Note F1 Revenue and segment information, page 266 Note F40 List of companies included in the consolidation scope, page 362	
2-2 Entities included in the organization's sustainability reporting	Extra-financial statements: 2.1. Reporting frameworks, page 164 Financial statements: Note F40 List of companies included in the consolidation scope, page 362	
2.3 Reporting period, frequency and contact point	Reporting period: from January 1, 2023 to December 31, 2023 Frequency: yearly and aligned on financial reporting Contact point: investor.relations@solvay.com Publication date: May 2024	
2.4 Restatements of information	Financial Statements: Consolidated Financial Statements: Main events and changes in consolidation scope during the year, page 246 Extra-financial statements: 2.1. Reporting frameworks, page 164	
2-5 External assurance	Auditor's report for the extra-financial statements, page 379	

ACTIVITIES AND WORKERS

Disclosure	Location	Omission
2-6 Activities, value chain and other business relationships	Performance: segments overview, page 78	
2-7 Employees	Extra-financial statements: 2.1. Reporting frameworks p 164 Extra-financial statements: 6.5. Recruitment, development and retention, page 220	
2-8 Workers who are not employees	Extra-financial statements: 6.5. Recruitment, development and retention, page 220	

GOVERNANCE

Disclosure	Location	Omission
2-9 Governance structure and composition	Corporate Governance Statement: 4. Board of Directors and Board Committees, page 91	
2-10 Nomination and selection of the highest governance body	Corporate Governance Statement: 4. Board of Directors and Board Committees, page 91	
2-11 Chair of the highest governance body	Corporate Governance Statement: 4. Board of Directors and Board Committees, page 91	
2-12 Role of the highest governance body in overseeing the management of impacts	Charter of Corporate Governance https://www.solvay.com/en/investors/corporate-governance	
2-13 Delegation of responsibility for managing impacts	Corporate Governance Statement, page 84	
2-14 Role of the highest governance body in sustainability reporting	Declaration by the persons responsible, page 388	
2-15 Conflicts of interest	Corporate Governance Statement: 4.1.4 Functioning of the Board of Directors, page 97 Corporate Governance Statement: Introduction, page 84 Charter of Corporate Governance https://www.solvay.com/en/investors/corporate-governance	
2-16 Communication of critical concerns	Corporate Governance Statement: 4.1.4 Functioning of the Board of Directors, page 97	
2-17 Collective knowledge of the highest governance body	Corporate Governance Statement: 4.1.7 Induction and continuous Board training, page 99	
2-18 Evaluation of the performance of the highest governance body	Corporate Governance Statement: 4.1.6 Evaluation, page 99	
2-19 Remuneration policies	Corporate Governance Statement: 6.2 Remuneration report, page 107	
2-20 Process to determine remuneration	Corporate Governance Statement: 6.2 Remuneration report, page 107	
2-21 Annual total compensation ratio	Corporate Governance Statement: 6.2 Remuneration report, page 107	

STRATEGY, POLICIES AND PRACTICES

Disclosure	Location	Omission
2-22 Statement on sustainable development strategy	Editorial, page 4	
2-23 Policy commitments	Extra-financial statements: 3.2. Management of the legal, ethics and regulatory framework, page 176 Extra-financial statements: 5.5. Hazardous materials, page 206	
2-24 Embedding policy commitments	Extra-financial statements: 6.2. Critical incident risk management, page 212 Extra-financial statements: 3.1 One Planet, page 175	
2-25 Processes to remediate negative impacts	Extra-financial statements: 3.3. Health, safety and environment management, page 182	
2-26 Mechanisms for seeking advice and raising concerns	Extra-financial statements: 3.2. Management of the legal, ethics and regulatory framework, page 176	
2-27 Compliance with laws and regulations	Extra-financial statements: 3.2. Management of the legal, ethics and regulatory framework, page 176 Extra-financial statements: 6.2. Critical incident risk management, page 212	
2-28 Membership associations	Extra-financial statements: 3.6. Membership of associations, page 187	

STAKEHOLDER ENGAGEMENT

Disclosure	Location	Omission
2-29 Approach to stakeholder engagement	Editorial, page 4	
2-30 Collective bargaining agreements	Extra-financial statements: 6.3. Labor practices,, page 214	

8.3. GRI 3: material topics 2021

Disclosure	Location	Omission
3-1 Process to determine material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	
3-2 List of material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	

MANAGEMENT OF THE LEGAL, ETHICS AND REGULATORY FRAMEWORK (HIGH MATERIALITY)

Source	Disclosure	Location	Omission
GRI 3: Material Topics 2021	3-3 Management of material topics	Extra-financial statements: 3.2. Management of the legal, ethics and regulatory framework, page 176	
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Risk management: 2.1 Compliance and business integrity, page 144	
GRI 205: Anti-corruption 2016	205-2 Communication and training about anti-corruption policies and procedures	Extra-financial statements: 3.2. Management of the legal, ethics and regulatory framework, page 176	
GRI 205: Anti-corruption 2016	205-3 Confirmed incidents of corruption and actions taken	Risk management: Litigation section, page 158 Extra-financial statements: 3.2. Management of the legal, ethics and regulatory framework, page 176	
GRI 206: Anti-competitive behavior 2016	206-1 Legal actions for anti-competitive behavior, antitrust, and monopoly practices	Risk management: Litigation section, page 158	
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Extra-financial statements: 3.2. Management of the legal, ethics and regulatory framework, page 176	
GRI 412: Human rights assessment 2016	412-1 Operations that have been subject to human rights reviews or impact assessments	Extra-financial statements: 3.2. Management of the legal, ethics and regulatory framework, page 176	
GRI 412: Human rights assessment 2016	412-2 Employee training on human rights policies or procedures	Extra-financial statements: 3.2. Management of the legal, ethics and regulatory framework, page 176	
GRI 415: Public policy 2016	415-1 Political contributions	Extra-financial statements: 3.2. Management of the legal, ethics and regulatory framework, page 176	
GRI 419: Socioeconomic Compliance 2016	419-1 Non-compliance with laws and regulations in the social and economic area	Risk management: Litigation section, page 158	

GREENHOUSE GAS EMISSIONS (PRIORITY)

Source	Disclosure	Location	Omission
GRI 3: Material Topics 2021	3-3 Management of material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Extra-financial statements: 4.2. Greenhouse gas emissions, page 191	
GRI 305: Emissions 2016	305-2 Energy indirect (Scope 2) GHG emissions	Extra-financial statements: 4.2. Greenhouse gas emissions, page 191	
GRI 305: Emissions 2016	305-3 Other indirect (Scope 3) GHG emissions	Extra-financial statements: 4.2. Greenhouse gas emissions, page 191	
GRI 305: Emissions 2016	305-4 GHG emissions intensity	Extra-financial statements: 4.2. Greenhouse gas emissions, page 191	
GRI 305: Emissions 2016	305-5 Reduction of GHG emissions	Extra-financial statements: 4.2. Greenhouse gas emissions, page 191	

ENERGY (PRIORITY)

Source	Disclosure	Location	Omission
GRI 3: Material Topics 2021	3-3 Management of material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Extra-financial statements: 4.3. Energy, page 196	
GRI 302: Energy 2016	302-2 Energy consumption outside of the organization	Extra-financial statements: 4.3. Energy, page 196	
GRI 302: Energy 2016	302-3 Energy intensity	Extra-financial statements: 4.3. Energy, page 196	
GRI 302: Energy 2016	302-4 Reduction of energy consumption	Extra-financial statements: 4.3. Energy, page 196	

BIODIVERSITY (PRIORITY)

Source	Disclosure	Location	Omission
GRI 3: Material Topics 2021	3-3 Management of material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Extra-financial statements: 5.4. Biodiversity, page 203	
GRI 304: Biodiversity 2016	304-2 Significant impacts of activities, products and services on biodiversity	Extra-financial statements: 5.4. Biodiversity, page 203	
GRI 304: Biodiversity 2016	304-3 Habitats protected or restored	Extra-financial statements: 5.4. Biodiversity, page 203	
GRI 304: Biodiversity 2016	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	Extra-financial statements: 5.4. Biodiversity, page 203	

PRODUCT DESIGN & LIFECYCLE MANAGEMENT (PRIORITY)

Source	Disclosure	Location	Omission
GRI 3: Material Topics 2021	3-3 Management of material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	
GRI 416: Customer health and safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	Extra-financial statements: 7.1. Product design and life cycle management, page 225 Extra-financial statements: 5.2. Waste, page 201 Extra-financial statements: 5.5. Hazardous materials, page 206	
GRI 416: Customer health and safety 2016	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Risk management: 2.5 Environmental impacts and controversies, page 152	

AIR QUALITY (HIGH MATERIALITY)

Source	Disclosure	Location	Omission
GRI 3: Material Topics 2021	3-3 Management of material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	
GRI 305: Emissions 2016	Disclosure 305-6 Emissions of ozone-depleting substances (ODS)	Extra-financial statements: 5.3. Air quality, page 201	
GRI 305: Emissions 2016	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant air emissions	Extra-financial statements: 5.3. Air quality, page 201	

WATER AND WASTEWATER (PRIORITY)

Source	Disclosure	Location	Omission
GRI 3: Material Topics 2021	3-3 Management of material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	
GRI 303: Water and effluents 2018	303-1 Interactions with water as a shared resource	Extra-financial statements: 5.1. Water and wastewater, page 199	
GRI 303: Water and effluents 2018	303-2 Management of water discharge-related impacts	Extra-financial statements: 5.1. Water and wastewater, page 199	
GRI 303: Water and effluents 2018	303-3 Water withdrawal	Extra-financial statements: 5.1. Water and wastewater, page 199	
GRI 303: Water and effluents 2018	303-4 Water discharge	Extra-financial statements: 5.1. Water and wastewater, page 199	
GRI 303: Water and effluents 2018	303-5 Water consumption	Extra-financial statements: 5.1. Water and wastewater, page 199	

WASTE (PRIORITY)

Source	Disclosure	Location	Omission
GRI 3: Material Topics 2021	3-3 Management of material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Extra-financial statements: 5.2. Waste, page 201	
GRI 306: Waste 2020	306-2 Management of significant waste-related impacts	Extra-financial statements: 5.2. Waste, page 201	
GRI 306: Waste 2020	306-3 Waste generated	Extra-financial statements: 5.2. Waste, page 201	
GRI 306: Waste 2020	306-4 Waste diverted from disposal	Extra-financial statements: 5.2. Waste, page 201	
GRI 306: Waste 2020	306-5 Waste directed to disposal	Extra-financial statements: 5.2. Waste, page 201	

EMPLOYEE HEALTH AND SAFETY (PRIORITY)

Source	Disclosure	Location	Omission
GRI 3: Material Topics 2021	3-3 Management of material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	
GRI 403: Occupational health and safety 2018	403-1 Occupational health and safety management system	Extra-financial statements: 6.1. Employee health and safety, page 208	
GRI 403: Occupational health and safety 2018	403-2 Hazard identification, risk assessment and incident investigation	Extra-financial statements: 6.1. Employee health and safety, page 208	
GRI 403: Occupational health and safety 2018	403-3 Occupational health services	Extra-financial statements: 6.1. Employee health and safety, page 208	
GRI 403: Occupational health and safety 2018	403-4 Worker participation, consultation and communication on occupational health and safety	Extra-financial statements: 6.1. Employee health and safety, page 208 Extra-financial statements: 6.3. Labor practices, page 214	
GRI 403: Occupational health and safety 2018	403-5 Worker training on occupational health and safety	Extra-financial statements: 6.1. Employee health and safety, page 208	
GRI 403: Occupational health and safety 2018	403-6 Promotion of worker health	Extra-financial statements: 6.1. Employee health and safety, page 208	
GRI 403: Occupational health and safety 2018	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Extra-financial statements: 6.1. Employee health and safety, page 208	
GRI 403: Occupational health and safety 2018	403-8 Workers covered by an occupational health and safety management system	Extra-financial statements: 6.1. Employee health and safety, page 208	
GRI 403: Occupational health and safety 2018	403-9 Work-related injuries	Extra-financial statements: 6.1. Employee health and safety, page 208	
GRI 403: Occupational health and safety 2018	403-10 Work-related ill health	Extra-financial statements: 6.1. Employee health and safety, page 208	

EMPLOYEE ENGAGEMENT AND WELL-BEING (HIGH MATERIALITY)

Source	Disclosure	Location	Omission
GRI 3: Material Topics 2021	3-3 Management of material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	
GRI 401: Employment 2016	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Extra-financial statements: 6.5. Labor Practices, page 220 Extra-financial statements: 6.5. Recruitment, development and retention, page 220	
GRI 407: Freedom of association and collective bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Extra-financial statements: 6.3. Labor practices, page 214	

DIVERSITY AND INCLUSION (PRIORITY)

Source	Disclosure	Location	Omission
GRI 3: Material Topics 2021	3-3 Management of material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	
GRI 405: Diversity and equal opportunity 2016	405-1 Diversity of governance bodies and employees	Extra-financial statements: 6.4. Diversity and inclusion, page 217	
GRI 405: Diversity and equal opportunity 2016	405-2 Ratio of basic salary and remuneration of women to men	Extra-financial statements: 6.4. Diversity and inclusion, page 217	

CORPORATE CITIZENSHIP (HIGH MATERIALITY)

Source	Disclosure	Location	Omission
GRI 3: Material Topics 2021	3-3 Management of material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	
GRI 413: Local communities 2016	413-1 Operations with local community engagement, impact assessments and development programs	Extra-financial statements: 6.6. Corporate citizenship, page 223	
GRI 413: Local communities 2016	413-2 Operations with significant actual and potential negative impacts on local communities	Risk management: 2.5 Environmental impacts and controversies, page 152	

HAZARDOUS MATERIALS (HIGH MATERIALITY)

Source	Disclosure	Location	Omission
GRI 3: Material Topics 2021	3-3 Management of material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	
GRI 403: Occupational health and safety 2018	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Extra-financial statements: 5.5. Hazardous materials, page 206 Extra-financial statements: 6.1. Employee health and safety, page 208	
Solvay	Safer alternatives for marketed products	Extra-financial statements: 5.5. Hazardous materials, page 206	

CRITICAL INCIDENT RISK MANAGEMENT (HIGH MATERIALITY)

Source	Disclosure	Location	Omission
GRI 3: Material Topics 2021	3-3 Management of material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	
GRI 307: Environmental Compliance 2016	307-1 Non-compliance with environmental laws and regulations	Extra-financial statements: 6.2. Critical incident risk management, page 212	

Moderate materiality aspects also included in this report

RECRUITMENT, DEVELOPMENT AND RETENTION (MODERATE MATERIALITY)

Source	Disclosure	Location	Omission
GRI 3: Material Topics 2021	3-3 Management of material topics	Extra-financial statements: 2.3. Materiality analysis, page 166	
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Extra-financial statements: 6.4. Recruitment, development and retention, page 238	
GRI 401: Employment 2016	401-2 Benefits provided to full-time employees that are not provided to temporary or part- time employees	Extra-financial statements: 6.5. Recruitment, development and retention, page 220	
GRI 404: Training and education 2016	404-1 Average hours of training per year per employee	Extra-financial statements: 6.5. Recruitment, development and retention, page 220	
GRI 404: Training and education 2016	404-2 Programs for upgrading employee skills and transition assistance programs	Extra-financial statements: 6.5. Recruitment, development and retention, page 220	
GRI 404: Training and education 2016	404-3 Percentage of employees receiving regular performance and career development reviews	Extra-financial statements: 6.5. Recruitment, development and retention, page 220	

08

FINANCIAL
STATEMENT

246	1. Consolidated financial statements	292	Note F16 : cash flows from investing activities – acquisition/disposal of assets and investments
250	1.1. Consolidated income statement		
251	1.2. Consolidated statement of comprehensive income	293	Note F17 : other cash flows from financing activities
252	1.3. Consolidated statement of cash flows	293	Note F18 : intangible assets
253	1.4. Consolidated cash flows from discontinued operations	296	Note F19 : goodwill and business combinations
254	1.5. Consolidated statement of financial position	298	Note N20 : property, plant and equipment
		301	Note F21 : right-of-use assets and lease obligations
258	2. Notes to the consolidated financial statements	304	Note F22 : investments in associates and joint ventures
260	2.1. consolidation scope	308	Note F23 : impairment
266	Note F1 : revenue and segment information	310	Note F24 : inventories
274	Note F2 : consolidated income statement by nature	311	Note F25 : other receivables (current)
275	Note F4 : other operating gains and losses	311	Note F26 : assets held for sale
275	Note F5 : results from portfolio management and major restructurings, legacy remediation and major litigations	312	Note F27 : equity
276	Note F6 : net financial charges	313	Note F28 : non-controlling interests
277	Note F7 : income taxes in the income statement and the statement of financial position	314	Note F29 : share-based payments
278	Note F8 : discontinued operations and partial demerger	321	Note F30 : employee benefits
279	Note F9 : earnings per share	331	Note F31 : provisions
288	note F10 : consolidated statement of comprehensive income	334	Note F32 : financial instruments and financial risk management
290	Note f11 : depreciation, amortization and impairments	355	Note F33 : net indebtedness
290	Note F12 : other non-operating and non-cash items	358	Note F34 : other liabilities (current)
290	Note F13 : income taxes in the statement of cash flows	358	Note F35 : commitments to acquire property, plant and equipment and intangible assets
291	Note F14 : changes in working capital		Note F36 : contingent assets, liabilities and financial guarantees
291	Note F15 : additions, reversals and use of provisions	360	Note F37 : related parties
		361	Note F38 : dividends proposed for distribution
		361	Note F39 : events after the reporting period
		362	Note F40 : list of companies included in the consolidation scope
368	3. Summary financial statements of Solvay SA/NV		

Financial statements

1. CONSOLIDATED FINANCIAL STATEMENTS

Solvay SA/NV (the “Company” or “Solvay”) is a public limited liability company governed by Belgian law and listed on Euronext Brussels and Euronext Paris. The principal activities of the Company, its subsidiaries, joint operations, joint ventures and associates (jointly the “Group”) are described in note F1 Revenue and Segment Information.

The Solvay Group operates in 45 industrial sites and 6 research centers and over 40 countries, employs approximately 9,000 employees and delivered net sales of €4.9 billion in 2023. Solvay SA/NV is the Solvay Group’s ultimate parent with its registered office located at Rue Ransbeek 310, B-1120 Brussels, Belgium.

On March 12, 2024, the Board of Directors authorized the consolidated financial statements for issuance.

MAIN EVENTS AND CHANGES IN THE CONSOLIDATION SCOPE

Partial Demerger of the Specialty Businesses

- On March 15, 2022, the Group announced that it was reviewing plans to separate into two independent, publicly traded companies:
- “EssentialCo”, which comprised the leading mono-technology businesses in the Group’s Chemicals segment and the Special Chem business. Following the Partial Demerger (as defined below), the Group consists of EssentialCo.
 - “SpecialtyCo” (now renamed to “Syensqo” or the “Syensqo Group”), which comprises the Group’s Materials segment, and the majority of the Group’s Solutions segment: Novecare, Technology Solutions, Aroma Performance, and Oil and Gas (together the “Specialty Businesses”).

The separation was effected by means of a partial demerger (“scission partielle”) of Solvay SA/NV, under Belgian law, whereby the shares and other interests the Company held in the legal entities operating the so-called “Specialty Businesses,” its rights and obligations under the agreements entered into with those legal entities, as well as certain other assets and liabilities were contributed under a universal succession regime (“transmission à titre universel”) to Syensqo SA/NV (the “Partial Demerger”).

- The Partial Demerger was approved by Solvay SA/NV’s shareholders at the extraordinary general meeting held on December 8, 2023. The Partial Demerger became effective on December 9, 2023, at 00:00 a.m. CET. In connection with the Partial Demerger, Syensqo became a public company, independent from Solvay, with its ordinary shares trading on the regulated markets of Euronext in Brussels and Paris starting on December 11, 2023. As a consequence, the Group presents the Specialty Businesses as discontinued operations:
- In the consolidated income statement for the periods prior to, and until the effectiveness of, the Partial Demerger – that is the previous year’s financial performance figures (the comparatives) have been restated. For 2023 financial year, the discontinued operations are included for the period until December 8, 2023.
 - In the consolidated statement of financial position, the assets and liabilities related to the Specialty Businesses have been derecognized from the consolidated statements as a part of the deconsolidation of the Specialty Businesses from the Group; the amounts in the consolidated statement of financial position of the previous year are presented in line with the previous method of presentation and are not restated in accordance with IFRS 5.
 - In the consolidated statement of cash flows, the cash-flows were not restated and present both continuing and discontinued operations in the primary statement. For 2023 financial year, the cash flows from discontinued operations are included for the period until December 8, 2023, However, below the statement, Solvay separately presented the consolidated cash flows from discontinued operations.

Further information on the accounting treatment of Partial Demerger is provided in note F8.

The Separation Agreement

Solvay SA/NV and Syensqo SA/NV entered into a Separation Agreement on December 4, 2023, and effective from the completion of the Partial Demerger, to govern certain practical aspects of the separation of the two groups, as well as the allocation of certain liabilities, including environmental liabilities. The Separation Agreement will be effective until the thirtieth anniversary of December 9, 2023, except with respect to claims relating to environmental liabilities, which can be made until 12 months after the relevant statute of limitations expires. The Separation Agreement may not be terminated early without written consent of each party.

- The Separation Agreement governs certain aspects of the separation of Syensqo from the Solvay Group, including, among other arrangements, those relating to:
- (i) the settlement and termination of certain intercompany balances and arrangements – see note F37 Related parties, note F32 Financial instruments;
 - (ii) the substitution, removal or release of legal entities that are part of the Solvay Group or the Syensqo Group, as applicable, in respect of certain third-party credit or other support obligations, as well as the provision of counter guarantees – see note F32 Financial instruments and note F36 Contingent liabilities;
 - (iii) the allocation of certain fees, costs and expenses incurred in connection with the Partial Demerger – see note F8;
 - (iv) the transfer to the other party of any assets (identified within 24 months of the completion of the Partial Demerger) allocated erroneously to the Syensqo Group or the Solvay Group;
 - (v) the transfer of all rights and obligations to Syensqo in relation to certain transferred employees’ supplementary pension schemes in Belgium – see note F30 Employee benefits.

The Separation Agreement contains provisions to allocate to the Solvay Group or the Syensqo Group environmental liabilities for certain operating, closed or divested sites, including sites for which provisions have been established in the Solvay Group’s consolidated financial statements, and cross-indemnity obligations applicable where a party incurs claims, liabilities or expenses for sites allocated to the other party in the Separation Agreement.

Under the cross-indemnity provisions, each of the Solvay Group, on the one hand, and the Syensqo Group, on the other hand, have agreed to indemnify the other party for certain environmental liabilities allocated to the other party. The Separation Agreement includes provisions regarding the management of environmental claims, remediation obligations and related actions. The Separation Agreement also provides that claims will be deemed to have been made, automatically, under the cross-indemnity provisions for specifically allocated environmental liabilities that are the subject of existing provisions as set forth in the Solvay Group consolidated financial statements as of and for the six-month period ended June 30, 2023. For all other environmental liabilities that are subject to the cross-indemnity provisions, claims may be submitted for up to 12 months following the expiry of the relevant statute of limitations. The Separation Agreement also contains customary provisions aimed at avoiding double recoveries. See note F31 Provisions for further details on provisions.

U.S. Tax Matters Agreement

The rules for determining whether a distribution such as the Partial Demerger and the internal separation of the U.S. Specialty Businesses and the U.S. Essential Businesses (the “U.S. Spin-Off”) qualify for tax-free treatment for U.S. federal income tax purposes are complex and depend on all the relevant facts and circumstances. Solvay intends for the Partial Demerger and the U.S. Spin-Off to each qualify as a tax-free reorganization under Sections 368(a)(1)(D) and 355 of the U.S. Internal Revenue Code of 1986, as amended (the “U.S. IRC”). Solvay has received a private letter ruling from the U.S. Internal Revenue Service (the “IRS”) confirming such qualification (except with respect to certain requirements under Section 355 of the U.S. IRC on which the IRS does not rule). Solvay also received a tax opinion from US tax counsel addressing those matters upon which the IRS would not rule, and relying on the IRS’ ruling as to matters covered by the ruling.

In connection with the U.S. Spin-Off and the Partial Demerger, Solvay and Syensqo entered into a U.S. Tax Matters Agreement (the “U.S. TMA”) intended to (among other things) preserve the tax-free treatment of the Partial Demerger and the U.S. Spin-Off for U.S. federal income tax purposes. Under the U.S. TMA, Solvay and Syensqo will generally be required to indemnify the other for any U.S. taxes and certain related losses resulting from (or relating to) the failure of the U.S. Spin-Off and the Partial Demerger (and certain associated transactions) to qualify for their intended U.S. tax treatment, where such taxes or losses are attributable to (1) untrue representations and breaches of covenants made in connection with the U.S. Spin-Off, the Partial Demerger or the U.S. TMA (including in the IRS ruling and tax opinion described above), (2) the application of certain provisions of U.S. federal income tax law to the U.S. Spin-Off or the Partial Demerger (for example, in connection with a change of control of either party) or (3) other actions or omissions within the party’s control which give rise to U.S. taxes (or related losses) in connection with the U.S. Spin-Off and the Partial Demerger.

Under the U.S. TMA, Solvay and Syensqo are prohibited from taking actions that are reasonably expected to cause the Partial Demerger or U.S. Spin-Off (or certain associated transactions) to fail to qualify for their intended U.S. tax treatment, or that could jeopardize the conclusions of, or that are inconsistent with, the IRS ruling or the tax opinion discussed above. Additionally, the parties are generally prohibited (subject to certain exceptions in the U.S. TMA), for the two-year period following completion of the Partial Demerger, from engaging in certain acquisitions, mergers, liquidations, sales, and redemption transactions with respect to their respective stock and assets that could jeopardize the tax-free status of the Partial Demerger or the U.S. Spin-Off for U.S. federal income tax purposes. Neither Solvay’s nor Syensqo’s obligations under the U.S. TMA are limited in amount or subject to any cap.

As of December 31, 2023, Solvay was not aware of any breach or alleged breach by it of its obligations under the U.S. TMA, and had not received any notice from Syensqo relating to a breach or alleged breach thereof.

The Transition Services Agreement

Solvay SA/NV and Syensqo SA/NV entered into a transition services agreement (the “TSA”), effective from the completion of the Partial Demerger for a non-renewable term of 24 months, whereby the Solvay Group and the Syensqo Group will, to the extent that certain business functions and corporate functions have not been separated prior to the completion of the Partial Demerger, each provide to the other (or the other’s respective subsidiaries) various services and support on an interim transitional basis. In particular, given that the Syensqo Group will not have certain internal corporate functions fully in place upon completion of the Partial Demerger (such as finance, legal, tax, human resources, payroll, information technology and other support services), the Solvay Group will provide support with such matters under the terms of the TSA. Upon termination of the TSA, the Syensqo Group will bear wind-down charges covering certain restructuring costs incurred by the Solvay Group.

From the completion of the Partial Demerger and going forward, the fees payable by the Syensqo Group to the Solvay Group have been determined internally using a limited mark-up, in line with the Solvay Group’s practice for internal servicing, and have not been the subject of independent bids. It is expected that, based on the assumed scope of services and related underlying cost structure, the annual aggregate fees for the services provided by the Solvay Group under the TSA will amount to between €150 million and €200 million.

See note F37 Related Parties for further details on related party transactions.

Restructuring provision

In the context of the Group’s plan to separate into two independent publicly traded companies, new restructuring initiatives were launched in 2023. These initiatives lead to the net suppression of approximately 224 roles at the end of 2023. As a consequence, a restructuring provision of €83 million was recognized in 2023, prior to the Partial Demerger date out of which €67 million for continuing operations.

Group portfolio management

RusVinyl equity investment

RusVinyl is a former Russian joint venture in chlorovinyls in which Solvay held a 50% equity interest, together with Sibur who held the remaining 50% equity interest. On March 24, 2023, the Group announced the completion of the sale of its 50% stake in RusVinyl, to its joint venture partner, Sibur. At the time of closing, the Group received €432 million in cash proceeds in Belgium, which have been reported as cash flow from investing activities in Q1 2023. A capital loss of €176 million has been recognized in Q1 2023, mainly reflecting recycling of the historical currency translation balances to the consolidated income statement.

Liability management

Prior to the Partial Demerger, Solvay undertook various liability management exercises in respect of certain of its outstanding debt securities. The purpose of the liability management exercises was to repurchase or redeem certain debt securities, and to transfer liability for the remaining relevant debt securities or related guarantees to the Syensqo Group upon the Partial Demerger becoming effective. The liability management exercises were also intended to amend certain contractual provisions in certain of the debt securities to facilitate the implementation of the Partial Demerger.

On September 4 and 5, 2023, Solvay announced the results of liability management transactions relating to certain senior and hybrid bonds denominated in euros. The transactions included:

- a request for consent of bondholders to the substitution, effective upon completion of the Partial Demerger, of Syensqo SA/NV for Solvay SA/ NV as issuer of (i) the €500,000,000 Undated Deeply Subordinated Fixed to Reset Rate Perp-NC5.5 Bonds with first call date on December 2, 2025 (ISIN: BE6324000858) (the “2025 Hybrid Bonds”), and (ii) the €500,000,000 2.750% Fixed Rate Bonds due December 2, 2027 (ISIN: BE6282460615) (the “2027 Bonds”).
- a tender offer relating to the €500,000,000 Undated Deeply Subordinated Fixed to Reset Rate Bonds with first optional redemption date of June 3, 2024 (ISIN: XS1323897725) (the “2024 Hybrid Bonds”) issued by Solvay Finance S.A. and irrevocably guaranteed on a subordinated basis by Solvay (the “Tender Offer”).

The 2025 Hybrid Bonds, the 2027 Bonds and the 2024 Hybrid Bonds

At the meeting in respect of the 2025 Hybrid Bonds, the necessary quorum was achieved, the relevant extraordinary resolution was passed and the relevant condition was satisfied. As a result, Syensqo SA/NV was substituted for Solvay SA/NV as issuer of the 2025 Hybrid Bonds, effective upon completion of the Partial Demerger, and subject to the satisfaction or waiver of certain conditions set out in the consent solicitation notice.

At the meeting of the holders of the 2027 Bonds, the necessary quorum was achieved, the relevant extraordinary resolution was passed and the relevant condition was satisfied. As a result, Syensqo SA/NV was substituted for Solvay SA/NV as issuer of the 2027 Bonds, effective upon completion of the Partial Demerger, and subject to the satisfaction or waiver of certain conditions set out in the consent solicitation notice.

On September 8, 2023, Solvay Finance S.A. accepted all validly tendered 2024 Hybrid Bonds pursuant to the Tender Offer for purchase in cash in an aggregate principal amount of €452,613,000 (representing approximately 90.52% in aggregate nominal amount of the outstanding 2024 Hybrid Bonds). Because it has purchased more than 90% of the initial aggregate principal amount of the 2024 Hybrid Bonds, Solvay Finance S.A. had the option, pursuant to the terms and conditions of the 2024 Hybrid Bonds, at any time, to redeem all of the remaining outstanding 2024 Hybrid Bonds that were not validly tendered for purchase pursuant to the Tender Offer at their principal amount together with any accrued and unpaid interest (including any deferred interest) up to the redemption date. Solvay Finance S.A. exercised this option on September 6, 2023, and redeemed the relevant 2024 Hybrid Bonds on September 13, 2023, in cash and for an aggregate principal amount of €47,387,000.

The redemption of the 2024 Hybrid Bonds was financed with proceeds drawn under Solvay’s bridge facility (€520 million). The corresponding obligations remained at Solvay and were not transferred to Syensqo SA/NV at the date of the Partial Demerger.

The 2029 Bonds

Solvay SA/NV has exercised its issuer make-whole call under the terms and conditions of the €600,000,000 0.500% Fixed Rate Bonds due September 6, 2029 (ISIN: BE6315847804) (the “2029 Bonds”). The redemption of the 2029 Bonds was funded with a new bridge facility. The additional funding cost for the anticipated long-term refinancing of the 2029 Bonds is estimated at approximately €20 million per year (after tax). The redemption notice was delivered on September 7, 2023, announcing the redemption date of October 9, 2023, in accordance with the terms and conditions of the 2029 Bonds. The outstanding amount of the 2029 Bonds (€597 million) were settled on October 9, 2023, with the proceeds from the Group’s bridge facility. The obligations under the bridge facility corresponding to the amount used for the redemption of the 2029 Bonds were transferred to Syensqo SA/NV upon completion of the Partial Demerger.

USD 2025 Bonds

Solvay SA/NV announced on September 27, 2023, that it intends to exercise its issuer make-whole call option under the terms of the indenture governing the 4.450% Senior Notes due 2025 issued by Solvay Finance (America), LLC for an amount outstanding of USD\$800,000,000 and guaranteed by Solvay SA/NV(CUSIP: 834423 AB1 / U8344P AB5) (the “USD 2025 Bonds”). The redemption took place on November 15, 2023, for an amount of €753 million and was funded with drawdowns on Solvay’s bridge facility. The obligations under the bridge facility corresponding to the amount used for the redemption of the USD 2025 Bonds were transferred to Syensqo SA/NV upon completion of the Partial Demerger.

Cytec 2025 Bonds

The 3.95% Senior Notes due 2025 issued by Cytec Industries Inc. (CUSIP: 232820 AK6) (the “Cytec 2025 Bonds”) were transferred to the Syensqo Group upon completion of the Partial Demerger, as Cytec Industries Inc. is now an indirect subsidiary of Syensqo SA/NV. The Cytec 2025 Bonds are outstanding for an amount of USD\$163.5 million. A counter guarantee was issued by Syensqo SA/NV in favor of Solvay SA/NV as Solvay SA/NV remained the original guarantor under the Cytec 2025 Bonds.

Redemption of €500 million Undated Deeply Subordinated Fixed to Reset Rate Perp-NC10 Bonds

Solvay SA/NV announced on October 5, 2023, that its subsidiary Solvay Finance SA will redeem its €500 million Undated Deeply Subordinated Fixed to Reset Rate Perp-NC10 Bonds irrevocably guaranteed on a subordinated basis by Solvay SA/NV (ISIN: XS0992293901) on the first call date (being November 12, 2023). This perpetual deeply subordinated bond, bearing an annual interest rate of 5.425%, was treated as equity under IFRS rules. As November 12, 2023, falls on a non-business day, repayment, in accordance with the terms and conditions, occurred on November 13, 2023. The redemption amount equaled the principal amount (€500 million) plus interest accrued and unpaid up to, but excluding, the redemption date (€27 million). The redemption was financed with proceeds drawn under Solvay’s bridge facility and Solvay’s obligations in respect of the amount of such drawings were not transferred to Syensqo SA/NV at the time of the Partial Demerger.

Redemption of €300 million Undated Deeply Subordinated Fixed to Reset Rate Perp-NC5.25 Bonds

Solvay SA/NV announced on October 20, 2023, that it will redeem its €300 million Undated Deeply Subordinated Fixed to Reset Rate Perp-NC5.25 Bonds (ISIN: BE6309987400) on December 4, 2023, as per its issuer general call option. This perpetual deeply subordinated bond, bearing an annual interest rate of 4.25%, was treated as equity under IFRS rules. The redemption amount equaled the principal amount (€300 million) plus interest accrued and unpaid up to, but excluding, the redemption date (€9.7 million). The redemption was financed with proceeds drawn under Solvay’s bridge facility and Solvay’s obligations in respect of the amount of such drawings were not transferred to Syensqo SA/NV at the time of the Partial Demerger.

1.1. Consolidated income statement

The 2022 amounts are restated			
In €million	Notes	2023	2022
Sales	(F1)	6,024	7,979
— of which revenue from non-core activities	(F3)	1,145	2,439
— of which net sales		4,880	5,539
Cost of goods sold		-4,642	-6,554
Gross margin		1,382	1,425
Commercial costs		-100	-94
Administrative costs		-426	-471
Research and development costs		-47	-46
Other operating gains and (losses)	(F4)	15	323
Earnings from associates and joint ventures	(F22)	53	153
Results from portfolio management and major restructuring	(F5)	-550	-68
Results from legacy remediation and major litigations	(F5)	-50	-101
EBIT		278	1,121
Cost of borrowings	(F6)	-71	-54
Interest on loans and short term deposits	(F6)	36	16
Other gains and (losses) on net indebtedness	(F6)	-6	27
Cost of discounting provisions	(F6)	-62	22
Result from equity instruments measured at fair value		4	0
Profit/(loss) for the year before taxes		180	1,132
Income taxes	(F7)	-208	-228
Profit/(loss) for the year from continuing operations		-28	904
Profit for the year from discontinued operations	(F8)	2,132	1,030
Profit/(loss) for the year		2,105	1,934
attributable to:			
— Solvay share – continuing operations		-37	890
— Solvay share – discontinued operations		2,130	1,015
— non-controlling interests – continuing operations		9	14
— non-controlling interests – discontinued operations		2	14
Basic earnings per share from continuing operations (€)		-0.36	8.58
Basic earnings per share from discontinued operations (€)		20.45	9.79
Basic earnings per share (€)	(F9)	20.09	18.37
Diluted earnings per share from continuing operations (€)		-0.35	8.55
Diluted earnings per share from discontinued operations (€)		20.20	9.75
Diluted earnings per share (€)	(F9)	19.85	18.30

1.2. Consolidated statement of comprehensive income

The 2022 amounts are restated			
In €million	Notes	2023	2022
Profit/(loss) for the year		2,105	1,934
Other comprehensive income			
Gains and losses on hedging instruments in a cash flow hedge	(F10)	-228	80
Currency translation differences – Subsidiaries and joint operations	(F10)	-138	284
Share of other comprehensive income of associates and joint ventures	(F10)	202	21
Recyclable components		-164	384
Gains and losses on equity instruments measured at fair value through other comprehensive income	(F10)	0	-25
Remeasurements of the net defined benefit liability	(F10)	-30	155
Share of other comprehensive income of associates and joint ventures	(F10)	0	0
Non-recyclable components		-30	130
Income tax relating to recyclable and non-recyclable components	(F10)	2	-67
Other comprehensive income/(loss), net of related tax effects	(F10)	-192	447
Comprehensive income/(loss) for the year		1,913	2,382
attributable to:			
— Solvay share		1,902	2,351
— non-controlling interests		11	30

1.3. Consolidated statement of cash flows

The amounts below include both continuing and discontinued operations – the comparative figures for 2022 are not restated
The consolidated cash-flows from discontinued operations for both years are disclosed below this statement.

<i>In €million</i>	Notes	2023	2022
Profit/(loss) for the year		2,105	1,934
Adjustments to profit/(loss) for the year			
— Depreciation, amortization and impairments	(F11)	994	923
— Earnings from associates and joint ventures	(F22)	-71	-171
— Other non-operating and non-cash items	(F12)	-1,481	43
— Additions and reversal of employee benefits and other provisions	(F15)	644	336
— Net financial charges		178	69
— Income tax expense/income	(F13)	450	217
Changes in working capital	(F14)	-78	-576
Payments related to employee benefits and use of provisions	(F15)	-304	-328
Use of provisions for additional voluntary contributions (pension plans)	(F15)	-116	-155
Dividends received from associates and joint ventures	(F22)	25	19
Income taxes paid (excluding income taxes paid on sale of investments)	(F13)	-434	-305
Cash flow from operating activities		1,911	2,006
of which cash flow related to portfolio management and excluded from Free Cash Flow		-270	-67
Acquisition (-) of subsidiaries	(F16)	-2	0
Acquisition (-) of investments - Other	(F16)	-12	-14
Loans to associates and non-consolidated companies		-4	-23
Sale (+) of subsidiaries and investments	(F16)	-718	94
Acquisition (-) of property, plant and equipment	(F16)	-967	-815
of which capital expenditures required by share sale agreement and excluded from Free Cash Flow		-57	0
Acquisition (-) of intangible assets	(F16)	-97	-94
Sale (+) of property, plant and equipment and intangible assets	(F16)	7	21
of which cash flow related to the sale of real estate in the context of restructuring/dismantling/remediation		-	11
Dividends from equity instruments measured at fair value		1	2
Changes in non-current financial assets		0	0
Cash flow from investing activities		-1,792	-831
Proceeds from perpetual hybrid bonds issuance	(F27)	0	0
Redemption of perpetual hybrid bonds	(F27)	-1,309	0
Acquisition (-) / sale (+) of treasury shares	(F29)	39	7
Increase in borrowings	(F33)	3,221	248
Repayment of borrowings	(F33)	-1,500	-796
Changes in other financial assets	(F33)	98	27
Payment of lease liabilities	(F33)	-112	-113
Net interests paid		-38	-62
Coupons paid on perpetual hybrid bonds	(F27)	-95	-82
Dividends paid		-424	-417
Acquisition of non-controlling interests		0	-117
Other	(F17)	-337	112
Cash flow from financing activities		-455	-1,191
of which increase/decrease of borrowings related to environmental remediation		-	0
Net change in cash and cash equivalents		-335	-15
Currency translation differences		-13	7
Opening cash balance		932	941
Closing cash balance	(F33)	584	932

1.4. Consolidated cash flows from discontinued operations

<i>In €million</i>	2023	2022
Cash flow from operating activities	1,108	1,234
Cash flow from investing activities	-675	-518
Cash flow from financing activities	-64	-286
Net change in cash and cash equivalents	368	430

1.5. Consolidated statement of financial position

<i>In €million</i>	Notes	December 31, 2023	December 31, 2022
ASSETS			
Intangible assets	(F18)	201	2,048
Goodwill	(F19, F23)	764	3,472
Property, plant and equipment	(F20)	2,144	5,311
Right-of-use assets	(F21)	267	474
Equity instruments measured at fair value	(F32)	88	71
Investments in associates and joint ventures	(F22)	230	809
Other investments		33	36
Deferred tax assets	(F7)	317	932
Loans and other assets	(F32)	266	466
Other financial instruments	(F33)	0	30
Non-current assets		4,309	13,651
Inventories	(F24)	642	2,109
Trade receivables	(F32)	840	2,026
Income tax receivables		66	108
Other financial instruments	(F33)	118	206
Other receivables	(F25)	462	1,629
Cash and cash equivalents	(F33)	584	932
Current assets		2,714	7,010
Total assets		7,022	20,660
EQUITY & LIABILITIES			
Share capital	(F27)	237	1,588
Share premiums		174	1,170
Other reserves		853	7,845
Non-controlling interests	(F28)	42	61
Total equity		1,305	10,664
Provisions for employee benefits	(F30)	793	1,057
Other provisions	(F31)	550	743
Deferred tax liabilities	(F7)	131	558
Financial debt	(F32)	1,981	2,450
Other liabilities		70	303
Non-current liabilities		3,525	5,111
Other provisions	(F31)	302	297
Financial debt	(F32)	211	510
Trade payables	(F32)	850	2,296
Income tax payables		68	119
Dividends payables		175	165
Other liabilities	(F34)	585	1,499
Current liabilities		2,192	4,885
Total liabilities		5,717	9,997
Total equity and liabilities		7,022	20,660

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

Equity attributable to equity holders of the parent

Equity attributable to equity holders of the parent

In €million	Notes	Equity attributable to equity holders of the parent						Revaluation reserve (fair value)				Non-controlling interests	Total equity
		Share capital	Share premiums	Treasury shares	Perpetual hybrid bonds	Retained earnings	Currency translation differences	Equity instruments measured at fair value through other comprehensive income	Cash flow hedges	Defined benefit pension plan	Total other reserves		
December 31, 2021		1,588	1,170	-232	1,786	5,467	-645	23	3	-421	5,982	112	8,851
Profit for the year		-	-	-	-	1,905	-	-	-	-	1,905	29	1,934
Items of other comprehensive income	(F10)	-	-	-	-	-	304	-19	73	88	446	2	447
Comprehensive income		-	-	-	-	1,905	304	-19	73	88	2,351	30	2,382
Cost of share based payment plans		-	-	-	-	14	-	-	-	-	14	-	14
Dividends		-	-	-	-	-403	-	-	-	-	-403	-18	-421
Coupons of perpetual hybrid bonds		-	-	-	-	-82	-	-	-	-	-82	-	-82
Acquisition (-) / sale (+) of treasury shares		-	-	7	-	-	-	-	-	-	7	-	7
Other		-	-	-	-	-48	23	0	0	1	-24	-63	-87
December 31, 2022		1,588	1,170	-225	1,786	6,854	-318	4	76	-332	7,846	61	10,664
Profit for the year		-	-	-	-	2,093	-	-	-	-	2,093	12	2,105
Items of other comprehensive income	(F10)	-	-	-	-	-	65	0	-179	-76	-191	-1	-192
Comprehensive income		-	-	-	-	2,093	65	0	-179	-76	1,902	11	1,913
Redemption of perpetual hybrid bonds	(F27)	-	-	-	-1,292	-16	-	-	-	-	-1,308	-	-1,308
Cost of share based payment plans		-	-	-	-	24	-	-	-	-	24	-	24
Effect of share based payment plans modification		-	-	-	-	-20	-	-	-	-	-20	-	-20
Dividends		-	-	-	-	-420	-	-	-	-	-420	-12	-432
Coupons of perpetual hybrid bonds		-	-	-	-	-95	-	-	-	-	-95	-	-95
Acquisition (-) / sale (+) of treasury shares		-	-	50	-	-11	-	-	-	-	39	-	39
Partial Demerger of Syensqo		-1,352	-995	79	-494	-6,729	-	-4	-	-51	-7,199	-17	-9,563
Other (*)		-	-	81	-	3	-	-	-	0	84	-	84
December 31, 2023		237	174	-15	0	1,683	-253	0	-103	-459	853	42	1,305

*) Other relates to the reclassification into equity investments at fair value through profit or loss due to the allocation of one Syensqo share for each Solvay share held by a subsidiary of Solvay SA upon completion of the Partial Demerger (See Note F27 Equity)

2. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

IFRS GENERAL ACCOUNTING POLICIES

Basis of preparation

This information was prepared in accordance with European Regulation (EC) 1606/2002 on the application of international accounting standards dated July 19, 2002. The Group's consolidated financial statements for the year ended December 31, 2023, were prepared in accordance with IFRS (International Financial Reporting Standards) as published by the International Accounting Standards Board (IASB), and endorsed by the European Union.

