Investor Presentation

TOMRA Systems ASA

24 February 2023

Our vision is to Lead the Resource Revolution

It is our belief that businesses have the power and responsibility to help manage our planet's precious resources – today and tomorrow.

TOMRA

5000
EMPLOYEES GLOBALLY

TOMRA

12.2
BILLION NOK REVENUES IN 2022

Publicly listed on Oslo Stock Exchange (OSEBX: TOM)

Collection

Recycling

Food

Our transformation journey

2004 RECYCLING

TOMRA acquires TITECH, the world's leading provider of optical recognition and sorting technology for the waste industry and TOMRA's transformation journey starts.

2005 COLLECTION

TOMRA acquires Orwak Group, a leading provider of compaction for a variety of materials.

2006 RECYCLING

TOMRA acquires Commodas - a leading supplier within the field of sensor-based products for mining and metal recycling.

2008 RECYCLING

TOMRA acquires Ultrasort - specialists in sensor-based mining technology.

2011 COLLECTION

Sale of Californian material handling business. With the divestment the US operation became less exposed to movements in commodity prices.

2011 FOOD

TOMRA acquires Odenberg, rounding out the offering to include food optimization.

2012 FOOD

TOMRA acquires BEST, leading food sorting machine producer. With the acquisition of BEST, TOMRA has by far the widest reach within the food sorting universe.

2014 COLLECTION

Divestment of Orwak. Further portfolio focus on sensor-based technology.

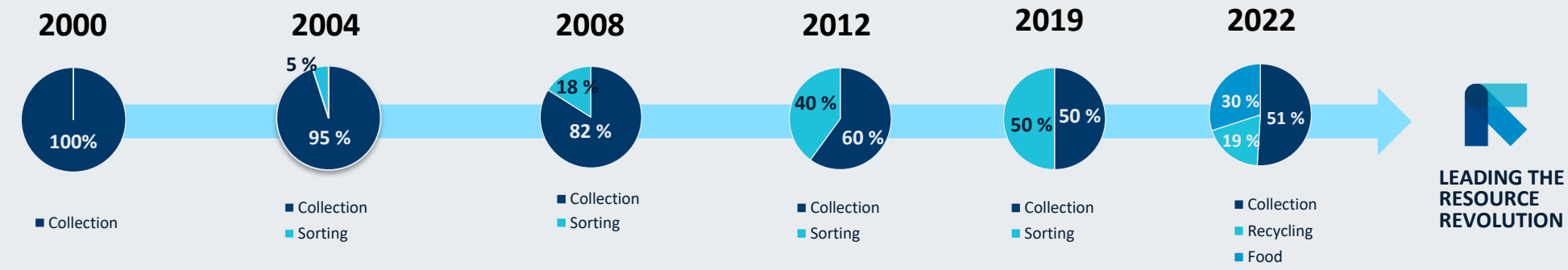
2016 FOOD

TOMRA expands into lane sorting, acquiring New Zealand based Compac, confirming TOMRA's position as the leading provider of sorting technology into the food industry.

2018 FOOD

TOMRA compliments its food sorting portfolio with the acquisition of BBC Technologies, a leading provider of precision grading systems for blueberries and other small fruits.

BBC TECHNOLOGIES



TOMRA

Revenues

We have built a broad business platform…

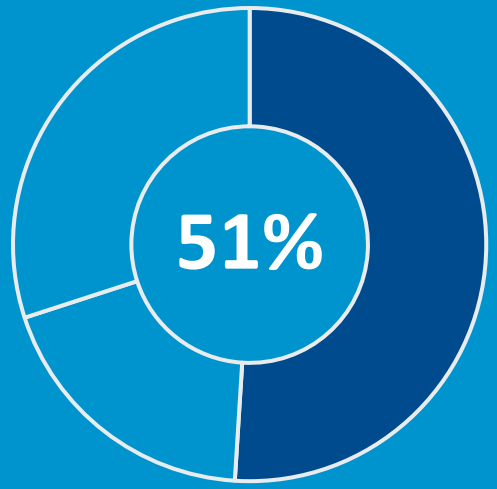
… while keeping a strong entrepreneurial spirit

TOMRA

Creating value through three divisions

TOMRA Collection

2022 Revenue



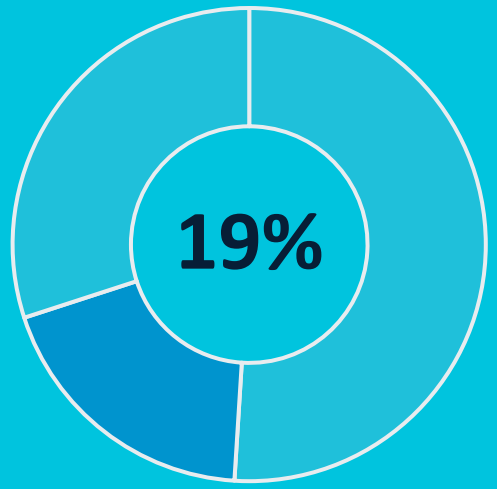
~2,600
Employees

Customers

Grocery retailers, bottlers, deposit scheme coordinators

TOMRA Recycling

2022 Revenue



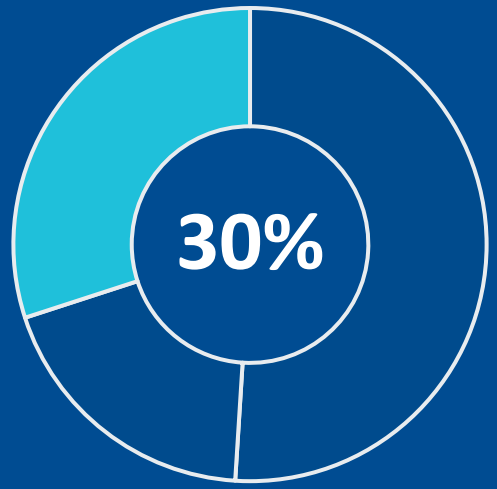
~800
Employees

Customers

Waste management, material recovery plants, recyclers

TOMRA Food

2022 Revenue

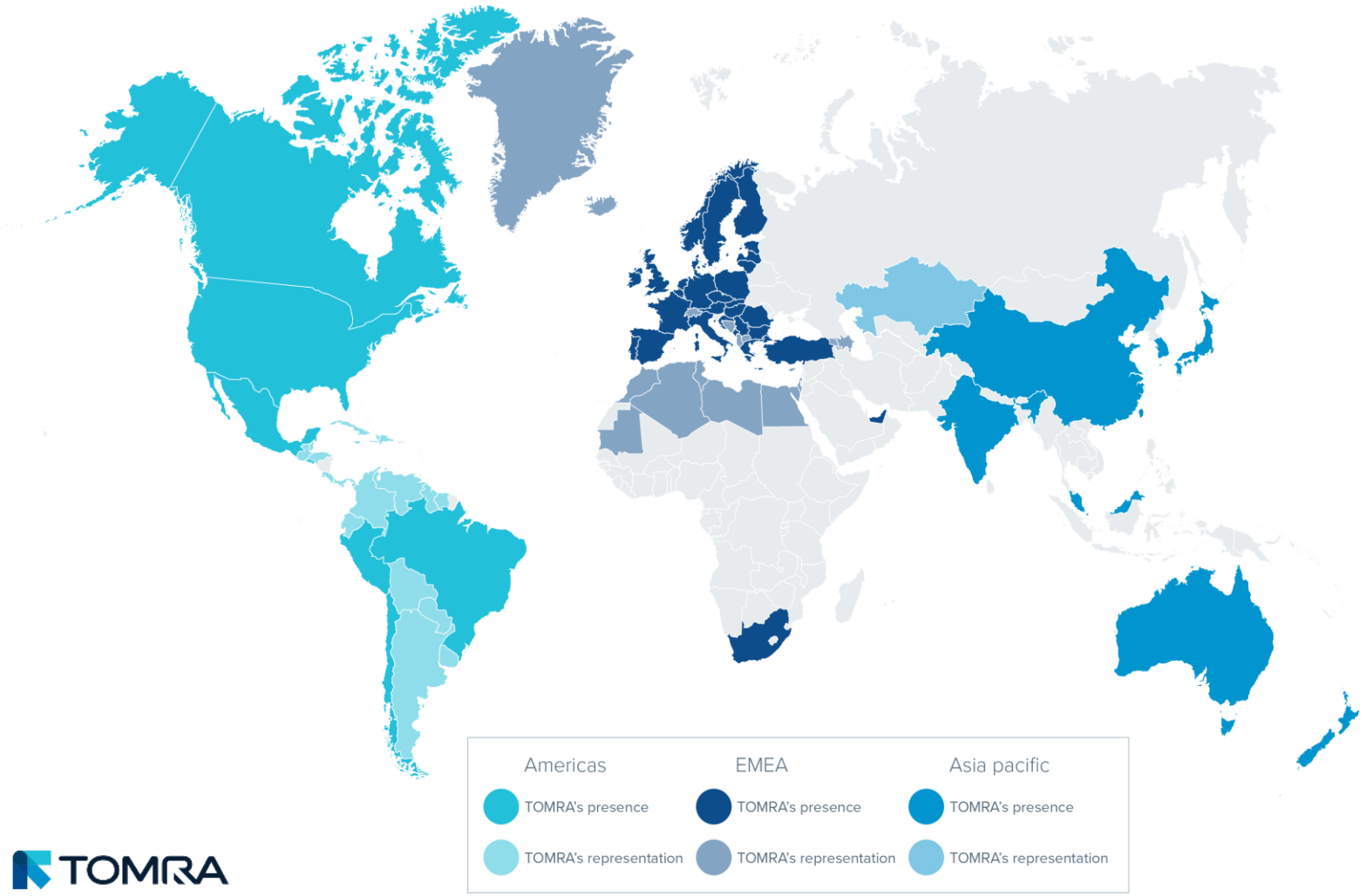


~1,600
Employees

Customers

Food growers, packers, processors & cooperatives

TOMRA's global presence



Installed base ~105,000

EMEA ~75,000

Americas ~22,000

Asia Pacific ~8,000

	Collection	Recycling	Food
EMEA	~63,000	~6,300	~5,600
Americas	~14,000	~1,400	~6,300
Asia Pacific	~5,000	~1,300	~1,900
Total	**~82,000**	**~9,000**	**~13,800**

TOMRA Collection

TOMRA

Global leader in reverse vending

50
years of experience

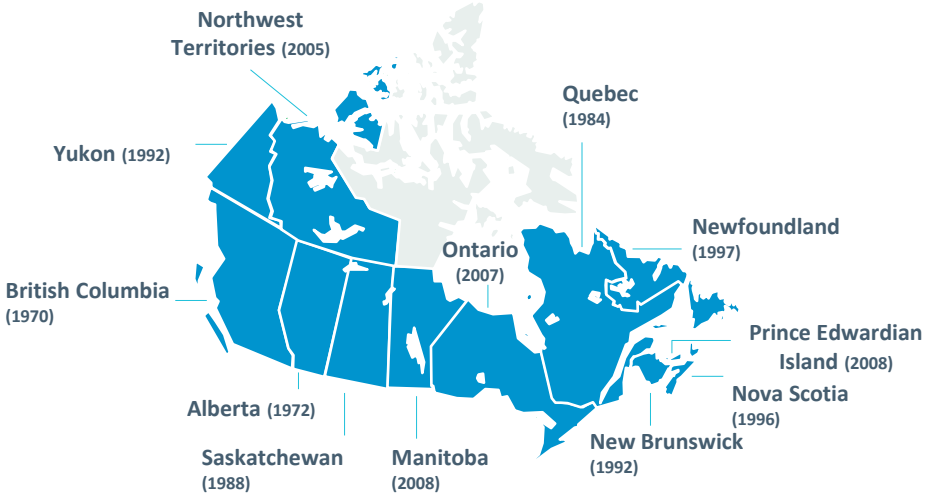
82 000
machines in operation

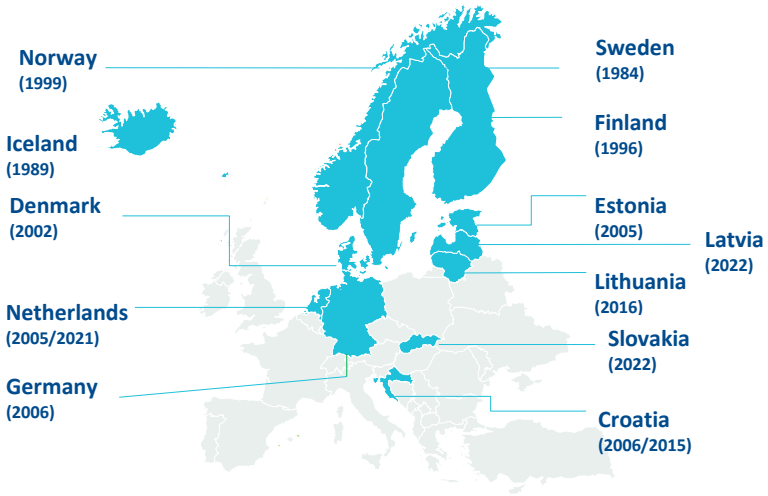
Represented in more than **60 countries**