The accounting standards applied in the consolidated financial statements for the year ended December 31, 2023, are consistent with those used to prepare the consolidated financial statements for the year ended December 31, 2022. The Group has not early adopted any other standards, interpretations or amendments that have been issued but is not yet effective.

Standards, interpretations and amendments applicable for the first time in 2023

The standards, interpretations and amendments that became effective as of January 1, 2023, and which are relevant to the Group are presented below. An assessment was made that these amendments had no material impact on the Group's consolidated financial statements.

Amendments to IAS 12 Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction

The amendments to IAS 12 Income Taxes narrow the scope of the initial recognition exception, so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences such as leases and decommissioning liabilities.

The Group assessed that the amendments had no material impact on its year-end report.

Amendments to IAS 1 Presentation of Financial Statements and IFRS Practice Statement 2: Disclosure of Accounting Policies

The amendments provide guidance on the application of materiality judgments to accounting policy disclosures. In IAS 1, the amendments replace the requirement to disclose "significant" accounting policies with a requirement to disclose "material" accounting policies. Guidance and illustrative examples are added in the Practice Statement 2 to assist in the application of the materiality concept when making judgments about accounting policy disclosures. The Group assessed that the amendments had no material impact on its year-end report.

Amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates

The amendments to IAS 8 clarify the distinction between changes in accounting estimates, changes in accounting policies and the correction of errors. They also clarify how entities use measurement techniques and inputs to develop accounting estimates.

The amendments had no impact on the Group's consolidated financial statements.

Amendments to IAS 12 Income Taxes: International Tax Reform – Pillar Two Model Rules

On May 23, 2023, the IASB issued the amendments to clarify the application of IAS 12 requirements to income taxes arising from tax law enacted or substantively enacted to implement the Organization for Economic Co-operation and Development (OECD)/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) Pillar Two model rules (Pillar Two income taxes).

The amendments introduce:

- A mandatory temporary exception to the accounting for deferred taxes arising from the jurisdictional implementation of the Pillar Two model rules; and
- Disclosure requirements for affected entities to help users of the financial statements better understand an entity's exposure to Pillar Two income taxes arising from that legislation, particularly before its effective date.

The mandatory temporary exception – the use of which is required to be disclosed – applies immediately. The remaining disclosure requirements apply for annual reporting periods beginning on or after January 1, 2023.

The Group applied the mandatory temporary exception to the accounting for deferred taxes. The management is currently assessing the accounting implications and the jurisdictions that could give rise to additional taxation as a result of the implementation of the Pillar Two Model Rules in national laws, which is not expected to be material for the Group. See more information on International Tax Reform in Note F7.A.

There are other IFRS amendments applicable for the first time in 2023, but do not have a material impact on, or are not relevant for, the consolidated financial statements of the Group and therefore have not been disclosed.

Standards, interpretations and amendments applicable for the first time after 2023

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements and which may have an impact on the Group are disclosed below. The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

Amendments to IFRS 16 Leases: Lease Liability in a Sale and Leaseback

On September 22, 2022, the IASB issued Amendments to IFRS 16 Leases: Lease Liability in a Sale and Leaseback. The amendments clarify how a seller-lessee subsequently measures sale and leaseback transactions that satisfy the requirements in IFRS 15 Revenue from Contracts with Customers to be accounted for as a sale. The amendments are effective for annual periods beginning on or after January 1, 2024, and are not yet endorsed by the EU. The Group is currently assessing the impact the amendments will have on its current accounting practices.

Amendments to IAS 1: Classification of Liabilities as Current or Non-current

These amendments provide a more general approach to the classification of liabilities under IAS 1 based on the contractual arrangements in place at the reporting date. The amendments aim to promote consistency in applying the requirements by helping companies determine whether, in the statement of financial position, debt and other liabilities with an uncertain settlement date should be classified as current (due or potentially due to be settled within one year) or non-current. The amendments were originally effective for annual reporting periods beginning on or after January 1, 2023, however, their effective date has been delayed to January 1, 2024. The amendments are not yet endorsed by the EU. This amendment is not expected to have a material impact on the Group's consolidated financial statements.

Amendments to IAS 7 Statement of Cash Flows and IFRS 7 Financial Instruments Disclosures: Supplier Finance Arrangements

In May 2023, the IASB issued amendments to IAS 7 and IFRS 7 to clarify the characteristics of supplier finance arrangements and require additional disclosure of such arrangements. The disclosure requirements in the amendments are intended to assist users of financial statements in understanding the effects of supplier finance arrangements on an entity's liabilities, cash flows and exposure to liquidity risk. The amendments will be effective for annual reporting periods beginning on or after January 1, 2024. Early adoption is permitted, but will need to be disclosed. The Group is still assessing the impact the amendments will have on its current accounting practices and disclosures. These amendments are not yet endorsed by the EU.

Amendments to IAS 21 The Effects of Changes in Foreign Exchange Rates: Lack of Exchangeability

On August 15, 2023, the IASB issued the amendments to IAS 21 which are effective for annual periods beginning on or after January 1, 2025, and specify when a currency is exchangeable into another currency and, consequently, when it is not, how an entity determines the exchange rate to apply when a currency is not exchangeable, and the disclosures an entity provides when a currency is not exchangeable. The Group is still assessing the impact the amendments will have on its current accounting practices and disclosures. These amendments are not yet endorsed by the EU.

Basis of measurement and presentation

The consolidated financial statements are presented in millions of euros, which is also the functional currency of the parent company. Rounding differences may occur in respect of individual amounts or percentages.

The preparation of the consolidated financial statements requires the use of estimates and assumptions that have an impact on the application of accounting policies and the measurement of amounts recognized in the consolidated financial statements. The areas for which the estimates and assumptions are material with respect to the consolidated financial statements are presented in the section Critical accounting judgments and Key sources of estimation uncertainty.

Principles of consolidation

2.1. Consolidation scope

2.1.1. General

The consolidated financial statements incorporate the financial statements of the Company, and:

- entities controlled by the Company (including through its subsidiaries) and that hence qualify as subsidiaries (see 3.1.2. below);
- arrangements over which the Company (including through its subsidiaries) exercises joint control, and that qualify as joint operations (see 3.1.3. below);
- arrangements over which the Company (including through its subsidiaries) exercises joint control, and that qualify as joint ventures (see 3.1.4. below);
- entities over which the Company (including through its subsidiaries) has significant influence and that hence qualify as associates (see 3.1.4. below).

Where necessary, adjustments are made to the financial statements of the investees so as to align their accounting policies with those of the Group.

In accordance with the principle of materiality, certain companies, which are not of a significant size, have not been included in the consolidation scope. Companies are deemed not to be significant when, during two consecutive years, they do not exceed any of the three following thresholds in terms of their contribution to the Group's accounts:

- sales of €30 million;
- total assets of €15 million;
- headcount of 150 persons.

Companies that do not meet these criteria are, nevertheless, consolidated where the Group believes that they have a potential for rapid development, or where they hold shares in other companies that are consolidated based on the above criteria.

In the aggregate, the non-consolidated companies have an immaterial impact on the consolidated financial statements of the Group.

The full list of companies can be obtained at the Company's head office.

2.1.2. Investments in subsidiaries

A subsidiary is an entity over which the Group has control. Control is achieved when the Group has (a) power over an investee, (b) exposure, or rights, to variable returns from its involvement with the investee, and (c) the ability to use its power over the investee to affect the amount of the investor's returns. To assess whether the Group has control, potential voting rights are taken into account. Subsidiaries are fully consolidated. The results of subsidiaries acquired or disposed of during the year are included in the consolidated income statement from the effective date of acquisition and up to the effective date of disposal.

Intra-group transactions, balances, income and expenses are eliminated on consolidation.

Non-controlling interests in subsidiaries are presented separately from the Group's equity. Non-controlling interests are initially measured, either at fair value (full goodwill method), or at the non-controlling interests' proportionate share in the recognized amounts of the acquiree's identifiable net assets (proportionate goodwill method). The choice of measurement is made on an acquisition-by-acquisition basis. Subsequent to the acquisition, the carrying amount of non-controlling interests is the amount of those interests at initial recognition plus the non-controlling interests' share of subsequent changes in equity. Total comprehensive income is attributed to non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Changes in the Group's equity interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions. The carrying amounts of the Group's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiary. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity.

When the Group loses control of a subsidiary, the profit or loss on disposal is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest, and (ii) the previous carrying amount of the assets (including goodwill) and liabilities of the subsidiary and any non-controlling interests. Amounts previously recognized in other comprehensive income in relation to the subsidiary are accounted for (i.e. Reclassified to profit or loss or transferred directly to retained earnings) in the same manner as would be required if the relevant assets or liabilities were disposed of. The fair value of any investment retained in the former subsidiary at the date when control is lost is considered to be the fair value on initial recognition for subsequent accounting in accordance with IFRS 9 or, when applicable, the cost on initial recognition of an investment in an associate or joint venture in accordance with IAS 28 Investments in Associates and Joint Ventures.

2.1.3. Investments in joint operations

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about relevant activities require the unanimous consent of the parties sharing control. In its consolidated financial statements, the Group recognizes its contractual share of the joint operations' assets, liabilities, revenue and expenses, which is generally aligned with the ownership interest in the joint operations.

2.1.4. Investments in associates and joint ventures

An associate is an entity over which the Group has significant influence and that is neither a subsidiary, nor an interest in a joint arrangement. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about relevant activities require the unanimous consent of the parties sharing control.

The results, assets and liabilities of associates and joint ventures are incorporated in the consolidated financial statements using the equity method of accounting, except when the investment is classified as held for sale, in which case it is accounted for in accordance with IFRS 5 Non-current Assets Held for Sale and Discontinued Operations. Under the equity method, on initial recognition, investments in associates and joint ventures are recognized in the consolidated statement of financial position at cost, and the carrying amount is adjusted for post-acquisition changes in the Group's share of the net assets of the associate or joint venture, less any impairment of the value of individual investments. Losses of an associate or joint venture in excess of the Group's interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture) are recognized only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets and (contingent) liabilities of the associate or joint venture recognized at the date of acquisition is goodwill. The goodwill is included within the carrying amount of the investment and is assessed for impairment as part of that investment.

Where a Group entity transacts with an associate or joint venture of the Group, profits and losses are eliminated to the extent of the Group's interest in the relevant associate or joint venture.

After application of the equity method, the Group reviews its investments in associates and joint ventures for impairment. At each reporting date, the Group determines whether there is objective evidence that the investment in the associate or joint venture is impaired. If there is such evidence, the Group performs its analysis and calculates any impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value, and then recognizes the loss in the consolidated income statement.

Foreign currencies

The individual financial statements of each Group entity are prepared in the currency of the primary economic environment in which the entity operates (its functional currency). For the purpose of the consolidated financial statements, the results and financial position of each Group entity are expressed in euros (EUR), which is the presentation currency of the Group's consolidated financial statements.

In preparing the financial statements of the individual entities, transactions in currencies other than the entities' functional currency are recognized at the exchange rates prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are translated at the closing rate. Non-monetary items carried at fair value that are denominated in foreign currencies are translated at the rate when the fair value was measured. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the date of the initial transactions.

Exchange differences are recognized in profit or loss in the period in which they arise except for:

- exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur in the foreseeable future (therefore forming part of the net investment in the foreign operation), which are recognized initially in other comprehensive income under "currency translation differences;" and
- exchange differences on transactions entered into in order to hedge certain foreign currency risks (see note F32 Financial instruments and financial risk management for hedge accounting policies).

The main exchange rates used are:

		Year-end rate		Average rate	
1 Euro =		December 31, 2023	December 31, 2022	2023	2022
Brazilian Real	BRL	5.3612	5.6354	5.4010	5.4391
Yuan Renminbi	CNY	7.8383	7.4199	7.6608	7.0781
Pound Sterling	GBP	0.8690	0.8870	0.8698	0.8526
Indian Rupee	INR	91.9678	88.3019	89.3107	82.6910
Japanese Yen	JPY	156.3416	140.7248	151.9821	138.0176
Korean Won	KRW	1,423.3871	1,349.6641	1,412.4780	1,357.2278
Mexican Peso	MXN	18.7359	20.8811	19.1854	21.1921
US Dollar	USD	1.1052	1.0674	1.0813	1.0531

Government grants

Government grants are not recognized until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants relating to the purchase of property, plant and equipment are deducted from the cost of those assets. They are recognized in the consolidated statement of financial position at their expected value at the moment of initial recognition. The grant is recognized in profit or loss over the depreciation period of the underlying assets as a reduction of depreciation expense.

Other government grants are recognized as income on a systematic basis over the periods in which the related costs, which they are intended to compensate for, are recognized. Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognized in profit or loss in the period in which they become receivable.

Climate change

In preparing the consolidated financial statements, management has considered the impacts of climate change, particularly in the context of the disclosures included in the Risk Report and Extra-financial Statements and the Group's progression towards the ambitious 2030 goals to reduce scope 1 and 2 greenhouse gas emissions from our operations by 30% and to achieve carbon neutrality by 2050.

Between 2021 and 2040, Solvay plans to invest up to €200 million to reach carbon neutrality for all its businesses other than Soda Ash with an additional investment of €1 billion identified for Soda Ash until 2040 to pave its path towards full carbon neutrality for the Group by 2050 (with approximately €250 million spent of the more than €600 million already engaged between Soda Ash and the rest). These investments are partially supported by external parties through equity-accounted investments and include non-recourse financing and government subsidies, enabling Solvay to remain competitive. Further studies on technology innovation will determine the future investment needs beyond 2040.

Since 2015 the Group has adopted an internal carbon price and it has imputed that as an input cost into all investment decisions, irrespective of prevailing market prices. The internal cost was originally set at €25 per metric ton in 2015, and was doubled to €50 in 2019. In 2021 it was then decided to be raised to €100 per metric ton of CO₂ with implementation in 2022. This approach ensures that all investments contribute positively to the resilience of the Group in the face of climate change risk and are also oriented towards achieving carbon neutrality.

In addition to the strategic direction, policies and commitments, it is important to note that Solvay is taking concrete actions aligned with its climate change commitments. These are extensively developed in the Sustainability Report. As an example of the Group's commitment to phase out of coal in the Soda Ash business, several projects were initiated comprising:

- The construction of two waste-wood boilers accounted for as finance leases in Rheinberg, Germany; the first of the two boilers was commissioned in 2021. The second boiler will enter into operation by the end of 2024.
- In Devnya, Bulgaria, a variety of renewable sources including sunflower husk pellets will be used to power production processes at our largest soda ash European site and reduce emissions related to energy production by 20%. As a consequence of this investment 130 kt CO₂ were not emitted in 2023.
- Already equipped with a waste to energy power plant since 2006, we recently further invested to modernize our gas cogeneration unit in Bernburg, Germany, to maintain our low CO₂ footprint at the site.
- In Green River, Wyoming, USA, our calciners and boilers are switching from coal to gas, a readily-available local resource, which will save 280 kilotons of CO₂ per year. This is in addition to the new project Solvay launched to deploy a new breakthrough technology that will abate greenhouse gas emissions originating from Trona mining operations. This will reduce the site's greenhouse gas emissions by 28% while growing its capacity. It will also make Solvay the first company to implement regenerative thermal oxidation technology to cut emissions from a trona mine. In 2023, about 100 kt CO₂ emissions were avoided.

- An equity investment in Dombasle Energy, France, of which Solvay has a 10% share. The project is largely financed through non-recourse debt executed in February 2022 and government subsidies. Included in the investment are two refuse derived fuel boilers. The project is expected to be fully deployed in 2025.

When such investments are made, the Group verifies the useful life of the assets that are replaced and adjusts the estimated useful life if necessary.

The Group is also actively working on sourcing its energy needs from more environmentally friendly resources including long-term renewable energy generation solutions both onsite and offsite at certain facilities. These include long-term solar and wind power purchase agreements generally accounted for as executory own use contracts. In addition, the Group has entered into long-term contracts to purchase Renewable Energy Certificates, which will cover almost one quarter of the electricity purchased and consumed in the United States. The latter are recorded in operating expenses. In 2023, 100% of our operations in China are still supplied by renewable electricity (1.3 PJ) (see Chapter 4.2 Energy of the extra-financial statements). From 6.3% of our renewable energy purchased versus our total amount of energy purchased in 2022, Solvay has improved its figure and has acquired 8.2% renewable energy purchased in 2023 versus total amount of energy purchased.

In addition the Star Factory program that embeds the design and execution of the ESG roadmap of each industrial sites including a specific effort on energy efficiency initiatives on the top of Energy transition projects. It was decided to extend the methodology of Star Factory to include other shared function (Supply Chain & Procurement particularly) in order to develop the complementary roadmaps to tackle Scope 3 emission on the top of improving competitiveness.

Management has also considered the impact of climate change in making some key estimates within the consolidated financial statements, including the execution of the Solvay One Planet strategy, which is included in the budgets, mid-term plan and long-term forecasts, which are used to:

- estimate future cash flows used in impairment assessments of the carrying value of non-current assets (such as intangible assets and goodwill) (see Note F23 Impairment);
- estimate future profitability used in the assessment of the recoverability of deferred tax assets (see Note F7.C. Deferred taxes in the consolidated statement of financial position);
- estimate provisions (see Note F31);
- estimate the long-term accounting assumptions, including CO₂ emission rights and energy prices for the energy intensive Soda Ash GBU (see Note F23 Impairment).

The Group's CO₂ emission rights and energy prices (gas/electricity/coal) are an important element of the cost structure, especially for the Soda Ash business. The Group has hedged a significant portion of its expected use through 2030. The hedges were taken into consideration in the goodwill impairment test performed and the long-term assumptions considered the higher capital expenditure required by the energy transition of the business after the hedged period. Considering the significant headroom on the Soda Ash CGU, no sensitivity is provided. See Note F23 Impairment.

The same exercise was done for the other cash generating units and management believes there are no realistic scenarios regarding climate change today, which would lead to an impairment of these assets.

In summary, the Group's climate change considerations mentioned above did not have a material impact on the financial reporting judgments and estimates during the year. Further, the Group concludes that the climate change risk does not impact the going concern assessment for December 2023.

CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

Critical accounting judgments

Partial Demerger of Syensqo

On March 15, 2022, the Group announced its plan to separate into two independent publicly traded companies. On December 9, 2023, the separation was effectuated through the means of the Partial Demerger. The Specialty Businesses were classified as discontinued operations following the approval of Partial Demerger by the shareholders and the net assets were distributed. The 2022 Consolidated Statement of Income was restated to reflect this classification. Solvay applied IFRIC 17 Distribution of Non cash-Assets to Owners to determine how to present the Partial Demerger which included estimating the fair value of the distribution. Solvay estimated the fair value of Syensqo by taking an average of the closing price of the first 30 days of trading activity of Syensqo to prevent distortions from short-term trading activity in the first weeks of trading. This being a fair value with observable inputs and was considered to be representative of the fair value at the distribution date.

The fair value was determined to be €9.5 billion which resulted in a gain of €1.65 billion over the then carrying amount of the net assets. The impact was recorded to the consolidated income statement in discontinued operations.

No other critical accounting judgments have been identified for the year ended December 31, 2023.

Key sources of estimation uncertainty

Impairment

The Group performs annual impairment tests on (groups of) CGUs to which goodwill has been allocated, and each time there are indicators that their carrying amount might be higher than their recoverable amount. This analysis requires management to estimate the future cash flows expected to be generated by the CGUs and a suitable discount rate in order to calculate present value. The recoverable amount is highly sensitive to discount and growth rates.

Further details are provided in note F19 Goodwill and Business Combinations and F23 Impairment.

Deferred tax assets

Deferred tax assets (DTA) are recognized for unused tax losses to the extent that it is probable that taxable profits will be available against which the losses can be utilized. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable profits.

The Group has €1,520 million (2022: €5,203 million) of tax losses carried forward for which no deferred tax assets were recognized. These losses relate to subsidiaries that have a history of losses, do not expire, and may not be used to offset taxable income elsewhere in the Group. The subsidiaries do not have any taxable temporary differences that could partly support the recognition of these losses as deferred tax assets. On this basis, the Group has determined that it cannot recognize deferred tax assets on these tax losses carried forward.

The goals referred to in Climate Change note may have an impact on the estimate of future probability used in the DTA recoverability assessment – see the note, above.

Further details are provided in Note F7.C. Deferred taxes in the consolidated statement of financial position and F7.D Other Information.

Defined benefit obligations – General

The actuarial assumptions used in determining the defined benefit obligations at December 31 as well as the annual cost can be found in note F30 Provisions for employee benefits. All main employee benefits plans are assessed annually by independent actuaries. Discount rates and inflation rates are defined centrally by management. The other assumptions (such as future salary increases and expected rates of medical care cost increases) are defined at a local level. All plans are supervised by the Group’s central Human Resources department with the help of a central actuary to check the reasonableness of the results and ensure consistency in reporting. All assumptions are reviewed at each reporting date.

Further details are provided in note F30 Employee benefits.

Environmental provisions

Environmental provisions are managed and coordinated jointly by the Environmental Rehabilitation department and the Finance department. In case of environmental impacts stemming from historical production activities, generally, no provision is recognized for remediation works beyond the 20 years due to the inherent high level of uncertainty as to the timing and amount.

The forecasts of expenses are discounted to their present value. The discount rates fixed by geographical area correspond to the average risk-free rate on 10-year government bonds or the inflation rate if higher. These rates are set annually by the Finance department and can be revised based on the evolution of economic parameters of the country involved. To reflect the passage of time, the provisions are increased each year at the discount rates described above.

Further details are provided in note F31 Provisions.

Provisions for litigations

Any significant litigations (post M&A and other, including threat of litigation) are reviewed by Solvay’s in-house lawyers with the support, when appropriate, of external counsels at least every quarter together with the Finance and Insurance Departments. This review includes an assessment of the need to recognize provisions, disclose contingent liabilities and/or contingent assets.

Further details are provided in note F31 Provisions and F36 Contingent assets, liabilities and financial guarantees.

Leases – Identifying whether a contract includes a lease

The Group enters into various contracts to obtain goods and services. Determining whether those contracts include a lease requires judgment. Elements that are considered include assessing whether or not there is an identified asset. To make the determination the Group considers whether or not it has the right to obtain substantially all of the economic benefit of the asset(s) throughout the period of use. Additionally, the Group assesses the extent of its decision-making rights and the existence of any substantive substitution rights. All facts and circumstances relevant to the assessment are considered and the identification of a lease is determined with the support of the departments that have the relevant knowledge, and which mainly includes the GBU management. Refer to note F21 Right-of-use assets and lease obligations for the leases that were identified by the Group and accounted for in accordance with IFRS 16 Leases.

Leases – Assessment of lease term

Determining the lease term requires judgment. Elements that are considered include assessing the probability that early termination options or extension options will be exercised. All facts and circumstances relevant to the assessment are considered, and the main ones have been described in note F21 Right-of-use assets and lease obligations. Lease terms are determined with the support of the departments that have the relevant knowledge, and that mainly includes the Purchasing department, and the Facilities department.

NON-IFRS (UNDERLYING) METRICS

In addition to IFRS accounts, Solvay also presents alternative performance indicators to provide a more consistent and comparable indication of the Group’s underlying financial performance and financial position, as well as cash flows. These indicators provide a balanced view of the Group’s operations and are considered useful to investors, analysts and credit rating agencies as these measures provide relevant information on the Group’s past or future performance, position or cash flows. These indicators are generally used in the sector it operates in and therefore serve as a useful aid for investors to compare the Group’s performance with its peers.

See note F1 Revenue and Segment Information for the reconciliation of the underlying EBITDA measure. Further information on definitions of adjustments (IFRS vs Underlying metrics) can be found in Glossary, and more information about reconciliation of non-IFRS (underlying) metrics with IFRS figures in Business Review.

NOTES TO THE CONSOLIDATED INCOME STATEMENT

Preliminary comment: consistent with the presentation in the consolidated income statement, the notes to the consolidated income statement as presented hereafter do not include the consolidated income statement impacts from discontinued operations that are presented on a separate line. Those are disclosed in note F8 Discontinued operations.

NOTE F1
REVENUE AND SEGMENT INFORMATION



Accounting policy

IFRS 15 establishes a five-step model to account for revenue arising from contracts with customers:

- Identify the contract,
- Identify the performance obligations,
- Determine the transaction price,
- Allocate the transaction price to the performance obligations in the contract, and
- Recognize revenue when or as the Group satisfies a performance obligation.

Under IFRS 15, revenue is recognized at an amount that reflects the consideration to which the Group expects to be entitled in exchange for transferring goods or services to a customer.

Sale of goods: Contracts can be short term (including based only on a purchase order) or long term, some have minimum off-take requirements. Contracts that contain take-or-pay provisions obligate customers to pay shortfall payments if the required volumes, as defined in the contracts, are not purchased. Shortfall payments are recognized as revenues when the likelihood of the customer purchasing the minimum volume becomes remote subject to renegotiation of the contract and collectability. As the Group is in the business of selling essential chemicals, and performance chemicals, contracts with customers generally concern the sale of goods. As a result, revenue recognition generally occurs at a point in time when control of the chemicals is transferred to the customer, generally on delivery of the goods.

Distinct elements: a good or service that is promised to a customer is distinct if both of the following criteria are met: (a) the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (i.e. The good or service is capable of being distinct); and (b) the Group’s promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (i.e. The promise to transfer the good or service is distinct within the context of the contract).

The revenue of the Group consists mainly of sales of chemicals, which qualify as separate performance obligations. Value-added services – mainly customer assistance services – corresponding to Solvay’s know-how are rendered predominantly over the period that the corresponding goods are sold to the customer.

Variable consideration: some contracts with customers provide trade discounts or volume rebates. Trade discounts and volume rebates give rise to variable consideration under IFRS 15, and are required to be estimated at contract inception and subsequently at each reporting date. IFRS 15 requires the estimated variable consideration to be constrained to prevent overstatement of revenue.

Moment of recognition of revenue: revenue is recognized when (or as) the Group satisfies a performance obligation by transferring a promised good or service (i.e. an asset) to a customer. An asset is transferred when (or as) the customer obtains control of that asset. Substantially all revenue stems from performance obligations satisfied at a point in time, i.e. The sale of goods. Revenue recognition for those takes into account the following:

- The Group has a present right to payment for the asset;
- The customer has legal title to the asset;
- The Group has transferred physical possession of the asset;
- The customer has the significant risks and rewards of ownership of the asset (in this respect, incoterms are considered); and
- The customer has accepted the asset.

Products sold to customers generally cannot be returned, other than for performance deficiencies. Customer acceptance clauses are in many cases a formality that would not affect the Group’s determination of when the customer has obtained control of the goods. Revenue from services is recognized in the period those services have been rendered.

The Group sells its chemicals to its customers, (a) directly, (b) through distributors, and (c) with the assistance of agents. When the Group delivers a product to distributors for sale to end customers, the Group evaluates whether that distributor has obtained control of the product at that point in time. No revenue is recognized upon delivery of a product to a customer or distributor if the delivered product is held on consignment. Indicators of consignment inventory include:

- The product is controlled by the Group until a specified event occurs, such as the sale of the product to a customer of the distributor or until a specified period expires;
- The Group is able to require the return of the product or transfer the product to a third party (such as another distributor); and
- The distributor does not have an unconditional obligation to pay for the product (although he might be required to pay a deposit).
- Agents facilitate sales and do not purchase and resell the goods to the end customer.

Warranties: warranties provide a customer with assurance that the related product will function as the parties intended because it complies with agreed-upon specifications. Substantially all warranties do not provide the customer with a service in addition to the assurance that the product complies with agreed-upon specifications, and are hence accounted for in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets.

Licensing: In case of performance obligations relating to licensing intellectual property (IP), the Group assesses if it grants a right to access the IP as it exists throughout the license period or a right to use the IP as it exists at the point in time at which the license is granted. If the performance obligation is to grant a right to access, then the related revenue is recognized over the license period; otherwise, it is recognized at a point in time, i.e. when the license period starts or when the customer starts using the IP. The Group assesses if the license provided can be considered as being distinct in the context of the contract. If not, the license will have to be bundled with other goods or services provided in the contract. Currently the Group grants a right to use IP, which means that revenue recognition occurs at a point in time.

An Operating Segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, whose operating results are regularly reviewed by the entity’s chief operating decision maker and for which discrete financial information is available.

General

Following the completion of the Partial Demerger of the Specialty Businesses on December 9, 2023, the structure of the internal organization changed what impacted the composition of the segments. Consequently, Solvay restructured its operating segments to better align with the Group’s strategy and is organized in the following reportable segments

- Basic Chemicals: host chemical intermediate businesses focused on mature and resilient markets. Solvay is a world leader in soda ash, bicarbonate, and peroxides. These global businesses share similar economic characteristics and serve major markets that include building and construction, consumer goods, and food.
- Performance Chemicals: hosts a wider range of products (in our Silica, Coatis and Special Chem businesses) that are subject to customization based on unique formulations and application expertise. These businesses share similar economic characteristics and are also high-quality assets with strong positions in their markets.
- Corporate: comprises corporate and other business services, such as Group research & innovation.

Solvay organizes its structure and groups the businesses around their similarities in financial performance which is systematically reviewed by the Chief Operational Decision Maker, products and production processes. Solvay’s chief operating decision maker is the Chief Executive Officer.

Prior year results were restated to align with the new reportable segments.

2.2. External net sales by cluster

The comparative figures for 2022 are restated

<i>In €million</i>	2023	2022
Soda Ash & Derivatives	2,093	2,221
Peroxides	633	773
Basic Chemicals	2,726	2,994
Silica	583	631
Coatis	646	870
Special Chem	919	1,040
Performance Chemicals	2,148	2,542
CBS and NBD	6	4
Corporate & Business Services	6	4
Total	4,880	5,540

There are no individual customers that contribute 10% or more to the Group's revenue or any individual segment's revenue in either 2023 or 2022.

Sales by market

Sales by market are presented in the Business Review, see note B1.

Net sales by country and region

The sales disclosed below are allocated based on the customers' location. The table presents restated information for 2022.

The comparative figures for 2022 are restated

<i>In €million</i>	2023	%	2022	%
Belgium	92	2%	139	3%
Germany	449	9%	461	8%
Italy	267	5%	272	5%
France	236	5%	242	4%
Netherlands	55	1%	51	1%
Spain	130	3%	122	2%
European Union – Other	415	9%	428	8%
European Union	1,645	34%	1,717	31%
Europe – Other	108	2%	113	2%
United States	830	17%	943	17%
Canada	58	1%	54	1%
North America	888	18%	997	18%
Brazil	610	13%	806	15%
Mexico	156	3%	131	2%
Latin America – Other	149	3%	235	4%
Latin America	914	19%	1,171	21%
Australia	27	1%	30	1%
China	298	6%	305	6%
Egypt	43	1%	65	1%
India	55	1%	63	1%
Indonesia	65	1%	86	2%
Israel	34	1%	46	1%
Japan	100	2%	107	2%
Malaysia	66	1%	83	1%
Russia	0	0%	8	0%
Saudi Arabia	99	2%	121	2%
South Africa	32	1%	52	1%
South Korea	115	2%	105	2%
Thailand	139	3%	154	3%
Turkey	38	1%	46	1%
Vietnam	48	1%	54	1%
Other	164	3%	218	4%
Asia and rest of the world	1,325	27%	1,541	28%
Total	4,880	100%	5,539	100%

Information per segment

The comparative figures for 2022 are restated

2023 – In €million	Basic Chemicals	Performance Chemicals	Corporate & Business Services	Group Total
Income statement items				
Net sales (including inter-segment sales)	2,777	2,152	6	4,935
— Inter-segment sales	-51	-4	0	-55
Net sales	2,726	2,148	6	4,880
Revenue from non-core activities	577	29	538	1,144
Gross margin	847	489	46	1,382
Depreciation and amortization	192	157	69	418
Earnings from associates and joint ventures	45	0	8	53
Underlying EBITDA ⁽¹⁾	916	405	-75	1,246
EBIT	712	186	-620	278
Net financial charges				-98
Income taxes				-208
Profit for the year from discontinued operations				2,132
Profit/(loss) for the year				2,105

December 31, 2023 – In €million	Basic Chemicals	Performance Chemicals	Corporate & Business Services	Group Total
Statement of financial position and other items				
Capital expenditures ⁽²⁾	294	120	35	450
Investments ⁽³⁾	4	5	-427	-418
Working capital				
— Inventories	325	289	28	642
— Trade receivables	459	264	118	841
— Trade payables	412	260	181	853

(1) Underlying EBITDA is a key performance indicator followed by management and includes other elements than those presented above. See below for the reconciliation between Underlying EBITDA and EBIT. See Business Review section for reconciliation of other Underlying measures with IFRS figures.
(2) Capital expenditures from continuing operations include acquisitions of property, plant and equipment, acquisition of intangible assets and acquisition of Right of use assets.
(3) The negative figure of €(427) million relates to RusVinyl sale of investment.

2022 – In €million	Basic Chemicals	Performance Chemicals	Corporate & Business Services	Group Total
Income statement items				
Net sales (including inter-segment sales)	3,064	2,554	4	5,622
— Inter-segment sales	-70	-12	0	-82
Net sales	2,994	2,542	4	5,539
Revenue from non-core activities	937	24	1,478	2,439
Gross margin	837	510	76	1,423
Depreciation and amortization	195	66	40	301
Earnings from associates and joint ventures	36	1	117	153
Underlying EBITDA ⁽¹⁾	859	414	86	1,359
EBIT	638	342	141	1,121
Net financial charges				11
Income taxes				-228
Profit for the year from discontinued operations				1,030
Profit/(loss) for the year				1,934

December 31, 2022 – In €million	Basic Chemicals	Performance Chemicals	Corporate & Business Services	Specialty Businesses	Group Total
Statement of financial position and other items					
Capital expenditures ⁽²⁾	235	101	74	612	1,022
Investments	1	0	5	8	15
Working capital					
— Inventories	354	351	21	1,382	2,108
— Trade receivables	522	277	229	998	2,026
— Trade payables	569	288	515	924	2,296

(1) Underlying EBITDA is a key performance indicator followed by management and includes other elements than those presented above. See below for the reconciliation between Underlying EBITDA and EBIT. See Business Review section for reconciliation of other Underlying measures with IFRS figures.
(2) Capital expenditures include acquisitions of property, plant and equipment, acquisition of intangible assets and acquisition of Right of use assets.

Reconciliation of Underlying EBITDA

The 2022 figures are restated

2023 – In €million	Basic Chemicals	Performance Chemicals	Corporate & Business Services	Group Total
EBIT	712	186	-620	278
Administrative costs			68	68
Other operating gains and (losses)			-14	-14
Earnings from associates and joint ventures			-7	-7
Depreciation and amortization	191	94	36	321
Results from portfolio management and major restructuring				
Results from legacy remediation and major litigations	13	126	461	600
Underlying EBITDA	916	405	-76	1,246

The reconciliation items “Result from portfolio management and major restructuring and results from legacy remediation and major litigations,” mainly include the loss on RusVinyl disposal and the restructuring and other costs incurred for the project aimed at the separation of the Group into two independent, publicly listed companies and other restructuring initiatives, and the environmental provisions accrued. The item depreciation and amortization exclude €102 million consisting of €7 million of the non-cash impact of purchase price allocation (PPA), amortization charges on intangible assets, and €95 million to adjust for the impact of impairment of other non-performing assets. The amount of €68 million includes the pure corporate costs related to the project aimed at the separation of the Group into two independent listed companies.

2022 – <i>In €million</i>	Basic Chemicals	Performance Chemicals	Corporate & Business Services	Group Total
EBIT	638	342	141	1,121
Administrative costs			71	71
Other operating gains and (losses)			-313	-313
Earnings from associates and joint ventures			-10	-10
Depreciation and amortization	192	89	40	321
Results from portfolio management and major restructuring and				
Results from legacy remediation and major litigations	28	-14	158	172
Underlying EBITDA	859	416	86	1,361

NON-CURRENT ASSETS, CAPITAL EXPENDITURES AND INVESTMENTS BY COUNTRY AND REGION

<i>In €million</i>	Non-current assets				Capital expenditures and investments			
	December 31, 2023	%	December 31, 2022	%	2023	%	2022	%
Belgium	272	7%	288	2%	-26	2%	-32	3%
Germany	338	9%	438	4%	-56	5%	-55	5%
Italy	259	7%	655	5%	-131	12%	-125	12%
France	653	18%	2,876	24%	-318	28%	-242	23%
Spain	128	3%	130	1%	-12	1%	-13	1%
European Union – Other	710	19%	314	3%	-33	3%	-37	4%
European Union	2,359	63%	4,702	38%	-577	51%	-504	49%
Europe – Other	6	0%	150	1%	-16	1%	-20	2%
United States	709	19%	5,273	43%	-390	34%	-348	34%
Canada	0	0%	175	1%	-19	2%	-12	1%
North America	709	19%	5,448	45%	-409	36%	-360	35%
Brazil	276	7%	277	2%	-41	4%	-34	3%
Latin America – Other	11	0%	22	0%	-5	0%	-5	1%
Latin America	287	8%	299	2%	-46	4%	-39	4%
Russia	0	0%	432	4%	0	0%	0	0%
Thailand	72	2%	91	1%	-5	0%	-5	0%
China	102	3%	588	5%	-54	5%	-79	8%
South Korea	50	1%	73	1%	-5	0%	-7	1%
India	0	0%	233	2%	-12	1%	-8	1%
Singapore	0	0%	3	0%	-1	0%	-3	0%
Japan	15	0%	19	0%	-3	0%	-3	0%
Other	125	3%	186	2%	-4	0%	-6	1%
Asia and rest of the world	364	10%	1,624	13%	-84	7%	-112	11%
Total	3,726	100%	12,223	100%	-1,132	100%	-1,036	100%

Non-current assets are those other than deferred tax assets, loans and other assets, and other financial instruments. Capital expenditures and investments include acquisitions of property, plant and equipment, right-of-use assets, intangible assets and investments in subsidiaries and other investments (joint operations, joint ventures and associates). Both exclude discontinued operations.

NOTE F2

CONSOLIDATED INCOME STATEMENT BY NATURE

The comparative figures for 2022 are restated

<i>In €million</i>	Notes	2023	2022
Net sales	(F1)	4,880	5,539
Revenue from non-core activities	(F3)	1,145	2,439
Raw materials, utilities and consumables used		-2,802	-4,790
Changes in inventories		-78	76
Personnel expenses		-835	-827
— Wages and direct social benefits		-623	-620
— Employer's contribution for social insurance		-163	-145
— Pensions and insurance benefits		-26	-48
— Other personnel expenses		-22	-14
Amortization, depreciation and impairment	(F11)	-423	-301
Other variable logistics expenses		-568	-695
Other fixed expenses		-412	-350
Addition and reversal of provisions (excluding employee benefit provisions)	(F31)	-279	-138
Significant income related to prior years	(F4)	0	97
M&A costs and gains and losses on disposals	(F5)	-404	-83
Earnings from associates and joint ventures	(F22)	53	153
EBIT		278	1,121

Other fixed expenses mainly include costs of services, licenses, and professional fees.

The change in raw materials, utilities, and consumables used is largely explained by the decrease in energy prices, and lower volume.

NOTE F3

REVENUE FROM NON-CORE ACTIVITIES

This revenue primarily comprises commodity and utility third party transactions, non-core licensing transactions, and other revenue, considered to not correspond to Solvay's core business (mainly in France and Italy). The decrease compared to 2022 is mainly related to the reduction in gas and electricity price.

NOTE F4

OTHER OPERATING GAINS AND LOSSES

<i>In €million</i>	2023	2022
Start-up and preliminary study costs	-2	-3
Capital gains/losses on sales of property, plant and equipment and intangible assets	3	3
Net foreign exchange gains and losses	2	10
Amortization of intangible assets resulting from PPA	-7	-8
Gain (loss) on CO ₂ hedge management (1)	-14	322
Financial result linked to operational activities	14	3
Other	19	-4
Other operating gains and losses	15	323

The comparative figures for 2022 are restated.
(1) In 2022, the gain of €322 million relates to the change in accounting treatment of the entire portfolio of CO₂ emission rights following the reconsideration of the IFRS 9 own use exemption.

NOTE F5

RESULTS FROM PORTFOLIO MANAGEMENT AND MAJOR RESTRUCTURINGS,
LEGACY REMEDIATION AND MAJOR LITIGATIONS



Accounting policy

- Results from portfolio management and major restructurings include:
- gains and losses on the sale of subsidiaries, joint operations, joint ventures, and associates that do not qualify as discontinued operations;
 - acquisition costs of new businesses;
 - one-off operating costs related to internal management of portfolio (carve-out of major lines of businesses);
 - gains and losses on the sale of real estate not directly linked to an operating activity;
 - restructuring charges driven by portfolio management and by major reorganizations of business activities, including impairment losses resulting from the shutdown of an activity or a plant;
 - impairment losses (reversals) resulting from testing of CGUs.
- Results from legacy remediation and major litigations include:
- the remediation costs not generated by on-going production facilities (shut-down of sites, discontinued productions, previous years' pollution); and
 - the impact of significant litigations.

Results from portfolio management and major restructuring

<i>In €million</i>	2023	2022
Restructuring costs and impairment	-146	15
Impairment	-95	28
Restructuring costs	-51	-13
M&A costs and gains and losses on disposals	-404	-83
Results from portfolio management and major restructuring	-550	-68

The comparative figures for 2022 are restated.

In 2023, the impairment includes goodwill impairment of energy CGU €(38) million, and impairment in the Special Chem CGU for Fluor Gases in Europe for €(48) million – see note F23 for further details on the impairment.

The restructuring costs are mainly linked to the separation plan of the Solvay Group €(35) million.

In 2023, M&A costs is mainly explained by the costs incurred for the ongoing separation plan of the Solvay Group €(218) million, and the recycling of RusVinyl of currency Translation Adjustment reserve €(176) million.

In 2022, impairment includes the reversal of impairment losses in the Special Chem CGU for Fluor Gases in Europe for €37 million, impairment losses of other non-performing assets for €(9) million.

The 2022 increase in M&A costs is mainly explained by the costs incurred for the ongoing separation plan of the Solvay Group. For the movement in restructuring and remediation costs please refer to the note F31 Provisions.

RESULTS FROM LEGACY REMEDIATION AND MAJOR LITIGATIONS

<i>In €million</i>	2023	2022
Major litigations	-12	-30
Remediation costs and other costs related to non-ongoing activities	-38	-71
Results from legacy remediation and major litigations	-50	-101

The comparative figures for 2022 are restated.

For the movement in litigation costs and remediation costs, please refer to the note F31. Provisions.

NOTE F6
NET FINANCIAL CHARGES



Accounting policy

Interest on borrowings is recognized in costs of borrowings as incurred, with the exception of borrowing costs directly attributable to the acquisition, construction and production of qualifying assets (see note F20 Property, Plant and Equipment).

Net foreign exchange gains or losses on financial items and changes in fair value of derivative financial instruments related to net indebtedness are presented in “Other gains and losses on net indebtedness,” with the exception of changes in fair value of derivative financial instruments that are hedging instruments in a cash flow hedge relationship, and which are recognized on the same line as the hedged item, when the latter affects profit or loss.

<i>In €million</i>	2023	2022
Cost of borrowings	-60	-45
Interest expense on lease liabilities	-11	-10
Interest on loans and short term deposits	36	16
Other gains and losses on net indebtedness	-6	27
Net cost of borrowings	-41	-12
Cost of discounting provisions	-45	-23
Impact of change of discount rate on provisions	-17	45
Result from equity instruments measured at fair value	4	0
Net financial charges	-98	11

The comparative figures for 2022 are restated.

Details are included in note F33 Net indebtedness.

The net cost of borrowings variance is mainly explained by:

- Higher cost of borrowings for €(15) million largely explained by the replacement of perpetual hybrid bonds that qualified as equity (for which coupons were deducted from equity upon declaration) by other non-current debts triggering interest expenses.
- Higher interest income on loans and deposits (higher volumes and increase in interest rates).
- Other gains and losses on net indebtedness from €27 million for 2022 to €(6) million for 2023, attributable to lower currency swaps income €(5) million (interest element), other financial charges for €(15) million mainly explained by costs related to the separation plan and lower foreign exchange income for €(13) million.

The cost of discounting provisions relates to post-employment benefits (€(26) million) and to environmental provisions (€(19) million) and its increase is largely attributable to the evolution of the applicable discount rates (see also note F30 Employee benefits and note F31 Provisions).

NOTE F7
INCOME TAXES IN THE INCOME STATEMENT AND THE STATEMENT OF FINANCIAL POSITION



Accounting policy

Current taxes

The current tax payable is based on taxable profit of the year. Taxable profit differs from profit as reported in the consolidated income statement because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group’s liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred taxes

Deferred taxes are recognized for temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and their corresponding tax bases used in the computation of taxable profit.

Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are generally recognized for all taxable temporary differences.

No deferred tax liabilities are recognized following the initial recognition of goodwill. In addition, no deferred tax assets or liabilities are recognized with respect to the initial recognition of an asset or liability in a transaction which is not a business combination and affects neither accounting profit nor taxable profit.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries, joint operations, joint ventures, and associates, except where the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized. Unrecognized deferred tax assets are re-assessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered. Deferred tax assets other than tax loss carryforwards are analyzed on a case by case basis, taking into account all relevant facts and circumstances. For example, a zero taxable profit, after deducting the amounts paid to retirees under a defined benefit plan and for which a deductible temporary difference existed, can justify the recognition of the underlying deferred tax assets. Recognition of deferred tax assets for tax loss carryforwards requires a positive taxable profit during the year that enables the utilization of tax losses that originated in the past. Because of uncertainties inherent to predicting such positive taxable profit, recognition of deferred tax assets from tax loss carryforwards is based on a case by case analysis, which is usually based on five-year profit forecasts, except with respect to any financial company for which ten-year financial profit forecasts are considered highly predictable and are consequently used.

The corporate tax reporting team, which monitors the Group deferred tax positions, is involved in assessing deferred tax assets.

Further details are provided in note F7.C.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset is realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Current tax assets and liabilities are offset when there is a legally enforceable right to set off the recognized amounts and when the Group intends to settle its current tax assets and liabilities on a net basis.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Current and deferred taxes for the period

Current and deferred taxes for the period are recognized as an expense or income in profit or loss, except when they relate to items that are recognized outside profit or loss (whether in other comprehensive income or directly in equity), in which case the tax is also recognized outside profit or loss, or when they arise from the initial accounting for a business combination. In the case of a business combination, the tax effect is taken into account in the accounting for the business combination.

Exception to the above, as from January 1, 2019, the Group applies the amendments to IAS 12, that apply to the income tax consequences of dividends recognized on or after the beginning of the earliest comparative period, i.e. January 1, 2018. In 2018, the income tax consequences of the coupons on perpetual hybrid bonds classified as equity were recognized in equity. As a result of the adoption of the amendment, those income tax consequences are now recognized in profit or loss.

F7.A. Income taxes

The income taxes (net expense) recognized in the consolidated income statement decreased by €29 million in 2023 compared to 2022. The income taxes (net expense) recognized in other comprehensive income decreased by €58 million in 2023 compared to 2022, mainly due to the movement in employee benefit provisions (see note F30 Employee benefits) and due to the variation of the CO₂ emission rights contracts (see note F32 Financial instruments and Financial risk management).

<i>In €million</i>	2023	2022
Current taxes related to current year	-180	-107
Provisions for tax litigations	1	11
Other current taxes related to prior years	5	4
Current taxes	-174	-92
Changes in unrecognized deferred tax assets (a)	-91	-7
Deferred tax income on amortization of PPA step-ups	2	3
Deferred tax impact of changes in the nominal tax rates	2	4
Deferred taxes related to prior years	-5	3
Other deferred taxes (b)	59	-138
Deferred taxes	-34	-135
Income taxes recognized in the consolidated income statement	-208	-228
Income taxes on items recognized in other comprehensive income	2	-66

The current taxes (net expense) related to the current year increased by €(73) million due to higher taxable profits in countries with high effective tax rates (e.g. Italy, Belgium, and Germany) slightly offset by the reversal of provisions for tax litigation.

- (a) In 2023, the change in unrecognized deferred tax assets amounted to €91 million resulting mainly from a revision of the forecasted taxable results mainly due to the exit from the tax unit in France as a consequence of the Partial Demerger of the Group.
- (b) In 2023, the other deferred taxes (€63 million) mainly relate to provisions other than employee benefits and tangible assets.

Developments in International Taxation

Solvay SA/NV is closely monitoring the laws which the various jurisdictions are adopting following the Organization for Economic Co-operation and Development (OECD) and EU-initiatives regarding the Pillar Two Global Minimum Tax of 15% and the potential impact thereof. A preliminary assessment of this potential impact, which has been conducted with support of an independent advisor using financial information of financial year 2022 of Solvay SA/NV (prior to the partial demerger of December 8, 2023), indicated that no material tax impact is reasonably to be expected. Because of the complexity of the Pillar Two rules, the continued further guidance and supplementation of the legislation and the complexity of Solvay's partial demerger from both a financial and transactional perspective, the financial year 2023 is considered not a suitable reference and the impact assessment will continue in the course of 2024.

Solvay SA/NV will continue to conduct tax technical analyses and further develop its tools and processes over the next few months and continue to involve, inform and educate key stakeholders, both internal and external.

F7.B. Reconciliation of the income tax expense

The effective income tax expense has been reconciled with the theoretical tax expense obtained by applying to the pre-tax profit of each Group entity the nominal tax rate prevailing in the country in which it operates.

<i>In €million</i>	2023	2022
Profit/(Loss) for the year before taxes	180	1,132
Earnings from associates and joint ventures	53	153
Profit/(Loss) for the year before taxes excluding earnings from associates and joint ventures	127	979
Reconciliation of the tax income/(expense)		
Total tax income/(expense) of the Group entities computed on the basis of the respective local nominal rates	-27	-222
Weighted average nominal rate	21%	25%
Withholding taxes	-31	-21
Tax effect of changes in nominal tax rates	2	4
Changes in unrecognized deferred tax assets	-91	-7
Tax effect of permanent differences	-36	17
Gain and losses with no tax expense and income	-20	-12
Provisions for tax litigations	1	11
Other tax effect of current and deferred tax adjustments related to prior years	0	7
Tax effect on distribution of dividends	-4	-4
Effective tax income/(expense)	-208	-227
Effective tax rate	116%	20%

The weighted average nominal rate decreased from 2022 (25%) to 2023 (21%).

The higher effective tax rate is mainly due to the changes in recognition of deferred tax assets in France and the impact of the RusVinyl disinvestment.

F7.C. Deferred taxes in the consolidated statement of financial position

2023 – In €million	Opening balance	Recognized in income statement	Recognized in other comprehensive income	Exchange rate effect	Other acquisition / disposal	Other	Partial Demerger	Closing balance
Temporary differences								
Employee benefits obligations	234	-90	-47	0		-1	1	98
Provisions other than employee benefits	175	24		1		-1	-164	35
Property, plant and equipment	-234	34		11			145	-44
Intangible assets	-196	28		-3			178	7
Right-of-use assets	-81	4		1			35	-40
Lease liabilities	82	-4		-1			-34	43
Goodwill	58	0		-1			-57	0
Other temporary differences	-66	2	49	0		4	-3	-14
Tax losses	375	-17		0		-1	-257	99
Tax credits	27	-16		0			-9	2
Total (net amount)	374	-34	2	8		2	-166	186

2022 – In €million	Opening balance	Recognized in income statement	Recognized in other comprehensive income	Exchange rate effect	Other acquisition / disposal	Transfer to assets held for sale	Closing balance
Temporary differences							
Employee benefits obligations	289	7	-68	5		1	234
Provisions other than employee benefits	208	-42		9	0	0	175
Property, plant and equipment	-225	7		-15	0	-1	-234
Intangible assets	-274	96		-17	0		-196
Right-of-use assets	-74	-4		-2	0	0	-81
Lease liabilities	75	4		3		0	82
Goodwill	3	56		-1			58
Other temporary differences	20	-84	1	-3	0	0	-66
Tax losses	263	109		3	0		375
Tax credits	33	-7		1			27
Total (net amount)	318	141	-66	-18	0	0	374

The significant components of the deferred tax assets and deferred tax liabilities at the end of 2023 and 2022 are as follows:

In €million		2023			
	Deferred tax assets	Deferred tax liabilities	Net deferred taxes before write-down	Write-down of deferred tax assets (unrecognized portion)	Net deferred taxes
Employee benefits obligations	208	-25	182	-84	98
Provisions other than employee benefits	165	-57	108	-73	35
Property, plant and equipment	56	-108	-52	8	-44
Intangible assets	14	-16	-1	8	7
Right-of-use assets	-6	-42	-47	7	-40
Lease liabilities	52	-1	51	-8	43
Goodwill	0	0	0	0	0
Other	200	-211	-10	-3	-14
Temporary differences	689	-459	230	-145	85
Operational losses	218	0	218	-165	53
Non-operational losses	58	0	58	-13	46
Tax losses	276	0	276	-178	99
Tax credits carried forward	2	0	2	0	2
Netting deferred taxes	-328	328	0	0	0
Deferred taxes	639	-131	508	-322	186

In €million		2022			
	Deferred tax assets	Deferred tax liabilities	Net deferred taxes before write-down	Write-down of deferred tax assets (unrecognized portion)	Net deferred taxes
Employee benefits obligations	328	-94	234	0	234
Provisions other than employee benefits	241	-66	174	1	175
Property, plant and equipment	69	-275	-207	-28	-234
Intangible assets	261	-381	-120	-76	-196
Right-of-use assets	0	-82	-81	0	-81
Lease liabilities	80	2	82	0	82
Goodwill	58	0	58	0	58
Other	175	-238	-63	-3	-66
Temporary differences	1,211	-1,133	76	-105	-29
Operational losses	1,479	0	1,479	-1,187	292
Non-operational losses	308	0	308	-225	83
Tax losses	1,787	0	1,787	-1,412	375
Tax credits carried forward	81	1	81	-55	27
Netting deferred taxes	-575	575	0	0	0
Deferred taxes	2,504	-557	1,945	-1,572	374

The evolution of the net deferred taxes between 2023 and 2022 mainly relates to the following items:

- The total net deferred taxes of €186 million at year-end 2023 are €188 million lower than in 2022.
- The main changes in 2023 are related to the following items:
- Deferred taxes on employee benefit obligations: €98 million at year-end 2023 - €136 million lower than in 2022, explained by the non-recognition of deferred taxes in France (€(48) million in income statement and €(28) million in other comprehensive income) and by the decrease of post-employment benefits obligations mainly in France.
- Deferred taxes on provisions other than employee benefits: €35 million at year-end 2023 - €140 million lower than in 2022; mainly due to the Partial Demerger (€164 million)
- Deferred taxes on intangible assets: €7 million at year-end 2023 - €203 million lower than in 2022. The decrease in these liabilities in 2023 is mainly due to the Partial Demerger (€178 million)
- deferred taxes on operational and non-operational tax losses: €99 million at year-end 2023 - €276 million lower than in 2022 mainly due to the Partial Demerger (€257 million) and less recognition in Belgium (€6 million).
- Deferred tax assets on other temporary differences: €(14) million at year-end 2023 - €52 million lower than in 2022 mainly due to the derecognition of the CO₂ emission rights contracts in several legal entities.
- Deferred tax liabilities on unremitted earnings were recognized in the Other Temporary differences for €(16) million at year-end 2023 (€(56) million at year-end 2022). The amounts of deferred tax liabilities not recognized, provided that the Group controls the timing of the reversal of the temporary differences and it is probable that they will not reverse in the foreseeable future were €36 million at year-end 2023 (€32 million at year-end 2022).

Recognized deferred taxes for which utilization depends on future taxable profits in excess of the profit arising from the reversal of existing taxable temporary differences within entities that have suffered a tax loss in either current or preceding years in the related tax jurisdiction, amount to €187 million (€134 million in 2022). This recognition is supported by favorable expectations of future taxable profits.

F7.D. Other information

For the majority of the Group’s tax loss carryforwards, no deferred tax assets have been recognized. The unrecognized tax losses are mainly located in countries where they can be carried forward indefinitely.

The tax losses carried forward generating deferred tax assets are given below by expiration date.

<i>In €million</i>	2023	2022
Within 1 year	13	0
Within 2 years	7	1
Within 3 years	2	1
Within 4 years	0	0
Within 5 or more years	53	12
No time limit	316	1,402
Total of losses carried forward which have generated recognized deferred tax assets	391	1,417
Tax losses carried forward for which deferred tax assets were written-down	1,520	5,203
Total of tax losses carried forward	1,911	6,620

The tax losses carried forward of €391 million (€1,417 million in 2022) have generated deferred tax assets for €100 million (€375 million in 2022).

The decrease of tax losses carried forward which have generated a reduction of tax assets, is largely due to the Partial Demerger of the Group

NOTE F8
DISCONTINUED OPERATIONS AND PARTIAL DEMERGER



Accounting policy

A discontinued operation is a component of the Group which the Group has disposed of or which is classified as held for sale, and which:

- represents a separate major line of business or geographical area of operations;
- is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations; or
- is a subsidiary acquired exclusively with a view to resale.

A component of the Group consists of operations and cash flows, which can be clearly distinguished operationally and for financial reporting purposes, from the rest of the Group.

In the consolidated statement of comprehensive income, the consolidated statement of cash flows, and disclosures, discontinued operations are restated for prior periods presented.

In accordance with IFRIC 17 Distribution of Non-cash Assets to Owners, and IFRS 10 Consolidated Financial Statements – chapter on loss of control – Solvay measures the profit on distribution in the form of demerger as the excess amount of the fair value of the distributed net assets over the then-carrying value of the net assets of the distributed businesses, adjusted for the related NCI.

The recognition of the fair value of the distributed net assets may require the use of valuation techniques. Solvay uses the observable values as input for such valuation techniques.

Solvay applies IFRS 5 requirements after intercompany elimination.

F8.A. Partial Demerger of the Specialty Businesses

On March 15, 2022, the Group announced that it was reviewing plans to separate into two independent, publicly traded companies. Effective December 9, 2023, at 00:00 a.m. CET, the Group’s Materials segment, and the majority of the Group’s Solutions segment (i.e., Novecare, Technology Solutions, Aroma Performance, and Oil and Gas) (together the “Specialty Businesses”) were separated from Solvay SA/NV by way of a partial demerger of Solvay SA/NV under Belgian law (the “Partial Demerger”), whereby the shares and other interests held by Solvay SA/NV in the legal entities operating the Specialty Businesses, Solvay SA/NV’s rights and obligations under the agreements entered into with those legal entities, as well as certain other assets and liabilities were contributed to Syensqo SA/NV.

The Partial Demerger had not satisfied the criteria of discontinued operations until the decision of the extraordinary shareholders’ meeting held on December 8, 2023, to approve the Partial Demerger. In consequence, the Specialty Businesses were not presented as discontinued operations in the Group’s 2022 annual integrated report. As mentioned above, the effective date of the Partial Demerger was December 9, 2023.

Discontinued operations include the operational results of the Specialty Businesses, mentioned above, certain corporate activities attributable to these businesses business prior to the Partial Demerger, and the gain on non-cash distribution of Specialty Businesses to Syensqo shareholders. The operations of Specialty Businesses are presented as discontinued operations in these financial statements.

The energy and CO₂ contracts related to the Specialty Businesses were transferred during the Partial Demerger.

Solvay SA/NV and Syensqo SA/NV entered into a Separation Agreement on December 4, 2023, to govern (i) certain practical aspects of the separation of the two groups, as well as the (ii) creation of cross indemnities to adjust, where necessary, the allocation of certain liabilities resulting from the legal structuring, and (iii) the allocation of certain liabilities, including environmental liabilities. Please refer to “Main Events and Changes in the Consolidation Scope” for further details on the “Separation Agreement” and “Liability management.”

The Partial Demerger impacted the market value of all of the issued and outstanding shares of Solvay SA and the options on these shares. This includes the shares held by Solvay Stock Option Management SRL (“SSOM”), a wholly owned subsidiary of Solvay, for the purposes of hedging its exposure under LTI plans. For each share of Solvay SA/NV held by SSOM upon completion of the Partial Demerger, SSOM received one newly issued share of Syensqo SA/NV; the newly issued Syensqo shares were classified as investments at fair value through profit or loss and reclassified out of equity. The details on treasury shares and equity investments at fair value through profit or loss are provided in Notes F30 Equity, and F32 Financial Instruments.

The profit from discontinued operations in the consolidated income statement is analyzed as follows (2023 – from January 1, 2023, to December 8, 2023):

<i>In €million</i>	2023	2022
Sales	6,656	8,092
— of which revenue from non-core activities	167	205
— of which net sales	6,489	7,887
Cost of goods sold	-4,357	-5,489
Gross margin	2,299	2,604
Commercial costs	-272	-222
Administrative costs	-466	-617
Research and development costs	-318	-312
Other operating gains and (losses)	-132	-152
Earnings from associates and joint ventures	18	18
Results from portfolio management and major restructuring	-53	-37
Results from legacy remediation and major litigations	-274	-182
EBIT	802	1,100
Cost of borrowings	-54	-63
Interest on loans and short term deposits	14	1
Other gains and (losses) on net indebtedness	-22	-24
Cost of discounting provisions	-20	18
Result from equity instruments measured at fair value	3	-13
Profit/(loss) for the year before taxes	723	1,019
Income taxes	-242	11
Profit for the year from discontinued operations	481	1,030
Gain on Partial Demerger according to IFRIC 17	1,651	
Profit for the year from discontinued operations with the gain on the Partial Demerger	2,132	1,030

The gain on Partial Demerger is analyzed below.

F8.B. Partial Demerger - other related information

Net assets of the demerged Specialty Businesses:

<i>In €million</i>	Upon completion of the Partial Demerger (Dec. 9, 2023)
ASSETS	
Intangible assets	1,678
Goodwill	2,637
Property, plant and equipment	3,481
Right-of-use assets	189
Equity instruments measured at fair value	79
Investments in associates and joint ventures	202
Other investments	4
Deferred tax assets	884
Loans and other assets	178
Other financial instruments	30
Non-current assets	9,362
Inventories	1,256
Trade receivables	1,083
Income tax receivables	55
Other financial instruments	56
Other receivables	320
Cash and cash equivalents	1,143
Current assets	3,913
Total assets	13,274
LIABILITIES	
Provisions for employee benefits	333
Other provisions	303
Deferred tax liabilities	718
Financial debt	816
Other liabilities	22
Non-current liabilities	2,192
Other provisions	315
Financial debt	1,472
Trade payables	923
Income tax payables	52
Other liabilities	401
Current liabilities	3,163
Total liabilities	5,355
Net assets directly associated with disposal group	7,920

Gain on Partial Demerger according to IFRIC 17:

<i>In €million</i>	
Fair value of the distribution	9,546
Net assets	-7,920
Other adjustments	7
Non-controlling interest associated with the net assets of Specialty Businesses	17
Gain on the Partial Demerger	1,651

The fair value of the distribution was measured by reference to the average of the closing price of the first 30 days of trading activity of Syensqo shares, following the Partial Demerger. This being a fair value measured with observable inputs, was considered to be representative of the fair value of the assets and liabilities effected by the demerger at the distribution date.

F8.C. Other information relevant to discontinued operations

Edison

In February 2023, Solvay Specialty Polymers Italy S.p.A., a former subsidiary of Solvay transferred to Syensqo as part of the Partial Demerger, received compensation of €91.6 million after decisions by the International Chamber of Commerce's Arbitration Court, the Swiss Supreme Court, and the Milan Court of Appeal, all of which ruled in favor of Solvay Specialty Polymers Italy S.p.A. The compensation relates to losses, damages and costs incurred up to the end of 2016 in relation to certain environmental issues at the Spinetta Marengo and Bussi sites, previously owned and operated by (Mont)Edison S.p.A. and Ausimont S.p.A. The compensation received in 2023 was included within discontinued operations in the Consolidated Income Statement.

Environmental liabilities

On June 28, 2023, Solvay Specialty Polymers USA, LLC, a former subsidiary of Solvay transferred to Syensqo as part of the Partial Demerger, and the New Jersey Department of Environmental Protection (NJDEP) announced they reached a settlement resolving certain PFAS-related claims in New Jersey. As a result of this settlement, Solvay increased its existing provision by around US\$250 million as of June 30, 2023, with US\$175 million cash out in 2024 and the balance over a 30-year period. There were no further changes prior to the Partial Demerger. The provision was derecognized as a part of the Partial Demerger and transferred to Syensqo as from December 9, 2023.

NOTE F9EARNINGS PER SHARE



Accounting policy

The basic earnings per share are obtained by dividing profit for the year by the weighted average number of ordinary shares outstanding during the reporting period. The weighted average number of ordinary shares excludes the treasury shares held by the Group over the reporting period.

The diluted earnings per share are obtained by dividing profit for the year, adjusted for the effects of dilutive potential ordinary shares, by the weighted average number of ordinary shares, also adjusted by the number of dilutive potential ordinary shares attached to the issuance of share options.

The number of dilutive potential ordinary shares is calculated for the weighted average number of share options outstanding during the reporting period as the difference between the average market price of ordinary shares during the reporting period and the exercise price of the share option. Share options have a dilutive effect only when the average market price is above the exercise price (share options are “in the money”).

For the purpose of calculating diluted earnings per share, there were no adjusting elements to the profit for the year (Solvay share).

Basic and diluted amounts per share for discontinued operations are presented in the consolidated income statement.

Number of shares (in units)	2023	2022
Weighted average number of ordinary shares (basic)	104,160,774	103,744,461
Dilution effect	1,288,845	398,745
Weighted average number of ordinary shares (diluted)	105,449,619	104,143,206

	2023		2022	
	Basic	Diluted	Basic	Diluted
Profit/(loss) for the year (Solvay share) including discontinued operations (in €thousands)	2,092,753	2,092,753	1,905,417	1,905,417
Profit/(loss) for the year (Solvay share) excluding discontinued operations (in €thousands)	-37,172	-37,172	890,040	890,040
Earnings per share (including discontinued operations) (in €)	20.09	19.85	18.37	18.30
Earnings per share (excluding discontinued operations) (in €)	-0.36	-0.35	8.58	8.55

The 2022 figures were restated.

More information regarding shares, including dividend per share, can be found in the Business Review section.

The average market price during 2023 was €26.93 per share. In connection with the listing of Syensqo SA/NV following completion of the Partial Demerger, Euronext Brussels restated the quotation data for 2023. For the purpose of calculating the average, we based on this restated data.

The following share options were out of the money, and therefore antidilutive for the period presented, but could potentially dilute basic earnings per share in the future (see note F29 Share-based payments):

Antidilutive share options per plans	Date granted	Exercise price (in €)	Number of share options granted	Number of share options outstanding
2016	February 24, 2016	13.11	696,144	168,429
2017	February 23, 2017	19.19	316,935	216,709
2018 – 1	February 27, 2018	19.51	400,704	260,611
2018 – 2	July 30, 2018	18.69	72,078	53,640
2019	February 27, 2019	16.74	438,107	175,109
2020	February 26, 2020	16.52	405,670	171,427
2021	February 24, 2021	16.49	265,433	105,594
2022	September 28, 2022	84.34	386,867	102,336
Total			2,981,938	1,253,855

The 2022 plan has not been split and the underlying is a combined instrument of Solvay SA/NV and Syensqo SA/NV shares. Consequently, the strike price (€84.34) has not been adjusted.

NOTES TO THE CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

NOTE F10
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME



Accounting policy

In accordance with IAS 1 Presentation of Financial Statements, the Group elected to present two statements, i.e. a consolidated income statement immediately followed by a consolidated statement of comprehensive income.

The components of other comprehensive income (OCI) are presented before related tax effects with one amount shown for the aggregate amount of income tax relating to those components. Tax impacts are further disclosed in this note.

Presentation of the tax effect relating to each item of other comprehensive income

Note: the below table presents the total other comprehensive income items for the aggregate of the shares of Solvay and the non-controlling interests.

In €million	2023		
	Before-tax amount	Tax expense (-)/income	Net of tax amount
Effective portion of gains and losses on hedging instruments in a cash flow hedge	-208	49	-159
Recycling to the income statement	-20		-20
Gains and losses on hedging instruments in a cash flow hedge (see note F32)	-228	49	-179
Currency translation differences arising during the year	-423		-423
Recycling of currency translations differences relating to foreign operations disposed of in the year	287		287
Other movement of currency translation differences (NCI) relating to foreign operations	-1		-1
Currency translation differences – Subsidiaries and joint operations	-138		-138
Currency translation differences arising during the year	23		23
Recycling of currency translations differences relating to foreign operations disposed of in the year	179		179
Share of other comprehensive income of associates and joint ventures	202		202
Recyclable components	-164	49	-115
Gains and losses on equity instruments measured at fair value through other comprehensive income	0	0	0
Remeasurements of the net defined benefit liability (see notes F7 & F30)	-30	-47	-77
Non-recyclable components	-30	-47	-77
Other comprehensive income/(loss)	-194	2	-192

In 2023, the recycling of the currency translation differences was mainly due to the Partial Demerger €(292) million and due to derecognition of RusVinyl €(169) million.

In €million	2022		
	Before-tax amount	Tax expense (-)/income	Net of tax amount
Effective portion of gains and losses on hedging instruments in a cash flow hedge	305	-7	298
Recycling to the income statement	-226		-226
Gains and losses on hedging instruments in a cash flow hedge (see note F32)	79	-7	72
Currency translation differences arising during the year	285		285
Recycling of currency translations differences relating to foreign operations disposed of in the year	-1		-1
Other movement of currency translation differences (NCI) relating to foreign operations	0		0
Currency translation differences – Subsidiaries and joint operations	284		284
Share of other comprehensive income of associates and joint ventures	22		22
Recyclable components	385	-7	377
Gains and losses on equity instruments measured at fair value through other comprehensive income	-25	6	-19
Remeasurements of the net defined benefit liability (see note F30)	155	-66	89
Non-recyclable components	130	-60	70
Other comprehensive income/(loss)	515	-67	447

Currency translation differences



Accounting policy

For the purpose of presenting consolidated financial statements at the end of each reporting period, the assets and liabilities of the Group's foreign operations are expressed in euros using closing rates. Income and expense items are translated at the average exchange rates for the period except when the impact of applying the average rate is materially different from applying the spot rate at the respective transactions' dates, in which case the latter is applied. Exchange differences arising, if any, are recognized in other comprehensive income as "currency translation differences".

Currency translation differences are reclassified from equity to profit or loss, on:

- A disposal of the Group's entire interest in a foreign operation. In this case, all of the accumulated exchange differences in respect of that operation attributable to the Group are reclassified to profit or loss. Any exchange differences that have previously been attributed to non-controlling interests are derecognized, but they are not reclassified to profit or loss.

At the end of 2023, the carrying amount of Currency Translation consists of €(288) million on BRL, €(211) linked to the conversion of Member States' currencies to Euro, and €256 million on USD.

NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS
(CONTINUING AND DISCONTINUED OPERATIONS)

NOTE F11
DEPRECIATION, AMORTIZATION AND IMPAIRMENTS

The depreciation, amortization and impairment losses (reversal) amount to €994 million in 2023 (€923 million in 2022), of which €500 million related to discontinued operations (€622 million in 2022).

The table below presents the amounts of the total depreciation, amortization and impairment losses (reversals) of continuing operations included in the various headings of the Consolidated Statements of Income.

<i>In €million</i>	2023	2022
Cost of goods sold	269	264
Administrative costs	37	42
Research and development costs	12	10
Other operating gains and (losses)	10	13
— Of which PPA (see Note F4)	7	8
Total depreciation and amortization	328	329
Goodwill Impairment	38	0
Other net Impairment	57	-28
Total depreciation, amortization and impairment losses (reversal)	423	301

The comparative figures for 2022 are restated.

In 2023, the impairments include the €38 million of impaired Energy CGU's goodwill and an impairment of €48 million of underperforming site within Special Chem CGU.

NOTE F12
OTHER NON-OPERATING AND NON-CASH ITEMS

The other non-operating and non-cash items for 2023 of €(1,481) million mainly comprise the result linked to the Partial Demerger €(1,651) million (see Note F8 for the details), reduced by recycling of CTA of RusVinyl €176 million.

In 2022, (€43) million mainly relate to non-cash capital gains and other results for M&A deals.

NOTE F13
INCOME TAXES IN THE STATEMENT OF CASH FLOWS

Income tax expense in 2023 amounts to €450 million (€217 million in 2022).

Income tax paid in 2023 amounts to €434 million (€305 million in 2022). The income tax paid has increased compared to previous years due to increased profits mainly in China, the US and Italy.

The major components of Income taxes are discussed in note F7 income taxes in income statement and statement of financial position.

NOTE F14
CHANGES IN WORKING CAPITAL

<i>In €million</i>	2023	2022
Inventories	215	-300
Trade receivables	122	-193
Trade payables	-495	115
Other receivables/payables	79	-197
Changes in working capital	-78	-576
Of which discontinued operations	-55	-268

The decrease in trade payables in 2023 results mainly from lower energy prices and the process of the Partial Demerger.

NOTE F15
ADDITIONS, REVERSALS AND USE OF PROVISIONS

<i>In €million</i>	2023	2022
Additions and reversal of employee benefits and other provisions	644	336
Of which:		
— Employee benefits	44	63
— Restructuring	104	32
— Environment	346	177
Payments related to employee benefits and use of provisions	-304	-328
Of which:		
— Employee benefits	-85	-101
— Restructuring	-92	-106
— Environment	-72	-90
Use of provisions for additional voluntary contributions (pension plans)	-116	-155

See note F31 for more information.

NOTE F16

CASH FLOWS FROM INVESTING ACTIVITIES – ACQUISITION/DISPOSAL OF ASSETS AND INVESTMENTS

The cash-flows in the table below present both continuing and discontinued operations.

2023 – In €million	Acquisitions	Disposals	Total
Investments	-12	-718	-730
— Subsidiaries		433	433
— Cash in Partial Demerger		-1,151	-1,151
— Other	-12		-12
Property, plant and equipment/Intangible assets	-1,063	7	-1,057
Total	-1,075	-711	-1,786

2022 – In €million	Acquisitions	Disposals	Total
Total investments	-14	95	81
— Subsidiaries		94	95
— Other	-14		-14
Property, plant and equipment/Intangible assets	-909	21	-888
Total	-923	116	-807

2023

In 2023, the amounts related to investment in subsidiaries related to the sale of RusVinyl. In regard to cash in the Partial Demerger, this is a result of the cash position in the demerged subsidiaries of Syensqo SA/NV.

The acquisition includes the following main projects:

- Soda Ash & Derivatives: Soda ash capacity increase in Green River (USA)
- Soda Ash & Derivatives: Coal phase-out in Green River (USA)
- Peroxides: Hydrogen Peroxide capacity increase in Antwerp (Belgium)
- Silica: New electric furnace in Collonges (France) to reduce CO₂ emissions
- Specialty Polymers: Polyvinylidene Fluoride (PVDF) capacity increase in Tavaux (France)
- Specialty Polymers: DCDPS monomer capacity increase in Augusta (USA)
- Specialty Polymers: Udel polysulfone capacity increase in Marietta (USA)
- Specialty Polymers: Compounding capacity increase at Changshu (PRC)
- Specialty Polymers: Waste water treatment units at Tavaux (France) and Changshu (PRC)
- Novecare: internalization of IRIS intermediate chemical production in Melle (France)
- Aroma performance: internalization of natural vanillin fermentation (Portugal) and purification (France)
- Technology Solutions: Aldoxime capacity increase in Mount Pleasant (USA)
- O&G: Friction reducers production capacity in West Texas (USA)

2022

The other acquisitions (€(14) million) mainly relate to several investments of the Corporate Venturing portfolio (New Business Development).

The disposal of subsidiaries (€95 million) mainly relates to the proceeds after taxes related to the final price adjustments for the disposal of the Barium Strontium business and the joint venture with Chemicals Products Corporation, the Polyamide business and the disposal of the Novecare Alkoxylation plant in Singapore.

The acquisition of property, plant and equipment and intangible assets (€(909) million) includes the following main projects:

- Specialty Polymers: Polyvinylidene Fluoride (PVDF) capacity increase in Tavaux (France) and Changshu (PRC)
- Soda Ash & Derivatives: Soda ash capacity increase in Green River (USA)
- Novecare: internalization of IRIS intermediate chemical production in Melle (France)
- Technology Solutions: Aldoxime capacity increase in Mount Pleasant (USA)
- Aroma performance: internalization of natural vanillin purification in Saint Fons (France)
- Specialty Polymers: DCDPS monomer capacity increase in Augusta (USA)
- Specialty Polymers: Udel polysulfone capacity increase in Marietta (USA)
- Soda Ash & Derivatives: methane emissions abatement in Green River (USA)

NOTE F17

OTHER CASH FLOWS FROM FINANCING ACTIVITIES

The €(337) millions of other cash flows from financing activities in 2023 (€112 million in 2022) mainly relate to margin calls on hedging instruments as part of Energy Services’ activities for €(317) million (€128 million in 2022).

For trading in futures of different commodities (CO₂, power, gas, coal), Energy Services uses brokers. These deals are subject to margin calls. To cover the credit risk of the counterparty, brokers pay a margin call to Solvay in case the instrument is in the money for Solvay. If the instrument is out of the money for Solvay, Solvay pays a margin call to the brokers. The margin calls are presented as part of financial debt (see note F33 Net indebtedness). Cash flows from margin calls are recognized as financing cash flows that fluctuate with the fair value of the instrument. The actual settlement of these commodity derivatives is net of margin calls and the gross amount (including margin calls that are reclassified from financing cash flows) is recognized in operating cash flows.

NOTES TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

NOTE F18

INTANGIBLE ASSETS



Accounting policy

An intangible asset is an identifiable non-monetary asset without physical substance. It is identifiable when it is separable, i.e. Is capable of being separated or divided from the Group, or when it arises from contractual or other legal rights. An intangible asset shall be recognized if, and only if:

- (a) it is probable that the expected future economic benefits that are attributable to the asset will flow to the Group; and
- (b) the cost of the asset can be measured reliably.

Intangible assets acquired or developed internally are initially measured at cost. The cost of an acquired intangible asset comprises its purchase price, import duties and non-refundable purchase taxes, after deducting trade discounts and rebates, and any directly attributable cost of preparing the asset for its intended use. Subsequent expenditure on intangible assets is capitalized only if it is probable that it will increase the future economic benefits associated with the specific asset. Other expenditure is expensed as incurred.

After initial recognition, intangible assets are measured at cost less accumulated amortization and impairment losses, if any.

Intangible assets are amortized on a straight-line basis over their estimated useful lives, which do not exceed the contractual period, if any. The estimated useful lives, residual values and amortization methods are reviewed at each year-end, and any changes in estimates are accounted for prospectively.

Patents and trademarks	2-20	years
Software	3-5	years
Development expenditures	2-5	years
Customer relationships	5-29	years
Other intangible assets – Technologies	5-20	years

Amortization expense is included in the consolidated income statement within the cost of goods sold, administrative costs, research and development costs and other operating gains and losses.

The asset is tested for impairment if (a) there is a trigger for impairment, and (b) annually for projects under development (see note F23 Impairment).

Intangible assets are derecognized from the consolidated statement of financial position on disposal or when no future economic benefits are expected from their use or disposal. The gain or loss arising from derecognition of an intangible asset is recognized in profit or loss at the moment of derecognition.

Research and development costs

Research costs are expensed in the period in which they are incurred.

Development costs are capitalized if, and only if, all the following conditions are fulfilled:

- the cost of the asset can be reliably measured;
- the technical feasibility of the product has been demonstrated;
- the product or process will be placed on the market or used internally;
- the assets will generate future economic benefits (a potential market exists for the product or, where it is to be used internally, its future utility has been demonstrated);
- the technical, financial and other resources required to complete the project are available.

Development costs comprise employee expenses, the cost of materials and services directly attributable to the projects, and an appropriate share of directly attributable fixed costs including, and where applicable, borrowing costs. The intangible assets are amortized as from the moment they are available for use, i.e. When they are in the location and condition necessary for them to be capable of operating in the manner intended by management. Development costs, which do not satisfy the above conditions are expensed as incurred.

Patents, trademarks and customer relationships

Those intangible assets have mainly been acquired through business combinations. Customer relationships consist of customer lists.

Other intangible assets

Other intangible assets mainly include technology acquired separately or in a business combination.

In the table below, additions and depreciation expenses include the items of Specialty Businesses until the Partial Demerger.

<i>In €million</i>	Development costs	Patents and trademarks	Customer relationships	Other intangible assets	Total
Gross carrying amount					
December 31, 2021	517	1,686	1,973	739	4,914
Additions	67	3		24	94
Disposals and closures	-22	-16		-5	-43
Increase through business combinations	0	0		0	0
Currency translation differences	7	60	93	22	183
Other	7	11		-15	3
December 31, 2022	577	1,744	2,066	765	5,152
Additions	71	1		33	105
Disposals and closures	-66	-74		-100	-239
Increase through business combinations	0	0		0	0
Currency translation differences	-3	-25	-37	-14	-80
Partial Demerger	-482	-1,079	-1,781	-582	-3,924
Other	1	5		-9	-3
December 31, 2023	98	572	248	92	1,010
Accumulated amortization					
December 31, 2021	-233	-1,047	-941	-590	-2,812
Amortization	-63	-97	-90	-14	-265
Impairment	0	0	0	0	0
Reversal of impairment	0	0		8	8
Disposals and closures	22	16		5	43
Currency translation differences	-2	-26	-29	-21	-78
Other	0	0		0	0
December 31, 2022	-277	-1,155	-1,061	-611	-3,104
Amortization	-54	-72	-85	-17	-228
Impairment	0	0	0	0	0
Reversal of impairment	0	0		0	0
Disposals and closures	61	74		100	235
Currency translation differences	1	13	16	13	43
Partial Demerger	223	651	887	485	2,246
Other	0	24		-25	-1
December 31, 2023	-45	-466	-244	-55	-809
Net carrying amount					
December 31, 2021	283	638	1,031	149	2,100
December 31, 2022	300	589	1,005	153	2,048
December 31, 2023	52	107	5	37	201

On December 31, 2023, intangibles mainly relate to the intangibles acquired through the acquisitions of Rhodia.

NOTE F19

GOODWILL AND BUSINESS COMBINATIONS



Accounting policy

Goodwill

Goodwill arising in a business combination is recognized as an asset at the date that control is obtained (the acquisition date). Goodwill is measured as the excess of the sum of:

- (a) the consideration transferred;
- (b) the amount of any non-controlling interests in the acquiree; and
- (c) in a business combination achieved in stages, the acquisition-date fair value of the previously held equity interest in the acquiree, over the share acquired by the Group in the fair value of the entity's identifiable net assets at the acquisition date.

Goodwill is not amortized but is tested for impairment on an annual basis, and more frequently if there are any impairment triggers identified.

For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units (or groups of cash-generating units) in accordance with IAS 36 Impairment of Assets.

A cash-generating unit (CGU) is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other group(s) of assets.

These tests consist of comparing the carrying amount of the assets or (groups of) CGUs with their recoverable amount. The recoverable amount of an asset or a (group of) CGU(s) is the higher of its fair value less costs to sell and its value in use. If the recoverable amount of the CGU is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro-rata on the basis of the carrying amount of each asset in the unit. An impairment loss recognized on goodwill shall not be reversed in a subsequent period.

Assets held for sale include their related goodwill.

On disposal of an operation within a CGU to which goodwill has been allocated, the goodwill associated with the operation disposed of is included in the determination of the profit or loss on disposal. It is measured on the basis of the relative values of the operation disposed of and the portion of the CGU retained, unless another method better reflects the goodwill associated with the operation disposed of.

Goodwill – overview

<i>In €million</i>	Total
December 31, 2021	3,379
Currency translation differences	94
Disposals	0
December 31, 2022	3,472
Addition	2
Currency translation differences	-36
Disposals	0
Impairment	-38
Partial Demerger	-2,637
December 31, 2023	764

In 2023 and 2022, the currency translation differences mainly relate to goodwill expressed in US dollars. Most of the goodwill expressed in US dollars are located in Specialty Businesses.

Regarding the impairment, see note F23 for more details.

Goodwill by (groups of) CGU(s)

Goodwill acquired in a business combination is allocated to the CGUs or groups of CGUs that are expected to benefit from that business combination.

As a result of the Partial Demerger of the Specialty Business the Group realigned its Operating Segments as detailed in note F1 Revenue and Segment Information. The realignment resulted in the reallocation of segment level goodwill of €186 million (see column Transfer). The goodwill was reallocated to the CGUs using a relative value approach (respective fair values). The reallocation did not have any significant impact on the impairment analysis performed.