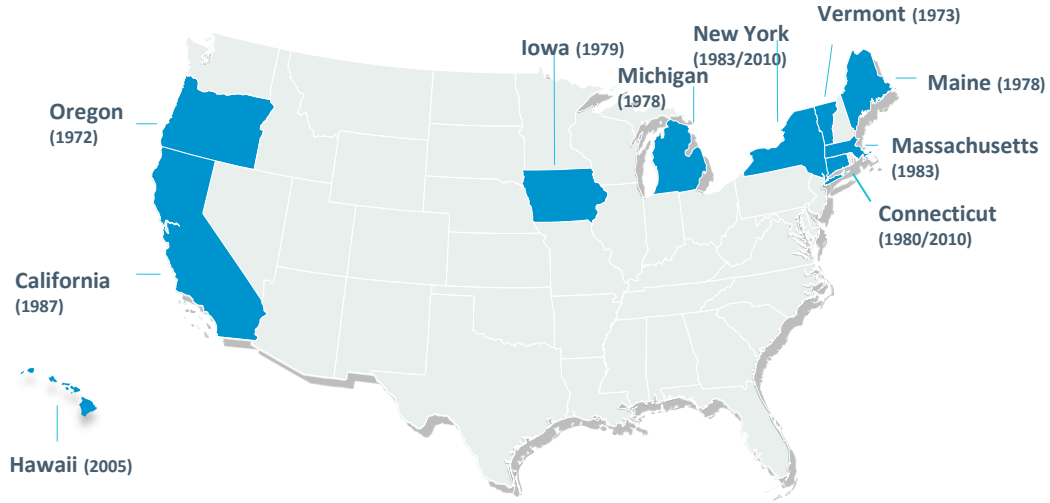
We are **technology leader** globally

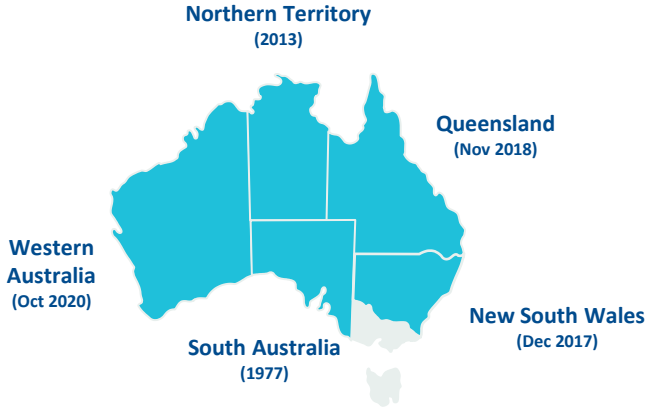
6.2bn NOK
revenues

An overview of current deposit markets





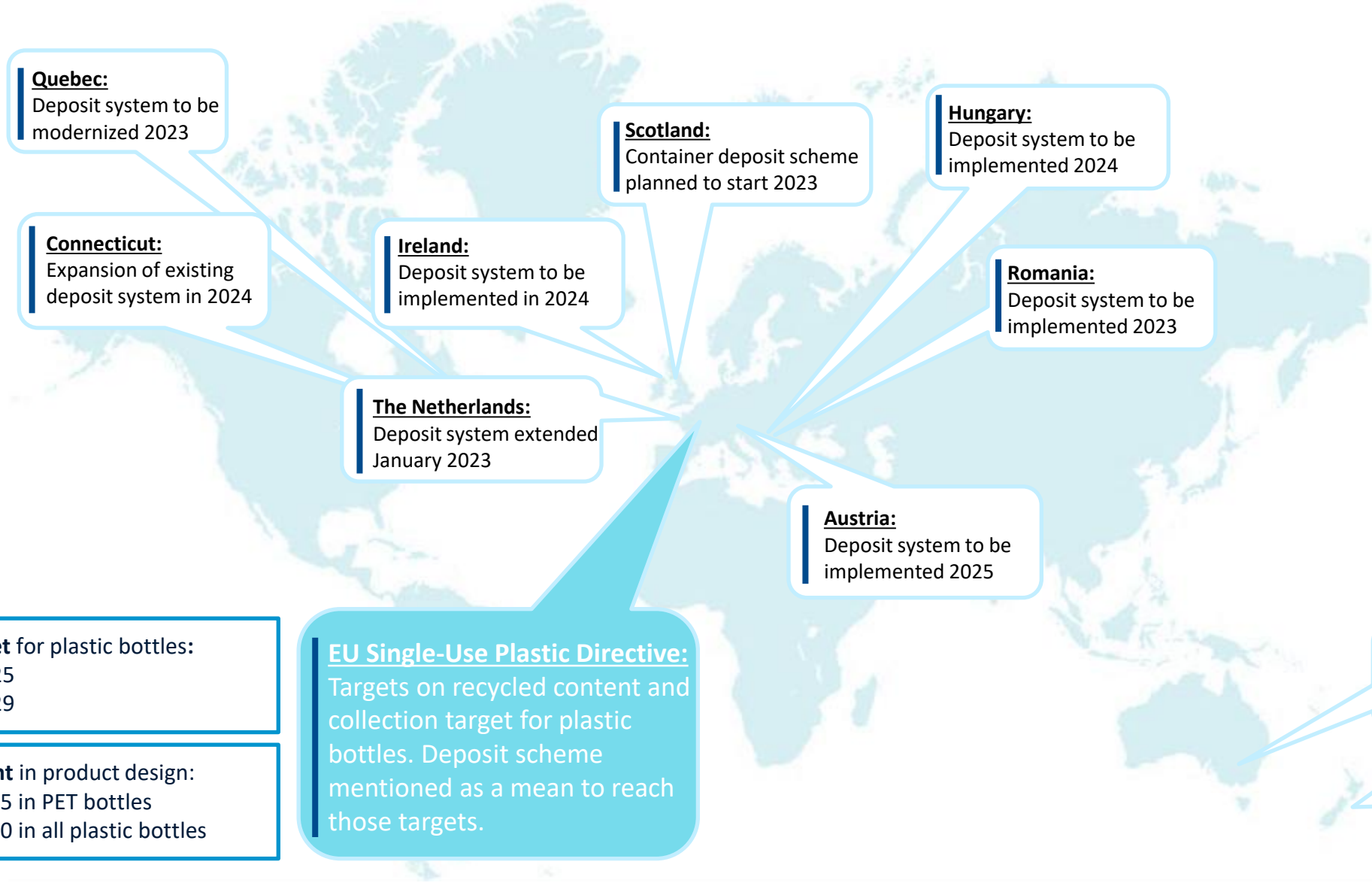




TOMRA

* In addition, some markets have refillable deposit systems such as: Austria, Belgium, Chile, Czech Republic, France, Hungary, Poland and South Korea

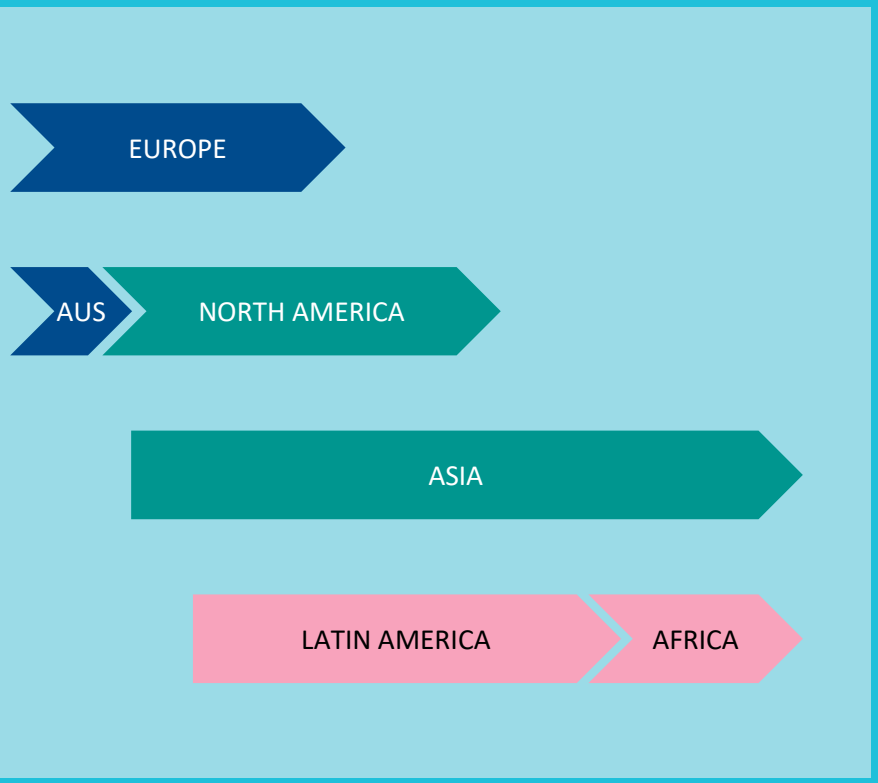
Upcoming deposit markets



Collection target for plastic bottles:
- 77% by 2025
- 90% by 2029

Recycled content in product design:
- 25% by 2025 in PET bottles
- 30% by 2030 in all plastic bottles

We are driving the market momentum through global advocacy work aiming to achieve best practice deposit systems and generate demand through innovations



Collection targets for plastic beverage bottles

77% 2025 **90%** 2029

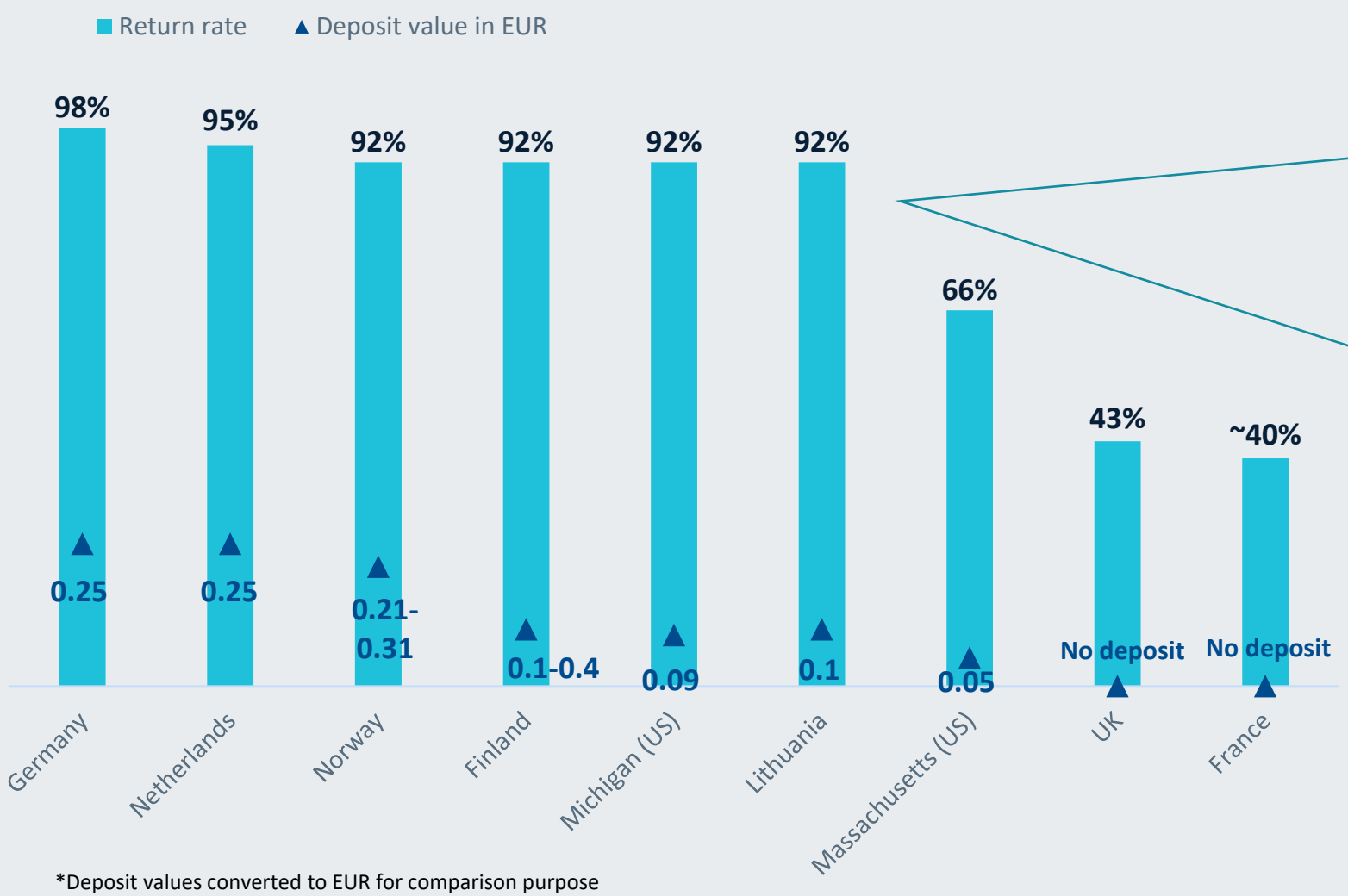
Targets for recycled content in plastic beverage bottles

25% 2025 **30%** 2030

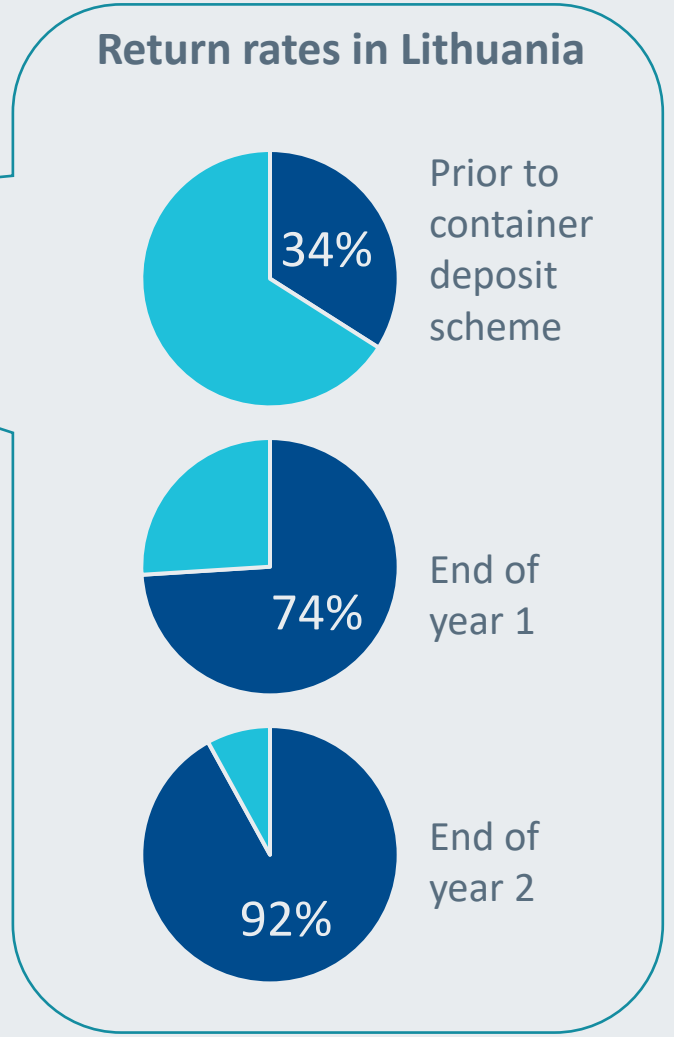
Continued work with governments to implement best practice deposit legislation

Innovate solutions that trigger modernizations and increased demand

High collection rates achieved in two years' time



*Deposit values converted to EUR for comparison purpose



Source: Reloop, The Guardian, LeParisien, USAD

The four principles of high-performing deposit return systems

PERFORMANCE

A collection target for a broad scope of beverage packaging plus a meaningful deposit **delivers strong results**.

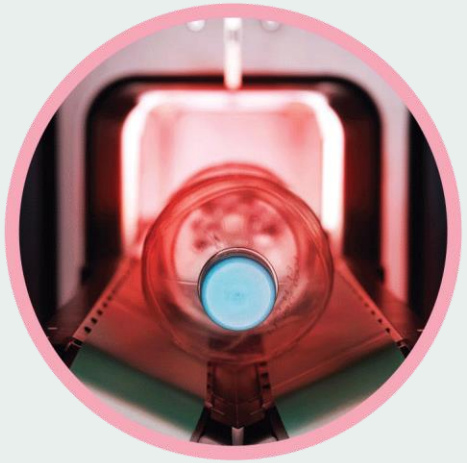
CONVENIENCE

The redemption system is **easy**, **accessible and fair** for everyone.

PRODUCER RESPONSIBILITY

Producers manage, finance and invest in the system with use of unredeemed deposits and commodity revenues.

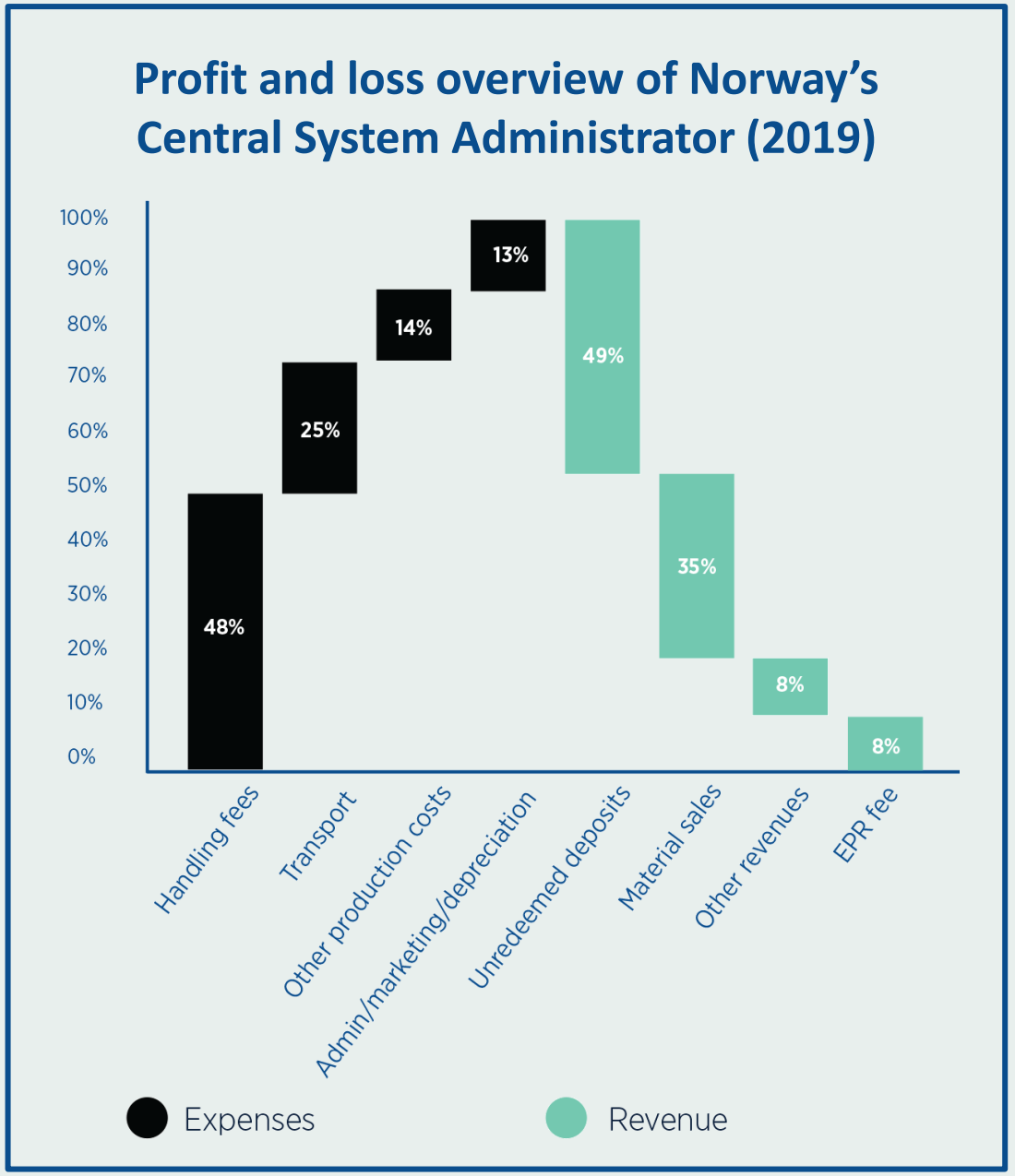
SYSTEM INTEGRITY



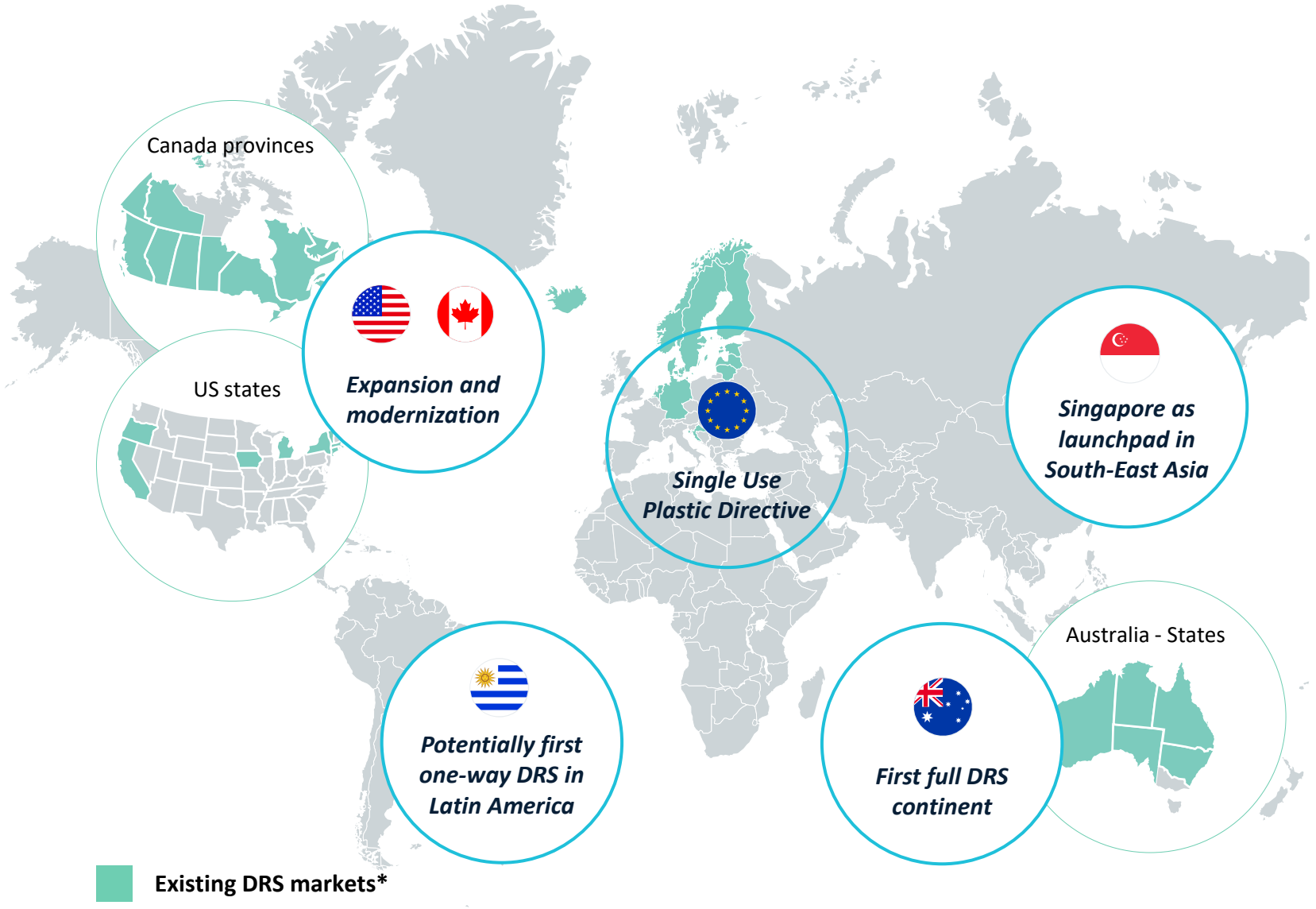
Trust is built into the system's processes through transparent management, a data-driven clearinghouse, and reliable redemption technology.