<i>In €million</i>	At beginning of the period	Additions	Impairment	Currency translation differences	Transfer	Partial Demerger	At the end of the period
Operating segments – Groups of CGUs							
— Materials	341					-341	0
— Chemicals	121				-121		0
— Solutions	264				-65	-199	0
(Groups of) CGUs							
— Composite Materials	591			-15		-577	0
— Novacare	565	2		-3		-564	0
— Technology Solutions	734			-17		-716	0
— Special Chem	210			0	65		275
— Specialty Polymers	181			-1		-180	0
— Soda Ash and Derivatives	162				75		237
— Coatis	82						82
— Silica	72						72
— Aroma Performance	49					-49	0
— Energy Services	50		-38			-12	0
— Hydrogen Peroxide Europe	21				17		37
— Hydrogen Peroxide Mercosul	14				14		27
— Hydrogen Peroxide Nafta	7				8		15
— Hydrogen Peroxide Asia	11			0	8		19
Total goodwill	3,472	2	-38	-35	0	-2,637	764

In €million	2022			
	At beginning of the period	Disposals	Currency translation differences	At the end of the period
Operating segments – Groups of CGUs				
— Materials	341			341
— Chemicals	121			121
— Solutions	264			264
(Groups of) CGUs				
— Composite Materials	555		37	591
— Novecare	553	0	12	565
— Technology Solutions	690		43	734
— Special Chem	210		0	210
— Specialty Polymers	179		1	181
— Soda Ash and Derivatives	162			162
— Coatis	82			82
— Silica	72			72
— Aroma Performance	49			49
— Energy Services	50			50
— Hydrogen Peroxide Europe	21			21
— Hydrogen Peroxide Mercosul	14			14
— Hydrogen Peroxide Nafta	7			7
— Hydrogen Peroxide Asia	11		0	11
Total goodwill	3,379	0	94	3,472

See note F23 Impairment.

NOTE F20

PROPERTY, PLANT AND EQUIPMENT



Accounting policy

General

Property, plant and equipment are tangible items that:

- are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and
- are expected to be used during more than one period.

The items of property, plant and equipment owned by the Group are recognized as property, plant and equipment when the following conditions are satisfied:

- it is probable that the future economic benefits associated with the asset will flow to the Group;
- the cost of the asset can be measured reliably.

Items of property, plant and equipment are initially measured at cost. The cost of an item of property, plant and equipment comprises its purchase price and any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. If applicable, the cost comprises borrowing costs during the construction period.

After initial recognition, items of property, plant and equipment are measured at cost less accumulated depreciation and impairment losses, if any.

Items of property, plant and equipment are depreciated on a straight-line basis over their estimated useful lives. The components of an item of property, plant and equipment with different useful lives are depreciated separately. Land is not depreciated. The estimated useful lives, residual values and depreciation methods are reviewed at each year end, also taking into account the potential impact of climate change including the execution of the Solvay One Planet Strategy (see Note on Climate Change in the IFRS general accounting policies). Any changes in estimates are accounted for prospectively.

Within Land and Buildings group		
— Buildings	30-40	years
Within Fixtures and equipment group		
— IT equipment	3-5	years
— Machinery and equipment	10-20	years
— Transportation equipment	5-20	years

Depreciation expense is included in the consolidated income statement within cost of goods sold, administrative costs, and R&D costs.

The asset is tested for impairment if there is a trigger for impairment (see note F23 Impairment).

Items of property, plant and equipment are derecognized from the consolidated statement of financial position on disposal or when no future economic benefits are expected from their use or disposal. The gain or loss which arises from derecognition of an item of property, plant and equipment is recognized in profit or loss at the moment of derecognition.

Subsequent expenditure

Subsequent expenditure related to items of property, plant and equipment is capitalized only if it is probable that it will increase the future economic benefits associated with the specific asset. Other expenditure is expensed as incurred. Subsequent expenditure incurred for the replacement of a component of an item of property, plant and equipment is only recognized as an asset when it satisfies the recognition criteria mentioned above. The carrying amount of replaced items is derecognized.

Repair and maintenance costs are recognized in the consolidated income statement as incurred.

Regarding its industrial activity, Solvay incurs expenditure for major repairs over several years for most of its sites. The purpose of this expenditure is to maintain the proper working order of certain installations without altering their useful life. This expenditure is considered as a specific component of the item of property, plant and equipment and is depreciated over the period during which the economic benefits are expected to be obtained, i.e. the major repairs’ intervals.

Dismantling and restoration costs

Dismantling and restoration costs are included in the cost of an item of property, plant and equipment if the Group has a legal or constructive obligation to dismantle or restore. They are depreciated over the useful life of the items to which they pertain.

Generally, Solvay’s obligation to dismantle and/or restore its operating sites is only likely to arise upon the discontinuation of a site’s activities. A provision for dismantling of discontinued sites or installations is recognized when there is a legal obligation (due to a request or injunction from the relevant authorities), or when there is no technical alternative than to dismantle, so as to ensure the safety compliance of the discontinued sites or installations.

In the table below, additions and depreciation expenses include the items of Specialty Businesses until the Partial Demerger.

<i>In €million</i>	Land and buildings	Fixtures and equipment	Other tangible assets	Property, plant and equipment under construction	Total
Gross carrying amount					
December 31, 2021	2,941	10,187	418	688	14,235
Additions	28	103	8	715	854
Disposals and closures	-28	-132	-19	0	-179
Increase through business combinations	0	0	0	0	0
Currency translation differences	44	206	8	15	273
Other	35	284	11	-385	-55
December 31, 2022	3,021	10,648	425	1,033	15,128
Additions	77	136	7	777	998
Disposals and closures	-23	-216	-17	-3	-258
Increase through business combinations	0	1	0	0	1
Currency translation differences	-35	-126	-4	-16	-181
Partial Demerger	-1,516	-5,458	-186	-955	-8,115
Other	68	393	20	-354	128
December 31, 2023	1,593	5,379	246	483	7,700
Accumulated depreciation					
December 31, 2021	-1,580	-7,375	-337		-9,291
Depreciation	-80	-464	-27		-570
Impairment	0	-6	0		-6
Reversal of impairment	8	21	0		29
Disposals and closures	26	130	19		175
Currency translation differences	-25	-151	-7		-183
Other	3	26	0		30
December 31, 2022	-1,648	-7,818	-351		-9,816
Depreciation	-76	-459	-22		-557
Impairment	-11	-44	-2		-57
Reversal of impairment	0	0	0		0
Disposals and closures	18	214	16		249
Currency translation differences	16	87	3		105
Partial Demerger	694	3,788	153		4,634
Other	-19	-90	-5		-114
December 31, 2023	-1,027	-4,323	-206	0	-5,556
Net carrying amount					
December 31, 2021	1,361	2,813	81	688	4,943
December 31, 2022	1,373	2,830	75	1,033	5,311
December 31, 2023	566	1,056	39	483	2,144

The additions and depreciation figures include the amounts related to the Specialty Businesses until the Partial Demerger on December 8, 2023. Please see Note F1 for the split of the capital expenditure by segments.

In 2023 and 2022, no borrowing costs were capitalized.

The line “Other” mainly includes changes following portfolio transactions and reclassification of property, plant and equipment under construction to the appropriate categories when they are ready for intended use, excluding the movements related to the Partial Demerger.

NOTE F21

RIGHT-OF-USE ASSETS AND LEASE OBLIGATIONS



Accounting policy

Definition of a lease

At inception of a contract, which generally coincides with the date the contract is signed, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

An asset is typically identified by being explicitly specified in a contract. However, an asset can also be identified by being implicitly specified at the time that the asset is made available for use by the customer. If the supplier has a substantive substitution right, then the asset is not identified. A substantive substitution right means that (a) the supplier has the practical ability to substitute the asset throughout the period of use, and (b) would economically benefit from doing so.

To assess whether a contract conveys the right to control the use of an identified asset, the Group assesses whether, throughout the period of use, it has:

- the right to obtain substantially all of the economic benefits from use of the identified asset; and
- the right to direct the use of the identified asset. This is generally the case when the Group has the decision-making rights regarding how and for what purpose the asset is used.

The Group’s leased assets relate mainly to buildings, transportation equipment, and industrial equipment.

Lease term

The Group determines the lease term as the non-cancellable period of a lease, together with both:

- periods covered by an option to extend the lease if the Group is reasonably certain to exercise that option; and
- periods covered by an option to terminate the lease if the Group is reasonably certain not to exercise that option.

In its assessment, the Group considers the impact of the following factors (non-exhaustive):

- contractual terms and conditions for the optional periods, compared with market rates;
- significant leasehold improvements undertaken (or expected to be undertaken) over the term of the contract;
- costs relating to the termination of the lease, including relocation costs, costs of identifying another underlying asset suitable for the Group’s needs, costs of integrating a new asset into the Group’s operations, and termination penalties;
- the importance of that underlying asset to the Group’s operations, including the availability of suitable alternatives;
- conditionality associated with exercising the option (i.e. When the option can be exercised only if one or more conditions are met), and the likelihood that those conditions will exist; and
- past practice.

Right-of-use asset and lease liability

The Group recognizes a right-of-use asset and a lease liability at the lease commencement date, which is the date that the lessor makes the asset available for use by the Group except for short-term leases (defined as leases with a lease term of 12 months or less) and leases of low value assets. The right-of-use assets are presented separately in the consolidated statement of financial position, and the lease liabilities are presented as part of financial debt.

Right-of-use asset

The right-of-use asset is initially measured at cost, which comprises:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentive received; and
- any initial direct costs incurred by the Group.

After the commencement date, the right-of-use asset is measured at cost less any accumulated depreciation and any accumulated impairment losses. Right-of-use assets are depreciated using the straight-line depreciation method, from the commencement date to (a) the end of the useful life of the underlying asset, in case the lease transfers ownership of the underlying asset to the Group by the end of the lease term, or the lease contains a purchase option that the Group is reasonably certain to exercise, or (b) the earlier of the end of the useful life and the end of the lease term, in all other cases.

Lease liability

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the respective Group entity's incremental borrowing rate. Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments, less any lease incentives receivable;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable by the Group under residual value guarantees;
- the exercise price of a purchase option if the Group is reasonably certain to exercise that option; and
- payments of penalties for early terminating the lease, if the Group is reasonably certain to exercise an option to early terminate the lease.

Service components (e.g. utilities, maintenance, insurance) are excluded from the measurement of the lease liability.

After the commencement date, the lease liability is measured by:

- increasing the carrying amount to reflect interest on the lease liability;
- reducing the carrying amount to reflect the lease payments made; and
- remeasuring the carrying amount to reflect any reassessment or lease modifications, or to reflect the impact from a revised index or rate.

Leasing of Palladium

The Group uses palladium, a precious metal, for certain of its operations. Next to purchasing this palladium, the Group also enters into various "leasing" agreements with financial institutions that give the Group the right to use palladium for a certain period and then return it at the end of the "lease". Based on our analysis of these agreements, these contracts are not in the scope of IFRS 16 Leases or IFRS 9 Financial Instruments. Due to the lack of clear IFRS guidance, the Group applied judgment to determine whether these rights and obligations shall be accounted for on a gross or a net basis. Considering that the Group bears no price risk during the "lease" term and is not in full control of the asset (in accordance with the IFRS Conceptual Framework), the Group believes a net presentation gives a better view on the economic substance of the transaction. As a result, only accruals are recorded for the production losses and regeneration costs and the "lease" fee is recognized within cost of sales.

<i>In €million</i>	Land	Buildings	Transportation equipment	Industrial equip- ment	Other tangible assets	Total
Gross carrying amount						
December 31, 2021	19	266	248	251	11	795
Additions	0	8	46	27	5	86
Disposals and closures	0	-38	-28	-11	-3	-79
Currency translation differences	0	7	8	5	0	21
Other	0	7	15	5	1	28
Transfer to assets held for sale	0	0	0	0	0	0
December 31, 2022	19	250	289	279	16	852
Additions	0	17	62	15	7	101
Disposals and closures	0	-25	-16	-18	-2	-62
Currency translation differences	0	-3	-7	-3	0	-14
Partial Demerger	-11	-170	-82	-133	-12	-409
Other	0	5	15	-10	1	11
Transfer to assets held for sale						0
December 31, 2023	8	73	261	128	8	479
Accumulated depreciation						
December 31, 2021	-4	-115	-127	-75	-8	-329
Depreciation	-1	-33	-46	-34	-3	-117
Impairment	0	-3	0	0	0	-3
Disposals and closures	0	38	28	11	3	79
Currency translation differences	0	-3	-4	-2	0	-9
December 31, 2022	-5	-115	-148	-100	-9	-377
Depreciation	-1	-31	-47	-32	-3	-114
Impairment	0	-1	0	0	0	-1
Disposals and closures	0	16	16	18	2	53
Currency translation differences	0	2	3	1	0	6
Partial Demerger	4	90	54	67	5	219
December 31, 2023	-2	-39	-122	-45	-5	-213
Net carrying amount						
December 31, 2021	15	151	121	176	3	466
December 31, 2022	14	134	141	178	6	474
December 31, 2023	6	34	139	83	3	267

The figures contain the amounts related to Specialty Businesses until December 8, 2023.

The Group primarily leases buildings that include office buildings, and warehouses. Those leases are generally long-term leases and may include extension options.

Next, the Group leases transportation equipment that mainly consists of railcars and containers to transport the Group's products.

Industrial equipment mainly relates to utility assets. In 2023, additions include €15 million for industrial equipment, €46 million for transportation and €17 million for buildings.

Generally, lease contracts are negotiated by the local teams, and contain a wide range of different terms and conditions. Many lease contracts contain extension options and/or early termination options to provide the Group with operational flexibility. Such options are taken into account when determining the lease term and the lease liability when it is reasonably certain that they will be exercised.

If the Group exercised its extension options not currently included in the lease liability, the present value of additional payments would amount to €42 million at December 31, 2023 (€100 million at December 31, 2022).

Lease contracts signed not yet commenced amount to €210 million at December 31, 2023 (€137 million for 2022) and mainly relate to a second waste wood boiler, steam turbine and auxiliaries in Germany, industrial equipment in France and rail cars in the United States.

Total cash outflows for leases amount to €134 million for 2023, of which €112 million related to payment of lease liabilities and €22 million of interest expenses (including the discontinued operations of €11 million). Information on the corresponding lease liabilities (after the demerger, long-term part of €243 million and short-term part of €63 million) can be found in the note F32 Financial Instruments. Information on the finance expense related to lease liabilities can be found in note F6 Net financial charges.

LEASE OF PALLADIUM

At the end of 2023, the total (gross) value of palladium leased still to be returned amounted to €33 million (end of 2022: €59 million). The difference is mainly due to the change of the market price of the commodity.

NOTE F22
INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

The list of associates and joint ventures is available in the note F40 List of companies included in the consolidation scope.

The associates and joint ventures not classified as held for sale/discontinued operations are accounted for under the equity method of accounting.

In €million	December 31, 2023			December 31, 2022		
	Associates	Joint ventures	Total	Associates	Joint ventures	Total
Investments in associates and joint ventures	42	188	230	18	790	809
Earnings from associates and joint ventures	3	53	53	0	153	153

INVESTMENTS IN ASSOCIATES

In €million	2023	2022
January 1	18	18
Profit for the year	4	1
Dividends received	-1	-1
Currency translation differences	0	0
Partial Demerger	20	
December 31	42	18

The amount in Partial Demerger results mainly from loss of control due to demerger and the change of the consolidation scope from full consolidation to equity accounting.
The figures contain the amounts related to Specialty Businesses until December 8, 2023.

The tables below present the summarized financial information of the associates together with the major one. The associates had no contingent liabilities or capital commitments as at December 31, 2023 and 2022.

In €million	December 31, 2023			December 31, 2022	
	Total	Of which Quingdao Hiwin Solvay Chemicals	Of which Solvay (Zhenjiang) Chemicals	Total	Of which Quingdao Hiwin Solvay Chemicals
Ownership interest		30%	9%		30%
Operating Segment		Performance Chemicals	Basic Chemicals		Performance Chemicals
Statement of financial position					
Non-current assets	163	24	130	38	29
Current assets	231	20	202	39	18
Cash and cash equivalents	139	4	135	6	1
Non-current liabilities	4	2	1	5	2
Non-current financial debt	2	0	0	2	0
Current liabilities	86	20	61	31	22
Current financial debt	4	4	0	6	6
Net asset	304	23	270	42	23
Carrying Amount of the interest in the Associate	42	7	25	18	7

Income statement	2023		2022	
Sales	69	54	102	61
Depreciation and amortization	3	3	3	3
Interest on loans and short term deposits	2	0	0	0
Profit for the year from continuing operations	3	1	4	2
Profit for the year	3	1	4	2
Total comprehensive income	4	1	4	2
Dividends received	1	0	1	

INVESTMENTS IN JOINT VENTURES

In €million	2023	2022
January 1	790	619
Additions	0	0
Capital increase / (decrease)	-3	-5
Profit for the year	67	170
Dividends received	-24	-18
Currency translation differences	-13	24
Impairment reversal	0	0
Other	-3	1
Sale of RusVinyl	-428	
Partial Demerger	-197	
December 31	188	790

The figures contain the amounts related to Specialty Businesses until December 8, 2023.
The amount in Partial Demerger mainly consists of demerged Strata Solvay Advanced Materials and Hindustan Gum & Chemicals.
The tables below present the summarized financial information of the material joint ventures. The joint ventures had no contingent liabilities or capital commitments as at December 31, 2023 and 2022.

December 31, 2023	Peroxidos do Brasil Ltda	Shandong Huatai Interox Chemical Co. Ltd	Aqua Pharma Group	Shinsol Advanced Chemicals
In €million				
Ownership interest	69.40%	50%	50%	51.0%
Operating Segment	Basic Chemicals	Basic Chemicals	Basic Chemicals	Performance Chemicals
Statement of financial position				
Non-current assets	121	7	24	22
Current assets	144	28	20	6
Cash and cash equivalents	84	22	9	6
Non-current liabilities	8	-	2	4
Non-current financial debt	1	0	0	4
Current liabilities	50	10	5	2
Current financial debt	6	0	0	0
Net asset	206	25	38	23
Carrying amount of the interest in the joint venture	143	12	19	12
2023 income statement				
Sales	195	40	32	0
Depreciation and amortization	-7	-1	-3	0
Cost of borrowings	0	0	0	0
Interest on loans and short-term deposits	8	0	0	0
Income taxes	-23	-3	-2	0
Profit for the year from continuing operations	56	8	-2	-2
Profit for the year	56	8	-2	-2
Other comprehensive income	4	0	-3	0
Total comprehensive income	61	8	-5	-2
Dividends received	18	2	0	0

Other comprehensive income mainly comprises the currency translation differences.

December 31, 2022	RusVinyl OOO	Peroxidos do Brasil Ltda	Strata – Solvay Advanced Material JV	Shandong Huatai Interox Chemical Co. Ltd	Hindustan Gum & Chemicals Ltd	Aqua Pharma Group	EECO Holding and subsidiaries	Shinsol Advanced Chemicals	Cogeneration Rosignano
In €million									
Ownership interest	50%	69.4%	50%	50%	50%	50%	33.3%	51.0%	25.4%
Operating Segment	Performance Chemicals	Basic Chemicals	Specialty Businesses	Basic Chemicals	Specialty Businesses	Basic Chemicals	Corporate & Business Services	Performance Chemicals	Corporate & Business Services
Statement of financial position									
Non-current assets	668	105	69	7	9	29	33		17
Current assets	294	128	19	24	307	19	38	16	9
Cash and cash equivalents	226	57	17	17	276	11	11	16	6
Non-current liabilities	59	9	-	-	9	2	18		13
Non-current financial debt	12	4	-0	0	0	0	18		13
Current liabilities	41	54	2	10	14	4	20		1
Current financial debt	3	10	-	0	0	0	19		0
Net asset	862	169	87	21	292	42	33	16	12
Carrying Amount of the interest in the Joint Venture	431	118	43	11	146	21	9	8	3
2022 income statement									
Sales	609	209	24	39	73	31	0		0
Depreciation and amortization	-53	-7	0	-1	-1	-4	-4		-3
Cost of borrowings	-14	0	0	0	0	0	-2		0
Interest on loans and short-term deposits	15	5	0	0	13	0	1		0
Income taxes	-58	-23	0	-2	-3	-1	-2		0
Profit for the year from continuing operations	233	48	18	4	12	1	10		2
Profit for the year	233	48	18	4	12	1	10		2
Other com-prehensive income	22	9	0	0	-8	0	0		
Total com-prehensive income	255	57	18	4	4	1	0		0
Dividends received	0	12	0	2	2	-1	0		0

Other comprehensive income mainly comprises the currency translation differences.

NOTE F23
IMPAIRMENT



Accounting policy

General

At the end of each reporting period, the Group reviews whether there is any indication that assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the CGU to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are allocated to individual CGUs, or otherwise they are allocated to the smallest group of CGUs for which a reasonable and consistent allocation basis can be identified.

The recoverable amount is the higher of fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate. Future cash flows are adjusted for risks not incorporated into the discount rate.

If the recoverable amount of an asset (or CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or CGU) is reduced to its recoverable amount. An impairment loss is recognized immediately in profit or loss.

When an impairment loss subsequently reverses, the carrying amount of the asset (or CGU) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined (net of amortization or depreciation) had no impairment loss been recognized for the asset (or CGU) in prior years. A reversal of an impairment loss is recognized immediately in profit or loss. An impairment loss recognized for goodwill shall not be reversed in a subsequent period.

Assets other than non-current assets held for sale

In accordance with IAS 36 Impairment of Assets, the recoverable amount of property, plant and equipment, intangible assets, right-of-use assets, CGUs or groups of CGUs, including goodwill, and equity method investees corresponds to the higher of their fair value less costs of disposal, and their value in use. The latter equals the present value of the future cash flows expected to be derived from each asset, CGU or group of CGUs, and equity method investees and is determined using the following inputs:

- business plan approved by management based on growth and profitability assumptions, taking into account past performances, forecast changes in the economic environment and expected market developments, including opportunity and risks resulting from climate change (taking into account the Solvay One Planet strategy – see note Climate change in the IFRS general accounting policies) and environmental regulations such as products phasing out. For further details, refer to the Risk Management Section. Such business plan generally covers five years, unless management is confident that projections over a longer period are reliable;
- consideration of a terminal value determined based on the cash flows generally obtained by extrapolating the cash flows of the last years of the business plan referred to above, affected by a long-term growth rate deemed appropriate for the activity and the location of the assets;
- discounting of expected cash flows at a rate determined using the weighted average cost of capital formula.

Discount rate

Weighted average cost of capital (WACC) was computed using a consistent methodology to account for the separation, new reference peers, and an extensive benchmarking. The short term WACC is utilized to discount the expected cash flows of the initial four years, and is computed based on prevailing discount rates. The long term WACC is utilized to discount the expected cash flows starting from the fifth year and for the Terminal Value. The long term WACC is based on the three-year averages of key parameters (risk free rates, betas, spreads). In 2022, a rolling eight-year average of historical short term WACCs was used to calculate the long term WACC.

	2023	2022
Short term discount rate (WACC)	9.9%	6.6%
Long term discount rate (WACC)	8.2%	6.5%

The increase in the WACCs is mainly due to the increase in the risk free rate reflecting tightening of monetary conditions by central banks and continued high inflation expectations. These WACCs are in the low range of the observed Peers' WACC estimates.

Long-term growth rates

The long-term growth rates used in 2023 are based on the comprehensive review of the entire business portfolio performed in 2019 with the definition of the G.R.O.W. Strategy when each CGU was assigned to one of business segments with different growth opportunities, consistent with the long term growth rates of the market they serve and the Group competitive position in those markets; and on the long term growth remains very strong.

After the reassessment of the long-term growth prospects the Group concluded that the prior year rates are still applicable, are consistent with the rates communicated during the capital market day in November 2023, and were thus set at:

- Coatis – 0%
- Peroxides – 1%
- Silica – 0%
- Soda Ash – 1%
- Spec Chem – 1%

Other key assumptions are specific to each CGU (utility price, volumes, margin, etc.).

Impairment test 2023

The impairment tests performed at CGU level at December 31, 2023, were based on the budget 2024 and the Mid Term Plan 2025-2028. With the exception of the Energy CGU the tests did not lead to any impairment of assets, as the recoverable amounts of the (groups of) CGUs were higher than their carrying amounts. More specifically, in all cases, the difference between the (groups of) CGUs' value in use and their carrying amount (headroom) represented in all a percentage of the carrying amount significantly exceeding 10%. As a result, for these (groups of) CGUs, a reasonable change in a key assumption relating to the recoverable amount for which the (groups of) CGUs is based, would not result in an impairment loss. Given the significant headroom no sensitivities were performed.

Due to the significant volatility in the Energy markets, the Group has decided to exit its external energy business. The Group's decision resulted in €38 million full impairment of the Energy CGU's goodwill. The impairment was recorded within results from portfolio management and major restructuring in the Consolidated Income Statement. The discount rate used was consistent with the Group model.

As a result of the Partial Demerger of the Specialty Business the Group realigned its Operating Segments as detailed in note F1 Revenue and Segment Information. The realignment resulted in the reallocation of segment level goodwill of €186 million. The goodwill was reallocated to the CGUs based on a relative value approach. The reallocation did not have any significant impact on the impairment analysis performed. For additional information on the reallocation of goodwill see note F19 Goodwill and Business Combinations.

Climate related matters were considered in the 2023 impairment analysis, however, it did not give rise to any impairments. More specifically, the group considered capital expenditures of over €1 billion within its Soda Ash and Derivatives CGU related to its carbon neutrality initiative within annual impairment testing.

As detailed in the note on climate change, the management has considered the impact of climate change, and more specifically the impact of the execution of the Solvay One Planet strategy, in the assessment of impairment. Furthermore, the long-term accounting assumptions, including CO₂ emission rights and energy prices for the energy intensive Soda Ash GBU have been considered together with applied relevant hedges. Considering the significant headroom on the Soda Ash CGU, the management believes that this headroom is enough to absorb climate change scenarios. Consequently, no sensitivity is provided. The same exercise was done for the other cash generating units and management believes there are no realistic scenarios regarding climate change today, which would lead to an impairment of these assets.

Other small groups of assets (Performance Chemicals)

In 2023, The Group impaired the tangible assets of the underperforming production assets within the Special Chem CGU for Fluor Gases in Europe (€48 million; Operating Segment: Performance Chemicals). Following a price improvement in 2021-2022, the 2020 impairment related to Fluor Gases was partially reversed in 2022. However, in 2023, due to stronger competition, deterioration in Agro market, and volume demand reduction, the impairment was re-recognized. The impairment was recorded within Results from portfolio management and major restructuring in the Consolidated Income Statement. The discount rate used was consistent with the Group model.

NOTE F24
INVENTORIES



Accounting policy

Cost of inventories includes the purchase, conversion and other costs incurred in bringing the inventories to their present location and condition. The cost of inventories is generally determined by using the weighted average cost method except for CO₂ emission rights (see below).

Inventories are measured at the lower of purchasing cost (raw materials and merchandise) or production cost (work in progress and finished goods) and net realizable value. Net realizable value represents the estimated selling price, less all estimated costs of completion and the estimated costs necessary to make the sale.

CO₂ emission rights

With respect to the mechanism set up by the European Union to encourage manufacturers to reduce their greenhouse gas emissions, carbon dioxide (CO₂) emission rights are granted to the Group for free.

In the absence of any IFRS regulating the accounting treatment of CO₂ emission rights, the Group applies the Trade/Production model, according to which CO₂ emission rights are presented as inventories if they will be consumed in the production process within the next 12 months, or as derivatives if they are held for trading. Energy Services is involved in CO₂ emission rights’ trading, arbitrage and hedging activities. In the inventory, each batch of EUA is tracked separately and the cost recognition formula is based on specific identification.

The net income or expense from these activities is recognized in “other operating gains and losses” (a) for the industrial component, where Energy Services sells the excess CO₂ emission rights generated by Solvay or where a Group deficit is recognized, as well as (b) for the trading component, where Energy Services acts as a trader/broker with respect to those CO₂ emission rights.

In light of its centralized CO₂ emission rights’ portfolio management, for emission rights that are substitutable between subsidiaries, the Group’s financial statements reflect the Group’s net position. If this net position is negative, a provision is recognized, measured based on the market price of the CO₂ emission rights at the reporting date.

Energy savings certificates (ESCs)

Energy savings certificates are presented as inventory items in finished goods. They are measured at weighted average cost. As their cost is not separately identifiable, and as they are a by-product, they are measured at their net realizable value upon initial recognition.

<i>In €million</i>	December 31, 2023	December 31, 2022
Finished goods	373	1,352
Raw materials and supplies	296	838
Work in progress	4	21
Total	673	2,211
Write-downs	-31	-102
Net total	642	2,109

The decrease of inventory is linked to the Partial Demerger (see Note F8)

The CO₂ emission rights amount to €49 million at the end of 2023 – this includes €12 million related to 2023 obligations and is included in inventory, and €38 million related to obligations after 2023 what is included in Other non-current assets. See Note F32 Financial instruments for further details on CO₂ hedging.

Inventory write-downs are included in cost-of-goods-sold in the consolidated income statement.

NOTE F25
OTHER RECEIVABLES (CURRENT)

<i>In €million</i>	December 31, 2023	December 31, 2022
VAT and other taxes	202	398
Advances to suppliers	37	149
Financial instruments – operational	56	929
Insurance premiums	36	31
Loan receivables	5	43
Other	125	79
Other current receivables	462	1,629

The reduction of the Other current receivables is mainly explained by the Partial Demerger.

The main differences relate to the Partial Demerger and changes in energy (gas and electricity) prices.

The row Other contains a pending insurance reimbursement of €32 million which will be transferred to Syensqo (see also Note F34 Other liabilities) and Fluor quotas of €16 million.

Financial instruments – operational includes held for trading and cash flow hedge derivatives (see note F32.A. Overview of financial instruments).

NOTE F26
ASSETS HELD FOR SALE

At the end of 2023 and 2022, there were no assets and liabilities classified as held for sale.

NOTE F27

EQUITY



Accounting policy

Share capital

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issuance of new share capital are directly recognized in equity as a deduction, net of tax, from the equity issuance proceeds.

Reserves

The reserves include:

- treasury shares;
- perpetual hybrid bonds that qualify as equity absent any unavoidable contractual obligation to repay the principal and interest of the perpetual hybrid bonds (no maturity, interest is payable annually but can be deferred indefinitely at the issuer's discretion);
- retained earnings;
- currency translation differences from the consolidation process relating to the translation of the financial statements of foreign operations prepared in a non-euro functional currency to the euro presentation currency;
- the impacts of the fair value re-measurement of equity instruments measured at fair value through other comprehensive income;
- the impacts of the fair value re-measurement of financial instruments documented as hedging instruments in cash flow hedges;
- actuarial gains and losses related to defined benefit plans.

Non-controlling interests

Those represent the share of non-controlling interests in the net assets and comprehensive income of subsidiaries of the Group, and correspond to the interests in subsidiaries that are not held by the Company or its subsidiaries.

NUMBER OF SHARES (IN UNITS)

	December 31, 2023	December 31, 2022
Shares issued and fully paid	105,876,416	105,876,416
Treasury shares held	868,490	2,107,752

The treasury shares held by the Group have been deducted from consolidated shareholders' equity.

The shares issued by Solvay have no par value.

Treasury shares

During 2023, Solvay has sold €50 million treasury shares in order to fulfill its employee benefits commitments.

As part of the Partial Demerger, the treasury shares held by a former subsidiary of Solvay transferred to Syensqo as part of the Partial Demerger, at their carrying amount of €79 million, were transferred to Syensqo SA/NV as part of the Specialty Businesses.

As a result of the Partial Demerger, for each treasury share held by Solvay Stock Option Management SRL ("SSOM"), a wholly owned subsidiary of Solvay, for the purposes of hedging its exposure under LTI plans, SSOM received one Syensqo share. Consequently, Solvay reclassified part of the equity (€81 million) related to treasury shares to equity investments at fair value through profit or loss.

Perpetual hybrid bonds

In connection with the Partial Demerger, all perpetual hybrid bonds were either transferred to Syensqo (€0.5 billion) or paid in full (€1.3 billion). For additional information see the Liability Management section of the Main Events and Changes in the Consolidation Scope in Note 1.

NOTE F28

NON-CONTROLLING INTERESTS

The amounts disclosed below are fully consolidated amounts and do not reflect the impacts from elimination of intragroup transactions.

At the end of 2023, the following most material subsidiaries have non-controlling interests (NCI) totaling €35 million out of total NCI of €42 million.

In €million	Solvay Lantian (Quzhou) Chemicals	Salzgewinnungsgeellschaft Westfalen
Non-controlling ownership interest	45%	35%
Statement of financial position		
Non-current assets	26	55
Current assets	47	22
Non-current liabilities	3	41
Current liabilities	15	4
Income statement		
Sales	89	11
Profit for the year	10	7
Other comprehensive income	-2	-1
Total comprehensive income	8	6
Dividends paid to non-controlling interests	3	0
Share of non-controlling interest in the profit for the year	4	2
Accumulated non-controlling interests	24	11

(i) Solvay Lantian (Quzhou) Chemicals was Zhejiang Lansol in 2022.

At the end of 2022, the following subsidiaries had non-controlling interests totaling €49 million, out of a total of €61 million.

In €million	Zhejiang Lansol	Solvay Hengchang Zhangjiagang Special Chem	Salzgewinnungsgeellschaft Westfalen
Non-controlling ownership interest	45%	30%	35%
Statement of financial position			
Non-current assets	28	17	56
Current assets	47	72	12
Non-current liabilities	2	1	40
Current liabilities	17	34	3
Income statement			
Sales	93	168	11
Profit for the year	9	36	4
Other comprehensive income	-3	-3	2
Total comprehensive income	6	32	6
Dividends paid to non-controlling interests	0	6	0
Share of non-controlling interest in the profit for the year	4	11	1
Accumulated non-controlling interests	24	16	9

During 2022 the Group purchased the remaining outstanding ownership interest in Solvay Soda Ash (20% for US\$120 million) and Solvay Special Chem Japan (33% for €3.55 million) with the difference between the consideration paid and the net book value of the non-controlling interest being recorded as a component of equity (loss of €88 million on the purchase of Solvay Soda Ash and a gain of €9.5 million on the purchase of Special Chem Japan).

NOTE F29
SHARE-BASED PAYMENTS



Accounting policy

Solvay has set up compensation plans, including equity-settled and cash-settled share-based compensation plans.

In its equity-settled plans, the Group receives services as consideration for its own equity instruments (namely through the issuance of share options). The fair value of services rendered by employees in consideration for the granting of equity-instruments represents an expense. This expense is recognized on a straight-line basis in the consolidated income statement over the vesting periods relating to these equity-instruments with the recognition of a corresponding adjustment in equity. The fair value of services rendered is measured based on the fair value of the equity-instruments on the grant date. It is not subsequently remeasured. At each reporting date, the Group re-estimates the number of share options likely to vest. The impact of the revised estimates is recognized in profit or loss against a corresponding adjustment in equity.

In its cash-settled plans, the Group acquires services by incurring a liability to transfer to its employees rendering those services amounts that are based on the price (or value) of equity instruments (including shares or share options) of the Group (namely through the issuance of performance share units). The fair value of services rendered by employees in consideration for the granting of share-based payments represents an expense. This expense is recognized on a straight-line basis in the consolidated income statement over the vesting periods relating to these share-based payments with the recognition of a corresponding adjustment in liabilities. At each reporting date, the Group re-estimates the number of options likely to vest, with the impact of the revised estimates recognized in profit or loss. The Group measures the services acquired and the liability incurred at the fair value of the liability. Until the liability is settled, the Group remeasures the fair value of the liability at the end of each reporting period and at the date of settlement, with any changes in fair value recognized in profit or loss for the period.

Service and non-market performance conditions are not taken into account when determining the grant date fair value of awards, but the likelihood of the conditions being met is assessed as part of the Group's best estimate of the number of equity instruments that will ultimately vest. Market performance conditions are reflected within the grant date fair value. Any other conditions attached to an award, but without an associated service requirement, are considered to be non-vesting conditions. Non-vesting conditions are reflected in the fair value of an award and lead to immediate expensing of an award unless there are also service and/or performance conditions. No expense is recognized for awards that do not ultimately vest because non-market performance and/or service conditions have not been met. Where awards include a market or non-vesting condition, the transactions are treated as vested irrespective of whether the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

The dilutive effect of outstanding options is reflected as additional share dilution in the computation of diluted earnings per share (further details are given in Note F9 Earnings per share).

Awards on shares of Syensqo SA/NV

The awards granted on shares of the Syensqo Group are not in scope of IFRS 2 Share Based Payments. Therefore the Management has established the accounting policy for these awards.

For the awards granted on Syensqo Group shares, a liability is recognized and measured based on the fair value of the Syensqo Group awards at each reporting date. On initial recognition of the liability at the Partial Demerger date, a corresponding entry is recognized in equity for the vesting period that has passed to date and the remaining amount is recognized as Other Receivables. This asset represents the services that have yet to be rendered by the beneficiaries. The asset will be amortized to the consolidated income statement over the remaining vesting period of the plans.

The costs of the awards related to the Syensqo Group are presented within operational (Administrative) expenses. The fair value fluctuation on the liability will be presented in Financial Results together with the fair value fluctuation on the hedging options/shares, which will partially hedge the impact.

The liability will be remeasured to its fair value at each reporting date. This applies equally to vested plans so long as there remains outstanding (unexercised) options.

The liabilities related to the fully vested plans are disclosed as current given that the beneficiaries may exercise their awards at any time. The liabilities related to the unvested plans are disclosed as non-current..

Effects of the Partial Demerger – amendments to the plans

As part of the Partial Demerger, the Solvay Board approved the amendments to the existing long term incentive plans (LTI). The LTIs were adjusted based on the following approaches:

- 1. Shareholder approach – The existing awards were adjusted to entitle beneficiaries to receive one share option of Solvay SA/NV and one share option of Syensqo SA/NV.
- 2. Employer approach – The existing awards were adjusted to entitle beneficiaries to receive a certain number of awards of their future employer (i.e. either the Syensqo Group or the Solvay Group).
- 3. Basket approach – The existing awards were modified to entitle beneficiaries to receive an option on both Solvay SA/NV and Syensqo SA/NV.

Stock option plans (shareholder approach)

All outstanding stock options were converted into options on both the Solvay Group and Syensqo Group shares, as described above. The options can be exercised individually on each Group's shares with the exception of the 2022 SOP, which is a basket option i.e. the option is exercised on both shares of Solvay and Syensqo simultaneously.

The 2022 SOP is no longer classified as an equity settled plan due to the basket option feature. This plan will be treated similarly to the awards on Syensqo's shares. At the date of the Partial Demerger, the fair value of the 2022 SOP was recalculated using the Monte Carlo model and the plan was reclassified. A liability of €4 million was recognized, with corresponding entries to equity (€0.6 million) and Other Receivables (€0.4 million).

The exercise prices of all the stock options (excluding the 2022 SOP) were reset at the Partial Demerger date taking into consideration the Solvay and Syensqo closing share prices at December 11, 2023. As per Belgian law requirements, the sum of new exercise prices of the Solvay and Syensqo options equal the original exercise price of the plans.

2022 Performance Share Unit (PSU) plan (shareholder approach)

The performance metrics were measured for the full year 2022 and 2023. The PSUs were converted to RSUs by applying an extrapolation method to the third performance year (2024). The vesting period remains unchanged. The RSUs will vest at the end of December 2024 and the shares of Solvay and Syensqo Goup will be delivered to the beneficiaries in Q1 2025.

2023 PSU and Restricted Share Unit (RSU) (employer approach)

The performance metrics were measured for the full year 2023. For the performance years 2024 and 2025, new KPIs were approved by the Group's Board. The vesting period remains unchanged. The PSUs and RSUs will vest at the end of December 2025 and the Solvay shares will be delivered to the beneficiaries in Q1 2026.

To ensure the beneficiaries were not disadvantaged by the amendments to the plan, the number of PSUs and RSUs per beneficiary was adjusted taking into account the 30 trading-days post-demerger average share price of Solvay and Syensqo.

2022 Employee Stock Purchase Plan (ESPP) (employer approach)

To ensure the beneficiaries were not disadvantaged by the amendments to the plan, the number of free and matching shares per beneficiary was adjusted taking into account the 30 trading-days post-demerger average share price of Solvay. The vesting period remains unchanged. The ESPP free and matching shares will vest at the end of September 2024.

Awards on Solvay Group shares

For the awards granted on Syensqo shares, a liability is recognized at the Partial Demerger date based on the fair value of the Syensqo Group awards, and it was re-measured on December 31 to €36 million. A corresponding entry is recognized in equity (€25 million) for the vesting period that has passed to date and the remaining amount is recognized as Other Receivables (€4 million). This asset represents the services that have yet to be rendered by the beneficiaries. The asset will be amortized to operational (Administrative) expenses in the consolidated income statement over the remaining vesting period of the plans.

The costs of the awards related to the Syensqo (€3 million) are presented within operational (administrative) expenses in the Consolidated Income statement. The fair value fluctuation on the liability (€4 million) is presented in Financial Results.

Modification accounting

In accordance with the requirements of IFRS 2 modification accounting, the Group obtained updated fair values using Black-Scholes models of all the share based payment plans at the date of the Partial Demerger based on (i) the original terms but updated to the Partial Demerger date, and (ii) the modified terms. The fair values were compared and where there was an increase in fair value under the modified terms, the Group will recognize this additional cost over the remaining vesting period for the unvested plans. The additional cost related to vested plans was recognized in full in Administrative Expenses for the year ended December 31, 2023. The impact of the incremental fair value for both unvested and vested plans was not material to the Group.

The Partial Demerger

As part of the Partial Demerger, Solvay transferred to Syensqo its rights and obligations under its outstanding incentive plans (including the PO2 SOP plan), in each case to the extent the beneficiaries of such plans (including members of the ELT before the Partial Demerger Date) are employed by Syensqo or one of its affiliates following completion of the Partial Demerger. Specific adjustments were made to the 2023 PSU and RSU plans for such beneficiaries.

Stock Option Plans

Prior to the Partial Demerger, all the stock option plans were equity settled. Following the Partial Demerger, the Group also has to account for awards granted on Syensqo shares (see the Shareholder approach). The table below includes both the options on Solvay shares as well as Syensqo shares. There was no stock option plan granted in 2023.

Share option plans	2021	2020	2019	2018 – 2	2018 – 1	2017	2016	2015
Number of share options granted and still outstanding at December 31, 2022	259,001	395,164	429,103	72,078	391,280	308,450	497,845	332,409
Granted share options								
Forfeitures of rights and expiries	-44,531	-15,041	-50,005	-6,425	-25,228	-23,505	-25,263	-332,409
Share options exercised			-96,959	-12,013	-19,277	-22,152	-389,437	
Partial Demerger of Syensqo ¹⁾	-108,876	-208,696	-116,300		-86,164	-46,084	-14,210	
Number of Solvay share options at December 31, 2023	105,594	171,427	165,839	53,640	260,611	216,709	68,935	
Solvay share options exercisable at December 31, 2023			165,839	53,640	260,611	216,709	68,935	
Exercise price (in €)	16.49	16.52	16.74	18.69	19.51	19.19	13.11	
Fair value of options at measurement date (in €)	4.56	4.42	4.16	2.68	2.68	2.25	6.30	
Number of Syensqo share options at December 9, 2023 ²⁾	105,594	171,427	177,109	65,653	279,888	238,861	220,140	
Share options exercised							-51,711	
Number of Syensqo share options at December 31, 2023	105,594	171,427	177,109	65,653	279,888	238,861	168,429	
Syensqo share options exercisable at December 31, 2023			177,109	65,653	279,888	238,861	168,429	
Exercise price (in €)	79.09	79.28	80.31	89.69	93.60	92.08	62.87	
Fair value of options at measurement date (in €)	22.45	21.76	20.5	13.37	13.37	11.27	31.22	

1) This row presents the number of plan participants that were Syensqo Group employees.
2) On December 9, 2023, following the Partial Demerger, the number of options on Solvay SA/NV was equal to the number of options on shares of Syensqo SA/NV – see the Shareholder approach. Starting from that date, under the Shareholder approach, the participants are able to exercise the options on Solvay SA/NV shares and the options on Syensqo shares separately.

Share option plans	2022
Number of share options granted and still outstanding at December 31, 2022	386,867
Granted share options	
Forfeitures of rights and expiries	-88,389
Share options exercised	
Partial Demerger of Syensqo	-196,142
Number of basket share options at December 31, 2023	102,336
Basket share options exercisable at December 31, 2023	
Exercise price (in €)	84.34
Fair value of options at measurement date (in €)	30.58

The options in 2022 SOP have a higher exercise price compared to other SOPs because this plan was converted using the Basket approach and for each option exercised, the holder will acquire one Solvay SA/NV share and one Syensqo SA/NV share against payment of the exercise price.

	2023		2022	
	Number of share options	Weighted average exercise price	Number of share options	Weighted average exercise price
January 1	3,072,197	102.45	2,919,955	104.54
Granted during the year			386,867	84.34
Forfeitures of rights and expiries during the year	-610,796	28.22	-7,246	96.49
Exercised during the year	-539,838	14.36	-227,379	98.57
Partial Demerger of Syensqo	-776,472			
December 31	1,145,091	21.82	3,072,197	102.45
Exercisable at December 31	765,734		1,602,062	

Shareholder approach		
— Options on Solvay Shares	1,042,755	17.74
— Solvay share options exercisable at December 31, 2023	765,734	
— Options on Syensqo Shares	1,258,672	83.54
— Syensqo share options exercisable at December 31, 2023	929,940	
Basket approach		
— Basket options	102,336	84.34
— Basket share options exercisable at December 31, 2023	0	

1) Before the Partial Demerger, only options on Solvay shares existed.
2) Following the completion of the Partial Demerger, the Shareholder approach or Basket approach were applied to SOP plans.

In 2023, the share options resulted in an expense of €3 million, which includes the impact of the plan amendments, and is recognized in the consolidated income statement as part of administrative costs. The carrying amount of the liability for stock options on Syensqo shares at December 31, 2023 is €28 million.

The updated valuation of the stock option plan of 2022 is based on:

- the price of the underlying asset (sum of the Solvay and Syensqo share): €109.45 at December 11, 2023;
- the time outstanding until option maturity: exercisable from January 1, 2026, until December 31, 2027, taking into account the fact that some of them will be exercised before the option maturity;
- the option exercise price: €84.34;
- the risk-free return: 2.52% (on average);
- the average volatility of the underlying yield, estimated based on the option price: 27.0%;
- an average dividend yield of 3.7%.

The performance condition has already been met and therefore is not factored into the model.

Weighted average remaining contractual life of the share option plans:

WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE

In years	2023	2022
2015		0.2
2016	0.2	1.2
2017	1.2	2.2
2018-1	2.2	3.2
2018-2	2.6	3.6
2019	3.2	4.2
2020	4.2	5.2
2021	5.1	6.1
2022	4.0	5.0

Performance Share Units Plan (PSU)

In 2023, the Board of Directors offered to executive staff a Performance Share Unit Plan, with the objective of promoting long-term success and to increase the focus on sustainable performance for the benefit of the Solvay Group and its stakeholders. All the managers involved subscribed to the PSU offered to them in 2023 with a grant date fair value of €108.56 representing the average stock market price of the share for the 30 days prior to the offer. In accordance with IFRS 2 requirements, the fair value of each PSU in this plan has been updated to €23.98, being the initial grant date fair value adjusted by the weighted average closing price of both Groups for the 30 days post the Partial Demerger (22% of the initial grant date fair value allocated to Solvay). The PSU plan 2023 is an equity-settled share-based plan with a three-year vesting period, after which shares will be issued, if vesting conditions are met.

The following table on the PSU plans contains the information as the plans were before the Partial Demerger.

Performance share units	Plan 2023	Plan 2022	Plan 2021
Number of PSUs	190,156	196,605	194,130
Grant date	07/03/2023	17/05/2022	23/02/2021
Vesting date	01/01/2026	01/01/2025	01/01/2024
Vesting period	07/03/2023 to 31/12/2025	17/05/2022 to 31/12/2024	31/03/2021 to 31/12/2023
Performance conditions	40% of the initial granted PSUs are subject to the achievement of Year over Year Underlying EBITDA growth target for each of the 3 (2023, 2024, 2025) performance years ending on December 31, 2025	40% of the initial granted PSUs are subject to the achievement of Year over Year Underlying EBITDA growth target for each of the 3 (2022, 2023, 2024) performance years ending on December 31, 2024	40% of the initial granted PSUs are subject to the achievement of Year over Year Underlying EBITDA growth target for each of the 3 (2021, 2022, 2023) performance years ending on December 31, 2023
	40% of the initial granted PSUs are subject to the sustained and /or improved ROCE % of the Company for each of the 3 (2023, 2024, 2025) performance years	40% of the initial granted PSUs are subject to the sustained and /or improved ROCE % of the Company for each of the 3 (2022, 2023, 2024) performance years	40% of the initial granted PSUs are subject to the sustained and /or improved ROCE % of the Company for each of the 3 (2021, 2022, 2023) performance years
	20% of the initial granted PSUs are subject to the reduction of GHG absolute emissions during the same 3 years (2023, 2024, 2025)	20% of the initial granted PSUs are subject to the reduction of GHG absolute emissions during the same 3 years (2022, 2023, 2024)	20% of the initial granted PSUs are subject to the reduction of GHG absolute emissions during the same 3 years (2021, 2022, 2023)
	Achievement of the plan is measured for each separate performance year. The score achieved for each individual year is acquired definitively, whatever the achievement of the other years	Achievement of the plan is measured for each separate performance year. The score achieved for each individual year is acquired definitively, whatever the achievement of the other years	Achievement of the plan is measured for each separate performance year. The score achieved for each individual year is acquired definitively, whatever the achievement of the other years
Validation of performance conditions	By the Board of Directors	By the Board of Directors	By the Board of Directors

For the PSU plan 2023, the participants who are also members of the Executive Leadership Team (including the CEO) on the grant date must achieve an additional performance condition. If achievement of the performance conditions outlined in the above table is positive (above zero), delivery of the PSUs is subject to further adjustment based on the Total Shareholder Return (TSR) performance of the Group in comparison to the TSR of the Stoxx 600 index companies for the period equal to the Performance Period.

The TSR performance condition was met at the end of 2023.

The PSU plan 2021 is a cash settled plan with a three year vesting period that vested on December 31, 2023. The payout was determined on the basis of the Solvay Group average share price (€104.29) during a 10-day trading period ending on November 30, 2023. At December 31, 2023, cumulative liability was (€9 million). At December 31, 2022, there was a liability of €39 million (this relates to all the plan members before the Partial Demerger) with the difference when compared to 2023 consists of the settlement of the 2020 PSU plan.

In 2023, the impact on the consolidated income statement regarding PSUs (net of hedging – see note F32 Financial instruments) amounts to a cost of €(12) million compared to a cost of €(20) million in 2022. Included in the 2023 PSU cost is €2 million related to the equity-settled plan.

At December 31, 2023, there were 57,410 outstanding PSUs for the 2023 equity settled plan and 67,304 for the 2021 cash-settled plan.

As mentioned above, the PSU plan 2022 has been converted to an RSU plan at the Partial Demerger date, consequently, there are no more performance share units left in PSU 2022.

Restricted Share Units (RSU)

In 2023 prior to the Partial Demerger, the Board of Directors offered to executive staff two Restricted Share Unit Plans, with the objective of encouraging beneficiaries to remain employed by the Group by allowing them to become shareholders of the Group. All the managers involved subscribed to the RSUs offered to them in 2023 with a grant date fair value of €108.56 representing the average Solvay Group stock market price of the share for the 30 days prior to the offer. In accordance with IFRS 2 requirements, the fair value of each RSU in these plans has been updated to €23.98, being the initial grant date fair value adjusted by the weighted average closing price of both Groups for the 30 days post the Partial Demerger (22% of the initial grant date fair value allocated to Solvay).

The Restricted Share Units are equity-settled share-based plans with a vesting date of December 31, 2025, after which shares will be issued, if vesting conditions are met.

In 2023, the impact on the consolidated income statement of the RSUs amounts to a cost of €8 million and includes the cost of the converted 2022 PSU plan post the Partial Demerger. The carrying amount of the liability for the 2022 RSU plan on awards on Solvay Group shares amounts to €8 million at the end of 2023.

At December 31, 2023, there were 25,654 RSUs 2023 options outstanding, and 85,428 RSUs 2022 options outstanding, what includes the transfer from PSU 2022 plan.

Employee Stock Purchase Plan (ESPP)

In September 2022, Solvay launched its first employee share purchase plan. By participating in the plan, employees have the opportunity to purchase Solvay Group shares on preferential terms. The grant date fair value was €82.85 representing the average stock market price of the share for the 30 days prior to the offer. In accordance with IFRS 2 requirements, the fair value of the ESPP has been updated to €18.23, being the initial grant date fair value adjusted by the weighted average closing price of both Groups for the 30 days post the Partial Demerger (22% of the initial grant date fair value allocated to Solvay).

These employees will receive one free Solvay Group share for joining the plan as well as one matching share for every two shares purchased. The ESPP is an equity-settled share-based plan with a vesting date of September 30, 2024, after which the free and matching shares will be issued, if vesting conditions are met.

On December 31, 2023, 24,493 shares are expected to be granted to the employees. The impact on the consolidated income statement of the ESPP amounts to a cost of €2 million.

There was no effect of the Partial Demerger on the ESPP plan because the plan was already fully settled.

Hedging

All hedging with call options on PSU, RSU and ESPP have been unwound in cash at the end September 2023.

NOTE F30
EMPLOYEE BENEFITS



Accounting policy

General

The Group’s employees are offered various post-employment benefits, other long-term employee benefits, and termination benefits as a result of legislation applicable in certain countries, and contractual agreements entered into by the Group with its employees or constructive obligations.

The post-employment benefits are classified as defined contribution or defined benefit plans.

Defined contribution plans

Defined contribution plans involve the payment of fixed contributions to a separate entity, and release the employer from any subsequent obligation, as this separate entity is solely responsible for paying the amounts due to the employee. The expense is recognized when an employee has rendered services to the Group during the period.

Defined benefit plans

Defined benefit plans concern all plans other than defined contribution plans, and include:

- post-employment benefits: pension plans, other post-employment obligations and supplemental benefits such as post-employment medical plans.

Taking into account projected final salaries on an individual basis, post-employment benefits are measured by applying a method (projected unit credit method) using assumptions involving discount rate, life expectancy, turnover, wages, annuity revaluation and medical cost inflation. The assumptions specific to each plan take into account the local economic and demographic contexts.

The discount rates are interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related pension obligation.

The amount recognized under post-employment obligations corresponds to the difference between the present value of future obligations and the fair value of the plan assets funding the plan, if any. If this calculation gives rise to a deficit, an obligation is recognized in liabilities. Otherwise, a net asset limited to the lower of the surplus in the defined benefit plan and the present value of any future plan refunds or any reduction in future contributions to the plan is recognized. Therefore the amount at which such an asset is recognized in the statement of financial position may be subject to a ceiling.

The defined benefit cost consists of service cost and net interest expense (based on discount rate) on the net liability or asset, both recognized in profit or loss, and remeasurements of the net liability or asset, recognized in other comprehensive income.

Service cost consists of current service cost, past service cost resulting from plan amendments or curtailments and settlement gains or losses.

The interest expenses arising from the reverse discounting of the benefit obligations, the financial income on plan assets (determined by multiplying the fair value of the plan assets by the discount rate) as well as interest on the effect of the asset ceiling are recognized on a net basis in the net financial charges (cost of discounting of provisions).

Remeasurements of the net liability or asset consist of:

- actuarial gains and losses on the benefit obligations arising from experience adjustments and/or changes in actuarial assumptions (including the effect of changes in the discount rate) recognized in other comprehensive income;
- changes as a consequence of plan amendments, recognized in profit or loss;
- the return on plan assets (excluding amounts in net interest) and changes in the limitation of the net asset recognized.

Other long-term employee and termination benefits

Other long-term employee benefits related to long service benefits granted to employees according to their seniority in the Group. Termination benefits include early pension plans. Other long-term employee and termination benefits are accounted for in the same way as post-employment benefits but remeasurements are fully recognized in the net financial charges during the period in which they occur.

The actuarial calculations of the main post-employment obligations and other long-term benefits are performed by independent actuaries.

Overview

PROVISIONS BY TYPE OF BENEFITS

<i>In €million</i>	December 31, 2023	December 31, 2022
Post-employment benefits	705	873
Other long-term benefits	47	136
Termination benefits	42	49
Total employee benefits	794	1,057

POST-EMPLOYMENT BENEFITS

A. Defined contribution plans

For defined contribution plans, Solvay pays contributions to publicly or privately administered pension funds or insurance companies.

B. Defined benefit plans

Defined benefit plans can be either funded via outside pension funds or insurance companies (“funded plans”) or financed within the Group (“unfunded plans”). Unfunded plans have no plan assets dedicated to them.

The net liability results from the net of the provisions and the asset plan surplus.

<i>In €million</i>	December 31, 2023	December 31, 2022
Provisions	705	873
Asset plan surplus (included in non-current loans and other assets)	-90	-62
Net liability	614	810
	2023	2022
Operational expense	31	18
Finance expense	34	12

The operating expense includes current service cost for €28 million (€15 million in 2022) (see also B.3.).

The 2022 figures were restated.

B.1. Management of risks

Over recent years, the Group has reduced its exposure to defined benefit plan obligations stemming from future services by converting existing plans into pension plans with a lower risk profile (hybrid plans, cash balance plans and defined contribution plans) or by closing them to new entrants.

Solvay continuously monitors its risk exposure, focusing on the following risks:

Asset volatility

Equity instruments, even though expected to outperform corporate bonds in the long-term, create volatility and risk in the short-term. To mitigate this risk, the allocation to equity instruments is monitored using Assets and Liabilities Management techniques, to ensure it remains appropriate given the respective schemes’ and Group’s long term objectives.

Changes in bond yields

A decrease in corporate bond yields will increase the carrying amount of the plans’ liabilities. For funded schemes this impact will be partially offset by an increase in the fair value of the plan assets.

Corporate bond yields are highly dependent on global and local market situations, the decisions of central banks and the political situation.

Events that are currently impacting the financial markets are:

- the perspective of slow growth in the world with a fragmentation by geographic zones;
- the anticipation of a decrease of rates by the US and European central banks;
- a reduction of the inflation but with signs of resistance of some elements of the underlying inflation;
- continuing political instability due to the war in Gaza, Ukraine and tension with China plus US elections.

Consequently, yields in the major currency zones (Eurozone, the UK, and the US) are decreasing since Q4 2023 and are close or below levels at the end of 2022 (see Actuarial assumptions used in determining the liability). The result is an increase in the Group’s defined benefit obligations in 2023.

Inflation risk

The defined benefit obligations are linked to inflation, and as a result, higher inflation may lead to an increase in the benefit obligation (although, in most cases, caps on the level of inflationary increases are in place to protect against extreme inflation). A limited part of the assets are either unaffected by or only partially correlated with inflation, meaning that an increase in inflation will also increase the plans’ net liabilities.

The inflation rate in each country is based on the Global Economic Consensus Forecast (GCF) with the exception of the UK, where the information is derived from the Bank of England. Long-term inflation assumptions have limited downward variation in the Eurozone in comparison to 2022. In the UK, the outlook for the retail price index and consumer price index has decreased slightly from 2022.

Life expectancy

The majority of the schemes’ obligations are to provide benefits for the life of the member. Increases in life expectancy will therefore increase the plans’ liabilities.

Regulatory risk

Especially with respect to funded plans, the Group is exposed to the risk of external funding following regulatory constraints. This should not impact the defined benefit obligation but could expose the Group to a potential significant cash outlay.

B.2. Description of obligations

The provisions have been set up to cover post-employment benefits granted by most Group companies in line, either with local rules and /or with established practices, which generate constructive obligations.

The largest post-employment plans in 2023 are in the United Kingdom, the United States, France, Germany, Belgium and Brazil. These six countries represent 91% of the total defined benefit obligations and represent 98% of the total recognized plan assets.

December 31, 2023							
<i>In €million</i>	Defined bene- fit obligations	In %	Recognized plan assets	Net liability/ (asset)	In %	Ratio plan assets on defined bene- fit obligations	of which asset surplus recognized in the balance sheet
United Kingdom	142	8%	139	3	0%	98%	12
United States	231	13%	207	24	4%	89%	10
France	632	34%	288	344	56%	46%	33
Germany	388	21%	190	199	32%	49%	0
Belgium	274	15%	292	-18	-3%	107%	34
Brazil	129	7%	90	39	6%	70%	0
Other countries	38	2%	16	23	4%	41%	2
Total	1,836	100%	1,222	614	100%	67%	90

The asset surplus represents an economic benefit for the Group or can revert to the company in case of wind up of the plans. The main countries where recognized assets are surplus are in Belgium and France. In Belgium the surplus can be used to offset employer contributions. For France the surplus relates to receivables for pensioners with annuity that are administered by the Group but are partially born by third party companies.

December 31, 2022							
In €million	Defined benefit obligations	In %	Recognized plan assets	Net liability/(asset)	In %	Ratio plan assets on defined benefit obligations	of which asset surplus recognized in the balance sheet
United Kingdom	1,045	27%	1,031	14	2%	99%	0
United States	1,097	29%	984	113	14%	90%	0
France	722	19%	309	414	51%	43%	32
Germany	399	10%	201	198	24%	50%	0
Belgium	328	9%	330	-2	0%	101%	23
Brazil	114	3%	85	29	4%	74%	
Other countries	95	3%	51	44	5%	54%	7
Total	3,801	100%	2,990	810	100%	79%	62

United Kingdom

Before the Partial Demerger, Solvay sponsored a few defined benefit plans in the United Kingdom; the largest one being the Rhodia Pension Fund. It was closed to new entrants in 2003 and replaced by a defined contribution plan.

After the Partial Demerger, one defined benefit plans remains with Solvay, the Solvay Defined Benefits Pension Fund. It is a final salary funded pension plan, with entitlement to accrue a percentage of salary per year of service. It was closed to new entrants in 2005 and replaced by a defined contribution plan.

At December 31, 2023, about 9% of the liabilities are attributable to current employees, 25% to former employees and 66% to current pensioners.

Pension funds in the UK function and comply with local legislation under a large regulatory framework. The Pensions Regulator has a risk-based approach to regulation and a code of practice, which provides practical guidance to trustees and employers of defined benefit schemes on how to comply with the scheme funding requirements. In accordance with UK legislation, pension funds are subject to Scheme Specific Funding, which requires that pension plans are funded prudently.

Each pension fund is governed by a Board of Trustees. They manage the fund with prudent and fair judgment. The Trustees determine the liabilities used for Statutory Funding Objectives based on prudent actuarial and economic assumptions. Any shortfall or deficit once these liabilities have been deducted from the fund's assets must be reduced by additional contributions and in a time frame determined in accordance with the employer's ability to pay and the strength of covenant or contingent security being offered by the employer.

Pension funds are subject to a triennial valuation cycle for funding purposes. This valuation is performed by the scheme actuary in line with UK regulations and is discussed between the Trustees and the sponsoring employer to agree the valuation assumptions and a funding plan.

For the Rhodia Pension Fund the last completed valuation was as of July 1, 2021. It established a fixed contribution rate of pensionable pay for active members plus a deficit recovery plan. Recovery contributions have been increased so that the plan is expected to be fully funded by the end of 2027 in accordance with local regulations. In December 2023, before the plan was demerged, Solvay made a voluntary contribution (£75 million).

For the Solvay Defined Benefits Pension Fund, the last completed valuation was as of March 31, 2022, which established a fixed contribution rate of pensionable pay for active members plus a deficit recovery plan. The current recovery plan foresees recovery contributions until June 2023. In May 2023 a voluntary contribution was paid to the fund (£10 million).

France

Solvay sponsors several defined benefit plans in France. The largest plans are the French compulsory retirement indemnity plan and three closed top hat plans. Solvay retains most of the liabilities for the defined benefit plans after Partial Demerger.

The main plan is for all former Rhodia employees who contributed to the plan prior to its closure in the 1970s. It offers a full benefit guarantee based on the end-of-career salary; more than 99% of the liabilities are attributable to current pensioners. The plan is partially funded. At the end of December 2023, an additional voluntary contribution was paid to the plan (€18 million).

In accordance with French legislation, adequate guarantees have been provided.

United States

Before the Partial Demerger, Solvay sponsored four defined benefit pension plans in the United States, one qualified plan and three non-qualified plans. After the Partial Demerger, Solvay retains liabilities for members of the qualified plan and for members of one non-qualified plan.

A qualified plan is an employer-sponsored retirement plan that qualifies for special tax treatment under Section 401(a) of the Internal Revenue Code. The defined benefit plans are closed to new entrants where newly hired employees are eligible to participate in a defined contribution plan. The qualified defined benefit pension plan is funded while the non-qualified defined benefit pension plan is unfunded. The qualified plan makes up most of the pension liabilities as of December 31, 2023.

Solvay's plans are in compliance with local laws regarding audited financial statements, governmental filings, and Pension Benefit Guaranty Corporation insurance premiums where applicable. The plans are reviewed and monitored locally by fiduciary committees for purposes of plan investments and administrative matters.

For the qualified plan, Solvay's contributions take into account minimum (tax-deductible) funding requirements as well as maximum tax-deductible contributions, both regulated by the tax authorities.

Certain eligible participants may elect to receive their pension in a single lump sum payment instead of a monthly payment.

At year-end, about 47% of the liabilities are attributable to current employees, 6% to former employees for whom benefit payments have not yet commenced and 47% to current pensioners.

Germany

Solvay sponsors various defined benefit plans in Germany. The largest plans are a closed final-pay plan and an open cash balance plan. Most of the liabilities were retained by Solvay after the Partial Demerger. At December 31, 2023, broadly about 78% of the liabilities are attributable to current pensioners. The plans are partially funded.

Belgium

Solvay sponsors two defined benefit plans in Belgium. These are funded pension plans. The plan for executives has been closed since the end of 2006, and the plan for the white and blue collars has been closed since 2004. The past service benefits provided under these plans continue to be adapted each year considering annual salary increase and inflation ("Dynamic management"). In accordance with market practice in Belgium, because of favorable retirement lump sum taxation, most benefits are paid as lump sum.

Furthermore, Solvay sponsors two open defined contribution plans, classified as defined benefit plans for accounting purposes due to the minimum guarantees explained hereafter. These are funded pension plans which are open since the beginning of 2007 for the one in favor of the executives and since the beginning of 2005 for the one in favor of the white and blue collars. Participants may choose to invest their contributions amongst four different investment funds (from "Prudent" to "Dynamic"). However, regardless of their choices, the Belgian law foresees that the employer must guarantee a return on employer contribution and on personal contribution, creating that way a potential liability for the Group. Since 2016 the return has been fixed at 1.75% for both types of contributions, at the minimum of the range provided by law since January 1, 2016 (1.75% to 3.75%). At the end of 2023, net liability recognized in the consolidated statement of financial position concerning these plans is not material.

Solvay's plans are administered through the Solvay Pension Fund that operates in compliance with local laws regarding minimum funding, investments principles, audited financial statements, governmental filings, and governance principles. The Pension Fund is managed through a General Assembly and a Board of Directors delegating day-to-day activities to an operational committee.

Approximately 20% of the liability and plan assets were transferred out from the Solvay Pension Fund to a separate pension fund and are included in the Partial Demerger.

Solvay sponsors a few other smaller pension plans. All these plans are insured.

Other plans

The majority of the obligations relate to pension plans. In some countries (mainly Belgium, Brazil, and the United States), there are also post-employment medical plans, which represent 4% (4% in 2022) of the total defined benefit obligation.

B.3. Financial impacts

Changes in net liability

<i>In €million</i>	2023	2022
Net amount recognized at beginning of period	810	1,123
Net expense recognized in P&L – Defined benefit plans	65	58
Actual employer contributions / direct actual benefits paid	-173	-227
Acquisitions and disposals	0	0
Remeasurements before impact of asset ceiling	31	-157
Change in the effect of the asset ceiling limit on remeasurements	-4	2
Reclassifications	2	2
Currency translation differences	0	9
The effect of Partial Demerger	-116	
Net amount recognized at end of period	614	810

Remeasurements before the impact of asset ceiling €31 million comprise:

- the favorable investment return on plan assets (excluding interests reported in the consolidated income statement) for €(132) million;
- decrease in discount rates of €34 million mainly in the United States, United Kingdom, Brazil and Eurozone;
- decrease in inflation rate of €(12) million for Eurozone;
- other remeasurements due to changes in the other financial assumptions, demographic and experience effects of €141 million of which €114 million is due to effect of Partial Demerger.

Net expense

<i>In €million</i>	2023	2022
Current service costs	28	15
Past service costs (including curtailments and settlements)	1	0
Service costs	29	15
Interest cost	86	35
Interest income	-52	-23
Net interest	34	12
Administrative expenses paid	1	3
Net expense recognized in P&L – Defined benefit plans	65	30
Remeasurements recognized in other comprehensive income	26	-220

The 2022 figures are restated.

The service costs and administrative expenses of these benefit plans are recognized within cost of sales, administrative costs, research & development costs or operating gains and losses and results from legacy remediation, and the net interest is recognized as a finance expense.

In 2023 the Group’s current service costs amount to €28 million (€20 million in 2022), of which €25 million (€11 million in 2022) related to funded plans and €4 million (€4 million in 2022) related to unfunded plans.

Net liability

<i>In €million</i>	December 31, 2023	December 31, 2022
Defined benefit obligations – Funded plans	1,678	3,477
Fair value of plan assets at end of period	-1,222	-2,995
Deficit for funded plans	456	482
Defined benefit obligations – Unfunded plans	159	323
Deficit / surplus (-)	614	805
Amounts not recognized as asset due to asset ceiling (recognized in other comprehensive income)	0	4
Net liability (asset)	614	810
Provision recognized	705	873
Asset recognized	-90	-62

Changes in defined benefit obligations

<i>In €million</i>	2023	2022
Defined benefit obligation at beginning of period	3,800	5,016
Current service costs	28	38
Past service costs (including curtailments)	1	1
Interest cost	86	99
Employee contributions	2	4
Settlements	0	0
Acquisitions and disposals (-)	0	0
Remeasurements in other comprehensive income	162	-1,067
Actuarial gains and losses due to changes in demographic assumptions	7	-26
Actuarial gains and losses due to changes in financial assumptions	-1	-1,100
Actuarial gains and losses due to experience	156	59
Actual benefits paid	-134	-324
Currency translation differences	0	32
Partial Demerger	-2,148	
Reclassification and other movements	37	2
Defined benefit obligation at end of period	1,836	3,800
Defined benefit obligations – Funded plans	1,678	3,477
Defined benefit obligations – Unfunded plans	159	323

Changes in the fair value of plan assets

<i>In €million</i>	2023	2022
Fair value of plan assets at beginning of period	2,995	3,896
Interest income	52	85
Remeasurements in other comprehensive income	132	-910
<i>Return on plan assets (excluding amounts in net interests including on asset surplus)</i>	132	-910
Employer contributions	173	227
Employee contributions	2	4
Administrative expenses paid	-1	-5
Acquisitions / Disposals (-)	0	0
Settlements	0	0
Actual benefits paid	-134	-324
Currency translation differences	0	-23
Partial Demerger	-2,032	
Reclassification and other movements	35	0
Fair value of plan assets at end of period	1,222	2,995
Actual return on plan assets (including on asset surplus)	184	-825

In 2023, the total return on plan assets, i.e. including interest income, is a gain of €184 million against €825 million loss in 2022.

In 2023, the Group’s cash contributions amount to €173 million (€227 million in 2022), of which €29 million (€155 million in 2022) of voluntary cash contributions, and €144 million (€72 million in 2022) of direct benefits payments and mandatory contributions to funds.

In 2023, the voluntary cash contributions were made to improve the funding level of the UK pension plans (€11 million) and France pension fund (€18 million) and increase de-risking with the additional plans assets.

Categories of plan assets

	December 31, 2023	December 31, 2022
Equities	18%	20%
Bonds	76%	74%
Properties and infrastructures	2%	3%
Cash and cash equivalents	3%	2%
Others	1%	1%
Total	100%	100%

With respect to the invested assets, it should be noted that these assets do not contain any direct investment in Solvay shares or in property or other assets occupied or used by Solvay. This does not exclude Solvay shares being included in mutual investment fund type investments.

Changes in asset ceiling

<i>In €million</i>	2023	2022
Effect of the asset ceiling limit at beginning of period	4	2
Partial Demerger	-4	0
Change in the effect of the asset ceiling limit on remeasurements	0	2
Effect of the asset ceiling limit at end of period	0	4

Assumptions regarding future benefits paid

The following are the expected benefits paid by the defined benefit plan in the future years.

<i>In €million</i>					
Period	Total	Eurozone	United Kingdom	USA	Other
2024	137	94	7	21	15
2025	141	98	7	21	15
2026–2028	440	309	24	61	46

Actuarial assumptions used in determining the liability

Some of the retirement plans that Solvay has in place provide annuity payments that are adjusted on a regular basis to mitigate the effects for cost of living increases.

The salary growth assumption is used to determine what will be the salary at the end of the career of the individuals, as the defined benefit plans take into account the last salary of the individuals. This assumption includes impacts of both inflation and merit increases.

The pension growth assumption defines the expected future adjustments for these annuity payments. The plan defines how these annuity payments will be adjusted, and might be linked to inflation. Pension growth assumptions mainly apply for the defined benefit retirement plans in the United Kingdom, France and Germany.

The long term inflation assumption is presented separately as salary growth and pension growth assumptions encompass more variables than inflation.

	Eurozone		UK		United States	
	2023	2022	2023	2022	2023	2022
Discount rates	3.00%	3.75%	4.50%	4.75%	4.75%	5.00%
Expected rates of future salary increases	2.00% – 4.00%	2.00% – 4.25%	2.75%	2.50% – 3.00%	3.75%	3.00% – 3.50%
Long term inflation	2.00% – 2.25%	2.00% – 2.50%	2.75%	3.00%	2.25%	2.50%
Expected rates of pension growth	0.00% – 2.25%	0.00% – 2.50%	2.55%	2.80%	NA	NA

Actuarial assumptions used in determining the annual cost

	Eurozone		UK		USA	
	2023	2022	2023	2022	2023	2022
Discount rates	3.75%	1.00%	4.75%	2.00%	5.00%	2.75%
Expected rates of future salary increases	2.00% – 4.25%	1.75% – 4.00%	2.50% – 3.00%	2.50% – 3.00%	3.75%	3.00% – 3.50%
Long term inflation	2.00% – 2.50%	1.75% – 2.00%	3.00%	3.00%	2.50%	2.50%
Expected rates of pension growth	0.00% – 2.50%	0.00% – 2.00%	2.80%	2.80%	NA	NA

Actuarial assumptions regarding future mortality are based on recent country specific mortality tables. These assumptions translate at January 1, 2023, into an average remaining life expectancy in years for a pensioner retiring at age 65:

<i>In years</i>	Belgium	France	Germany	United Kingdom	United States
Retiring at the end of the reporting period					
Male	19	25	21	22	21
Female	22	29	24	24	23
Retiring 20 years after the end of the reporting period					
Male	20	28	23	23	22
Female	24	31	26	26	24

For most countries the mortality assumptions reflect actual scheme experience and/or Solvay's expectations in terms of future mortality improvements.

The actuarial assumptions used in determining the employee benefits obligation at December 31, 2023, are based on the following employee benefits liabilities durations:

	Eurozone	United Kingdom	United States
Duration in years	9.2	12.8	6.6

Sensitivities on the defined benefits obligation for the post-employment benefits

Each sensitivity amount is calculated assuming that all other assumptions are held constant. The economic factors and conditions often affect multiple assumptions simultaneously.

Sensitivity to a change of percentage in the discount rates:

In €million	0.25% increase	0.25% decrease
Eurozone	-28	28
United Kingdom	-4	4
United States	-4	4
Others	-3	3
Total	-39	39

Sensitivity to a change of percentage in the inflation rates:

In €million	0.25% increase	0.25% decrease
Eurozone	25	-24
United Kingdom	3	-3
United States	0	0
Others	3	-2
Total	31	-29

Sensitivity to a change of percentage in salary growth rates:

In €million	0.25% increase	0.25% decrease
Eurozone	3	-3
United Kingdom	0	0
United States	0	0
Others	0	0
Total	3	-3

Sensitivity to a change of one year on mortality tables – The table shows impacts when the age of all beneficiaries increases or decreases by one year:

In €million	Age correction +1 year	Age correction -1 year
Eurozone	-52	52
United Kingdom	-4	4
United States	-4	4
Others	-4	4
Total	-64	64

NOTE F31
PROVISIONS



Accounting policy

General

Provisions are recognized when (a) the Group has a present obligation (legal or constructive) as a result of a past event, (b) it is probable that the Group will be required to settle the obligation, and (c) a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. Where the effect of the time value of money is material, the amount is the present value of expenditures required to settle the obligation. Impacts of changes in discount rates are generally recognized in the financial result.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received when the Group settles the obligation.

Restructurings

A restructuring provision is recognized when the Group has developed a detailed formal plan for the restructuring and has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement the plan or announcing its main features to those affected by it. The measurement of a restructuring provision includes only the direct expenditures arising from the restructuring, which are those amounts that are both necessarily entailed by the restructuring and not associated with the ongoing activities of the entity.

Environmental remediation costs

Environmental liabilities are mainly related to non-ongoing activities (shut-down sites, discontinued activities or divested activities where Solvay maintains certain commitments) and, to a lower extent, to ongoing activities (see comments below).

An environmental provision is recognized, in accordance with IAS 37, when there is a current legal or constructive obligation resulting from past events which will result in a probable outflow of resources (expenses / cash outs) to settle it and for which a reliable estimate of such outflows and timing can be made.

- The environmental expenses encompass, but are not limited to, the following key matters
- Sampling and analytical costs for soil and ground water monitoring
- Cost related to dismantling when required to meet a remediation or permit obligation
- Asbestos removal when obligated by regulation
- Environmental investigations and studies (Risk Assessments, Phase I and II soil and groundwater)

The closing amount of the environmental provisions is based on the net present value of the future cash flows needed, for current and future years, to settle remediation obligations. Forecast expenditures are based on external consultant estimates, where appropriate and possible. Future expenditures are forecast and revised biannually and validated quarterly by Solvay finance and suitably qualified industrial experts led by the Group Environmental Rehabilitation Director and benefit from inputs of legal department staff for the evolution of Environmental Regulations.

In the absence of probable obligations, a contingent liability may be disclosed to represent the future possible liability. In some cases, contingent liabilities cannot be quantified. See Note F36 Contingent assets, liabilities and financial guarantees.

<i>In €million</i>	Restructuring	Environment	Litigation	Other	Total
December 31, 2022	119	702	97	123	1,041
Additions	104	362	28	147	641
Reversals of unused amounts	0	-16	-10	-14	-40
Uses	-92	-72	-20	-37	-221
Increase/decrease through discounting	0	38	0		39
Remeasurements					
Currency translation differences		-3	1		-3
Acquisitions and changes in consolidation scope					
Disposals					
Partial Demerger	-47	-501	-35	-34	-617
Other	0	-4		16	12
December 31, 2023	83	506	61	202	852
Of which current provisions	36	87	19	161	302

The provisions decreased by €(189) million in 2023, of which, €(36) million for Restructuring, €(196) million for Environment and €(36) million for Litigation, partially offset by an increase of €79 million for others.

See below for more details on the recognition and additions to the provisions.

The Provision decreased as consequence of Partial Demerger by €(617) millions

The movements in Other provisions mainly relate to post-closing adjustments resulting from M&A warranties including indemnities for environmental remediation on sites subject to disinvestment.

Management expects provisions (other than employee benefits) to be used (cash outlays) as follows:

<i>In €million</i>	up to 5 years	between 5 and 10 years	beyond 10 years	Total
Total provisions for environment	243	55	208	506
Total provisions for litigation	56	5		61
Total provisions for restructuring and other	279	6		285
December 31, 2023	578	66	208	852

Restructuring provisions

In 2023, these provisions amount to €83 million, compared with €119 million at the end of 2022.

The provisions at the end of 2023 mainly relate to the restructuring charges for the simplification of all support functions in the frame of the Group’s simplification and transformation program, including the strategic transformation measures.

Environmental provisions

These provisions amount to €506 million at the end of 2023, compared with €702 million at the end of 2022, and pertain to:

- mines and drilling operations to the extent that legislation and/or operating permits in relation to quarries, mines and drilling operations contain requirements to remedy or to pay compensation to third parties. Those provisions amount to €133 million at the end of 2023 and most of these, based on local expert advice, can be expected to be used within 20 year horizon.
- lime dikes (settling ponds related mainly to soda ash plants), dump at sites and third party dump sites (linked to several industrial activities). These provisions have an horizon of 1 to 20 years.
- Various types of pollution (organic, inorganic) coming from miscellaneous chemical productions; these provisions mainly cover discontinued activities or closed plants. Most of these provisions have a horizon of 1 to 20 years;
- The environmental provision decreased as consequence of Partial Demerger by €(501) millions which includes the environmental remediation of €323 million with NJDEP in US (see note F8).

The variation of environmental provisions also was impacted by lower discount rate increasing the present value of the overall liability by €16 million. This effect, combined with the unwinding of the opening liabilities for €22 million resulted in a net increase of €38 million related to discounting. The estimated amounts are discounted based on the probable date of settlement, and are periodically adjusted to reflect the passage of time.

The breakdown of the environmental provisions and related uses for the main countries/regions is reported here below:

<i>In €million</i>	December 31, 2023				December 31, 2022			
	Provisions	In %	Provisions ongoing activities	Use of provisions	Provisions	In %	Provisions ongoing activities	Use of provisions
France	147	29%	0	-21	145	21%	1	-24
Germany	115	23%	6	-4	112	16%	7	-5
Rest of Europe	170	34%	5	-17	144	21%	5	-15
North America	5	1%	0	-23	226	32%	0	-37
Rest of the world	69	13%	1	-10	74	11%	0	-8
Total	506	100%	12	-75	702	100%	12	-90

Provisions for litigation

Provisions for litigation refer to indirect tax and legal exposures. They amount to €61 million in 2023 (€97 million in 2022). The balance at the end of 2023 relates to indirect tax risks (€11 million) and legal claims (€50 million).

Other provisions

Other provisions increased from €123 million at the end of 2022 to €202 million at the end of 2023. They relate to various risks, of which the main ones concern (i) the shutdown or disposal of activities and (ii) risk related to the execution of contracts or termination. Other provisions also included a provision for litigation post M&A deal for which an indemnification asset for €21 million (In Other receivables/payables) has been recognized as foreseen in the Separation Agreement.

Other provisions relate to the shutdown or disposal of activities and amount to €202 million in 2023, compared with €123 million at the end of 2022.

NOTE F32
FINANCIAL INSTRUMENTS AND FINANCIAL RISK MANAGEMENT



Accounting policy

General

Financial assets and liabilities are recognized when, and only when Solvay becomes a party to the contractual provisions of the instrument.

Amortized cost is the amount at which the financial asset or financial liability is measured at initial recognition minus the principal repayments, plus or minus the cumulative amortization using the effective interest method of any difference between that initial amount and the maturity amount and, for financial assets, adjusted for any loss allowance. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial asset or financial liability to the gross carrying amount of a financial asset or to the amortized cost of a financial liability. When calculating the effective interest rate, the Group estimates the expected cash flows by considering all the contractual terms of the financial instrument (for example, prepayment, extension, call and similar options) but does not consider the expected credit losses. The calculation includes all fees and points paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs, and all other premiums or discounts.

Financial assets

Trade receivables are initially measured at their transaction price, if they do not contain a significant financing component, which is the case for substantially all trade receivables. Other financial assets are initially measured at fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset.

A financial asset is classified as current when the cash flows expected to flow from the instrument mature within one year.

All recognized financial assets will subsequently be measured at either amortized cost or fair value under IFRS 9 Financial Instruments, specifically:

- A debt instrument that (i) is held within a business model whose objective is to collect the contractual cash flows and (ii) has contractual cash flows that are solely payments of principal and interest on the principal amount outstanding is measured at amortized cost (net of any write down for impairment), unless the asset is designated at fair value through profit or loss (FVTPL) under the fair value option.
- All other debt instruments are measured at FVTPL.
- All equity investments are measured in the consolidated statement of financial position at fair value, with gains and losses recognized in profit or loss except that if an equity investment is not held for trading, nor contingent consideration recognized by an acquirer in a business combination, an irrevocable election can be made at initial recognition to measure the investment at FVTOCI, with dividend income recognized in profit or loss. This classification is determined on an instrument-by-instrument basis. Upon derecognition, the cumulative gains or losses previously recognized in other comprehensive income are reclassified to retained earnings.
- Equity investments in partnerships of investment funds are measured in the consolidated statement of financial position at fair value with gains and losses recognized in profit or loss. Based on the analysis of the characteristics of these funds the Group determined that they were not eligible for the FVTOCI option and therefore are accounted for at FVTPL.

For instruments quoted in an active market, the fair value corresponds to a market price (level 1). For instruments that are not quoted in an active market, the fair value is determined using valuation techniques including reference to recent arm’s length market transactions or transactions involving instruments which are substantially the same (level 2), or discounted cash flow analysis including, to the greatest possible extent, assumptions consistent with observable market data (level 3). However, in limited circumstances, cost of equity instruments may be an appropriate estimate of their fair value. That may be the case if insufficient more recent information is available to measure fair value, or if there is a wide range of possible fair value measurements and cost represents the best estimate of fair value within that range.

Impairment of financial assets

The impairment loss of a financial asset measured at amortized cost is calculated based on the expected loss model, representing the weighted average of credit losses with the respective risks of a default occurring as the weights. Expected credit losses are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate.

For trade receivables that do not contain a significant financing component (i.e. substantially all trade receivables), the loss allowance is measured at an amount equal to lifetime expected credit losses. Those are the expected credit losses that result from all possible default events over the expected life of those trade receivables, using a provision matrix that takes into account historical information on defaults adjusted for the forward-looking information per customer. The Group considers a financial asset in default risk when contractual payments are 60 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is fully impaired when there is no reasonable expectation of recovering the contractual cash flows.

Impairment losses are recognized in the consolidated income statement, except for debt instruments measured at fair value through other comprehensive income. In this case, the allowance is recognized in other comprehensive income.

Financial liabilities

Financial liabilities are initially measured at fair value minus, in the case of a financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the issue of the financial liability. Subsequently, they are measured at amortized cost, except for:

- financial liabilities at fair value through profit or loss. Such liabilities, including derivatives that are liabilities, are subsequently measured at fair value;
- financial guarantee contracts. After initial recognition, guarantees are subsequently measured at the higher of the expected losses and the amount initially recognized.

Derivative financial instruments

A derivative financial instrument is a financial instrument or other contract within the scope of IFRS 9 Financial Instruments with all three of the following characteristics:

- its value changes in response to the change in a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract (sometimes called the "underlying");
- it requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors;
- it is settled at a future date.

The Group enters into a variety of derivative financial instruments (forward, future, option, collars and swap contracts) to manage its exposure to interest rate risk, foreign exchange rate risk, and commodity risk (mainly utility and CO₂ emission rights price risks).

As explained above, derivatives are initially recognized at fair value at the date a derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in income or expense, unless the derivative is designated and effective as a hedging instrument. The Group designates certain derivatives as hedging instruments of the exposure to variability in cash flows with respect to a recognized asset or liability or a highly probable forecast transaction that could affect profit or loss (cash flow hedges).

A derivative with a positive fair value is recognized as a financial asset whereas a derivative with a negative fair value is recognized as a financial liability. Derivative instruments (or portions of them) are presented as non-current assets or non-current liabilities if the remaining maturity of the underlying settlements is more than 12 months after the reporting period. Other derivative instruments (or portions of them) are presented as current assets or current liabilities.

Hedge accounting

The Group designates certain derivatives and embedded derivatives, in respect of interest rate risk, foreign exchange rate risk, Solvay share price risk, and commodity risk (mainly utility and CO₂ emission rights price risks), as hedging instruments in a cash flow hedge relationship.

At the inception of the hedge relationship, there is a formal designation and documentation of the hedging relationship and the Group’s risk management objective and strategy for undertaking the hedge. So to apply hedge accounting: (a) there is an economic relationship between the hedged item and the hedging instrument, (b) the effect of credit risk does not dominate the value changes that result from that economic relationship, and (c) the hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item.