Reinvestment of unredeemed deposits and material revenue within the system

In Norway **over 80%** of the system's costs are covered by unredeemed deposits and material revenue



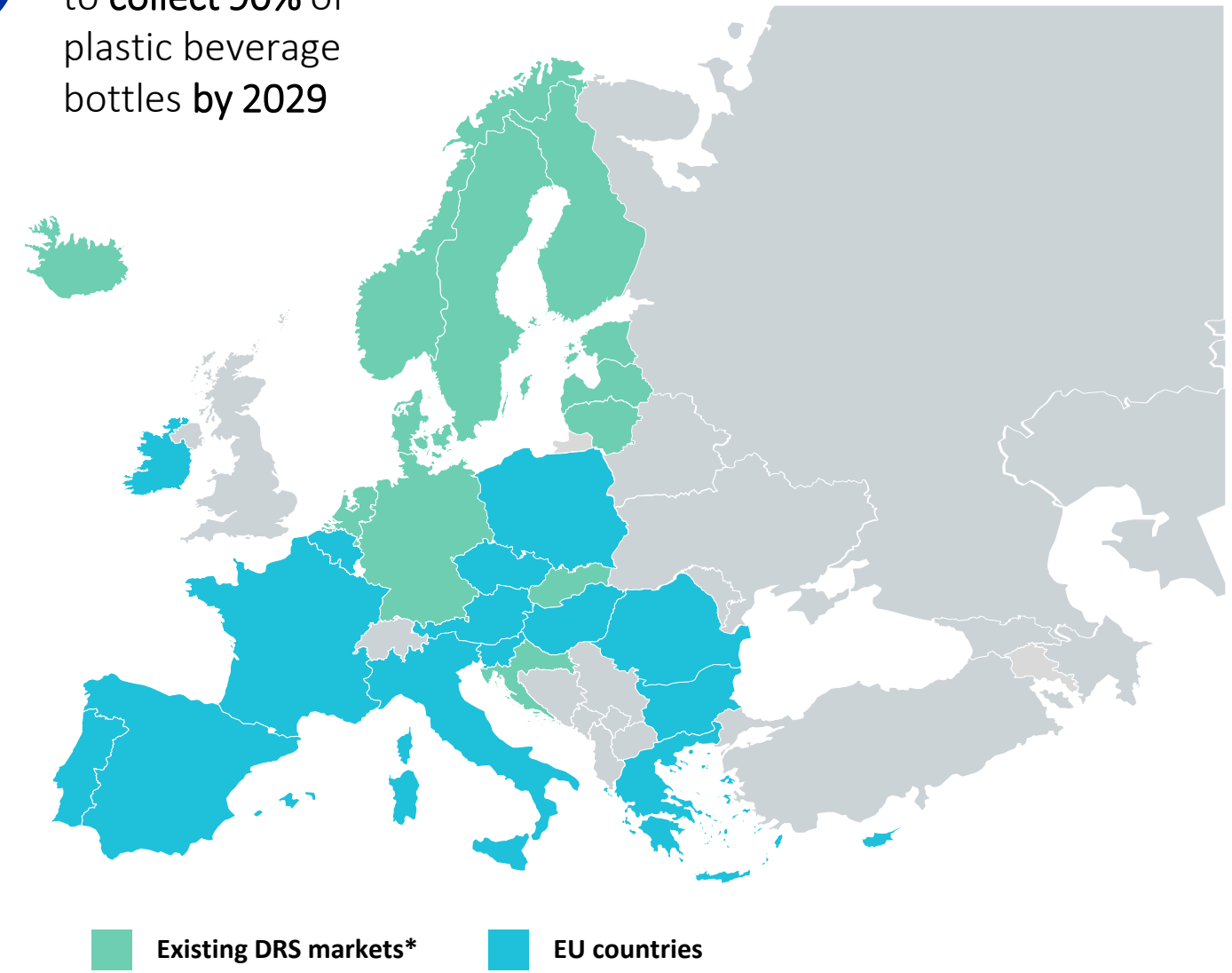
Legislative outlook supports new and expanded Deposit Return Scheme (DRS) markets towards 2030



* In addition, some markets have refillable deposit systems such as: Austria, Belgium, Chile, Czech Republic, France, Hungary, Poland and South Korea

Europe and the Single Use Plastic Directive (SUPD) will be the main driver of new deposit markets towards 2030

All EU member states to **collect 90%** of plastic beverage bottles **by 2029**



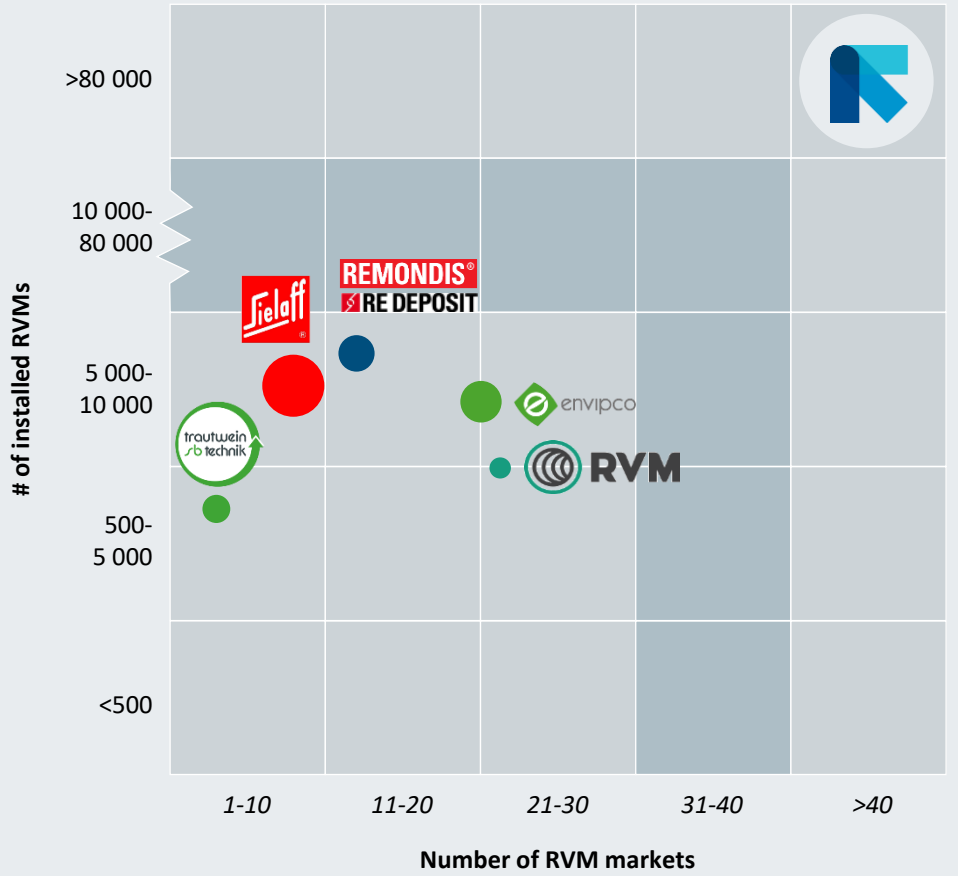
* In addition, some markets have refillable deposit systems such as: Austria, Belgium, Czech Republic, France, Hungary and Poland

Strong local presence in existing and upcoming European deposit markets

Establishing local TOMRA entities and building local presence and partnerships early is key in our go to market strategy

* In addition, some markets have refillable deposit systems such as: Austria, Belgium, Czech Republic, France, Hungary and Poland

Preferred partner in reverse vending solutions



Source: TOMRA estimates and analysis

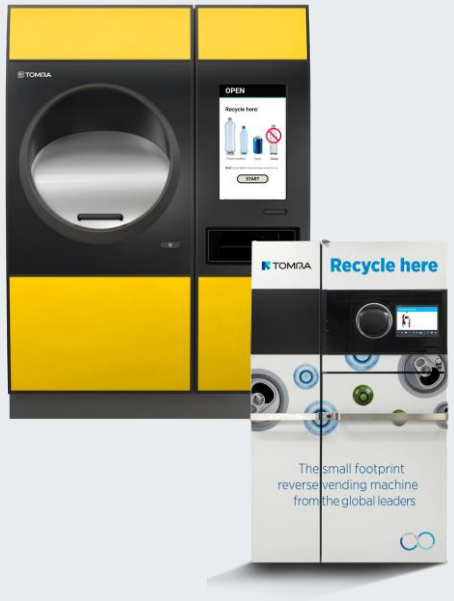
Customer centricity is at the core of our innovation strategy

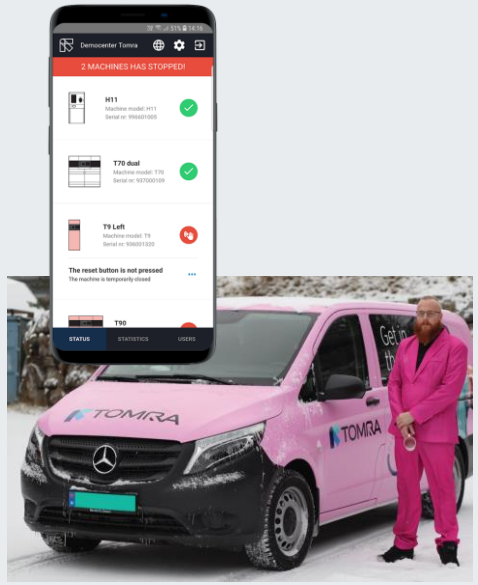
Strategic aspiration:
Innovate **the most attractive** solutions and the best customer experience

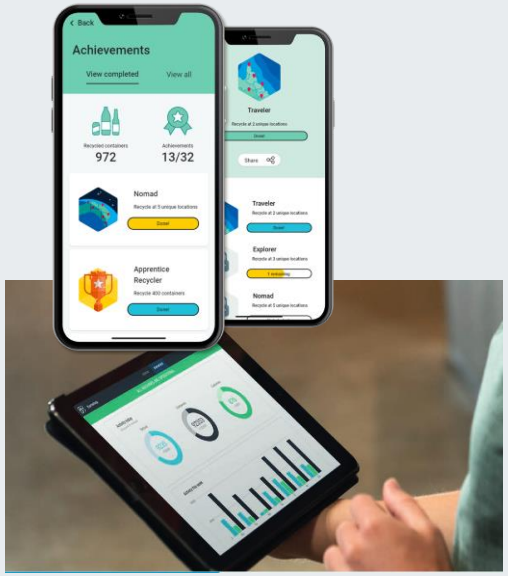
A great recycling experience

Efficient operations for peace of mind

A smart investment for long-term benefits







Business model expertise across deposit systems

Financing

Location: Retail — Other

Sales & Service model

Retailer purchases and takes the ownership of the RVM and TOMRA provides services

- Upfront equipment revenue
- Recurring service revenues
- Proven track record
- Lower risk