The requirement under (a) above that an economic relationship exists means that there is an expectation that the value of the hedging instrument and the value of the hedged item will systematically change in the opposite direction in response to movements in either the same underlying (or underlyings that are economically related in such a way that they respond in a similar way to the risk that is being hedged).

Cash flow hedges

The effective portion of changes in the fair value of hedging instruments that are designated in a cash flow hedge is recognized in other comprehensive income.

The gain or loss relating to the ineffective portion is recognized immediately in profit or loss.

As long as cash flow hedge qualifies, the hedging relationship is accounted for as follows:

- a) the separate component of equity associated with the hedged item (cash flow hedge reserve) is adjusted to the lower of the following (in absolute amounts):
 - (i) the cumulative gain or loss on the hedging instrument from inception of the hedge; and
 - (ii) the cumulative change in fair value (present value) of the hedged item (i.e. the present value of the cumulative change in the hedged expected future cash flows) from inception of the hedge.
- b) the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge (i.e. The portion that is offset by the change in the cash flow hedge reserve calculated in accordance with (a)) is recognized in other comprehensive income;
- c) any remaining gain or loss on the hedging instrument (or any gain or loss required to balance the change in the cash flow hedge reserve calculated in accordance with (a)) is hedge ineffectiveness that is recognized in profit or loss.
- d) the amount that has been accumulated in the cash flow hedge reserve in accordance with (a) is accounted for as follows:
 - (i) if a hedged forecast transaction subsequently results in the recognition of a non-financial asset or a non-financial liability, the Group removes that amount from the cash flow hedge reserve and includes it directly in the initial cost or other carrying amount of the asset or the liability. This is not a reclassification adjustment and hence it does not affect other comprehensive income;
 - (ii) for cash flow hedges other than those covered by i), that amount is reclassified from the cash flow hedge reserve to profit or loss as a reclassification adjustment in the same period or periods during which the hedged expected future cash flows affect profit or loss (for example, in the periods that interest income or interest expense is recognized or when a forecast sale occurs);
 - (iii) however, if that amount is a loss and the Group expects that all or a portion of that loss will not be recovered in one or more future periods, it immediately reclassifies the amount that is not expected to be recovered into profit or loss as a reclassification adjustment.

Most hedged items are transaction related. The time value of options, forward elements of forward contracts, and foreign currency basis spreads of financial instruments that are hedging the items affect profit or loss at the same time as those hedged items.

Hedge accounting is discontinued prospectively when the hedging relationship (or a part of a hedging relationship) ceases to meet the qualifying criteria (after taking into account any rebalancing of the hedging relationship, if applicable). This includes instances when the hedging instrument expires or is sold, terminated or exercised.

When the Group discontinues hedge accounting for a cash flow hedge it accounts for the amount that has been accumulated in the cash flow hedge reserve as follows:

- if the hedged future cash flows are still expected to occur, that amount remains in the cash flow hedge reserve until the future cash flows occur. However, if that amount is a loss and the Group expects that all or a portion of that loss will not be recovered in one or more future periods, it immediately reclassifies the amount that is not expected to be recovered into profit or loss as a reclassification adjustment;
- if the hedged future cash flows are no longer expected to occur, that amount is immediately reclassified from the cash flow hedge reserve to profit or loss as a reclassification adjustment. A hedged future cash flow that is no longer highly probable to occur may still be expected to occur.

The following table presents the financial assets and liabilities as current or non-current according to their classification under IFRS 9.

		December 31, 2023	December 31, 2022
<i>In €million</i>	Classification	Carrying amount	Carrying amount
Non-current assets – Financial instruments		234	464
Equity instruments measured at fair value through other comprehensive income	Financial assets measured at fair value through other comprehensive income	1	24
Equity instruments measured at fair value through profit or loss	Financial assets measured at fair value through profit or loss	87	47
Loans and other non-current assets (excluding pension fund surpluses and long-term inventory balance)	Financial assets measured at amortized cost	136	197
Financial instruments – Operational		10	196
Held for trading	Held for trading	5	130
Derivative financial instruments designated in a cash flow hedge relationship	Cash-flow hedge	5	66
Current assets – Financial instruments		1,598	4,093
Trade receivables	Financial assets measured at amortized cost	840	2,026
Other financial instruments		118	206
Other marketable securities >3 months	Financial assets measured at amortized cost	50	43
Currency swaps	Held for trading	2	1
Other current financial assets	Financial assets measured at amortized cost	66	162
Financial instruments – Operational		56	929
Held for trading	Held for trading	11	553
Derivative financial instruments designated in a cash flow hedge relationship	Cash-flow hedge	45	376
Cash and cash equivalents	Financial assets measured at amortized cost	584	932
Total assets – Financial instruments		1,833	4,557
Non-current liabilities – Financial instruments		2,051	2,753
Financial debt		1,981	2,450
Bonds	Financial liabilities measured at amortized cost	0	1,994
Other non-current debts	Financial liabilities measured at amortized cost	1,735	42
Derivative financial instruments designated in a cash flow hedge relationship	Cash-flow hedge	2	0
Lease liabilities IFRS 16 – Non-current portion	Lease liabilities measured at amortized cost	243	413
Other liabilities	Financial liabilities measured at amortized cost	39	112
Financial instruments – Operational		32	192
Held for trading	Held for trading	17	146
Derivative financial instruments designated in a cash flow hedge relationship	Cash-flow hedge	15	46
Current liabilities – Financial instruments		1,344	3,646
Financial debt		211	510
Short-term financial debt	Financial liabilities measured at amortized cost	88	397
Currency swaps	Held for trading	1	2
Derivative financial instruments designated in a cash flow hedge relationship	Cash-flow hedge	59	0
Lease liabilities IFRS 16 – Current portion	Lease liabilities measured at amortized cost	63	111
Trade payables	Financial liabilities measured at amortized cost	850	2,296
Financial instruments – Operational		108	676
Held for trading	Held for trading	19	492

Derivative financial instruments designated in a cash flow hedge relationship	Cash-flow hedge	88	183
Dividends payables	Financial liabilities measured at amortized cost	175	165
Total liabilities – Financial instruments		3,395	6,399

In 2022 and 2023, long-term CO₂ inventory balances reported are not financial assets and hence are not included in the table above. They are presented as other non-current assets.

F32.A. Overview of financial instruments

The following table gives an overview of the carrying amount of all financial instruments by category as defined by IFRS 9.

Financial Instruments

	December 31, 2023	December 31, 2022
<i>In €million</i>	Carrying amount	Carrying amount
<i>Fair value through profit or loss</i>	105	731
Held for trading (financial instruments – operational – see note F25)	16	683
Held for trading (other financial instruments – see note F33, table Changes in financial debt)	2	1
Equity instruments measured at fair value through profit or loss	87	47
<i>Financial assets measured at amortized cost</i>	1,677	3,360
Financial assets measured at amortized cost (including cash and cash equivalents, trade receivables, loans and other current/non-current assets except pension fund surpluses and long-term inventory balance)	1,677	3,360
<i>Financial assets measured at fair value through other comprehensive income</i>	51	466
Derivative financial instruments designated in a cash flow hedge relationship (see note F25)	50	442
Equity instruments measured at fair value through other comprehensive income	1	24
Total financial assets	1,833	4,557
<i>Fair value through profit or loss</i>	-37	-641
Held for trading (financial instruments – operational – see note F34)	-36	-639
Held for trading (financial debt – see note F33, table Changes in financial debt)	-1	-2
<i>Financial liabilities measured at amortized cost</i>	-2,887	-5,005
Financial liabilities measured at amortized cost (excluding dividends payable and IFRS 16 lease liabilities)	-2,712	-4,841
Dividends payables	-175	-165
<i>Lease liabilities measured at amortized cost</i>	-307	-524
Lease liabilities IFRS 16 measured at amortized cost	-307	-524
<i>Financial liabilities measured at fair value through other comprehensive income</i>	-165	-229
Derivative financial instruments designated in a cash flow hedge relationship (see note F34)	-165	-229
Total financial and lease liabilities	-3,395	-6,399

The category “Held for trading” contains derivative financial instruments that are used for management of foreign currency risk, utility and CO₂ emission rights price risks, index and shares. Contracts which have been documented as hedging instruments (hedge accounting under IFRS 9 Financial Instruments) or which meet the exemption criteria for own use are not included in the category “Held for trading.”

Equity instruments measured at fair value through OCI pertained to Solvay’s New Business Development (NBD) activity that is, now, a part of Syensqo and was subject to the Partial Demerger. In turn, at the end of 2023, €87 million of instruments at fair value through profit or loss relate to capital instruments related to Syensqo Group.

F32.B. Fair value of financial instruments

Valuation techniques and assumptions used for measuring fair value.



Accounting policy

Quoted market prices are available for financial assets and financial liabilities with standard terms and conditions that are traded on active markets. The fair values of derivative financial instruments are equal to their quoted prices, if available. In case such quoted prices are not available, the fair value of the financial instruments is determined based on a discounted cash flow analysis using the applicable yield curve derived from quoted interest rates matching maturities of the contracts for non-optional derivatives. Optional derivatives are fair valued based on option pricing models, taking into account the present value of probability weighted expected future payoffs, using market reference formulas.

The fair values of other financial assets and financial liabilities are determined in accordance with generally accepted pricing models based on discounted cash flow analysis.

Fair value of financial instruments measured at amortized cost (excluding IFRS 16 lease liabilities)

<i>In €million</i>	December 31, 2023		December 31, 2022	
	Carrying amount	Fair value	Carrying amount	Fair value
Non-current assets – Financial instruments	136	136	197	197
Loans and other non-current assets (except pension fund surpluses and long-term inventory balance)	136	136	197	197
Non-current liabilities – Financial instruments	-1,774	-1,774	-2,148	-1,994
Bonds	0	0	-1,994	-1,830
Other non-current debts	-1,735	-1,735	-42	-42
Other liabilities	-39	-39	-112	-112

The carrying amounts of current financial assets and liabilities are estimated to reasonably approximate their fair values, due to the short term to maturity.

Financial instruments measured at fair value in the consolidated statement of financial position

The table “Financial instruments measured at fair value in the consolidated statement of financial position” provides an analysis of financial instruments that, subsequent to their initial recognition, are measured at fair value, grouped into Levels 1 to 3 based on the degree to which the fair value is observable. Financial instruments, classified as held for trading and as hedging instruments in cash flow hedges are mainly grouped into Levels 1 and 2. They are fair valued based on forward pricing and swap models using present value calculations. The models incorporate various inputs including foreign exchange spot and interest rates of the respective currencies, currency basis spreads between the respective currencies, interest rate curves and forward rate curves of the underlying commodity. The equity instruments measured at fair value through OCI and through profit and loss are presented within Level 1 and 3. The fair value of the instruments presented under Level 3 is measured based on the guidelines recommended by The International Private Equity and Venture Capital Valuation (IPEV).

In accordance with the Group internal rules, the responsibility for measuring the fair value level resides with (a) the Treasury department for the non-utility derivative financial instruments, and the non-derivative financial liabilities, (b) the Sustainable Development and Energy department for the utility derivative financial instruments and (c) the Finance department for non-derivative financial assets.

The Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period. During the year, no such transfers have occurred.

Financial instruments measured at fair value in the consolidated statement of financial position

In €million	December 31, 2023			
	Level 1	Level 2	Level 3	Total
Held for trading		17		18
— Foreign currency risk		3		3
— Utility risk		4		5
— CO ₂ risk				
— Shares		8		8
— Index		2		2
Equity instruments measured at fair value through profit or loss				
— Shares	87			87
Cash flow hedges	0	50		50
— Foreign currency risk		2		2
— Interest rate risk		0		0
— Utility risk		47		48
— CO ₂ risk	0			0
— Shares				
— Equity instruments measured at fair value through other comprehensive income			1	1
— New Business Development			1	1
Total assets	87	67	1	156
Held for trading		-37		-37
— Foreign currency risk		-1		-1
— Interest rate risk				
— Utility risk		-8		-8
— CO ₂ risk		-26		-26
— Shares				
— Index		-2		-2
Cash flow hedges		-165		-165
— Foreign currency risk		-1		-1
— Interest rate risk		-61		-61
— Utility risk		-59		-59
— CO ₂ risk		-44		-44
— Shares				
Total liabilities		-202		-202

The fair value of the financial instruments to manage the utility risk significantly reduced in 2023. This is mainly explained by the price decrease of power and gas in 2023 in comparison to 2022.

In €million	December 31, 2022			
	Level 1	Level 2	Level 3	Total
Held for trading	483	200		683
— Foreign currency risk		5		5
— Utility risk	466	188		654
— CO ₂ risk	17	4		21
— Solvay share price		2		2
— Index		2		2
Equity instruments measured at fair value through profit or loss			47	47
— New Business Development			47	47
Cash flow hedges	184	259		442
— Foreign currency risk		20		20
— Utility risk	44	236		280
— CO ₂ risk	140	2		142
Equity instruments measured at fair value through other comprehensive income			24	24
— New Business Development			24	24
Total assets	667	459	71	1,197
Held for trading	-275	-366		-640
— Foreign currency risk		-3		-3
— Utility risk	-275	-313		-588
— CO ₂ risk		-46		-46
— Solvay share price		-1		-1
— Index		-2		-2
Cash flow hedges	-127	-102		-229
— Foreign currency risk		-7		-7
— Utility risk	-103	-93		-195
— CO ₂ risk	-24	-2		-26
— Solvay share price		-1		-1
Total liabilities	-401	-468		-869

Movements of the period

Reconciliation of level 3 fair value measurements of financial assets and liabilities.

December 31, 2023			
	At fair value through profit or loss	At fair value through other comprehensive income	Total
In €million	Equity instruments	Equity instruments	
January 1	47	24	71
Total gains or losses			
— Recognized in profit or loss	2		2
— Recognized in other comprehensive income		0	0
Acquisitions	0	8	8
Capital decreases		-1	-1
Transfers out of level 3			
Partial Demerger	-49	-30	-79
December 31	0	1	1
December 31, 2022			
	At fair value through profit or loss	At fair value through other comprehensive income	Total
In €million	Equity instruments	Equity instruments	
January 1	62	17	79
Total gains or losses			
— Recognized in profit or loss	-15		-15
— Recognized in other comprehensive income		8	8
Acquisitions	-1	-1	-2
Capital decreases			
Transfers out of level 3			
December 31	47	24	70

Income and expenses of financial instruments recognized in the consolidated income statement and in other comprehensive income

The figures for 2022 are restated.

In €million	2023	2022
Recognized in the consolidated income statement		
Recycling from OCI of derivative financial instruments designated in a cash flow hedge relationship		
— Foreign currency risk	39	-27
— Utility risk	-1	231
Changes in the fair value of financial instruments held for trading		
— Utility risk	86	259
— CO ₂ risk	15	2
Recognized in the gross margin	138	465
Recycling from OCI of derivative financial instruments designated in a cash flow hedge relationship		
— Foreign currency risk		
— Solvay share price		
Changes in the fair value of financial instruments held for trading		
— CO ₂ risk		188
— Solvay share price		-2
Gains and losses (time value) on derivative financial instruments designated in a cash flow hedge relationship		
— Foreign currency risk		
Foreign operating exchange gains and losses	2	10
Recognized in other operating gains and losses	2	196
— Recycling from OCI of derivative financial instruments designated in a cash flow hedge relationship		
— Foreign currency risk		0
Recognized in results from portfolio management and reassessments		0
Net interest expense	-24	-29
Financial charge on lease liabilities	-11	-10
Other gains and losses on net indebtedness (excluding gains and losses on items not related to financial instruments)		
Foreign currency risk	1	14
Interest element of financial instruments	6	11
Others	-7	
Recognized in charges on net indebtedness (*)	-35	-14
Dividends from equity instruments measured at fair value through other comprehensive income		
Total recognized in the consolidated income statement	106	647

(*) The note F6 Net Financial Charges shows an amount of €(41) million for 2023 (€(12) million for 2022) reported under “Net cost of .” This amount includes €(6) million for 2023 (€3 million for 2022) of financial expenses not related to financial instruments that are excluded in this table from the line item “Recognized in charges on net indebtedness.”

The gain on highly probable sales in foreign currency recognized in gross margin for €39 million is mainly explained by the hedging of the US\$ currency and the loss recognized on utility instruments for €(1) million are the result of the recycling of gains and losses of derivative financial instruments designated in a cash flow hedge relationship.

The change in fair value of financial instruments held for trading recognized in gross margin is explained by:

- a gain of €86 million (€259 million in 2022) mainly due to the price increase of gas and electricity;
- a gain of €15 million (a gain of €2 million in 2022) mainly due to the price variation of CO_{2i};

In 2022, the gain of €188 million recognized in other operating gains and losses is mainly explained by the CO₂ emission rights, previously considered under the “own use” exemption. The remaining amounts are related to changes in fair value of equity swaps for long-term incentives.

In 2023, in the caption other gains and losses on net indebtedness, the foreign exchange income decreased by €(13) million in comparison to 2022. The gain of €6 million (€11 million for 2022) is related to the interest element of financial derivatives (forward points). The other costs increased by €(7) million in 2023 in comparison to 2022 due to one off costs incurred in the frame of the separation plan.

Income and expenses on financial instruments recognized in other comprehensive income include the following:

	Cash flow hedges									
	Foreign currency risk		Interest rate risk		Commodity risk		Risk on Solvay share price		Total	
	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
January 1	13	-7			67	7		2	81	1
Recycling from other comprehensive income of derivative financial instruments designated in a cash flow hedge relationship	-41	31	9		13	-257			-20	-226
Effective portion of changes in fair value of cash flow hedge	29	-10	-70		-167	317		-1	-209	306
December 31	1	13	-61		-87	67		1	-148	81

Conventionally, (+) indicates an increase and (-) a reduction in equity.

F32.C. Capital management

See 2 Capital, shares and shareholders in respect of capital in the Corporate Governance statement chapter of this annual report.

The Group manages its funding structure with the objective of safeguarding its ability to continue as a going concern, optimizing the return for shareholders, maintaining an investment-grade rating, and minimizing the cost of debt.

The capital structure of the Group consisted of equity (including perpetual hybrid bonds on December 31, 2022 (see note F28 Equity)) and of net debt (see note F33 Net indebtedness). Perpetual hybrid bonds were nevertheless considered as debt in the Group’s underlying metrics. There are no hybrid bonds at the end of 2023.

Besides the statutory minimum equity funding requirements that apply to the Company’s subsidiaries in the different countries, Solvay is not subject to any additional legal capital requirements.

The Treasury department reviews the capital structure on an ongoing basis under the authority and the supervision of the Chief Financial Officer. As appropriate, the Legal department is involved to ensure compliance with legal and contractual requirements.

F32.D. Financial risk management

The Group is exposed to market risk from movements in foreign exchange rates, interest rates and other market prices (utility prices, CO₂ emission rights prices and equity prices). The Group’s senior management oversees the management of these risks and is supported by the Treasury department (non-commodity risks) and Solvay Sustainable Development and Energy department that advise on financial risks and the appropriate financial risk governance framework for the Group. Both departments provide assurance to the Group’s senior management that the Group’s financial risk activities are governed by appropriate policies and procedures and that financial risks are identified, measured and managed in accordance with the Group’s policies and risk objectives. Solvay uses derivative financial instruments to hedge clearly identified foreign exchange, interest rate, index, utility price and CO₂ emission rights price risks (hedging instruments). All derivative activities for risk management purposes are carried out by specialist teams that have the appropriate skills, experience and supervision. However, the required criteria to apply hedge accounting are not met in all cases.

Furthermore, the Group is also exposed to liquidity risks and credit risks.

Foreign currency risks

- The Group is an essential chemical company with operations worldwide, and hence undertakes transactions denominated in foreign currencies. Consequently, the Group is exposed to exchange rate fluctuations. In 2023, the Group was mainly exposed to US Dollar, Chinese Yuan and Brazilian Real.
- To mitigate its foreign currency risk, the Group has defined a hedging policy that is essentially based on the principles of financing its activities in local currency and hedges the transactional exchange risk at the time of invoicing (risk which is certain). The Group constantly monitors its activities in foreign currencies and hedges, where appropriate, the exchange rate exposures on expected cash flows (risk which is highly probable).

- Exchange rate exposures are managed within approved policy parameters utilizing forward foreign exchange contracts or, when appropriate, other derivatives like currency options.
- In the course of 2023, the €/US\$ exchange rate moved from 1.0674 at the start of January to 1.1052 at the end of December (from 1.1327 to 1.0674 in 2022).
- A fluctuation of (0.10) to the US\$/€exchange rate, would generate in 2023 about €30 million (€180 million for 2022) variation to the EBITDA; 63% of this variation is at conversion level and 37% at transaction level, the latter being mostly hedged. EBITDA is the key non-IFRS metric for operational performance as defined in the glossary.
- At the end of 2023, a strengthening of the US dollar vs euro would increase the net debt by approximately €0 million (€87 million in 2022) per 0.10 US\$/€fluctuation. Conversely, a weakening of the US dollar vs euro would decrease the net debt by approximately €0 million (€72 million in 2022) per 0.10 US\$/€fluctuation.
- The Group’s currency risk can be split into two categories: translation and transactional risk.

Translation risk

- The translation exchange risk is the risk affecting the Group’s consolidated financial statements related to investees operating in a currency other than the euro (the Group’s presentation currency).
- During 2023 and 2022, the Group did not hedge the currency risk of foreign operations.

Transactional risk

The transactional risk is the exchange risk linked to a specific transaction, such as a Group entity buying or selling in a currency other than its functional currency.

To the largest extent possible, the Group manages the transactional risk on receivables and borrowings centrally and locally when centralization is not possible.

The choice of borrowing currency depends mainly on the opportunities offered by the various markets. This means that the selected currency is not necessarily that of the country in which the funds will be invested. Nonetheless, operating entities are financed essentially in their functional currencies.

In emerging countries, it is not always possible to borrow in local currency, either because funds are not available in local financial markets, or because the financial conditions are too onerous. In such a situation, the Group has to borrow in a different currency. Nonetheless, the Group considers opportunities to refinance its borrowings in emerging countries with local currency debt.

Derivatives are initially recognized at fair value at the date a derivative contract is entered into and are classified into the two categories described below.

Held for trading

The transactional risk is managed either by spot or forward contracts. Unless documented as hedging instruments (see above), derivative financial instruments are classified as held for trading.

In 2023, the notional amounts transacted to manage the transactional risk are:

- a long position of €271 million (compared to €343 million in 2022);
- a short position of €(284) million (compared to €(666) million in 2022);
- In comparison to 2022, the separation plan that occurred in 2023 led to a decrease of the transactional risk (mainly in China) that impacted the short position by €(382) million.

The following table details the notional amounts of the Group’s derivatives contracts outstanding at the end of the period:

In €million	Notional amount ⁽¹⁾		Fair value assets		Fair value liabilities	
	2023	2022	2023	2022	2023	2022
December 31						
Held for trading long position	271	343	1	1	-1	-1
Held for trading short position	-284	-666	2	4	0	-2
Total	-13	-323	3	5	-1	-3

(1) Long/(short) positions (if the foreign exchange transaction does not involve the functional currency, both notional amounts are considered).

Cash flow hedge

The Group uses derivatives to hedge identified foreign exchange rate risks. It documents those as hedging instruments unless it hedges a recognized financial asset or liability when generally no cash flow hedge relationship is documented. Most hedges are transaction related.

At the end of 2023, the Group had mainly hedged highly probable sales in foreign currencies (short position) in a nominal amount of US\$203 million (€184 million) and JPY134 million (€1 million). All cash flow hedge contracts that exist at the end of December 2023 will be settled within the next 12 months, and will impact profit or loss during that period.

The following table details the notional amounts of Solvay's derivatives contracts outstanding at the end of the period:

NOTIONAL AMOUNTS

December 31, 2023								
In €million	Notional amount of the instrument ⁽¹⁾	Notional amount of the risk exposure ⁽¹⁾	Percentage of exposure hedged		Average hedge exchange rate per risk category	Cash flow hedge reserve	Fair value of the hedging instrument	
							Equity	Assets Liabilities
Cash flow hedges – Forecasted sales and purchases ⁽³⁾								
JPY/EUR	-1	-1	50%	(2)	126.94	0	0	0
JPY/USD	0	-3	4%	(4)	145.33	1	1	0
Total JPY	-1	-4				1	1	0
USD/BRL	-63	-106	60%	(2)	4.78	0	0	0
USD/CNY	-68	-138	49%	(2)	6.92	0	0	0
USD/EUR	-24	-37	66%	(2)	1.13	0	1	-1
USD/MXN	-11	-23	48%	(2)	18.32	-1	0	-1
USD/THB	-17	-39	44%	(2)	33.75	0	0	0
Total USD	-184	-342				-1	1	-2
Total	-185	-346				0	2	-2

(1) Long/(short) positions.
(2) In compliance with Group Treasury Policy the percentage of hedged exposure will reach the progressive minimum compliance level of 60% in 2023.
(3) The hedging instruments are located in the line item: "Other Receivables" and "Other Liabilities" in the statement of financial position.
(4) In compliance with Group Treasury Policy the hedging will be stopped in 2024 due to the low materiality exposure.

Hedge relationships are seldom perfect. Therefore, ineffectiveness could arise with the result that changes in the fair value or cash flows of the hedged item that are attributable to a hedged risk and the hedging instrument do not offset within a period. The sources of hedge ineffectiveness that could potentially affect the hedging relationship during its term are listed below:

- A reduction in the amount of the forecast sales resulting in quantity or notional amount differences – the hedged item and hedging instrument are based on different quantities or notional amounts.
- A significant change in the credit risk of parties.

Timing differences – the hedged item and hedging instrument occur or are settled at different dates.

In 2023, no hedge ineffectiveness was recognized in the consolidated income statement.

December 31, 2022								
In €million	Notional amount of the instrument ⁽¹⁾	Notional amount of the risk exposure ⁽¹⁾	Percentage of exposure hedged		Average hedge exchange rate per risk category	Cash flow hedge reserve	Fair value of the hedging instrument	
							Equity	Assets Liabilities
Cash flow hedges – Forecasted sales and purchases ⁽³⁾								
JPY/EUR	-71	-147	48%		139.17	0	1	1
JPY/USD	-42	-87	48%	(2)	132.47	-1	1	2
Total JPY	-113	-234				-1	1	2
USD/BRL	-187	-285	66%	(2)	5.28	3	3	0
USD/CNY	-157	-353	45%	(2)	6.82	-1	1	2
USD/EUR	-340	-674	50%		1.05	8	10	2
USD/MXN	-66	-135	49%	(2)	21.01	3	3	0
USD/THB	-36	-79	45%		34.69	1	1	0
Total USD	-786	-1,525				14	19	5
Total	-899	-1,759				13	20	7

(1) Long/(short) positions.
(2) In compliance with Group Treasury Policy the percentage of hedged exposure will reach the progressive minimum compliance level of 60% in 2022.
(3) The hedging instruments are located in the line item: "Other Receivables" and "Other Liabilities" in the statement of financial position.

Effects of IBOR market developments

All the new Liquidity Facilities (RCF, Bilateral lines) have been negotiated using only SOFR reference index and not IBOR anymore. This will not have any impact financially.

The ISDA's agreements were as well amended to include the SOFR.

All the other old agreements (before June 2023) still reflect IBOR on the agreements. Banks in that case will apply market standard approach and use the new SOFR reference rate for those agreements, therefore will not have an impact on our financial charges nor relations.

Interest rate risks

See the Financial risk in the Management of risks section of this annual report for additional information on the interest rate risks management.

- Interest rate risk is managed at Group level.
- The Group is exposed to interest rate risk because entities in the Group borrow funds at both fixed and floating interest rates. Interest rate risk is managed at Group level by maintaining an appropriate mix between fixed and floating rate borrowings.

Interest rate exposure by currency is summarized below:

In €million	December 31, 2023			December 31, 2022		
Currency	Fixed rate	Floating rate	Total	Fixed rate	Floating rate	Total
Financial debt						
EUR	-164	-1,840	-2,003	-1,642	-32	-1,673
USD	-137	-2	-139	-1,153	-11	-1,163
BGN	-1	-1	-2	0	-33	-33
INR	0	0	0	-11	-6	-17
KRW	-2	-10	-12	-19	-7	-26
THB	-9	0	-10	-12	0	-12
BRL	-8	-2	-10	-12	0	-12
Other	-13	-3	-16	-22	-1	-23
Total	-333	-1,859	-2,192	-2,870	-90	-2,959
Cash and cash equivalents						
EUR		297	297		201	201
USD		138	138		320	320
CAD		2	2		53	53
THB		22	22		28	28
SAR		8	8		11	11
BRL		65	65		177	177
CNY		16	16		22	22
KRW		6	6		7	7
JPY		10	10		30	30
Other		20	20		83	83
Total		584	584		932	932
Other financial instruments						
CNY		12	12		43	43
EUR		65	65		185	185
SAR		4	4		4	4
Other		38	38		4	4
Total		118	118		236	236
Total	-333	-1,156	-1,489	-2,870	1,078	-1,791

At the end of 2023, €1,859 million of the Group's gross debt was at floating-rate, and is largely comprised of:

- bridge facility in for a total of €1,500 million maturing in 2025 (carrying amount of €1,500 million);
- a term loan for an amount of €200 million.

The latter are subject to interest rate hedging via zero cost interest collar (for the bridge facility of €1,500 million) and interest rate swaps (for the term loan of €200 million) reducing the volatility to interest rate fluctuations (discussed below).

The fixed-rate debt is mainly comprised of IFRS 16 lease liability for a total of €307 million (carrying amount of €307 million).

The impact of interest rate volatility at the end of 2023 compared to 2022 is the following:

In €million	Sensitivity to a + 100bp movement in EUR market interest rates		Sensitivity to a - 100bp movement in EUR market interest rates	
	2023	2022	2023	2022
Profit or loss	-7	-1	6	1

The sensitivity to interest rates volatility on the floating gross financial debt remains insignificant at the end of 2023 compared to 2022 thanks to the interest rates hedging. Most of the sensitivity disclosed in 2023 corresponds to the remaining volatility between the maximum interest rate payable (cap strike rate) and the minimum rate (floor strike rate) following the hedging of the bridge facility (€1,500 million) via zero cost interest collar.

Interest rate risk hedged by instrument accounted for as held for trading

In 2023 and 2022, there are no outstanding interest rate instruments accounted for as held for trading.

Interest rate risk hedged by instrument accounted for as a hedging instrument in a cash flow hedge

In 2022, there are no outstanding interest rate instruments accounted for under cash flow hedges. In 2023, in the context of the execution of liability management prior to the Partial Demerger the Group has decided to hedge executed floating rate debts and drawdowns executed in 2023 (€1.7 billion) as well as future long-term refinancing:

December 31, 2023							
In €million	Notional amount of the instrument ⁽¹⁾	Notional amount of the risk exposure ⁽¹⁾	Percentage of exposure hedged	Hedge interest rate per risk category	Cash flow hedge reserve	Fair value of the hedging instrument	
Cash flow hedges on floating interests rates					Equity	Assets	Liabilities
Floating rate debt (Euribor6M)	200	200	100%	3.52%	-2	0	-2
Floating rate debt (Euribor1M)	1,500	1,500	100%	3.55%	-1	0	-1
Future long-term refinancing (Euribor6M)	750	750	100%	3.20% + Fixed margin	-25	0	-25
Future long-term refinancing (Euribor6M)	750	750	100%	3.05% + Fixed margin	-33	0	-33
Total	3,200	3,200			-61	0	-61

Other market risks

Utility and CO₂ price risks

The Group purchases a large portion of its coal, gas and electricity needs in Europe and the United States based on fluctuating liquid market indices. Moreover, the Group purchases raw materials with a price formula referring to market indices. In order to reduce the cost volatility, the Group has developed a policy for exchanging variable price against fixed price through derivative financial instruments. Most of these hedging instruments can be documented as hedging instruments of the underlying purchase contracts. Utility purchase contracts at fixed price with a physical delivery for use in the Group's operations are qualified as own use contracts and constitute a natural hedge. Those have not been included in this note.

Financial hedging of utility and CO₂ emission rights price risks is managed centrally by Energy Services on behalf of the Group entities.

Energy Services also carries out trading transactions with respect to utility and CO₂.

The following tables detail the notional principal amounts and fair values of utility and CO₂ derivative financial instruments outstanding at the end of the reporting period:

Held for trading	Notional amount of the instrument ⁽¹⁾		Notional amount of the instrument (in units)			Fair value of the instrument – Asset		Fair value of the instrument – Liability	
December 31	2023	2022	2023	2022		2023	2022	2023	2022
In €million (except where indicated)									
Coal					Tons				
Power	22	922	118,090	7,318,874	MWh	0	307	-13	-306
Standard Quality Gas	21	619	811,174	13,372,959	MWh	10	347	0	-282
CO ₂	9	10	394,500	707,550	Tons	0	21	-26	-46
Total	52	1,550				10	675	-39	-634

(1) The hedging instruments are located in the line item: "Other Receivables" and "Other Liabilities" in the consolidated statement of financial position.

The amounts presented in the tables hereafter include hedging needs of the GBUs of the Group that are sourced through Energy Services, and not the full Group utility hedging needs.

December 31, 2023												
Cash flow hedge	Notional amount of the instrument ⁽¹⁾	Notional amount of the instrument (in units)		Notional amount of the risk exposure	Notional amount of the risk exposure (in units)		Percentage of exposure hedged	Average hedge price per risk category		Cash flow hedge reserve	Fair value of the instrument – Asset	Fair value of the instrument – Liability
In €million (except where indicated)												
Benzene												
Coal												
Power	112	781,326	MWh	181	1,763,316	MWh	44%	142	EUR/MWh	30	33	-3
Standard Quality Gas	245	12,343,602	MWh	579	24,542,118	MWh	50%	27	EUR/MWh	-41	15	-56
CO ₂ ⁽²⁾	553	3,469,500	Tons	801	9,230,909	Tons	38%	87	EUR/Tons	-43	0	-44
Total	909			1,561						-54	48	-102

(1) The hedging instruments are located in the line item: "Other Receivables" and "Other Liabilities" in the consolidated statement of financial position.

(2) Excluding the reserve frozen in OCI, following roll-over transactions (€(33) million)

December 31, 2022													
Cash flow hedge	Notional amount of the instrument ⁽¹⁾	Notional amount of the instrument (in units)		Notional amount of the risk exposure	Notional amount of the risk exposure (in units)		Percentage of exposure hedged		Average hedge price per risk category		Cash flow hedge reserve	Fair value of the instrument – Asset	Fair value of the instrument – Liability
In €million (except where indicated)													
Benzene													
Coal													
Power	154	1,078,973	MWh	702	3,505,469	MWh	31%	132	EUR/MWh	71	40	-111	
Standard Quality Gas	330	13,525,810	MWh	1,650	34,722,420	MWh	39%	33	EUR/MWh	-156	240	-84	
CO ₂	368	5,440,050	Tons	1,150	24,096,508	Tons	45%	61	EUR/Tons	152	142	-26	
Total	852			3,502						67	422	-221	

(1) The hedging instruments are located in the line item: "Other Receivables" and "Other Liabilities" in the consolidated statement of financial position.

Solvay's strategic decision to discontinue external commercial activities and the Partial Demerger resulted in the reduction of volumes and notional amounts, aligning with our continuous efforts to optimize the portfolio, concentrate on core activities, and enhance operational efficiency.

Hedge relationships are seldom perfect. Therefore, ineffectiveness could arise with the result that changes in the fair value or cash flows of the hedged item that are attributable to a hedged risk and the hedging instrument do not offset within a period. The sources of hedge ineffectiveness that could potentially affect the hedging relationship during its term are listed below:

- A reduction in the amount of the forecast sales resulting in quantity or notional amount differences – the hedged item and hedging instrument are based on different quantities or notional amounts.
- A significant change in the credit risk of parties.
- Timing differences – the hedged item and hedging instrument occur or are settled at different dates.

In 2023, no hedge ineffectiveness was recognized in the consolidated income statement.

Fair value hedge

The Group covered a part of its CO₂ emission rights in inventory by forward sales of CO₂ emission rights to a related party. The Group qualifies this hedging strategy as fair value hedge. The change in fair value of forward sales are accounted for in profit and loss, concomitantly with the revaluation of the CO₂ emission rights held in inventory.

The Group has established a 1:1 hedge ratio for the underlying risk of the forward sales of CO₂ emission rights to the related party that is identical to the hedged risk component.

The impact of the hedging instrument on the statement of financial position as at December 31, 2023, is as follows:

					December 31, 2023			
Carrying amount					Balance sheet line item(s)	Change in fair value used for calculating hedge ineffectiveness		
Notional			Assets	Liabilities		Assets	Liabilities	
In Tons	In €million		In €million			In €million		
Fair Value Hedge								
CO ₂ emission rights forwards	25,000		0		-2	Financial Instrument	1	-1

December 31, 2023							
			Carrying amount		Balance sheet line item(s)	Change in fair value used for calculating hedge ineffectiveness	
Notional			Assets	Liabilities		Assets	Liabilities
In Tons		In €million	In €million			In €million	
Fair value hedge							
CO ₂ emission rights forwards	25,000	0	2		Inventories	1	

December 31, 2022						
Carrying amount			Balance sheet line item(s)		Change in fair value used for calculating hedge ineffectiveness	
Notional		Assets	Liabilities		Assets	Liabilities
In Tons	In €million	In €million			In €million	
Fair value hedge						
CO ₂ emission rights forwards	86,500	1	-6	Financial instrument		-6

December 31, 2022							
			Carrying amount		Balance sheet line item(s)	Change in fair value used for calculating hedge ineffectiveness	
			Assets	Liabilities		Assets	Liabilities
			In Tons	In €million	In €million	In €million	
Fair value hedge							
CO ₂ emission rights forwards	86,500	-1	7		Inventories	6	

The sensitivities of commodity derivative financial instruments as of December 31, 2023, are presented below.

The sensitivities were defined based on the price levels and volatility levels of each commodity. These assumptions do not constitute an estimation of future market prices and the sensitivities presented are not representative of future changes in Solvay's equity and results.

	December 31, 2023		
	Price change	Other comprehensive income	Profit or loss
In €million			
Natural gas	+€10 / MWh	82	0
Natural gas	-€10 / MWh	-82	0
Electricity	+€30 / MWh	-23	0
Electricity	-€30 / MWh	23	0
CO ₂ emission rights	+€5€ / T	22	0
CO ₂ emission rights	-€5 / T	-22	0

Performance Share Units Plan (PSU) risk on Solvay share price

In order to neutralize the volatility of the Solvay share price, which will impact the liability valuation relating to the cash settled PSU plans (with related employer charges), the Group entered into a hedge covering 100% of the risk for 2023 employee reward plan (fully unwound prior to separation). PSU plan 2022 hedges were unwound during the 2023 year prior separation date. The group will assess during 2024 the necessary steps to mitigate future potential risk.

Credit risk

See the Financial risk in the Management of risks section of this annual report for additional information on credit risk management.

The Group continuously monitors the credit risk of important business partners.

The Group engages in transactions only with financial institutions with a good credit rating. The Group monitors and manages exposures to financial institutions within approved counterparty credit limits and credit risk parameters in order to mitigate the risk of default. For financial guarantees, see note F36 Contingent assets, liabilities and financial guarantees.

The Group recognizes expected credit losses on all of its trade receivables: it applies the simplified approach and recognizes lifetime expected losses on all trade receivables, using a provision matrix in order to calculate the lifetime expected credit losses for trade receivables, using historical information on defaults adjusted for the forward-looking information.

The Group classifies the customers and their related receivables in various rating classes, based on the risks’ grading attributed to the customers and on the aging balance of receivables. As such, for all receivables overdue below six months, the Group considers percentages within a range between 0.005% and 4.031%, depending on the rating class. For all receivables overdue in excess of six months, the Group considers a rate of 50% or of 100%, depending on the rating class. The customer’s grading is reviewed annually for customers assessed as low risk profile, and every six months for customers assessed as higher risk profile.

There is no significant concentration of credit risk at Group level because the receivables’ credit risk is spread over a large number of customers and markets.

The aging of trade receivables, financial instruments – operational, loans and other non-current assets is as follows:

December 31, 2023		With expected loss allowance, not credit-impaired					
In €million	Total	Credit-impaired	Not past due	Less than 30 days past due	Between 30 and 60 days past due	Between 60 and 90 days past due	More than 90 days past due
Trade receivables	894	55	802	28	1	6	3
Trade receivables – allowance	-54	-53	-1				-1
Trade receivables – net	840	3	801	28	1	6	2
Financial instruments – operational	66		66				
Loans and other non-current assets ⁽¹⁾	140	4	135	0			
Loans and other non-current assets – allowance	-4	-4					
Loans and other non-current assets – net	136	0	135	0	0	0	0
Total	1,042	3	1,002	28	1	6	2

⁽¹⁾ Loans and other non-current assets do not include pension fund surplus and long-term inventory.

December 31, 2022		With expected loss allowance, not credit-impaired					
In €million	Total	Credit-impaired	Not past due	Less than 30 days past due	Between 30 and 60 days past due	Between 60 and 90 days past due	More than 90 days past due
Trade receivables	2,098	68	1,986	33	6	1	3
Trade receivables – allowance	-72	-67	-2	0			-2
Trade receivables – net	2,026	1	1,984	33	6	1	1
Financial instruments – operational	1,125		1,125				
Loans and other non-current assets ⁽¹⁾	208	11	197	0			
Loans and other non-current assets – allowance	-11	-11					
Loans and other non-current assets – net ⁽¹⁾	197	0	197	0	0	0	0
Total	3,348	1	3,306	33	6	1	2

⁽¹⁾ Loans and other non-current assets do not include pension fund surplus and long-term inventory.

The table below presents the allowances on trade receivables:

In €million	2023	2022
January 1	-72	-51
Additions	-11	-22
Uses	5	2
Reversal	9	1
Currency translation differences	-1	-2
Transfer to assets held for sale	0	0
Partial Demerger	14	
Other	0	0
December 31	-54	-72

Liquidity risk

See the Financial risk in the Management of risks section of this annual report for additional information on the liquidity risk management.

Liquidity risk relates to Solvay's ability to service and refinance its debt (including notes issued) and to fund its operations.

This depends on its ability to generate cash from operations and not to overpay for acquisitions. In addition, external factors impacting the global liquidity markets could also make financing sources less accessible.

The Finance Committee gives its opinion on the appropriate liquidity risk management for the Group's short, medium and long term funding and liquidity management requirements.

The Group manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecasts and actual cash flows, and by matching the maturity profiles of financial assets and liabilities.

The Group staggers the maturities of its financing sources over time in order to limit amounts to be refinanced each year.

The following tables detail the Group's remaining contractual maturity for its financial liabilities with contractual repayment periods.

The tables have been prepared using the discounted cash flows of financial liabilities, based on the earliest date on which the Group can be required to pay.

The following tables present discounted amounts (carrying amounts):

Outflows of cash:	December 31, 2023				
	Total	Within one year	In year two	In years three to five	Beyond five years
Trade payables	850	850			
Dividends payables	175	175			
Financial instruments – operational	140	108	32		
Other non-current liabilities	34		12	2	20
Financial debt	1,885	148	1,711	23	3
Leasing debt	307	63	44	92	107
Total	3,390	1,344	1,799	117	130

Outflows of cash:	December 31, 2022				
	Total	Within one year	In year two	In years three to five	Beyond five years
Trade payables	2,296	2,296			
Dividends payables	165	165			
Financial instruments – operational	867	675	20	172	
Other non-current liabilities	99		59	26	14
Financial debt	2,435	399	10	1,423	604
Leasing debt	524	111	90	160	164
Total	6,386	3,646	178	1,781	782

The following tables present undiscounted amounts (nominal value):

Outflows of cash:	December 31, 2023				
	Total	Within one year	In year two	In years three to five	Beyond five years
Trade payables	850	850			
Dividends payables	175	175			
Financial instruments – operational	140	108	32		
Other non-current liabilities	34		12	2	20
Financial debt	1,886	148	1,711	23	4
Leasing debt	307	63	44	92	107
Total	3,391	1,344	1,799	117	131
Interests on financial debt and lease liabilities	179	82	61	17	19
Total outflows of cash	3,570	1,426	1,860	134	150

Outflows of cash:	December 31, 2022				
	Total	Within one year	In year two	In years three to five	Beyond five years
Trade payables	2,296	2,296			
Dividends payables	165	165			
Financial instruments – operational	867	675	20	172	
Other non-current liabilities	99		59	26	14
Financial debt	2,444	399	9	1,428	608
Leasing debt	524	111	90	160	164
Total	6,395	3,646	178	1,786	785
Interests on financial debt and lease liabilities	321	78	73	122	48
Total outflows of cash	6,717	3,724	251	1,908	833

Trade payables include €70 million (2022: €172 million) due to suppliers that have signed up for a supply chain financing program, under which the suppliers can elect to receive a discounted early payment from the partner bank rather than being paid in line with the agreed payment terms. If the option is taken, the Group’s liability is assigned by the supplier to the partner bank. The value of the Group’s liability remains unchanged. The Group assesses each arrangement against indicators to determine if the liabilities which suppliers have sold to the partner bank under the supplier financing scheme continue to meet the definition of trade payables or should be classified as financial debt. On December 31, 2023 and 2022, the liabilities met the criteria of Trade Payables.

Solvay’s liquidity amounts to €2.1 billion including €0.7 billion of cash and cash equivalents on the statement of financial position and €1.4 billion of committed fully undrawn credit facilities (€1.1 billion multilateral RCF due 2028 with extension possibility, and €0.3 billion bilateral RCF due in 2026 with extension possibilities) unused at the end of December 2023. Solvay is negotiating two other bilateral lines for up to €0.15 billion).

In addition, Solvay has access to a Belgian Treasury Bill program for €1.0 billion (no outstanding balance on December 31, 2023). The program is covered by a back-up credit line.

NOTE F33
NET INDEBTEDNESS

The Group’s net indebtedness is the balance between its financial debts and other financial instruments, and cash and cash equivalents.

In €million	December 31, 2023	December 31, 2022
Financial debt	2,192	2,959
Cash and cash equivalents	-584	-932
Other financial instruments	-118	-236
Net indebtedness	1,489	1,791

The 2022 figures relate to the net indebtedness balance of the Group prior to the Partial Demerger.

After Partial Demerger, the financial debt at the end of 2023 includes:

- four drawdowns (€1,500 million) for the execution of the liability management prior to the Partial Demerger,
- a term loan for an amount of €200 million
- the lease debt IFRS16 (€307 million)
- other financial debt (€185 million, excluding lease debt) mainly short term

Solvay is Investment Grade rating BBB-/A3 (stable outlook) by Standard & Poor’s (as of December 11th, 2023).

Financial debt: main borrowings

	December 31, 2023					December 31, 2022		
In €million (except where indicated)	Nominal amount	Coupon	Maturity	Secured	Amount at amortized cost	Fair value	Amount at amortized cost	Fair value
Cytec 2025 Bonds (issuance US\$ 250 million)		3.95%	2025	No			152	147
USD 2025 Bonds (144A;US\$ 800 million)		4.45%	2025	No			748	721
Total senior US\$ notes					0	0	900	868
2027 Bonds (issuance €500 million)		2.75%	2027	No			497	482
2029 Bonds (issuance €600 million)		0.500%	2029	No			597	479
Total senior €notes					0	0	1,094	961
Bridge facility drawdown (€1,500 million) ⁽¹⁾	1,500	Floating rate	2025		1,500	1,500	0	0
Total Bridge facilities	1,500				1,500	1,500	0	0
Term loan (€200 million)	200	Floating rate	2025		200	200	0	0
Other borrowings from third parties	185				185	185	441	441
Lease debts IFRS16	307				307	307	524	524
Total					2,192	2,192	2,959	2,794

(1) The Solvay bridge facility has as initial maturity in October 2024, but the company has an unconditional right to extend two times the maturity by 6 months, until October 2025. The bridge facility has therefore been classified as non-current.

There are no instances of default on the above-mentioned financial debts. There are no financial covenants breach, neither on Solvay SA/NV, nor on any of the Group's holding companies.

As a result of the Partial Demerger all Senior notes were either transferred to Syensqo or paid in full. For additional information see the Liability Management section of the Main Events and Changes in the Consolidation Scope in Note 1.

Other financial instruments

<i>In €million</i>	December 31, 2023	December 31, 2022
Non-current other financial instruments	0	30
Current other financial instruments	119	206
— Currency swaps	2	1
— Other marketable securities >3 months	50	43
— Other current financial assets	67	162
Other financial instruments	119	236

The other marketable securities >3 months include the bank drafts position.

The other current financial assets mainly include margin calls of Energy Services for instruments with a negative fair value, and represent collateral for the obligations.

Cash and cash equivalents

<i>In €million</i>	December 31, 2023	December 31, 2022
Cash	300	630
Short-term deposits	285	303
Cash and cash equivalents	584	932

By their nature, the carrying amount of cash and cash equivalents is equal to, or a very good proxy of, its fair value.

Changes in financial debt and in other financial instruments arising from financing activities

	December 31, 2022	2023									
<i>In €million</i>	Total	Cash flows from increase of borrowings	Cash flows from repayment of borrowings	Changes in foreign exchange rates	Changes in other current financial assets	Other in financing cash flows	Transfer from non-current to current	Payment of lease liabilities	Other	Partial Demerger	Total
Bonds	1,994			-13			-1,336		1	-647	0
Other non-current debts	42	1,702		0			-8		11	-10	1,737
Long term leasing debt	413			-6			-116		112	-160	243
Interest rate swaps	0								2		2
Non-current financial debt	2,450	1,702		-19			-1,460		126	-817	1,983
Current financial debt	510	1,519	-1,500	-17		-279	1,460	-112	102	-1,472	211
Total financial debt	2,960	3,221	-1,500	-36		-279	0	-112	228	-2,289	2,192
Other non-current financial instruments	-30									30	0
Currency swaps	-1								-1		-2
Other marketable securities >3 months	-43			2	-2	-58				51	-50
Other current financial assets	-162				100	-10				5	-67
Other financial instruments	-206			2	98	-69			-1	56	-119
Total cash flow	-366	3,221	-1,500	-34	98	-347	0	-112	227	-2,233	-679

The financial debt decreased from €2,960 million at the end of 2022 to €2,192 million at the end of 2023.

The non-current financial debt decreased by €(467) million, mainly resulting from:

- the increase of €1,702 million is mainly explained by:
 - four drawdowns of €1,500 million for the execution of the liability management prior to the Partial Demerger,
 - a term loan for an amount of €200 million
- the change in foreign exchange rates for €(19) million;
- the transfer to current financial debt for €(1,460) million mainly explained by:
 - the 2029 Bonds €(600) million redeemed on October 9, 2023
 - the 2025 USD Bonds \$ (800) million redeemed on November 15, 2023, for an amount of €(738) million
- the transfer to Syensqo of Cytec 2025 Bonds US\$(163.5) million, the 2027 Bonds €(500) million and leases liabilities for €(160) million for a total amount of €(817) million.

The current financial debt decreased by €(299) million, mainly in short term financial debt:

- the increase in borrowings of €1,519 million is mainly explained by the drawdowns under a bridge facility (€600 million and US\$816 million) and a credit facility (US\$200 million).
- the decrease in borrowings of €(1,500) million is explained by the repayment of the 2029 Bonds for €(600) million, the redemption of the USD 2025 Bonds for \$(800) million and the repayment of the credit facility for US\$200 million.
- the decrease reported under other financing cash flows of €(279) million is explained by margin calls on hedging instruments as part of Energy Services' activities;
- the transfer from non-current financial debt to current of €1,460 million is explained above;
- the transfer to Syensqo for €(1,472) million mainly explained by the bridge facilities of €600 million and US\$816 million.

The other financial instruments decreased by €(87) million, mainly for the collateral related to the margin calls on energy services, following the decrease in the energy, CO₂ and gas prices.

NOTE F34
OTHER LIABILITIES (CURRENT)

<i>In €million</i>	December 31, 2023	December 31, 2022
Wages and benefits debts	125	371
VAT and other taxes	107	184
Social security	29	51
Financial instruments – operational	108	676
Insurance premiums	31	15
Advances from customers	30	97
Long Term Incentive – current part	31	
Other	126	106
Other current liabilities	585	1,499

Other includes insurance reimbursements of €32 million that will be paid to Syensqo (see Note F25 Other receivables) and Compliance EU Allowances of €24 million.

The decrease in value is due to the Partial Demerger and 2023 values are presented after the demerger.

Financial instruments – operational include held for trading and cash flow hedge derivatives (see note F32 Overview of financial instruments).

OTHER NOTES

NOTE F35
COMMITMENTS TO ACQUIRE PROPERTY, PLANT AND EQUIPMENT AND INTANGIBLE ASSETS

<i>In €million</i>	December 31, 2023	December 31, 2022
Commitments to acquire property, plant and equipment and intangible assets	124	457

The amount mainly relates to commitments for the acquisition of industrial property, plant and equipment.

The amount in 2022 was higher compared to 2023, mainly due to the planned purchase of the new Solvay Group headquarters in Belgium as well as the acquisition of industrial equipment for the extension of the Tavaux site in France.

NOTE F36
CONTINGENT ASSETS, LIABILITIES AND FINANCIAL GUARANTEES



Accounting policy

A contingent asset is a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or nonoccurrence of one or more uncertain future events not wholly within the control of the Group.

Contingent assets are not recognized in the consolidated financial statements since this may result in the recognition of income that may never be realized. However, when the realization of income is virtually certain, then the related asset is not a contingent asset and its recognition is appropriate.

Contingent assets are assessed continually to ensure that developments are appropriately reflected in the consolidated financial statements. If it has become virtually certain that an inflow of economic benefits will arise, the asset and the related income are recognized in the consolidated financial statements of the period in which the change occurs. If an inflow of economic benefits has become probable, the Group discloses the contingent asset.

A contingent liability is:

- (a) a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group; or
- (b) a present obligation that arises from past events but is not recognized because:
 - (i) it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation; or
 - (ii) the amount of the obligation cannot be measured with sufficient reliability

Contingent liabilities are not recognized in the consolidated financial statements, except if they arise from a business combination. They are disclosed unless the possibility of an outflow of economic benefits is remote.

Financial guarantees are contracts that require the Group to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument.

In order to avoid double counting, only guarantees in excess of liabilities recognized or disclosures made elsewhere in the Group's consolidated financial statements are disclosed in this note. Regarding financial guarantees, all financial guarantees of the Group are presented in this note.

<i>In €million</i>	December 31, 2023	December 31, 2022
Contingent assets		91
Guarantees for pensions	55	378
Environmental contingent liabilities	271	315
Guarantee on Cytec 2025 Bonds	151	0
Contingent liabilities	477	693

Contingent assets

There are no contingent assets at the end of 2023. See Note F8 Discontinued operations for additional information on the collection of the contingent assets from Edison in Q1, 2023.

Contingent liabilities

The guarantees for pensions are related to the main UK Pension Funds (€55 million) – See note F32.B.2. Description of obligations. Such corresponds to the recognized plan assets surplus as at December 31, 2023 or the amount by which the guarantee exceeds the recognized pension liability (as at December 31, 2022). This guarantee applies to the pension liability measured based on a local UK regulatory basis (prudential basis) plus an allocation for market risk, which is higher when compared to the IAS 19 methodology. The probability of the guarantees being called is considered to be highly remote. The decrease over the prior year is mainly attributable to the Partial Demerger of Syensqo.

Contingent liabilities of €271 million above relate to environmental remediation matters that can be estimated with sufficient reliability.

Generally, in line with good business practice, we are not reporting any pending or threatened proceeding, which has not matured, and where the probability of existing or future exposure is unlikely or uncertain, where financial impact is not estimable and for which we are not able to quantify contingent liabilities.

See note F31.B Provisions for additional information.

HSE related proceedings

Rosignano site: The Public Prosecutor’s Office of the Criminal Court of Livorno, Italy initiated preliminary criminal investigations in 2019 regarding the alleged contamination of certain water tables outside our site and in our former landfill of Rosignano, Italy site. These investigations are still ongoing.

Bulgaria

In Bulgaria, Solvay Sodi AD, a subsidiary of Solvay, is subject to certain state-imposed obligations for emergency oil stocks (reserves) for 2021 through 2023, for which it was not able to comply. As a result, the competent Bulgarian authority imposed fines for 2021 and 2022 on Solvay Sodi AD of approximately €15 million for our share of the penalties which were fully provisioned. For 2023, the order is suspended and as a result no fine is imposed and therefore no provision has been recorded. Should this suspension be lifted, an additional penalty of €9 million may be imposed on Solvay Sodi AD. Solvay Sodi AD has brought a lawsuits to contest these fines and is seeking relief through national authorities pleading that the existing Bulgarian emergency stocks system is not compatible with the EU law, and in its current form obligations for emergency oil reserves should apply only to companies trading in crude oil and liquid fuels.

Financial Guarantees

Cytec 2025 Bonds

The 3.95% Senior Notes due 2025 issued by Cytec Industries Inc. (the “Cytec 2025 Bonds”) were transferred to Syensqo SA/NV with Cytec Industries Inc. as of December 8, 2023, for US\$163.5 million (151.2 million euros at December 31, 2023). A counter guarantee was issued from Syensqo SA/ NV in favor of Solvay SA/NV as Solvay SA/NV remained the original guarantor. As Syensqo SA/NV, the ultimate parent of Cytec Industries, Inc. is an investment grade company and due to the short period of time before the bonds are due to be repaid, the Group deemed risk of default to be remote, and as such no provision was recorded.

NOTE F37
RELATED PARTIES

Balances and transactions between Solvay SA/NV and (a) its subsidiaries and (b) its joint operations for the Group’s share of the respective joint operations, which are related parties of Solvay SA/NV, have been eliminated in consolidation and are not disclosed in this note. Details of transactions between the Group and other related parties are disclosed below.

Sale and purchase transactions

<i>In €million</i>	Sale of goods		Purchase of goods	
	2023	2022	2023	2022
Associates	12	20	-35	-38
Joint ventures	8	31	-3	-20
Other related parties	23	91	-45	-98
Total	43	142	-82	-157

<i>In €million</i>	Amounts owed by related parties		Amounts owed to related parties	
	2023	2022	2023	2022
December 31				
Associates	0	0	9	4
Joint ventures	0	0	0	1
Other related parties	14	15	4	28
Total	14	15	13	34

Loans to related parties

<i>In €million</i>	December 31, 2023	December 31, 2022
Loans to associates	1	2
Loans to other related parties	18	54
Total	19	55
Loans from other related parties	-3	-4

Compensation of key management personnel

Key management personnel are composed of all members of the Board of Directors and members of the Executive Leadership Team.

Amounts due in respect of the year (compensation) and liabilities existing at the end of the year in the consolidated statement of financial position:

<i>In €million</i>	December 31, 2023	December 31, 2022
Wages, charges and short-term benefits	6	4
Long-term benefits	0	1
Cash-settled share-based payments liability	1	4
Total	7	9

Expenses of the year:

<i>In €million</i>	2023	2022
Wages, charges and short-term benefits	-35	-11
Long-term benefits	-2	-2
Share-based payments expenses	-4	-5
Total	-41	-18

Excluding employer social charges and taxes.

The increase in wages, charges and short-term benefits compared to 2022 mainly relates to the short-term incentives associated with the Partial Demerger.

NOTE F38
DIVIDENDS PROPOSED FOR DISTRIBUTION

The Board of Directors will propose to the General Shareholders’ Meeting a gross dividend of €2.43 per share.

Taking into account the dividend advance payment distributed in January 2024 of €1.62 per share, the dividends proposed for distribution, but not yet recognized as a distribution to equity holders amount to €86 million.

NOTE F39
EVENTS AFTER THE REPORTING PERIOD



Accounting policy

Events after the reporting period which provide evidence of conditions that existed at the end of the reporting period (adjusting events) are recognized in the consolidated financial statements. Events indicative of conditions that arose after the reporting period are non-adjusting events and are disclosed in the notes if material.

NOTE F40
LIST OF COMPANIES INCLUDED IN THE CONSOLIDATION SCOPE

The Group consists of Solvay SA/NV and a total of 150 investees.

Of these 150 investees, 76 are fully consolidated, 7 are proportionately consolidated and 17 are accounted for under the equity method, whilst the other 50 do not meet the criteria of significance.

In accordance with the concept of materiality, certain companies (Other Investments), which are insignificant, have not been included in the consolidation scope. They are measured at cost and tested for impairment on an annual basis, which is considered a good proxy of their fair value. For more information, refer to Principles of consolidation.

List of companies entering or leaving the consolidation scope

Companies entering the consolidation scope

Country	Company	Comments
ARGENTINA	Químicos Esenciales de Argentina SA, Buenos Aires	New company
CHINA	Essential (Shanghai) Enterprise Management Co., Shanghai	New company
ITALY	Essentials Chemicals Italy S.p.a., Livorno	New company
INDIA	ES Essential Chemicals Private Limited, Mumbai	New company
SOUTH AFRICA	Solvay Polymers and Chemicals South Africa (PTY) Ltd, Johannesburg	Meets the consolidation criteria
SOUTH KOREA	Special Chem Korea Co., Ltd., Gunsan	New company
TURKEY	Essential Istanbul Chemical Items Industry and Trade Limited Company, Istanbul	New company
UNITED STATES	Essential Finance (America) LLC, Wilmington DE	New company
	Essential Holding America, LLC, Wilmington, DE	New company
	Essential Elements USA LLC, Wilmington, DE	New company
	Essential Chemicals USA LLC, Wilmington, DE	New company

Companies leaving the consolidation scope

Country	Company	Comments
ARGENTINA	Solvay Quimica SA, Buenos Aires	Partial Demerger of Syensqo
AUSTRALIA	Cytec Asia Pacific Holdings Pty Ltd, Baulkham Hills	Partial Demerger of Syensqo
	Cytec Australia Holdings Pty Ltd, Baulkham Hills	Partial Demerger of Syensqo
BELGIUM	EECO Holding SA, Brussels	Partial Demerger of Syensqo
	Solvay Participations Belgique S.A., Brussels	Partial Demerger of Syensqo
	Solvay Specialty Polymers Belgium SA / NV, Brussels	Partial Demerger of Syensqo
CANADA	Cytec Canada Inc, Niagara Falls Welland	Partial Demerger of Syensqo
CHINA	Cytec Industries Co. Ltd, Shanghai	Partial Demerger of Syensqo
	Cytec Engineered Materials Co. Ltd, Shanghai	Partial Demerger of Syensqo
	Rhodia Hong Kong Ltd, Hong Kong	Partial Demerger of Syensqo
	Solvay (Shanghai) Ltd, Shanghai	Partial Demerger of Syensqo
	Solvay (Zhangjiangang) Specialty Chemicals Co. Ltd, Suzhou	Partial Demerger of Syensqo
	Solvay China Co., Ltd, Shanghai	Partial Demerger of Syensqo
	Solvay Hengchang (Zhangjiagang) Specialty Chemical Co., Ltd, Zhangjiagang City	Partial Demerger of Syensqo

	Solvay Specialty Polymers (Changshu) Co. Ltd, Changshu	Partial Demerger of Syensqo
	Zhuhai Solvay Specialty Chemicals Co Ltd, Zhuhai City	Partial Demerger of Syensqo
CHILE	Cytec Chile Ltda, Santiago	Partial Demerger of Syensqo
FRANCE	Cogénération Tavaux SAS, Paris	Partial Demerger of Syensqo
	Rhodia Energy GHG S.A.S., Puteaux	Partial Demerger of Syensqo
	Rhodia Laboratoire du Futur S.A.S., Pessac	Partial Demerger of Syensqo
	Rhodia Participations S.N.C., Courbevoie	Partial Demerger of Syensqo
	RhodianyI S.A.S., Saint-Fons	Partial Demerger of Syensqo
	Solvay Energie France S.A.S., Paris	Partial Demerger of Syensqo
	Solvay France S.A., Courbevoie	Partial Demerger of Syensqo
GERMANY	Cytec Engineered Materials GmbH, Oestringen	Partial Demerger of Syensqo
	European Carbon Fiber GmbH, Kelheim	Partial Demerger of Syensqo
	Solvay Specialty Polymers Germany GmbH, Hannover	Partial Demerger of Syensqo
INDIA	Hindustan Gum & Chemicals Ltd, New Delhi	Partial Demerger of Syensqo
	Solvay Specialty Polymers Italy S.p.A., Milano	Partial Demerger of Syensqo
INDONESIA	PT. Cytec Indonesia, Jakarta	Partial Demerger of Syensqo
	Solvay Manyar P.T., Gresik	Partial Demerger of Syensqo
IRELAND	Solvay Finance Ireland Unlimited, Dublin	Partial Demerger of Syensqo
ITALY	Cogeneration Spinetta S.p.a., Bollate	Partial Demerger of Syensqo
	Solvay Solutions Italia S.p.A., Milano	Partial Demerger of Syensqo
	Solvay Specialty Polymers Italy S.p.A., Milano	Partial Demerger of Syensqo
JAPAN	Solvay Japan K.K., Tokyo	Partial Demerger of Syensqo
	Solvay Nicca Ltd, Tokyo	Partial Demerger of Syensqo
	Solvay Specialty Polymers Japan KK, Minato Ku-Tokyo	Partial Demerger of Syensqo
LUXEMBOURG	Cytec Luxembourg International Holdings Sarl, Strassen	Partial Demerger of Syensqo
	Solvay Finance (Luxembourg) SA, Luxembourg	Partial Demerger of Syensqo
	Solvay Hortensia S.A., Luxembourg	Partial Demerger of Syensqo
	Solvay Luxembourg S.a.r.l., Luxembourg	Partial Demerger of Syensqo
MEXICO	Cytec de Mexico S.A. de C.V., Jalisco	Partial Demerger of Syensqo
NETHERLANDS	Cytec Industries B.V., Vlaardingen	Partial Demerger of Syensqo
	Solvay Solutions Nederland B.V., Klundert	Partial Demerger of Syensqo
NEW ZEALAND	Solvay New Zealand Ltd, Auckland	Partial Demerger of Syensqo
PERU	Cytec Peru S.A.C., Lima	Partial Demerger of Syensqo
PORTUGAL	Solvay Biotecnologia Portugal LDA, Carnaxide	Partial Demerger of Syensqo
RUSSIA	RusVinyl OOO, Moscow	Sold to Sibur
	Solvay Vostok OOO, Moscow	No longer meets the consolidation criteria
SINGAPORE	Rhodia Amines Chemicals Pte Ltd, Singapore	Partial Demerger of Syensqo
	Solvay Specialty Chemicals Asia Pacific Pte. Ltd, Singapore	Partial Demerger of Syensqo
SOUTH KOREA	Cytec Korea Inc, Seoul	Partial Demerger of Syensqo
	Solvay Specialty Polymers Korea Company Ltd, Seoul	Partial Demerger of Syensqo
THAILAND	Solvay (Bangpoo) Specialty Chemicals Ltd, Bangkok	Partial Demerger of Syensqo
	Solvay (Thailand) Ltd, Bangkok	Partial Demerger of Syensqo
TURKEY	Solvay Istanbul Kimya Limited Sirketi, Istanbul	Partial Demerger of Syensqo
UNITED ARAB EMIRATES	Cytec Nibras LLC, Al Ain	Partial Demerger of Syensqo
	Strata - Solvay Advanced Materials Joint-Venture LLC, Al Ain	Partial Demerger of Syensqo

UNITED KINGDOM	Advanced Composites Group Investments Ltd, Heanor	Partial Demerger of Syensqo
	Cytec Engineered Materials Ltd, Wrexham	Partial Demerger of Syensqo
	Cytec Industrial Materials (Derby) Ltd, Heanor	Partial Demerger of Syensqo
	Cytec Industrial Materials (Manchester) Ltd, Heanor	Partial Demerger of Syensqo
	Cytec Industries UK Holdings Ltd, Wrexham	Partial Demerger of Syensqo
	McIntyre Group Ltd, Watford	Partial Demerger of Syensqo
	Oldbury Energy Solutions UK Ltd, Oldbury	Partial Demerger of Syensqo
	Rhodia Holdings Ltd, Watford	Partial Demerger of Syensqo
	Rhodia International Holdings Ltd, Oldbury	Partial Demerger of Syensqo
	Rhodia Organique Fine Ltd , Watford	Partial Demerger of Syensqo
	Rhodia Overseas Ltd, Watford	Partial Demerger of Syensqo
	Rhodia Pharma Solutions Holdings Ltd, Cramlington	Partial Demerger of Syensqo
	Rhodia Pharma Solutions Ltd, Cramlington	Partial Demerger of Syensqo
	Rhodia Reorganisation, Watford	Partial Demerger of Syensqo
	Solvay Solutions UK Ltd, Watford	Partial Demerger of Syensqo
	Umeco Composites Ltd, Heanor	Partial Demerger of Syensqo
	Umeco Ltd, Heanor	Partial Demerger of Syensqo
UNITED STATES	Ausimont Industries, Inc., Wilmington, Delaware	Partial Demerger of Syensqo
	CEM Defense Materials LLC, Tempe Arizona	Partial Demerger of Syensqo
	Cytec Engineered Materials Inc., Princeton New Jersey	Partial Demerger of Syensqo
	Cytec Global Holdings Inc., Princeton New Jersey	Partial Demerger of Syensqo
	Cytec Industrial Materials (ok) Inc., Tulsa Oklahoma	Partial Demerger of Syensqo
	Cytec Industries Inc, Princeton New Jersey	Partial Demerger of Syensqo
	Cytec Korea Inc., Princeton New Jersey	Partial Demerger of Syensqo
	Cytec Technology Corp., Princeton New Jersey	Partial Demerger of Syensqo
	Energy Solutions US LLC, Breckenridge, Texas	Partial Demerger of Syensqo
	Garret Mountain Insurance Co., Burlington Vermont	Partial Demerger of Syensqo
	Solvay America Inc., Houston, Texas	Partial Demerger of Syensqo
	Solvay Finance (America) LLC, Houston, Texas	Partial Demerger of Syensqo
	Solvay Holding Inc., Princeton, New Jersey	Partial Demerger of Syensqo
	Solvay India Holding Inc., Princeton, New Jersey	Partial Demerger of Syensqo
	Solvay Specialty Polymers USA, LLC, Alpharetta, Georgia	Partial Demerger of Syensqo
	Solvay USA INC., Princeton, New Jersey	Partial Demerger of Syensqo
URUGUAY	Zamin Company S/A, Montevideo	Liquidated

Companies changing the consolidation method

Country	Company	Comments
CHINA	Solvay (Zhenjiang) Chemicals Co., Ltd, Zhenjiang New area ¹⁾	Change from full consolidation to equity method due to the loss of control during the Partial Demerger
ITALY	Cogeneration Rosignano S.r.l., Rosignano	Change from equity method to full consolidation due to the purchase of the Marubeni's shares

1) Following the change in the consolidation scope, Solvay (Zhenjiang) Chemicals Co., Ltd was assessed to satisfy the criteria of an associate as the Group maintains significant influence.

List of subsidiaries

Indicating the percentage holding.

The percentage of voting rights is very close to the percentage holding.

ARGENTINA	
Solvay Argentina SA, Buenos Aires	100
Quimicos Esenciales de Argentina SA, Buenos Aires	100
AUSTRALIA	
Solvay Interox Pty Ltd, Banksmeadow	100
AUSTRIA	
Solvay Österreich GmbH, Wien	100
BELGIUM	
Carrières les Petons S.P.R.L., Walcourt	100
Solvay Chemicals International S.A., Brussels	100
Solvay Chimie S.A., Brussels	100
Solvay Pharmaceuticals S.A. - Management Services, Brussels	100
Solvay Stock Option Management S.P.R.L., Brussels	100
BRAZIL	
Cogeracao de Energia Electricica Rhodia Brotas SA, Brotas	100
Rhodia Brasil SA, Sao Paolo	100
Rhodia Poliamida Brasil Ltda , Sao Paolo	100
Rhopart-Participacoes Servidos e Comercio Ltda, Sao Paolo	100
BULGARIA	
Solvay Bulgaria EAD, Devnya	100
CANADA	
Solvay Canada Inc, Toronto	100
CHINA	
Essential (Shanghai) Enterprise Management Co. , Shanghai	100
Liyang Solvay Rare Earth New Material Co., Ltd, Liyang City	96.3
Solvay (Shanghai) International Trading Co., Ltd, Shanghai	100
Solvay Chemicals (Shanghai) Co. Ltd, Shanghai	100
Solvay Fine Chemical Additives (Qingdao) Co., Ltd, Qingdao	100
Solvay Lantian (Quzhou) Chemicals Co., Ltd, Zhejiang	55
FINLAND	
Solvay Chemicals Finland Oy, Voikkaa	100
FRANCE	
Rhodia Chimie S.A.S. , Aubervilliers	100
Rhodia Operations S.A.S. , Aubervilliers	100
Solvay - Opérations - France S.A.S., Paris	100
Solvay Energy Services S.A.S. , Puteaux	100
Solvay Finance S.A., Paris	100
GERMANY	
Cavity GmbH, Hannover	100
Horizon Immobilien AG, Hannover	100
Salzgewinnungsgesellschaft Westfalen GmbH & Co KG, Hannover	65
German limited partnership, which makes use of the exemptions offered by Section 264(b) of the German Commercial Code, not to publish their annual financial statements.	
Solvay Chemicals GmbH, Hannover	100
Solvay Fluor GmbH, Hannover	100
Solvay Flux GmbH, Hannover	100

Solvay GmbH, Hannover	100
Solvin GmbH & Co. KG - PVDC, Rheinberg	100
Solvin Holding GmbH, Hannover	100
INDIA	
ES Essential Chemicals Private Limited, Mumbai	100
ITALY	
Cogeneration Rosignano S.r.l., Rosignano	100
Essentials Chemicals Italy S.p.a., Livorno	100
Solvay Chimica Italia S.p.A., Milano	100
Solvay Energy Services Italia S.r.l., Bollate	100
JAPAN	
Nippon Solvay KK, Tokyo	100
Solvay Special Chem Japan Ltd, Anan City	100
LUXEMBOURG	
Renestia S.A., Capellen	100
Solvay Chlorovinyls Holding S.a.r.l., Luxembourg	100
MEXICO	
Solvay Fluor Mexico S.A. de C.V., Ciudad Juarez	100
Solvay Mexicana S. de R.L. de C.V., Monterrey	100
NETHERLANDS	
Rhodia International Holdings B.V., Den Haag	100
Solvay Chemicals and Plastics Holding B.V., Linne-Herten	100
Solvay Chemie B.V., Linne-Herten	100
Solvin Holding Nederland B.V., Linne-Herten	100
POLAND	
Solvay Poland Sp. z o.o., Gorzow Wielkopolski	100
PORTUGAL	
Solvay Business Services Portugal Unipessoal LDA, Carnaxide	100
Solvay Peroxidos Portugal Unipessoal LDA, Povoá	100
SINGAPORE	
Solvay Fluor Holding (Asia-Pacific) Pte. Ltd., Singapore	100
SOUTH AFRICA	
Solvay Polymers and Chemicals South Africa (PTY) Ltd, Johannesburg	100
SOUTH KOREA	
Special Chem Korea Co. Ltd, Gunsan	100
Solvay Chemical Services Korea Co. Ltd, Seoul	100
Solvay Silica Korea Co. Ltd, Incheon	100
SPAIN	
Solvay Quimica S.L., Barcelona	100
SWITZERLAND	
Solvay Vinyls Holding AG, Bad Zurzach	100
THAILAND	
Solvay Asia Pacific Company Ltd, Bangkok	100
Solvay Peroxythai Ltd, Bangkok	100
TURKEY	
Essential Istanbul Chemical Items Industry and Trade Limited Company, Istanbul	100
UNITED KINGDOM	
Rhodia Limited, Watford	100
Solvay Interlox Ltd, Warrington	100
Solvay UK Holding Company Ltd, Warrington	100

UNITED STATES	
American Soda LLC, Houston, TX	100
Essential Finance (America) LLC, Wilmington, DE	100
Essential Holding America, LLC, Wilmington, DE	100
Essential Elements USA LLC, Wilmington, DE	100
Essential Chemicals USA LLC, Wilmington, DE	100
Rocky Mountain Coal Company, LLC, Houston, TX	100
Solvay America Holdings, Inc., Houston, TX	100
Solvay Chemicals, Inc., Houston, TX	100
Solvay Fluorides, LLC, St Louis, IL	100

List of joint operations

Indicating the percentage holding.

AUSTRIA	
Solvay Sisecam Holding AG, Wien	75
BELGIUM	
BASF Interlox H2O2 Production N.V., Brussels	50
BULGARIA	
Solvay Sodi AD, Devnya	73.5
NETHERLANDS	
MTP HP JV C.V., Weesp	50
MTP HP JV Management bv, Weesp	50
SAUDI ARABIA	
Saudi Hydrogen Peroxide Co, Jubail	50
THAILAND	
MTP HP JV (Thailand) Ltd, Bangkok	50

List of companies consolidated by applying the equity method of accounting

Indicating the percentage holding.

Joint ventures

AUSTRALIA	
Aqua Pharma Australia Pty Ltd, Armidale	50
BRAZIL	
Peroxidos do Brasil Ltda, Sao Paulo	69.4
CANADA	
Aqua Pharma Inc, Saint John	50
CHILE	
Aqua Pharma Chile Spa, Puerto Montt	50
CHINA	
Shandong Huatai Interlox Chemical Co. Ltd, Dongying	50
IRELAND	
Aqua Pharma Ireland Ltd, Dublin	50
NORWAY	
Aqua Pharma Group A.S., Lillehammer	50
Aqua Pharma A.S., Lillehammer	50
Haugaland Shipping A.S., Haugesund	50

TAIWAN		
Shinsol Advanced Chemicals Corporation, New Taipei		51
UNITED KINGDOM		
Aqua Pharma Technical Ltd, Inverness		50
Aqua Pharma Ltd, Inverness		50
UNITED STATES		
Aqua Pharma U.S. Inc, Kirkland		25

Associates

CHINA		
Qingdao Hiwin Solvay Chemicals Co. Ltd, Qingdao		30
Solvay (Zhenjiang) Chemicals Co., Ltd, Zhenjiang New Area ¹⁾		9.35
FRANCE		
GIE Chime Salindres, Salindres		50
MEXICO		
Silicatos y Derivados S.A. DE C.V., Estado de Mexico		20

1) Following the change in the consolidation scope, Solvay (Zhenjiang) Chemicals Co., Ltd was assessed to satisfy the criteria of an associate as the Group maintains significant influence.

3. SUMMARY FINANCIAL STATEMENTS OF SOLVAY SA/NV

The annual financial statements of Solvay SA/NV are presented in a summary format below. In accordance with the Belgian Code of Companies and Asociations, the annual financial statements of Solvay SA/NV, the management report and the statutory auditor's report will be filed with the National Bank of Belgium.

These documents are also available free of charge on the internet or upon request sent to:

Solvay SA/NV

Rue de Ransbeek 310

B – 1120 Brussels

Introductory note

Until December 8, 2023, Solvay SA/NV (“Solvay” or the “Company”) owned and controlled the Specialty Polymers, Composites, Novecare, Technology Solutions, Aroma Performance and Oil and Gas Solutions businesses (together, the “Specialty Businesses”), and the Soda Ash and Derivatives, Peroxides, Silica, Special Chem and Coatis businesses (together, the “Essential Businesses”). Effective December 9, 2023, at 00:00 a.m. CET, the Specialty Businesses were separated from Solvay by way of a partial demerger of the Company under Belgian law (the “Partial Demerger”), whereby the shares and other interests held by the Company in the legal entities operating the Specialty Businesses, the Company's rights and obligations under the agreements entered into with those legal entities, as well as certain other assets and liabilities were contributed to Syensqo SA/NV (“Syensqo”), and ordinary shares of Syensqo were issued and allocated directly to shareholders in Solvay on a pro rata basis.

It should be noted that from an accounting point of view, this Partial Demerger had retroactive effect to July 1, 2023. In addition, the Belgian tax authorities (Service des Décisions Anticipées en matière fiscale) agreed to consider July 1, 2023, for the purposes of the application of Belgian corporate income tax rules to Solvay. The significant variations that appear in 2023 in the accounts of Solvay SA/NV are largely justified by the effects of the Partial Demerger and the subsequent contributions to the Belgian company Syensqo SA/NV.

The balance sheet of Solvay SA/NV at the end of the year 2023 presented below is based on a dividend distribution of €2.43 per share.

At the end of 2023, Solvay SA/NV still has one Branch, Solvay S.A. Italia (Viale Lombardia 20, 20021 Bollate, Italy).

The accounts of Solvay SA/NV are prepared in accordance with Belgian generally accepted accounting principles.

The main activities of Solvay SA/NV consist of holding and managing a number of investments in Group companies and of financing the Group’s activities from the bank and bond markets. Solvay SA/NV also has a Group internal factoring activity without recourse. As a result, Solvay SA/NV owns and manages Group’s trade receivables from customers based in Europe and in Asia. It manages a research center at Neder-Over-Heembeek (Brussels, Belgium) and a very limited number of commercial activities not undertaken through subsidiaries.

BALANCE SHEET OF SOLVAY SA/NV (SUMMARY)

In €million	December 31 2023	December 31 2022
ASSETS		
Fixed assets	4,558	11,438
Start-up expenses and intangible assets	65	117
Tangible assets	56	73
Financial assets	4,436	11,248
Current assets	1,021	4,508
Inventories	7	3
Trade receivables	379	1,000
Other receivables	328	2,827
Short-term investments and cash equivalents	284	656
Accrued income and deferred charges	24	22
Total assets	5,579	15,946
SHAREHOLDERS' EQUITY AND LIABILITIES		
Shareholders' equity	1,856	9,020
Capital	237	1,588
Issue premiums	179	1,200
Reserves	141	1,982
Net income carried forward	1,298	4,250
Provisions and deferred taxes	191	230
Financial debt	1,586	2,429
— due in more than one year	1,500	1,922
— due within one year	86	507
Trade liabilities	156	147
Other liabilities	1,749	4,081
Accrued charges and deferred income	42	38
Total shareholders' equity and liabilities	5,579	15,946

- The total assets decrease of €10,367 million is resulting from:
- the reduction of financial assets (€(6,812) million) linked to the transfer of several investments to Syensqo SA/NV as part of the Partial Demerger (mainly Solvay Holding Inc, Solvay France, Solvay Participations Belgique, Solvay Specialty Polymers Italy) (€7,968 million), the intragroup sale of the Dutch company Solvay Chemicals and Plastics Holding (€494 million), the intragroup acquisition of shares for a total of €1,653 million (notably Solvay GmbH, Rhodia Operations, Essentials Chemicals Italy), an impairment of €685 million on different subsidiaries (mainly Solvay Holding Inc, Essential Holding America), and the conclusion of new loans to affiliates for €681 million.
 - the decrease of trade receivables (€(621) million) mainly caused by the transfer of receivables as part of the Partial Demerger (€660 million);
 - the other receivables decrease (€(2,499) million) linked to the transfer to Syensqo SA/NV as part of the Partial Demerger of current accounts and loans with subsidiaries (€2.287 million).

The Shareholders equity decrease (€(7,165) million) is due to the transfer of equity to Syensqo SA/NV as part of the Partial Demerger (€(8,502) million), the profit of the year (€1,593 million) and the dividend to be distributed in 2024 (€(257) million).

The financial debt totals €1,586 million compared to €2,429 million at the end of 2022. The decrease of €843 million is mainly due to the reimbursement of loans (€(800) million), the transfer of loans (€1,622 million) to Syensqo SA/NV as part of the Partial Demerger and the new subscribed loans for €1,500 million.

Other liabilities decrease by €2,331 million due the transfer of current accounts to Syensqo SA/NV (€(1,889) million) and to a reduction of the dividend payable ((€172) million) as a result of the Partial Demerger.

INCOME STATEMENT OF SOLVAY SA/NV (SUMMARY)

<i>In €million</i>	2023	2022
Sales	111	141
Other operating income	1,099	1,141
Operating expenses	-1,229	-1,154
Operating profit / (loss)	-19	128
Financial income and expenses	1,615	338
Profit / (loss) for the year before taxes	1,597	466
Income taxes	-4	-12
Profit / (loss) for the year	1,593	454
Profit / (loss) for the year available for distribution	1,593	454

In 2023, the net result for the year of Solvay SA/NV is a profit amounting to €1,593 million, compared with a profit of €454 million in 2022.

This result includes:

- The operating result amounted to an operating loss of €-19 million, compared with an operating profit of €128 million in 2022. This decrease is mainly driven by costs incurred in the context of the Partial Demerger.
- Financial gain and losses (€1,615 million) impacted in 2023 by dividends received for €1,797 million (€421 million in 2021) and net financial interests charges of €174 million (€90 million in 2022);
- Impairment on shares (€685 million) is offset by a capital gain on the intragroup sale of Solvay Chemicals and Plastics Holding BV to Solvay GmbH (€680 million).

PROFIT AVAILABLE FOR DISTRIBUTION

<i>In €million</i>	2023	2022
Profit / (loss) for the year available for distribution	1,593	454
Carried forward	-37	4,225
Total available to the General Shareholders' Meeting	1,555	4,679
Appropriation		
Gross dividend	257	429
Carried forward	1,298	4,250
Total	1,555	4,679

09

DECLARATIONS: AUDITOR'S REPORTS AND DECLARATION BY THE PERSONS RESPONSIBLE

372	Auditor's reports
388	Declaration by the persons responsible

389	Glossary
-----	----------



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Independent auditor's report to the general meeting of Solvay SA for the year ended 31 December 2023

In the context of the statutory audit of the Consolidated Financial Statements of Solvay SA (the "Company") and its subsidiaries (together the "Group"), we report to you as statutory auditor. This report includes our opinion on the consolidated statement of financial position as at 31 December 2023, the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year ended 31 December 2023 and the disclosures including material accounting policy information (all elements together the "Consolidated Financial Statements") as well as our report on other legal and regulatory requirements. These two reports are considered one report and are inseparable.

We have been appointed as statutory auditor by the shareholders' meeting of 10 May 2022, in accordance with the proposition by the Board of Directors following recommendation of the Audit Committee and following recommendation of the workers' council. Our mandate expires at the shareholders' meeting that will deliberate on the Consolidated Financial Statements for the year ending 31 December 2024. We performed the audit of the Consolidated Financial Statements of the Group during 2 consecutive years.

Report on the audit of the Consolidated Financial Statements

Unqualified opinion

We have audited the Consolidated Financial Statements of Solvay SA, that comprise of the consolidated statement of financial position on 31 December 2023, the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year ended 31 December 2023, and the disclosures, including material accounting policy information, which show a consolidated balance sheet total of € 7,022 million and of which the consolidated income statement shows a profit for the year of € 2,105 million.

In our opinion, the Consolidated Financial Statements give a true and fair view of the consolidated net equity and financial position as at 31 December 2023, and of its consolidated results for the year then ended, prepared in accordance with the International Financial Reporting Standards as adopted by the European Union ("IFRS") and with applicable legal and regulatory requirements in Belgium.

Basis for the unqualified opinion

We conducted our audit in accordance with International Standards on Auditing ("ISA's") applicable in Belgium. In addition, we have applied the ISA's approved by the International Auditing and Assurance Standards Board ("IAASB") that apply at the current year-end date and have not yet been approved at national level. Our responsibilities under those standards are further described in the "Our responsibilities for the audit of the Consolidated Financial Statements" section of our report.

We have complied with all ethical requirements that are relevant to our audit of the Consolidated Financial Statements in Belgium, including those with respect to independence.

We have obtained from the Board of Directors and the officials of the Company the explanations and information necessary for the performance of our audit and we believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.



Audit report dated 12 April 2024 on the Consolidated Financial Statements of Solvay SA as of and for the year ended 31 December 2023 (continued)

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the Consolidated Financial Statements of the current reporting period.