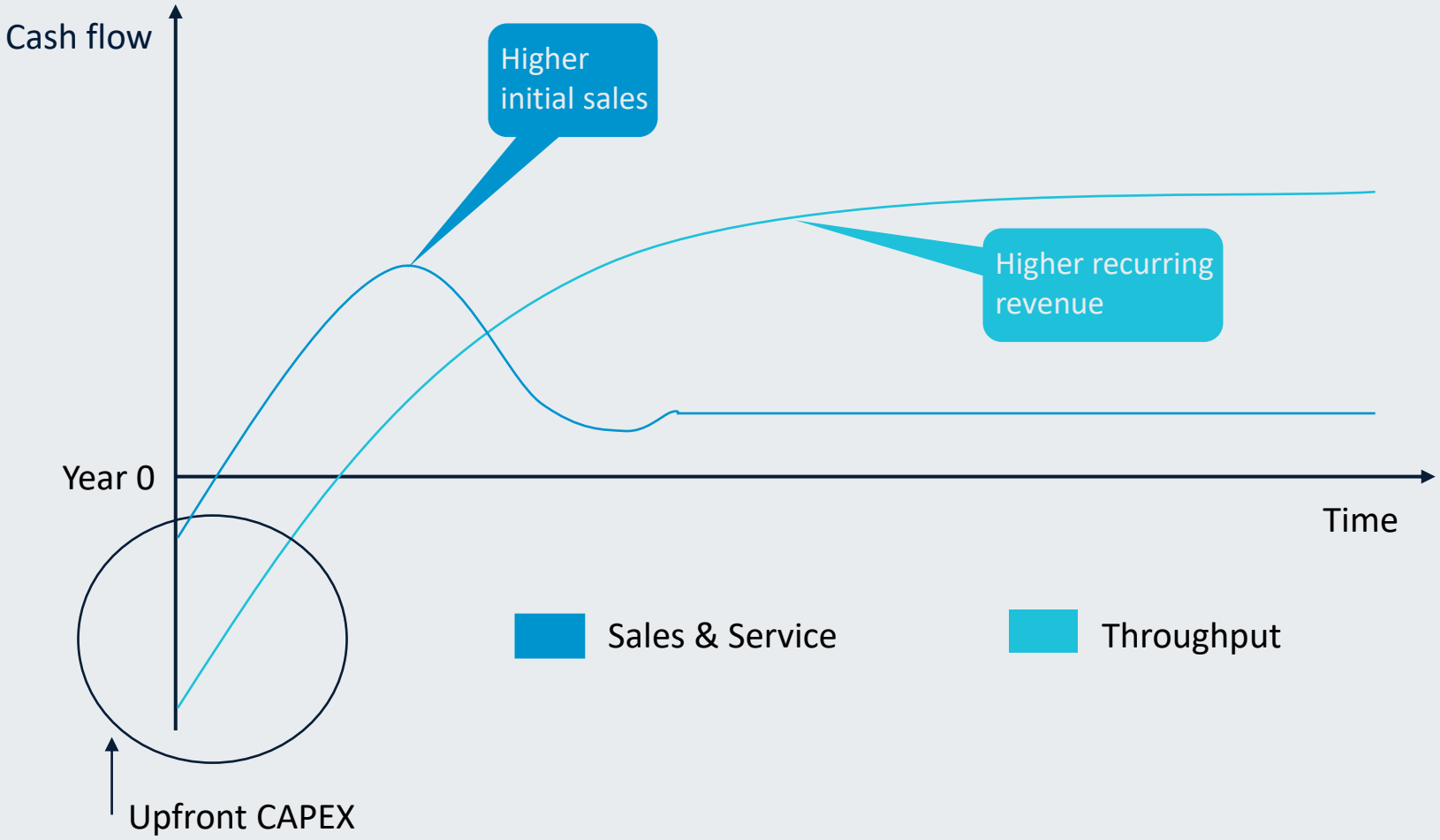
Throughput model

TOMRA owns and operates the RVM and receives a fee per container handled by the RVM

- High recurring Revenue
- Swift roll-out
- Aligned interests
- Utilize financial strength

Cash flow profiles of the two business models

Illustrative cash flow profiles per machine



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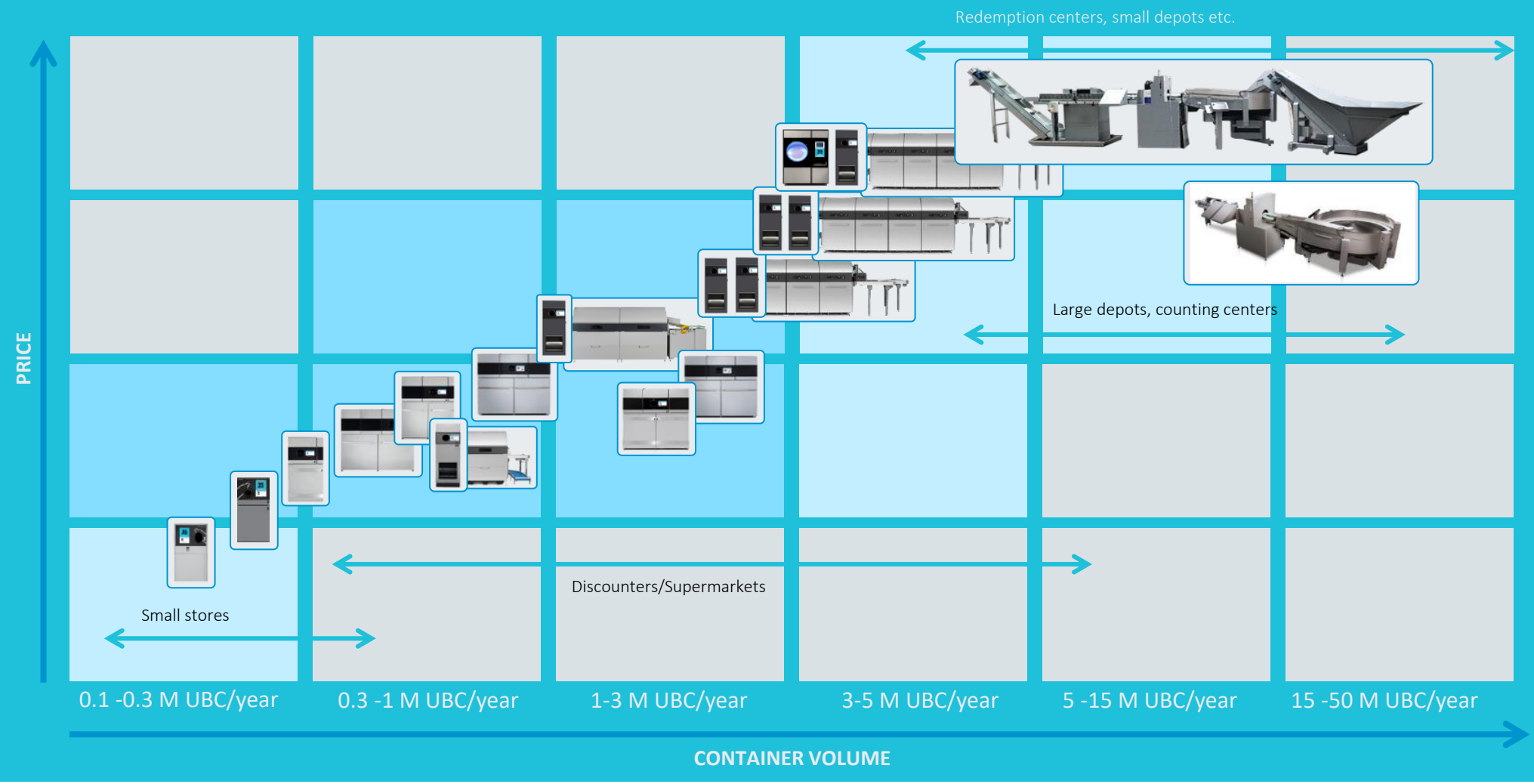
Flexibility and scalability to enable new business models and new market entry

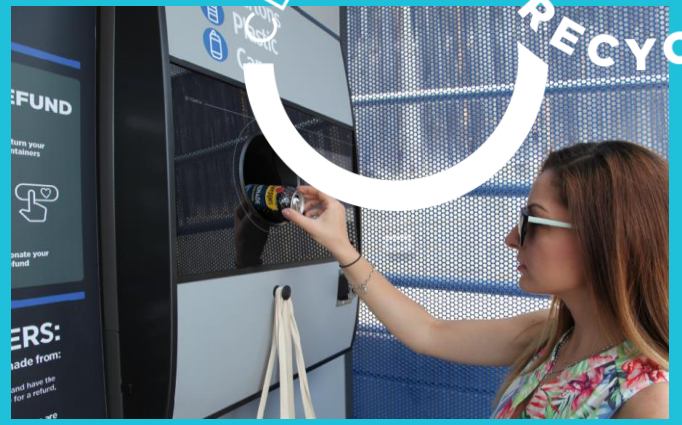


Advanced digital platform leveraged across stakeholder groups


EI LASIPULLOJA TÄHÄN
AUTOMAATTIIN, KIITOS
TOMRA
AUKI
Muovipullot
Tölkit
AVAA LUUKKU

RVM Kiosks

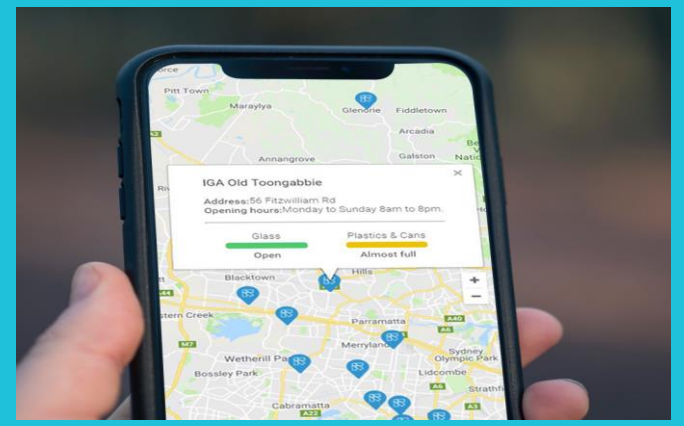
Reverse Vending Centres



Single RVMs

Automated Depots

Over the Counter

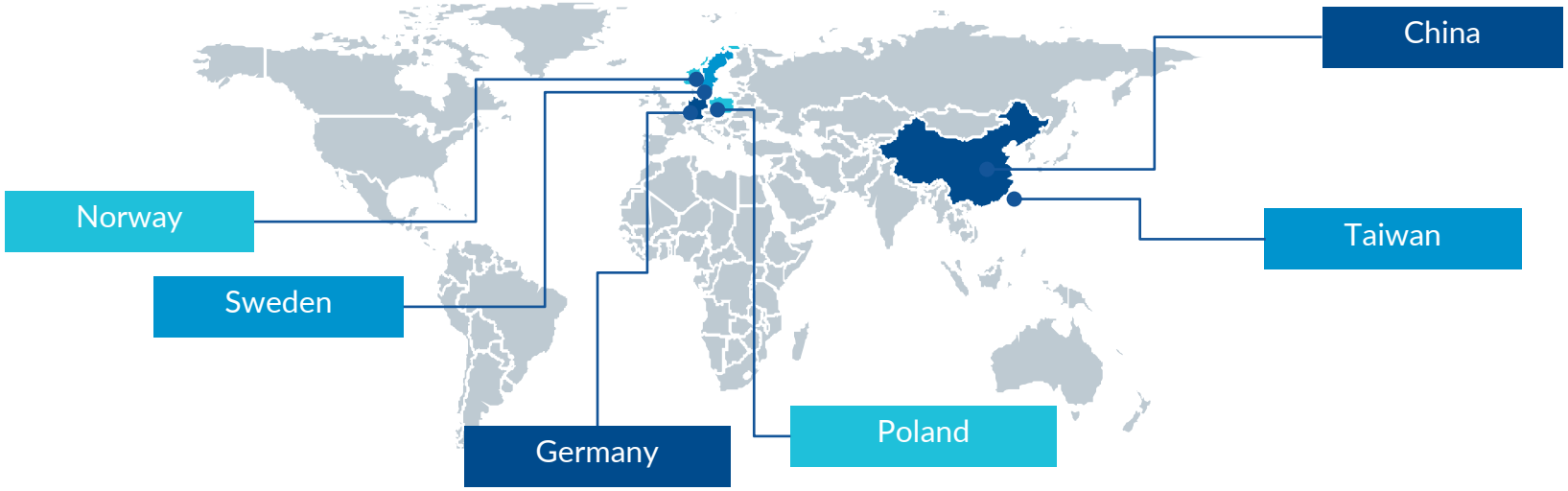


Scheme App

Global Supply Chain

Optimize global sourcing and production set-up

Current supply chain with country origin on purchased material

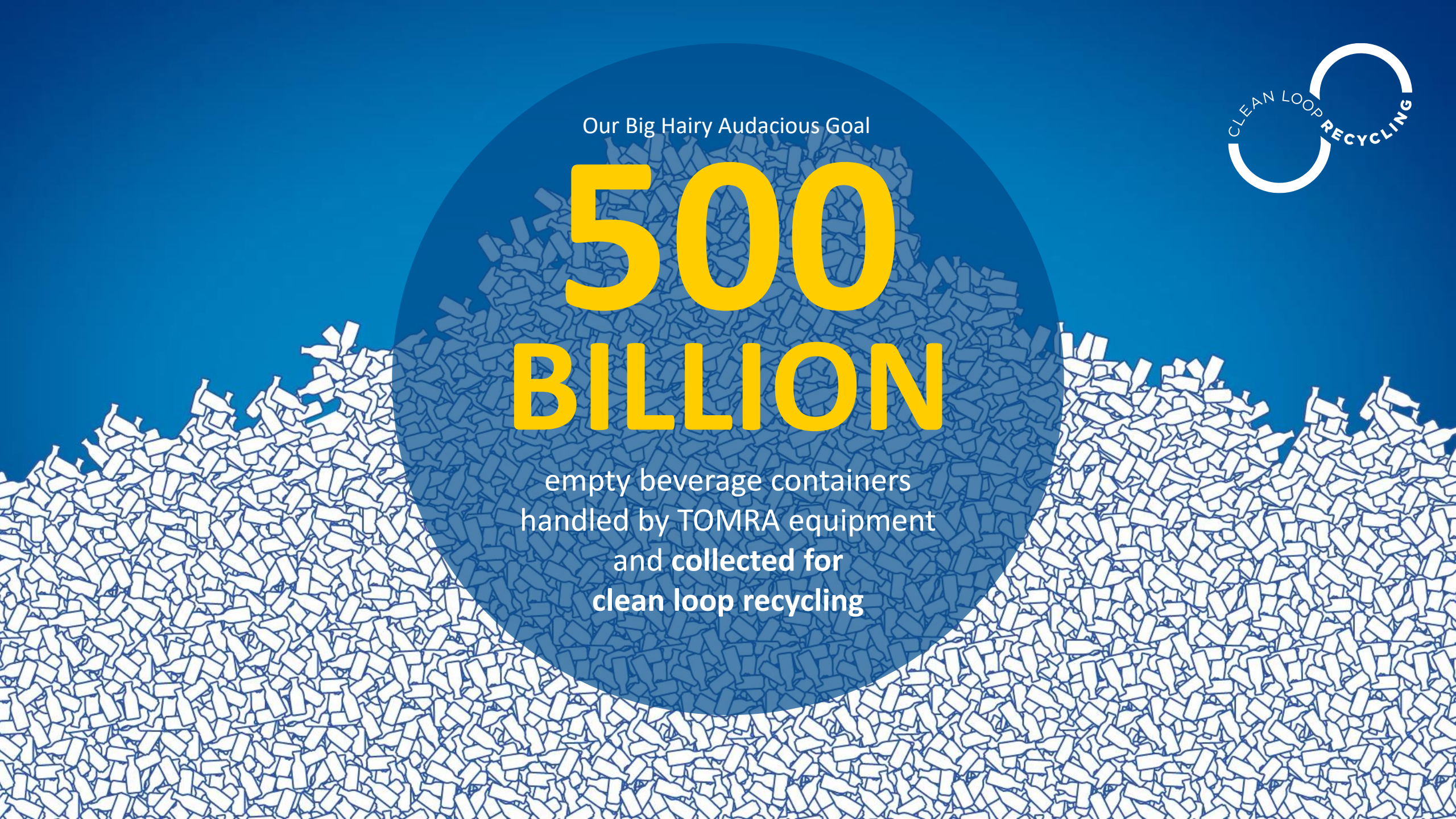


The goal

Support the market demands both on capacity and flexibility

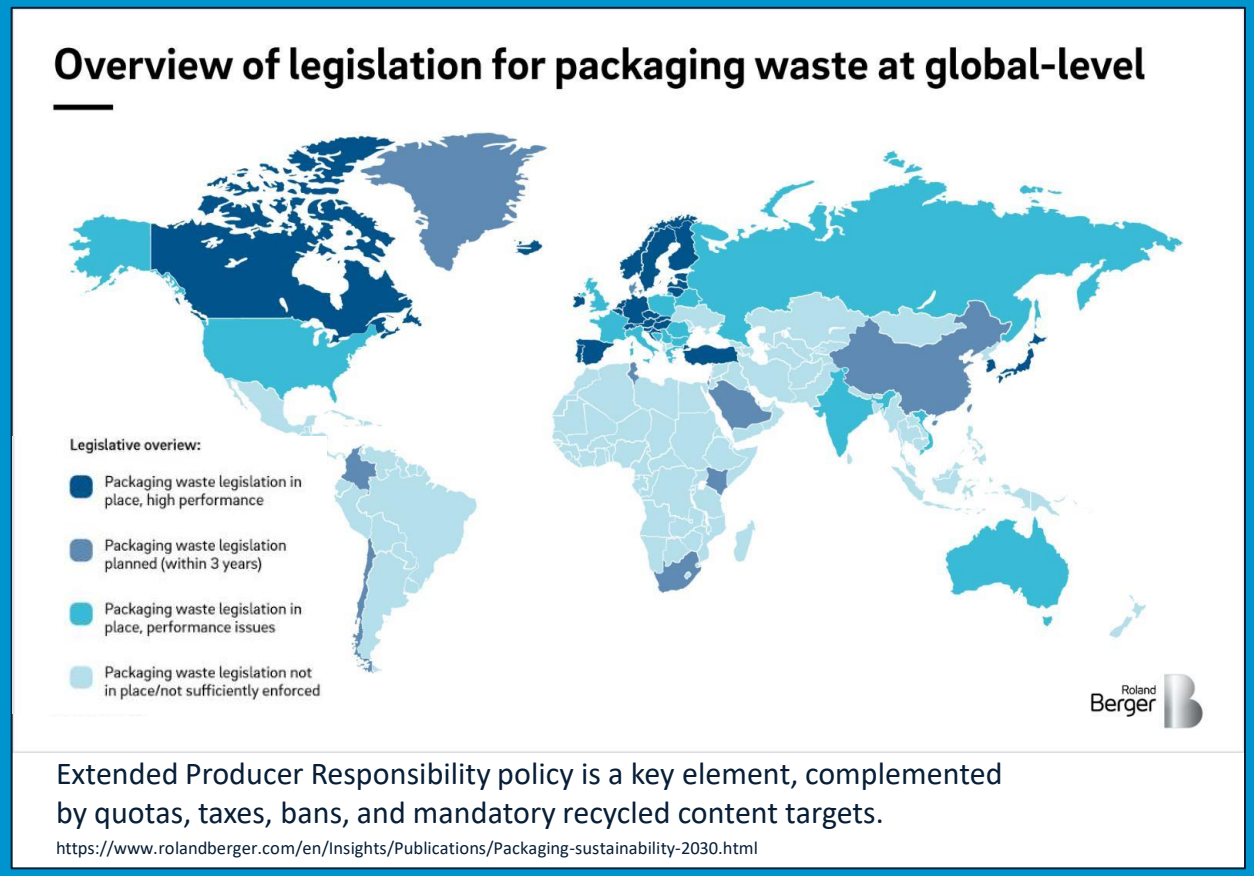
Capable of annual delivery of up to 30.000 RVMs

Dual sourcing strategy in focus to reduce risk and exposure (increase European sourcing)


Our Big Hairy Audacious Goal
500
BILLION
empty beverage containers
handled by TOMRA equipment
and **collected for**
clean loop recycling
CLEAN LOOP RECYCLING

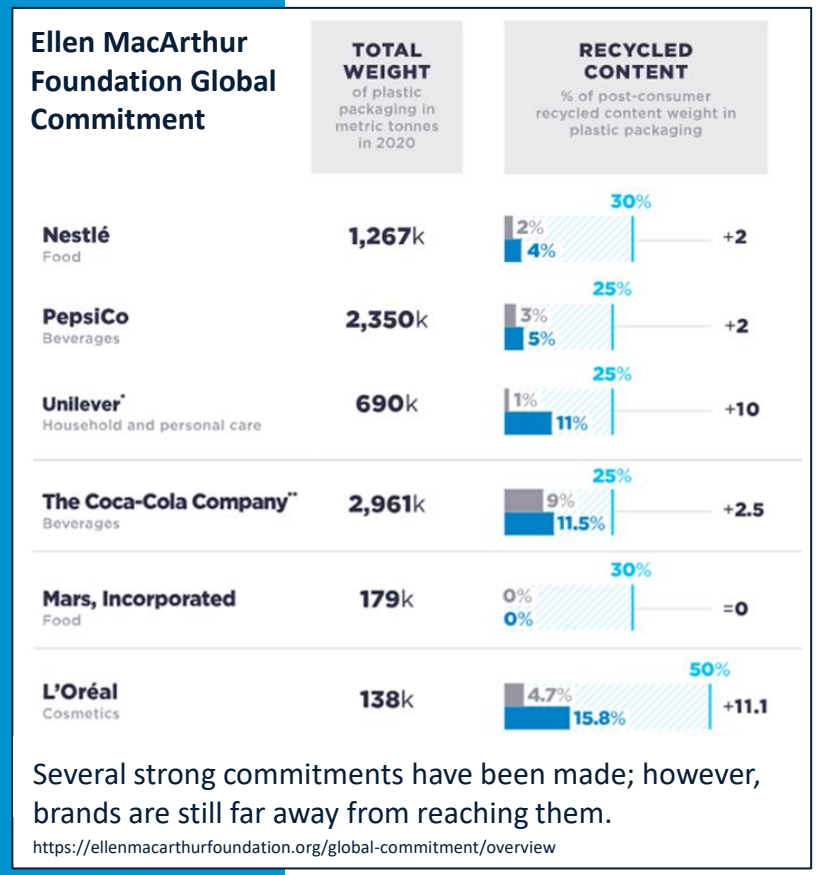
TOMRA Recycling

There is a legislative push and market pull towards a circular economy



Extended Producer Responsibility policy is a key element, complemented by quotas, taxes, bans, and mandatory recycled content targets.

https://www.rolandberger.com/en/Insights/Publications/Packaging-sustainability-2030.html