These matters were addressed in the context of our audit of the Consolidated Financial Statements as a whole and in forming our opinion thereon, and consequently we do not provide a separate opinion on these matters.

Accounting effect of the partial demerger of Syenqo SA

Description of the key audit matter

As disclosed in the note F8, the Group's Materials segment, and the majority of the Group's Solutions segment (i.e., Novecare, Technology Solutions, Aroma Performance, and Oil and Gas) (together the "Specialty Businesses") were separated from Solvay SA/NV via a partial demerger of Solvay SA/NV (the "Partial Demerger"), effective December 9, 2023 at 00:00 am CET.

This partial demerger was accounted under IFRS 5 and IFRIC 17 and as a result, the Group derecognized the assets and liabilities related to the discontinued operations and recorded a gain from discontinued operation in the amount of €1,651 million, representing the excess of the fair value of the distribution over the carrying value of distributed assets and liabilities at the date of the Partial Demerger.

This area is important to our audit because of the magnitude of the amounts, the pervasive impact on the Consolidated Financial statements as well as on the judgment involved in the determination of the fair market value of the distributed assets and liabilities at the date of the Partial Demerger.

Summary of the procedures performed

- We held meetings, performed inquiries with management and read minutes of the board of directors' meetings to obtain an understanding of the demerger process and the internal controls set up by management over the Partial Demerger Process.
- As part of our audit of the Consolidated Financial Statements, we evaluated

management's assessment of the fulfillment of the criteria pursuant to IFRS 5, Non-current Assets Held for Sale and Discontinued Operations, for the classification as discontinued operations of the Specialty Businesses.

- We assessed the accuracy of the classification and presentation of the Specialty Businesses as discontinued operations in the Consolidated Financial Statements, and of the accurate separation of the discontinued operations from the continuing operations.
- We examined whether the comparative figures of the discontinued operations for the year ended 31 December 2022 were accurately restated as required by IFRS 5.
- We assessed the reasonableness of management's fair value measurement of the distribution pursuant to IFRIC 17, Distributions of Non-cash Assets to Owners, by recomputing the average of the closing price of the first 30 days of trading activity of Syensqo SA shares.
- We recalculated the gain on the Partial Demerger by comparing the fair value of the distribution with the carrying value of the assets and liabilities of the Specialty Businesses.
- We have assessed the completeness and accuracy of note F8 "Discontinued operations and partial demerger" of the Consolidated Financial Statements in accordance with IFRS 5 and IFRIC 17, as well as the adequacy of the disclosures of the other impacts of the Partial Demerger within the notes of the Consolidated Financial Statements.

Defined benefit obligations

Description of the key audit matter

The defined benefit obligations mainly relate to post-employment pension plans and amount to € 614 million as at 31 December 2023, and are disclosed in note F30 of the Consolidated Financial Statements. It consists of gross defined benefit obligations (€ 1,836 million) offset partially by plan assets (€ 1,222 million). The largest plans in 2023 are in the United Kingdom, France, the United States, Germany, Brazil and Belgium and represent 98% of the total defined benefit obligations of the Group.



Audit report dated 12 April 2024 on the Consolidated Financial Statements of Solvay SA as of and for the year ended 31 December 2023 (continued)

This area is important to our audit because of the magnitude of the amounts, management's judgment involved in determining actuarial assumptions (more in particular discount rates and inflation rates) and plan assets' fair values and the technical expertise required to evaluate these obligations and properly reflect the impacts in the Consolidated Financial Statements in accordance with IAS 19 "Employee Benefits".

Summary of the procedures performed

- We obtained an understanding of the Group estimation process to evaluate the defined-benefit obligations and plan assets as well as the related management review controls;
- We assessed the design of the internal controls established by the Group to manage the underlying participant data and to ensure that the amendments to the plans are properly and timely reflected in the Consolidated Financial Statements;
- We reconciled, on a sample basis, the fair value of the plan assets to external confirmations;
- We assessed the expertise, independence and integrity of the external actuaries engaged by the Group;
- With the assistance of our internal actuarial specialists, we assessed the actuarial report prepared by the external actuaries engaged by the Group to ensure that the main changes to the plans were properly considered in the actuarial calculations;
- We compared, on a sample basis, the input data used for the calculation of the provisions by the external actuary (such as population, age, years of service, wage,...) with source information of the human resources department of the Group;
- We assessed the appropriateness of the key actuarial assumptions (discount rates and inflation rates) with the assistance of our internal actuarial specialists;

- We validated that the actuarial calculations are properly recorded in the Consolidated Financial Statements in accordance with IAS19;
- We assessed the roll-forward of the provisions to understand the changes in the valuation of the provisions compared to last year;
- We assessed the adequacy and completeness of the disclosures presented in the note F30 of the Consolidated Financial Statement based on the requirements of IAS 19.

Impairment of goodwill and other non-current assets of the CGU's "Soda Ash and Derivatives" and "Special Chem"

Description of the key audit matter

Following the Group's past acquisitions, significant goodwill has arisen, amounting to € 764 million as at 31 December 2023, which represents 11% of the consolidated total assets and includes € 275 million of goodwill for Special Chem and € 237 million for Soda Ash and Derivatives.

As described in notes F19 (Goodwill and business combinations) and F23 (Impairment), the Company reviews the carrying amounts of its cash generating units ("CGU's") annually or more frequently if impairment indicators are present. The impairment assessment involves a comparison of the estimated value in use of the CGU to its carrying amount. The assessment is a judgmental process which requires estimates concerning the projected future cash flows associated with the CGU, the weighted average cost of capital ("WACC") and the growth rate of revenue and costs to be applied in determining the value in use.

This area is important to our audit because of the magnitude of the amounts, the judgments, and the technical expertise required to perform the impairment testing of long-term assets.

Summary of the procedures performed

- We obtained an understanding of the Group impairment testing process;



Audit report dated 12 April 2024 on the Consolidated Financial Statements of Solvay SA as of and for the year ended 31 December 2023 (continued)

- We evaluated and challenged management determination of CGU's and allocation of goodwill to those CGU's for the purpose of impairment testing;
- We evaluated the discount rate by comparison to (i) peer-group information, (ii) the Group's cost of capital and (iii) relevant risk factors; and the long-term growth rate by comparing with shadow computation performed by our valuation experts;
- We assessed the mathematical accuracy and conformity with IAS 36 of the valuation model used by the Group;
- We tested the reasonableness of projected cash flows considering the Group's historic forecasting accuracy and compared these projections with the budget 2024 approved by the Board of Directors and the mid-term plans, including with respect to the impact of climate change and the alignment with the Solvay One Planet objectives;
- We included our internal valuation specialist on our team to analyze and test the valuation model and the abovementioned critical assumptions used in the valuation model as well as the reasonableness of impairment loss booked during the period;
- We analyzed and tested the sensitivity analysis prepared by management, to understand the impact of reasonable changes in the key assumptions on the available headroom for the two CGU's;
- We assessed the Group reconciliation of the value in use derived from the impairment tests to the market capitalization;
- We considered additional impairment or reversal of impairment indicators and triggers by reading minutes of the board of directors' meetings, and we held regular discussions with the management and the audit committee;
- We assessed the appropriateness and completeness of the disclosures in the Notes to the Consolidated Financial Statements in accordance with IAS 36.

Responsibilities of the Board of Directors for the preparation of the Consolidated Financial Statements

The Board of Directors is responsible for the preparation of the Consolidated Financial Statements that give a true and fair view in accordance with IFRS and with applicable legal and regulatory requirements in Belgium and for such internal controls relevant to the preparation of the Consolidated Financial Statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of Consolidated Financial Statements, the Board of Directors is responsible for assessing the Company's ability to continue as a going concern, and provide, if applicable, information on matters impacting going concern. The Board of Directors should prepare the financial statements using the going concern basis of accounting, unless the Board of Directors either intends to liquidate the Company or to cease business operations, or has no realistic alternative but to do so.

Our responsibilities for the audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance whether the Consolidated Financial Statements are free from material misstatement, whether due to fraud or error, and to express an opinion on these Consolidated Financial Statements based on our audit. Reasonable assurance is a high level of assurance, but not a guarantee that an audit conducted in accordance with the ISA's will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Consolidated Financial Statements.

In performing our audit, we comply with the legal, regulatory and normative framework that applies to the audit of the Consolidated Financial Statements in Belgium. However, a statutory audit does not provide assurance about the future viability of the Company and the Group, nor about the efficiency or effectiveness with which the board of directors has taken or will undertake the Company's and the Group's business operations.



Audit report dated 12 April 2024 on the Consolidated Financial Statements of Solvay SA as of and for the year ended 31 December 2023 (continued)

Our responsibilities with regards to the going concern assumption used by the board of directors are described below.

As part of an audit in accordance with ISA's, we exercise professional judgment and we maintain professional skepticism throughout the audit. We also perform the following tasks:

- identification and assessment of the risks of material misstatement of the Consolidated Financial Statements, whether due to fraud or error, the planning and execution of audit procedures to respond to these risks and obtain audit evidence which is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting material misstatements resulting from fraud is higher than when such misstatements result from errors, since fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtaining insight in the system of internal controls that are relevant for the audit and with the objective to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control;
- evaluating the selected and applied accounting policies, and evaluating the reasonability of the accounting estimates and related disclosures made by the Board of Directors as well as the underlying information given by the Board of Directors;
- conclude on the appropriateness of the Board of Directors' use of the going-concern basis of accounting, and based on the audit evidence obtained, whether or not a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's or Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the

related disclosures in the Consolidated Financial Statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on audit evidence obtained up to the date of the auditor's report. However, future events or conditions may cause the Company to cease to continue as a going-concern;

- evaluating the overall presentation, structure and content of the Consolidated Financial Statements, and evaluating whether the Consolidated Financial Statements reflect a true and fair view of the underlying transactions and events.

We communicate with the Audit Committee within the Board of Directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Because we are ultimately responsible for the opinion, we are also responsible for directing, supervising and performing the audits of the subsidiaries. In this respect we have determined the nature and extent of the audit procedures to be carried out for group entities.

We provide the Audit Committee within the Board of Directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Audit Committee within the Board of Directors, we determine those matters that were of most significance in the audit of the Consolidated Financial Statements of the current period and are therefore the key audit matters. We describe these matters in our report, unless the law or regulations prohibit this.

Report on other legal and regulatory requirements

Responsibilities of the Board of Directors

The Board of Directors is responsible for the preparation and the content of the Board of

Directors' report on the Consolidated Financial Statements, the non-financial information attached to the Board of Directors' report, and other information included in the annual report.



Audit report dated 12 April 2024 on the Consolidated Financial Statements of Solvay SA as of and for the year ended 31 December 2023 (continued)

Responsibilities of the auditor

In the context of our mandate and in accordance with the additional standard to the ISA's applicable in Belgium, it is our responsibility to verify, in all material respects, the Board of Directors' report on the Consolidated Financial Statements, the non-financial information attached to the Board of Directors' report, and other information included in the annual report, as well as to report on these matters.

Aspects relating to Board of Directors' report and other information included in the annual report

In our opinion, after carrying out specific procedures on the Board of Directors' report, the Board of Directors' report is consistent with the Consolidated Financial Statements and has been prepared in accordance with article 3:32 of the Code of companies and associations.

In the context of our audit of the Consolidated Financial Statements, we are also responsible to consider whether, based on the information that we became aware of during the performance of our audit, the Board of Directors' report and other information included in the annual report, being:

- Business environment and Strategy
- Sustainable value creation

contain any material inconsistencies or contains information that is inaccurate or otherwise misleading. In light of the work performed, there are no material inconsistencies to be reported.

The non-financial information required by article 3:32, § 2, of the Code of companies and associations has been included in the Board of Directors' report on the Consolidated Financial Statements. The Company has prepared this non-financial information based on Global Reporting Initiatives standards ("GRI"). However, in accordance with article 3:80 § 1, 5° of the Code of companies and associations, we do not express any opinion on the question whether this non-financial information has been established in accordance with the GRI framework. As requested by the Company, we have issued a separate reasonable and limited assurance report on a selection of sustainability indicators in accordance with the International Standard on Assurance Engagements ISAE 3000. We do not

express any assurance on the sustainability indicators not covered by our separate reasonable and limited assurance report.

Independence matters

Our audit firm and our network have not performed any services that are not compatible with the audit of the Consolidated Financial Statements and have remained independent of the Company during the course of our mandate.

The fees related to additional services which are compatible with the audit of the Consolidated Financial Statements as referred to in article 3:65 of the Code of companies and associations were duly itemized and valued in the notes to the Consolidated Financial Statements (chapter corporate governance).

European single electronic format ("ESEF")

In accordance with the standard on the audit of the conformity of the financial statements with the European single electronic format (hereinafter "ESEF"), we have carried out the audit of the compliance of the ESEF format with the regulatory technical standards set by the European Delegated Regulation No 2019/815 of 17 December 2018 (hereinafter: "Delegated Regulation").

The board of directors is responsible for the preparation, in accordance with the ESEF requirements, of the consolidated financial statements in the form of an electronic file in ESEF format (hereinafter 'the digital consolidated financial statements') included in the annual financial report available on the portal of the FSMA (<https://www.fsma.be/en/stori>).

It is our responsibility to obtain sufficient and appropriate supporting evidence to conclude that the format and markup language of the digital consolidated financial statements comply in all material respects with the ESEF requirements under the Delegated Regulation.

Based on the work performed by us, we conclude that the format and tagging of information in the digital consolidated financial statements of Solvay SA per 31 December 2023 included in the annual financial report available on the portal of the FSMA (<https://www.fsma.be/en/stori>) are, in all material respects, in accordance with the ESEF requirements under the Delegated Regulation.



Audit report dated 12 April 2024 on the Consolidated Financial Statements of Solvay SA as of and for the year ended 31 December 2023 (continued)

Other communications.

- This report is consistent with our supplementary declaration to the Audit Committee as specified in article 11 of the regulation (EU) nr. 537/2014.

Diegem, 12 April 2024
EY Bedrijfsrevisoren BV
Statutory auditor
Represented by

Marie Kaisin*
Partner
*Acting on behalf of a BV
24MK0026



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Independent auditor’s assurance report

Scope

We have been engaged by Solvay SA (hereafter the “Company” or “Solvay”) to perform a reasonable assurance engagement in accordance with the International Standard on Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (“ISAE 3000 revised”), hereafter referred to as “the Engagement 1”, to report on Solvay SA’s sustainability indicators listed in Appendix A (“Subject Matter A”), and included in the accompanying annual report 2023 (the “Report”) for the period from 1 January 2023 to 31 December 2023.

We have also been engagement by Solvay SA to perform a limited assurance engagement in accordance with ISAE 3000 revised, hereafter referred to as “the Engagement 2”, to report on Solvay SA’s sustainability indicators listed in Appendix B (“Subject Matter B”), and included in the accompanying annual report 2023 (the “Report”) for the period from 1 January 2023 to 31 December 2023.

Together, the sustainability indicators in Appendix A (“Subject Matter A”) and B (“Subject Matter B”) are referred to as “the Subject Matters”.

Other than as described in the preceding paragraphs, which set out the scope of our engagement, we did not perform assurance procedures on the remaining information included in the Report, and accordingly, we do not express an opinion on this information.

Criteria applied by Solvay SA

In preparing the Subject Matters, Solvay SA applied the Value Reporting Foundation Integrated Reporting principles, certain of the Global Reporting Initiative (“GRI”) Standards, and certain of the World Business Council for Sustainable Development (“WBCSD”) disclosures of the ESG Disclosure Handbook, as well as a set of own reporting criteria as disclosed in the Glossary and throughout the Report (“the Criteria”).

Solvay’s responsibilities

Solvay’s management is responsible for selecting the Criteria, and for presenting, in all material respect, the Subject Matters in accordance with those Criteria. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the subject matter, such that it is free from material misstatement, whether due to fraud or error.

EY’s responsibilities under a reasonable assurance engagement

Our responsibility is to express a reasonable assurance opinion on the presentation of Solvay SA’s sustainability indicators listed in Appendix A based on the evidence we have obtained.

We conducted our reasonable engagement in accordance with the International Standard on Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (“ISAE 3000 revised”). Those standards require that we plan and perform our engagement to obtain reasonable assurance about whether, in all material respects, the Subject Matter is presented in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

A reasonable assurance engagement undertaken in accordance with ISAE 3000 revised involves assessing the suitability of the Company’s use of the Criteria as the basis for the preparation of the Subject Matter A, assessing the risks of material misstatement whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the Subject Matter A.

Besloten vennootschap
Société à responsabilité limitée
RPR Brussel - RPM Bruxelles - BTW-TVA BE0446.334.711-IBAN N° BE71 2100 9059 0069
*handelend in naam van een vennootschap/agissant au nom d'une société

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We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our reasonable assurance opinion.

EY's responsibilities under a limited assurance engagement

Our responsibility is to express a limited assurance conclusion on the presentation of Solvay SA's sustainability indicators listed in Appendix B based on the evidence we have obtained.

We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements Other Than Audits or Reviews of Historical Financial Information ("ISAE 3000 revised"). Those standards require that we plan and perform our engagement to express a conclusion on whether we are aware of any material modifications that need to be made to the Subject Matter B in order for it to be in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

A limited assurance engagement undertaken in accordance with ISAE 3000 revised involves assessing the suitability of the Company's use of the Criteria as the basis for the preparation of the Subject Matter B, assessing the risks of material misstatement whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the Subject Matter B.

A limited assurance engagement is more limited in scope than a reasonable assurance engagement in relation to the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks. A limited assurance engagement consists of making inquiries, primarily of persons responsible for preparing the Subject Matter and related information and applying analytical and other appropriate procedures. A higher level of assurance, i.e. reasonable assurance, would have required more extensive procedures.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

Our Independence and Quality Control

We have maintained our independence and confirm that we have met the requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, and have the required competencies and experience to conduct this assurance engagement.

Our firm applies International Standard on Quality Management 1, which requires us to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Description of procedures performed

Reasonable assurance engagement

Procedures performed in a reasonable assurance engagement vary in nature and timing and are more extensive than for a limited assurance engagement. Consequently, the level of assurance obtained in a reasonable assurance engagement is substantially higher than the assurance that would have been obtained had a limited assurance engagement been performed.



Although we considered the design of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

Our procedures included amongst other:

- Obtaining an understanding of the reporting processes for Subject Matter A;
- Evaluating the consistent application of the Criteria;
- Assessing the appropriateness of the Company's own reporting criteria in terms of its relevance, completeness, reliability, impartiality and clarity;
- Interviewing relevant staff at local level responsible for data collection, reporting and calculation of Subject Matter A;
- Interviewing management and relevant staff at corporate level responsible for consolidating and carrying out internal control procedures on Subject Matter A;
- Interviewing relevant staff responsible for reporting Subject Matter A in the Report;
- Determining the nature and extent of the procedures for each of the locations contributing to Subject Matter A. Based on the site scoping, 8 sites (Bernburg Koeth, Dombasle-sur-Meurthe, Green River (WY), Lisbon, Linne-Herten, Paulinia, Torrelavega and Zhenjiang Songl) were selected to validate the data and evaluate the design and implementation of data collection and calculation processes as well as validation procedures related to Subject Matter A. For the remaining locations contributing to the sustainability indicators listed in Appendix A, procedures were carried out centrally to review the reasonableness of the data collection, data calculation, and data validation procedures;
- Obtaining information that Subject Matter A reconciles with underlying records of the Company;
- Obtaining internal and external documentation that reconciles with Subject Matter A;
- Performing an analytical review of the data and trends in Subject Matter A for consolidation at corporate level and the data reported by the sites;
- Performing tests of details and tracing the input information to supporting invoices or other evidence;
- Evaluating the overall presentation of Subject Matter A in the Report.

We also performed such other procedures as we considered necessary in the circumstances.



Limited assurance engagement

Procedures performed in a limited assurance engagement vary in nature and timing and are less extensive than for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the Subject Matter B and related information, and applying analytical and other appropriate procedures.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

Our procedures included amongst other:

- Obtaining an understanding of the reporting processes for Subject Matter B;
- Evaluating the consistent application of the Criteria;
- Assessing the appropriateness of the Company's own reporting criteria in terms of its relevance, completeness, reliability, impartiality and clarity;
- Interviewing relevant staff at local level responsible for data collection, reporting and calculation of Subject Matter B;
- Interviewing management and relevant staff at corporate level responsible for consolidating and carrying out internal control procedures on Subject Matter B;
- Interviewing relevant staff responsible for reporting Subject Matter B in the Report;
- Determining the nature and extent of the review procedures for each of the locations contributing to Subject Matter B. Based on the site scoping, 8 sites (Bernburg Koeth, Dombasle-sur-Meurthe, Green River (WY), Lisbon, Linne-Herten, Paulinia, Torrelavega and Zhenjiang Songl) were visited to validate the data and evaluate the design and implementation of data collection and calculation processes as well as validation procedures related to Subject Matter B. For the remaining locations contributing to the sustainability indicators listed in Appendix B, procedures were carried out centrally to review the reasonableness of the data collection, data calculation, and data validation procedures;
- Obtaining information that Subject Matter B reconciles with underlying records of the Company;
- Obtaining internal and external documentation that reconciles with Subject Matter B;
- Performing an analytical review of the data and trends in Subject Matter B for consolidation at corporate level and the data reported by the sites;
- Performing limited tests of details and tracing the input information to supporting invoices or other evidence;
- Evaluating the overall presentation of Subject Matter B in the Report.

We also performed such other procedures as we considered necessary in the circumstances.



Conclusion and Opinion

Reasonable assurance engagement opinion

In our opinion, the Solvay SA's sustainability indicators listed in Appendix A for the period from 1 January 2023 to 31 December 2023 are presented in all material respects, in accordance with the Criteria.

Limited assurance engagement conclusion

Based on our limited assurance engagement, nothing has come to our attention that makes us to believe that Solvay SA's sustainability indicators listed in Appendix B for the period from 1 January 2023 to 31 December 2023, are not presented, in all material respects, in accordance with the Criteria.

Diegem, 12 April 2024

EY Réviseurs d'Entreprises SRL
Represented by

Marie Kaisin*
Partner
*Acting on behalf of an SRL
24MK0027



Appendix A

Domain	Topic	Sustainability indicators	Level of Assurance
CLIMATE	GHG emissions	Emissions increase or reduction at constant scope year on year	Reasonable
	GHG emissions	Direct CO2 emissions (Scope 1)	Reasonable
	GHG emissions	Indirect CO2 emissions (Scope 2)	Reasonable
	GHG emissions	Other greenhouse gas emissions not according to Kyoto (Scope 1)	Reasonable
	GHG emissions	Other greenhouse gas emissions according to Kyoto Protocol (Scope 1)	Reasonable
	GHG emissions	Total direct and indirect emissions (Scopes 1 & 2)	Reasonable
	GHG emissions	Scope 3 emissions - all categories	Reasonable
	Energy	Phase-out of coal use in total energy production	Reasonable
	Biodiversity	Pressure of Solvay products on biodiversity	Reasonable
RESOURCES	Water & wastewater	Freshwater withdrawal	Reasonable
	Waste	Non-hazardous industrial waste	Reasonable
	Waste	Hazardous industrial waste	Reasonable
	Waste	Total industrial waste	Reasonable
	Waste	Non-hazardous industrial waste not treated in a sustainable way	Reasonable
	Waste	Hazardous industrial waste not treated in a sustainable way	Reasonable
	Waste	Total industrial waste not treated in a sustainable way	Reasonable



	Waste	Mining waste	Reasonable
	Sustainable business solutions	Product portfolio assessed	Reasonable
	Sustainable business solutions	Sustainable solutions - % Group sales	Reasonable
BETTER LIFE	Employee health & Safety (occupational safety - OS)	RIIR - Reportable Injuries and Illnesses Rate	Reasonable
	Employee health & Safety (occupational safety - OS)	LTIR - Lost Time Injuries and Illnesses Rate	Reasonable
	Employee health & Safety (occupational safety - OS)	Fatal accidents of Solvay employees and contractors	Reasonable
	Diversity & inclusion	Total headcount	Reasonable
	Diversity & inclusion	Percentage of women in the Group	Reasonable
	Diversity & inclusion	Percentage of women in senior and middle management	Reasonable



Appendix B

Domain	Topic	Sustainability indicators	Level of Assurance
CLIMATE	Energy	Primary Energy consumption	Limited
	Energy	Renewable energy consumption	Limited
	Circular economy	Percentage of sales aligned with circular economy principles	Limited
RESOURCES	Water & wastewater	Chemical oxygen demand (COD)	Limited
	Water & wastewater	Persistent organic pollutants (POP)	Limited
	Hazardous materials	Substance of very high concern (SVHC) according to REACH criteria present in products sold	Limited
	Hazardous materials	Percentage of completion of Analysis of Safer Alternatives program for marketed substances	Limited
	Air quality	Nitrogen oxides emissions - NOx	Limited
	Air quality	Sulphur oxides emissions - SOx	Limited
	Air quality	Non-methane volatile organic compounds emissions - NMVOC	Limited
	Air quality	Ozone depleting substances - ODP	Limited
	Air quality	Persistent organic pollutants - POP	Limited
	Diversity & inclusion	Headcount by employee category (senior manager, middle manager, junior manager, non-manager)	Limited
	Process accident & safety (PS)	Process safety incident rate	Limited
	Process accident & safety (PS)	Number of incidents (Medium, High, Catastrophic)	Limited
	Process accident & safety (PS)	Number of incidents (Medium, High, Catastrophic) with environmental consequences	Limited

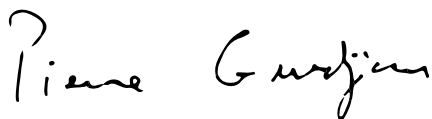


BETTER LIFE	Process accident & safety (PS)	Number of incidents (Medium, High, Catastrophic) with environmental consequences in which the limits of the operating permit were exceeded	Limited
	Employee Engagement and wellbeing	Coverage by collective agreement	Limited
	Management of the legal ethics and Regulatory framework	Total claims made	Limited
	Management of the legal ethics and Regulatory framework	Total claims closed including cases for which there was insufficient information or cases that were misdirected or referred	Limited
	Management of the legal ethics and Regulatory framework	Unsubstantiated claims among resolved cases	Limited
	Management of the legal ethics and Regulatory framework	Substantiated claims among resolved cases	Limited

Declaration by the persons responsible

The Board of Directors hereby declares that, to the best of its knowledge:

- The financial statements, prepared in accordance with International Financial Reporting Standards ("IFRS"), give a true and fair view of the assets, liabilities, financial position, and earnings of the issuer and of the entities included in the consolidation;
- The extra-financial statements are prepared in accordance with the GRI standards and the Integrated Reporting Framework;
- The management report includes an accurate review of the business developments, earnings, and financial position of the issuer and of the entities included in the consolidation, as well as a description of the main risks and uncertainties that these entities face.



Pierre Gurdjian

Chairman of the Board of Directors



Philippe Kehren

Chief Executive Officer, Director

Glossary

Adjustments

Each of these adjustments made to the IFRS results is considered to be significant in nature and/or value. Excluding these items from the profit metrics provides readers with relevant additional information on the Group's underlying performance over time because it is consistent with how the business' performance is reported to the Board of Directors and the Executive Committee. These adjustments consist of:

- Results from portfolio management and major restructurings;
- Results from legacy remediation and major litigations;
- Amortization of intangible assets resulting from Purchase Price Allocation (PPA) and inventory step-up in gross margin;
- Net financial results related to changes in discount rates, coupons of hybrid bonds deducted from equity under IFRS, and debt management impacts (mainly including gains/(losses) related to the early repayment of debt;
- Adjustments of equity earnings for impairment gains or losses and unrealized foreign exchange gains or losses on debt and contribution to IFRS equity earnings of equity investments disposed of in the period;
- Results from equity instruments measured at fair value, and remeasurement of the long-term incentive plans related to Syensqo Group shares and the related hedging instruments.
- Gains and losses, related to the management of the CO₂ hedges not accounted for as Cash Flow Hedge, deferred in adjustments until the maturity of the economic hedge;
- Tax effects related to the items listed above and tax expense or income of prior years;
- All adjustments listed above apply to both continuing and discontinuing operations, and include the impacts on non-controlling interests.

Basic earnings per share

Net income (Solvay's share) divided by the weighted average number of shares, after deducting own shares purchased to cover Long Term Incentive programs.

Capital expenditure (capex)

Cash paid for the acquisition of tangible and intangible assets presented in cash flows from investing activities, and cash paid on the lease liabilities (excluding interests paid), presented in cash flows from financing activities. This indicator is used to manage capital employed in the Group.

Cash conversion

Is a ratio used to measure the conversion of EBITDA into cash. It is defined as (Underlying EBITDA + Capex from continuing operations) / Underlying EBITDA.

CARECHEM

Carechem 24 is a multilingual telephone advice service providing access to a team of trained responders 24 hours a day, 365 days a year. Carechem 24 provides companies all over the world with emergency product support during a hazardous materials incident.

CGU

Cash-generating unit.

Code of conduct

Solvay is committed to responsible behavior and integrity, taking into account the sustainable growth of its business and its good reputation in the communities in which it operates.

CTA

Currency Translation Adjustment.

Diluted earnings per share

Net income (Solvay's share) divided by the weighted average number of shares adjusted for effects of dilution.

Discontinued operations

Component of the Group which the Group has disposed of or which is classified as held for sale, and:

- Represents a separate major line of business or geographical area of operations;
- Is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations;
- Is a subsidiary acquired exclusively with a view to resale.

Dividend yield (net)

Net dividend divided by the closing share price on December 31.

Dividend yield (gross)

Gross dividend divided by the closing share price on December 31.

DJ STOXX

Dow Jones Stoxx is a European stock index composed of the 665 most important European shares.

DJ EURO STOXX

Dow Jones Euro Stoxx is a pan-European stock index which includes the 326 most important shares of the general Dow Jones index, belonging to eleven countries of the Eurozone.

EBIT

Earnings before interest and taxes. Performance indicator that is a measure of the Group's operating profitability irrespective of the funding's structure.

EBITDA

Earnings before interest and taxes, depreciation and amortization. The Group has included EBITDA as an alternative performance indicator because management believes that the measure provides useful information to assess the Group's operating profitability as well as the Group's ability to generate operating cash flows.

Eco-profile

A description of the magnitude and significance of the environmentally relevant inputs and outputs (including, as appropriate, raw materials, intermediate products, emissions and waste) associated with a product throughout its lifecycle.

ESPP

Employee Stock Purchase Plan.

Environmental protection agency

The U.S. Environmental Protection Agency (EPA or USEPA) is an agency of the United States federal government that was created for the purpose of protecting human health and the environment by writing and enforcing regulations based on laws passed by Congress.

Equity per share

Equity (Solvay share) divided by the number of outstanding shares at year-end (issued shares - treasury shares).

EURONEXT

Global operator of financial markets and provider of trading technologies.

Free cash flow

Cash flows from operating activities (excluding cash flows linked to acquisitions or disposals of subsidiaries, cash outflows of Voluntary Pension Contributions, as they are deleveraging in nature as a reimbursement of debt and cash flows related to internal management of portfolio such as one-off external costs of internal carve-out and related taxes...), cash flows from investing activities (excluding cash flows from or related to the acquisitions and disposals of subsidiaries and cash flows associated with the partial demerger project), and other investments, and excluding loans to associates and non-consolidated investments, and recognition of factored receivables), payment of lease liabilities, and increase/decrease of borrowings related to environmental remediation. Prior to the adoption of IFRS 16, operating lease payments were included within free cash flow. Following the application of IFRS 16, because leases are generally considered to be operating in nature, free cash flow incorporates the payment of the lease liability (excluding the interest expense). Excluding this item in the free cash flow would result in a significant improvement of free cash flow compared to prior periods, whereas the operations themselves have not been affected by the implementation of IFRS 16. It is a measure of cash generation, working capital efficiency and capital discipline of the Group.

Free cash flow to Solvay shareholders

Free cash flow after payment of net interests, coupons of perpetual hybrid bonds and dividends to non-controlling interests. This represents the cash flow available to Solvay shareholders, to pay their dividend and/or to reduce the net financial debt.

Free cash flow conversion

Calculated as the ratio between the free cash flow to Solvay shareholders of the last rolling 12 months (before netting of dividends paid to non-controlling interest) and underlying EBITDA of the last rolling 12 months.

FTSEUROFIRST 300

The FTSEurofirst 300 Index tracks the equity performance across the region of the 300 largest companies ranked by market capitalization in the FTSE Developed Europe Index.

GBU

Global business unit.

Gearing ratio

Underlying net debt / total equity.

GRI

GRI (Global Reporting Initiative) is the independent, international organization that helps businesses and other organizations take responsibility for their impacts, by providing them with the global common language to communicate those impacts. GRI provides the world's most widely used standards for sustainability reporting – the GRI Standards.

HPPO

Hydrogen peroxide propylene oxide, a new technology to produce propylene oxide using hydrogen peroxide.

ICCA

International Council of Chemistry Associations.

IFRS

International Financial Reporting Standards.

Integrated reporting

This is a process founded on integrated thinking, which results in a periodic integrated report by an organization about value creation over time and related communications regarding aspects of value creation.

ISO 9001

The ISO 9001 standard defines a set of requirements for the establishment of a system of quality management in an organization, whatever its size and activity.

ISO 14001

The ISO 14001 family addresses various aspects of environmental management. It provides practical tools for companies and organizations looking to identify and control their environmental impact and constantly improve their environmental performance.

ISO 14040

The ISO 14040 standard covers life cycle assessment (LCA) studies and life cycle inventory (LCI) studies.

ISO 26 000

The ISO 26000 is a global standard that provides guidelines for organizations that wish to operate in a socially responsible manner. The standard was published in 2010 after five years of negotiations among a large number of stakeholders worldwide. Representatives of governments, NGOs, industry, consumer groups, and the world of work were involved in its development. It therefore represents an international consensus.

LCA

Life Cycle Assessment.

Leverage ratio

Net debt / underlying EBITDA of the last 12 months. Underlying leverage ratio = underlying net debt / underlying EBITDA of the last 12 months.

Loss prevention process

Loss prevention aims at maintaining the production flow and profitability of the plants by providing risk mitigation. It also contributes to increasing the protection of people and the environment.

LTII

Lost Time Injury or Illness: A Work Related Injury or Illness that results in a work interruption of one or more days, not including the day of the accident.

LTIIR

Lost Time Injury and Illness Rate: number of Lost Time Injuries and Illnesses resulting from accidents per 200,000 work hours.

Mandatory contributions to employee benefits plans

For funded plans, contributions to plan assets correspond to amounts required to be paid during the respective period, in accordance with agreements with trustees or regulation, as well as, for unfunded plans, benefits paid to beneficiaries.

Materiality

Organizations are faced with a wide range of topics on which they could report. The relevant topics are those that may reasonably be considered important for reflecting the organization's economic, environmental, and social impacts, or influencing the decisions of stakeholders, and therefore potentially merit inclusion in an annual report. Materiality is the threshold at which aspects become sufficiently important that they should be reported.

Natural currency hedge

A natural currency hedge is an investment that reduces the undesired risk by matching cash in and outflows.

Near miss

Accident or collision narrowly avoided.

Net cost of borrowings

Cost of borrowings netted with interest on loans and short-term deposits, as well as other gains (losses) on net indebtedness.

Net financial debt (IFRS)

(IFRS) net debt = Non-current financial debt + current financial debt – cash & cash equivalents – other financial instruments (current and noncurrent). Underlying net debt reclassifies as debt 100% of the hybrid perpetual bonds, considered as equity under IFRS. It is a key measure of the strength of the Group's financial position and is widely used by credit rating agencies.

Net financial charges

Net cost of borrowings, and costs of discounting provisions (namely, related to post-employment benefits and Health Safety and Environmental liabilities).

Net pricing

The difference between the change in sales prices versus the change in variable costs.

Net sales

Sales of goods and value-added services corresponding to Solvay's know-how and core business. Net sales exclude Revenue from non- core activities.

Net working capital

Includes inventories, trade receivables and other current receivables, netted with trade payables and other current liabilities.

Occupational accident

Accident which occurred during the execution of a work contract with Solvay. Accidents on the way to/from home are not considered as work-related except if at the time of the accident, the worker was traveling for Solvay.

OCI

Other Comprehensive Income.

OECD

Organization for Economic Co-operation and Development.

OHSAS 18001

OHSAS 18001 is an international occupational health and safety management system specification.

Open innovation

Innovation that is enriched with outside expertise, through partnerships with the academic world and by shareholdings in start-ups, either directly or via investment funds.

Operational deleveraging

Reduction of liabilities (net debt or provisions) through operational performance only, i.e. excluding impacts from acquisitions and divestitures, as well as remeasurement impacts (changes of foreign exchange, inflation, mortality, and discount rates).

Organic growth

Growth of Net sales or underlying EBITDA excluding scope changes (related to small M&A not leading to restatements) and forex conversion effects. The calculation is made by rebasing the prior period at the business scope and forex conversion rate of the current period.

OSHA

United States Occupational Safety and Health Administration.

PA

Polyamide, Polymer type.

PP

Unit of percentage points, used to express the evolution of ratios.

PPA

Purchase Price Allocation (PPA) accounting impacts related to acquisitions..

PSM

Process safety management.

PSU

Performance Share Unit.

Product stewardship

A responsible approach in managing risks throughout the entire life cycle of a product, from the design stage to the end of life.

Research & innovation

Research & development costs recognized in the income statement and as capital expenditure before deduction of related subsidies, royalties and depreciation and amortization expense. It measures the total cash effort in research & innovation, regardless of whether the costs were expensed or capitalized.

Research & innovation intensity

Ratio of research & innovation / net sales.

REACH

REACH is the European Community Regulation on chemicals and their safe use (EC 1907/2006). It deals with the registration, evaluation, authorization, and restriction of chemical substances. The law entered into force on June 1, 2007.

Responsible care®

Responsible Care® is the global chemical industry's unique initiative to improve health, environmental performance, enhance security, and to communicate with stakeholders about products and processes.

Result from legacy remediation and major litigations

It includes:

- The remediation costs not generated by on-going production facilities (shut-down of sites, discontinued productions, previous years' pollution), and
- The impact of significant litigations.

Results from portfolio management and major restructuring

It includes:

- Gains and losses on the sale of subsidiaries, joint operations, joint ventures, and associates that do not qualify as discontinued operations;
- Acquisition costs of new businesses;
- One-off operating costs related to internal management of portfolio (carve-out of major lines of businesses);
- Gains and losses on the sale of real estate not directly linked to an operating activity;
- Restructuring charges driven by portfolio management and by major reorganization of business activities, including impairment losses resulting from the shutdown of an activity or a plant;
- Impairment losses resulting from testing of Cash Generating Units (CGUs).
- It excludes non-cash accounting impact from amortization and depreciation resulting from the purchase price allocation (PPA) from acquisitions.

Revenue from non-core activities

Revenues primarily comprising commodity and utility trading transactions and other revenue, considered to not correspond to Solvay's know-how and core business.

RII

Reportable Injury & Illness: work related injury or illness resulting from an accident with severity above first aid, according to US OSHA 29 CFR 1904.

RIIR

Reportable Injury & Illness rate): number of reportable injury or illness per 200,000 work hours.

ROCE

Return on Capital Employed, calculated as the ratio between underlying EBIT (before adjustment for the amortization of PPA) and capital employed. Capital employed consists of net working capital, tangible and intangible assets, goodwill, rights-of-use assets, investments in associates & joint ventures and other investments, and is taken as the average of the situation at the end of the last 4 quarters.

ROE

Return on equity.

RSU

Restricted Share Units.

Safety data sheets

Safety Data Sheets are the main tool for ensuring that manufacturers and importers communicate enough information along the supply chain to allow safe use of their substances and mixtures.

SAELs

Solvay Acceptable Exposure Limits

SBTI

Science Based target initiative

SDG

United Nations Sustainable Development Goals.

Seveso regulations

The Control of Major Accident Hazards Involving Dangerous Substances Regulations. These regulations (often referred to as “COMAH Regulations” or “Seveso Regulations”) give effect to European Directive 96/82/EC. They apply only to locations where significant quantities of dangerous substances are stored.

SOCRATES

Global tool for industrial hygiene management.

SOLVAY WAY

Launched in 2013 and aligned with ISO 26000, Solvay Way is the sustainability approach of the Group. It integrates social, societal, environmental, and economic aspects into the Company's management and strategy, with the objective of creating value shared by all of its stakeholders. Solvay Way is based on an ambitious and pragmatic framework serving as a tool of both measurement and progress. Solvay Way lists 49 practices – practices that reflect the Solvay Way's 22 commitments and are structured on a four-level scale (launch, deployment, maturity, performance).

SOP

Stock Option Plan.

SPM

The Sustainable Portfolio Management tool is integrated into the Solvay Way framework (linked to five practices). It serves as a strategic tool for developing information on our portfolio and analyzing the impacts of sustainability megatrends on our businesses.

SVHC

Substance of Very High Concern (SVHC) is a chemical substance, the utilization of which within the European Union has been proposed to become subject to legal authorization under the REACH regulation.

TCFD

Task Force on Climate-related Financial Disclosure.

Underlying

Underlying results are deemed to provide a more comparable indication of Solvay's fundamental performance over the reference periods. They are defined as the IFRS figures adjusted for the “Adjustments” as defined above. They provide readers with additional information on the Group's underlying performance over time as well as the financial position and they are consistent with how the business’ performance and financial position are reported to the Board of Directors and the Executive Committee.

Underlying net debt

Underlying net debt reclassifies 100% of the perpetual hybrid bonds, which are considered as equity under IFRS, as debt

Underlying tax rate

Income taxes / (Result before taxes – Earnings from associates & joint ventures) – all determined on an Underlying basis. The adjustment of the denominator regarding associates and joint ventures is made as these contributions are already net of income taxes. This provides an indication of the tax rate across the Group.

Voluntary pension contributions

Contributions to plan assets in excess of Mandatory contributions to employee benefits plans. These payments are discretionary and are driven by the objective of value creation. These voluntary contributions are excluded from free cash flow as they are deleveraging in nature as a reimbursement of debt.

WACC

Weighted Average Cost of Capital.

Velocity

Total number of shares traded during the year divided by the total number of listed shares, using the Euronext definition.

Velocity adjusted by free float

Velocity adjusted as a function of the percentage of the listed shares held by the public, using the Euronext definition.

WBCSD

World Business Council for Sustainable Development.

YOY

Year-over-year comparison.

Shareholders' diary

MAY 7, 2024

First quarter 2024 results

MAY 28, 2024

Ordinary General Shareholders' meeting

JUNE 3, 2024

Ex-coupon date

JUNE 5, 2024

Final dividend: payment date

JULY 31, 2024

First half 2024 results

NOVEMBER 6, 2024

Nine months 2024 results

About this report

Solvay's 2023 Annual Integrated Report provides material information on Solvay for the year ending December 31, 2023. This report integrates all content in one comprehensive document. The first chapters highlight the strong legacy that lay the foundations of Solvay in its new perimeter as a result of the spin-off of specialty businesses to Syensqo. They provide a detailed presentation of the company, its strategy, business environment and main achievements in 2023.

Our Annual Integrated Report includes our management report, as required by article 12 of the Royal Decree of 14 November 2007 relating to the obligations of issuers of financial instruments admitted for trading on a regulated market. The information required by articles 3:6 and 3:32 of the Belgian Code of Companies and Associations can be found in the different chapters of the report. This includes our Corporate governance statement, our Remuneration report, Risk management report, Business performance review, Extra-financial statements, and Financial statements. Solvay's 2023 Annual Integrated Report is based on the Value Reporting Foundation Integrated Reporting principles and elements of content, and aligned with the GRI Sustainability Reporting Standards and the World Business Council for Sustainable Development (WBCSD) Environmental, Social, and Governance (ESG) Disclosure Handbook.

Solvay's 2023 Annual Integrated Report has been validated by Solvay's Executive Leadership Team and Board of Directors.

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Ce rapport est également disponible en français. Dit jaarverslag is ook beschikbaar in het Nederlands.

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