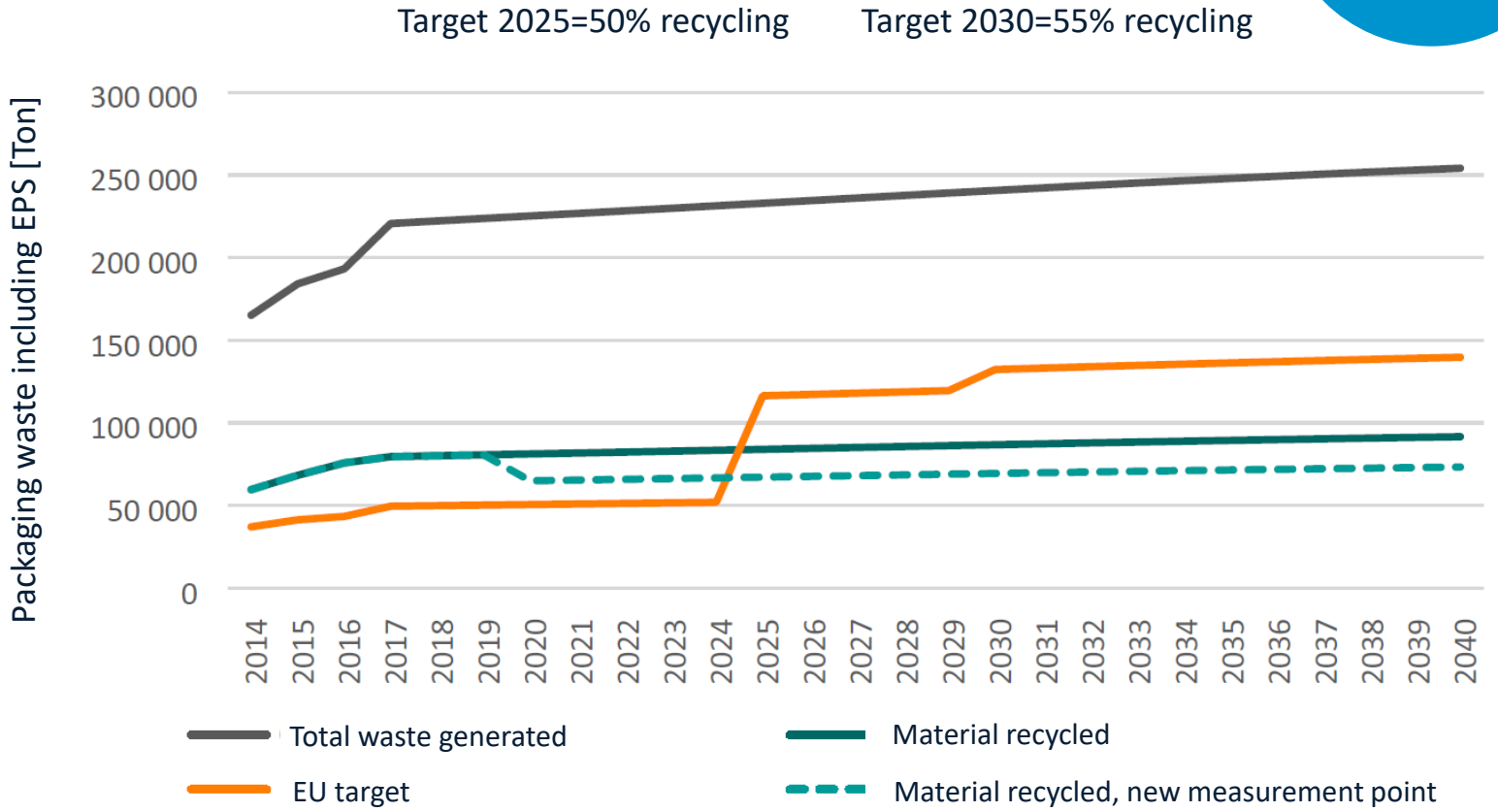


Several strong commitments have been made; however, brands are still far away from reaching them.

https://ellenmacarthurfoundation.org/global-commitment/overview

EU member states need to meet PPWD[1] targets for plastic recycling

Example: Norway



[1] Packaging and Packaging Waste Directive

Source: Utkast til høringsnotat med konsekvensutredning, Miljødirektoratet, February 27th 2020

Strong commitment from the industry to use recycled polymers

Selected global commitments (non-exhaustive)

“Our ambition is to use 1 million tons of plastic waste a year in our global chemical plants by 2025”

1 million tons

“Produce and market 2 million tons of recycled and renewable based polymers annually by 2030”

2 million tons

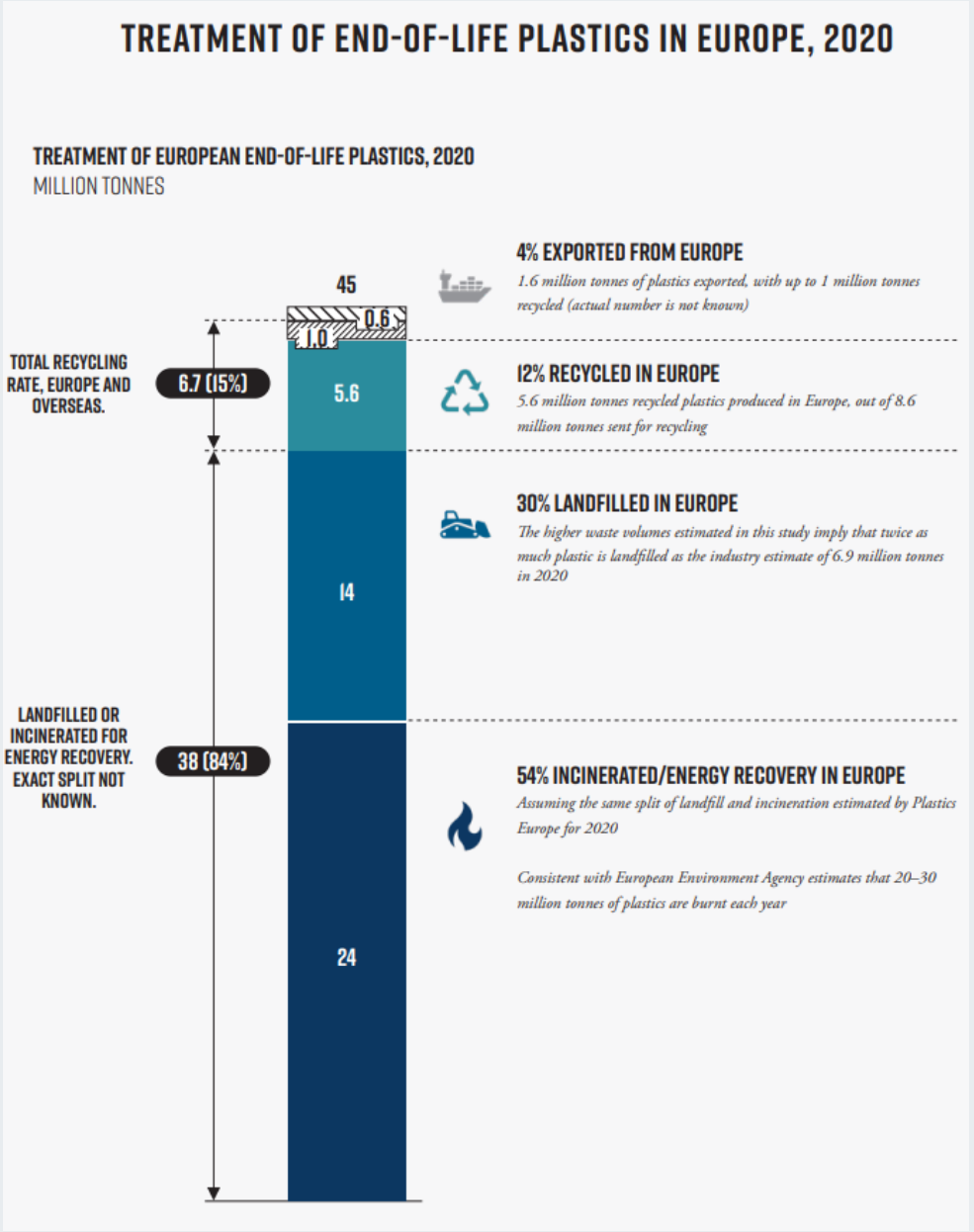
“Produce 2 million tons of sustainable (includes recycled and biobased) polyolefins by 2030”

2 million tons

“By 2030, Dow will enable 1 million tons of plastic to be collected, reused or recycled through its direct actions and partnerships”

1 million tons

+ others



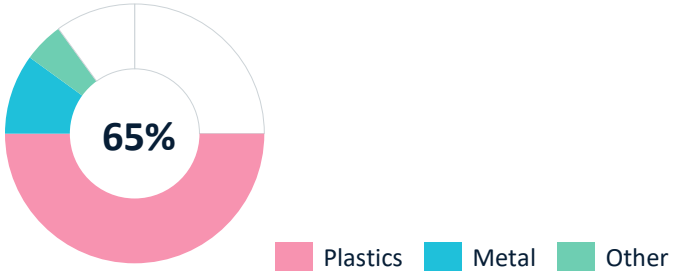
https://materialeconomics.com/publications/europes-missing-plastics

Sorting is essential for a circular economy

Waste sorting segment

Recover materials for recycling from both source separated and mixed household waste

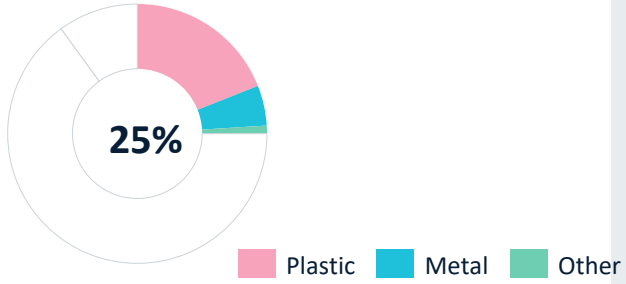
Segment share of installed base



Recycling segment

Upgrade material to pure fractions for high quality recycling

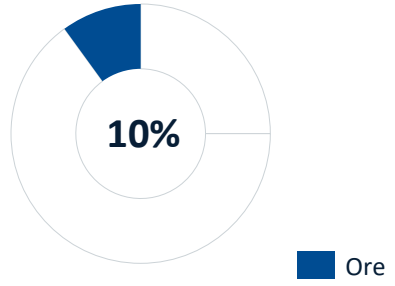
Segment share of installed base



Ore sorting segment

Recovery and ore sorting to reduce environmental impact

Segment share of installed base

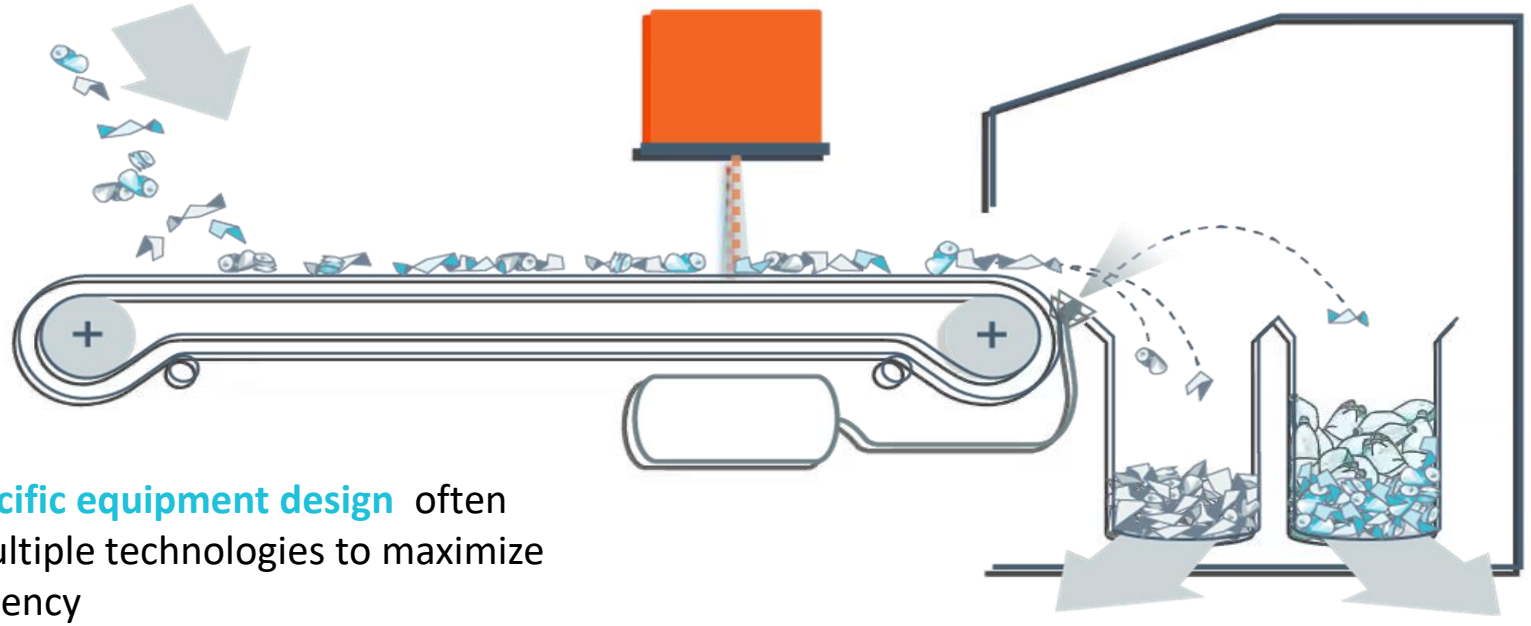


TOMRA

How does sensor-based separation work?

Feeding of
unsorted material

High-tech sensors to **identify objects**

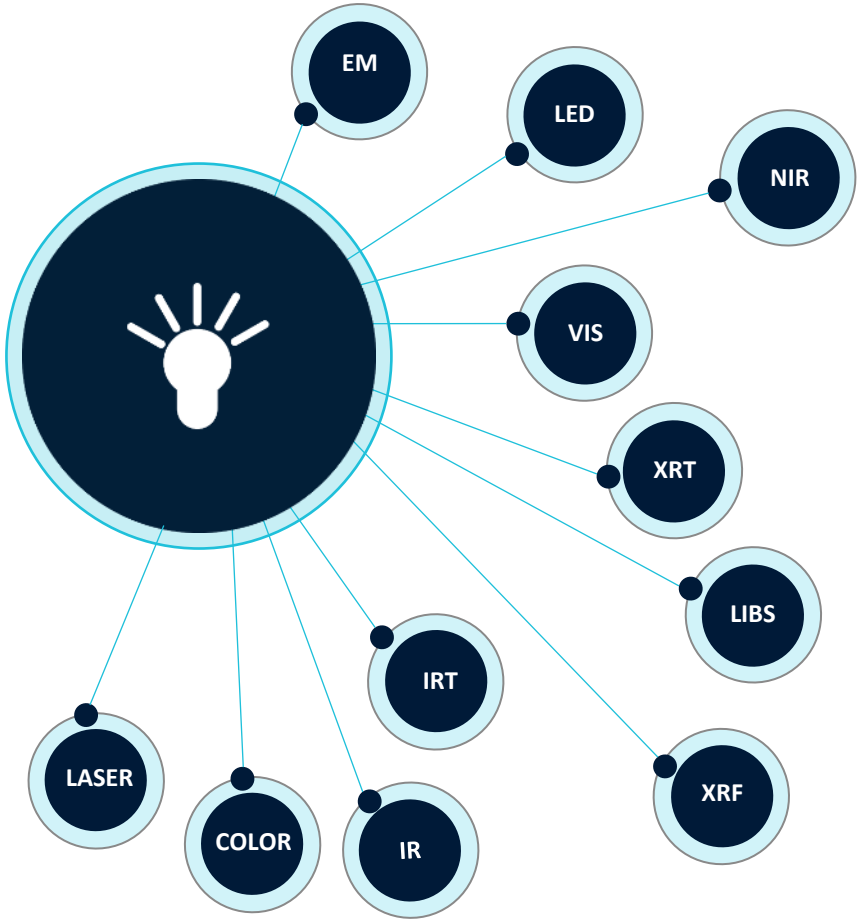


Precise ejection by ultra fast air jets

Product specific equipment design often including multiple technologies to maximize sorting efficiency

High-speed processing of information (material, shape, size, color, defect, damage and location of objects)

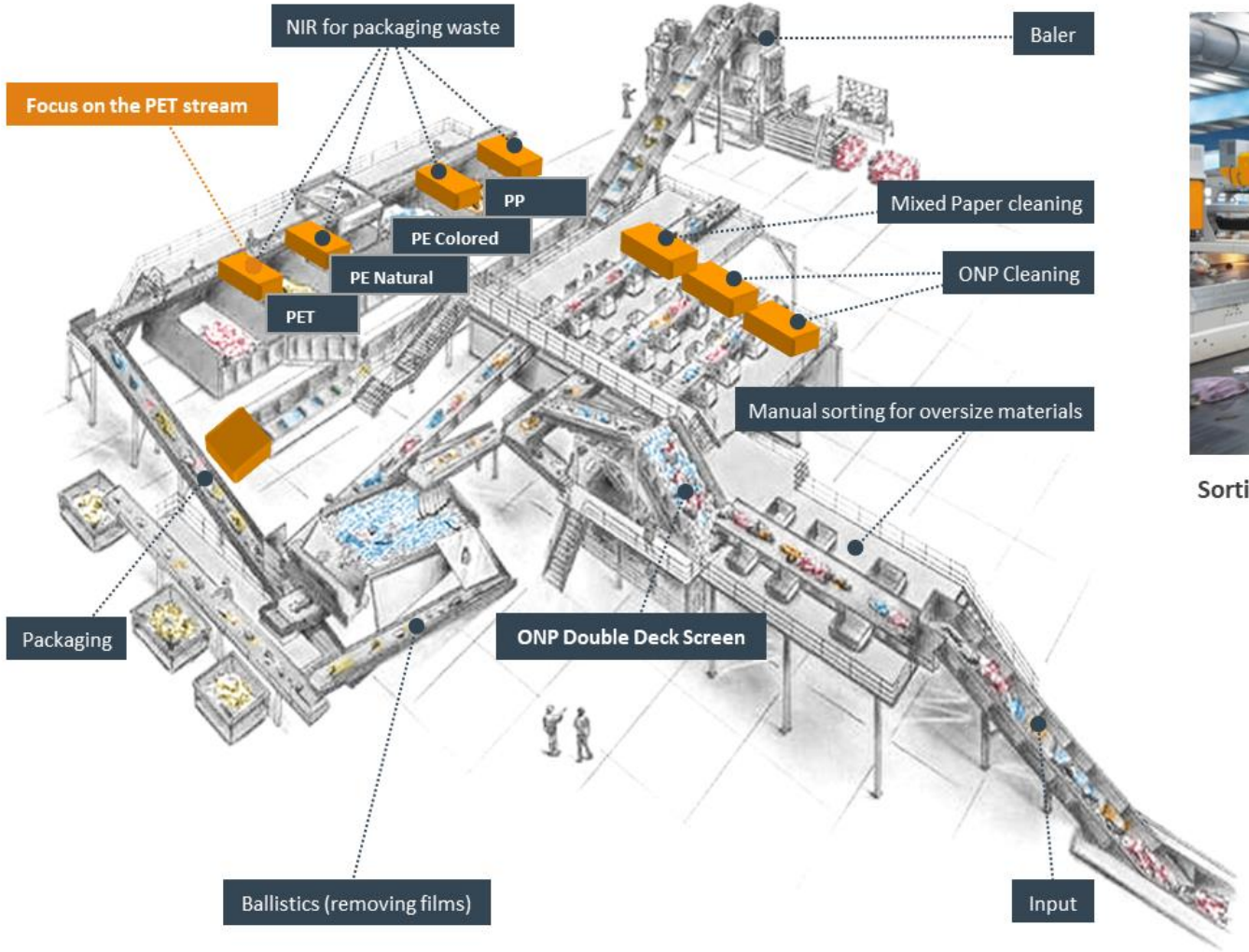
A broad sensor-based technology portfolio



	RECYCLING	FOOD
ELECTROMAGNETIC SENSOR (EM) Electro-magnetic properties like conductivity and permeability	X	X
LED SPECTOMETRY (LED) Color and spectral properties based on multiple LED light sources in very high optical resolution	X	X
NEAR-INFRARED SPECTROSCOPY (NIR) Specific and unique spectral properties of reflected light in the near-infrared spectrum	X	X
VISIBLE LIGHT SPECTROMETRY (VIS) Specific and unique spectral properties of reflected light in the visible spectrum	X	X
X-RAY TRANSMISSION (XRT) Atomic density irrespective of surface properties and thickness	X	X
LASER INDUCED BREAKDOWN SPECTROSCOPY (LIBS) Elemental composition	X	
X-RAY FLUORESCENCE (XRF) Elemental composition	X	
INFRARED TRANSMISSION (IRT) Density and shape properties by light absorption		X
IR CAMERA (IR) Heat conductivity and heat dissipation		X
COLOR CAMERA (COLOR) Color properties measured in very high optical resolution	X	X
LASER REFLECTION/FLUORESCENCE (LASER) Structural, elemental and biological properties by reflection, absorption and fluorescence of laser light	X	X

TOMRA

Automation with TOMRA units



Sorting of Municipal Solid Waste, Cyprus

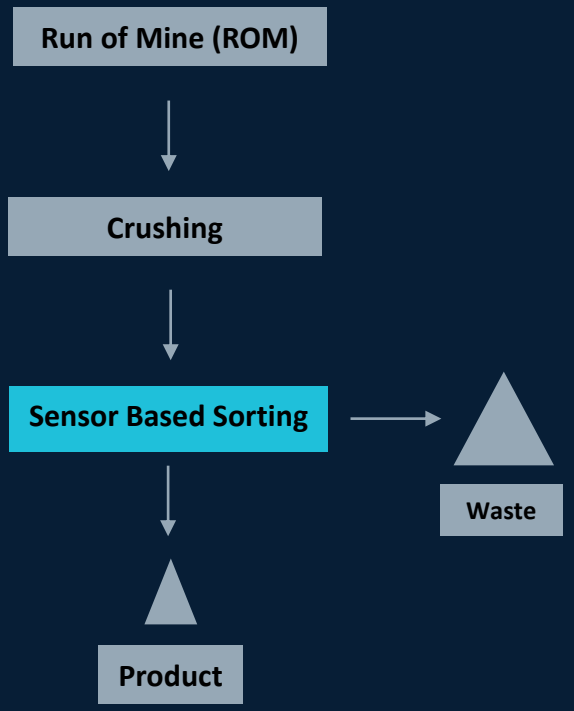
Our solutions enable recovery of recyclables from different waste streams

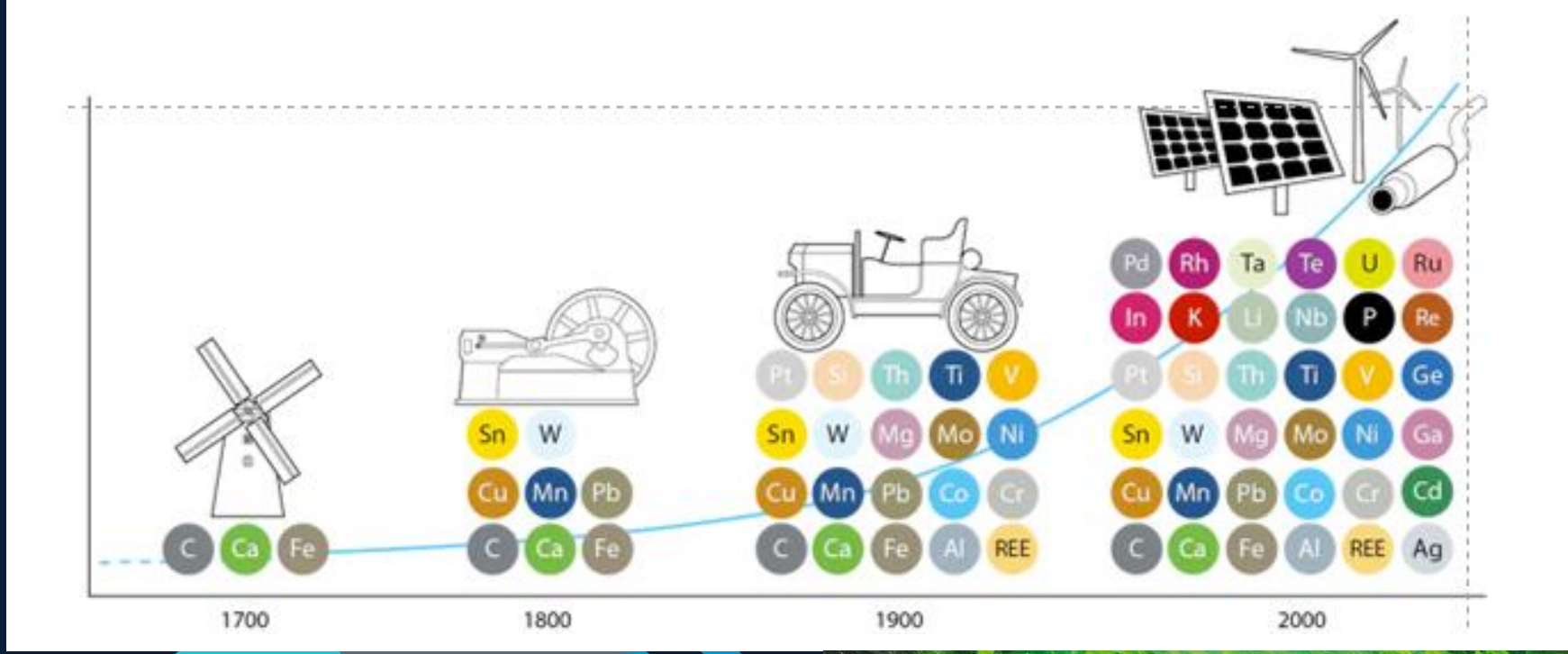
A modern packaging sorting plant can contain up to 60 NIR sorters

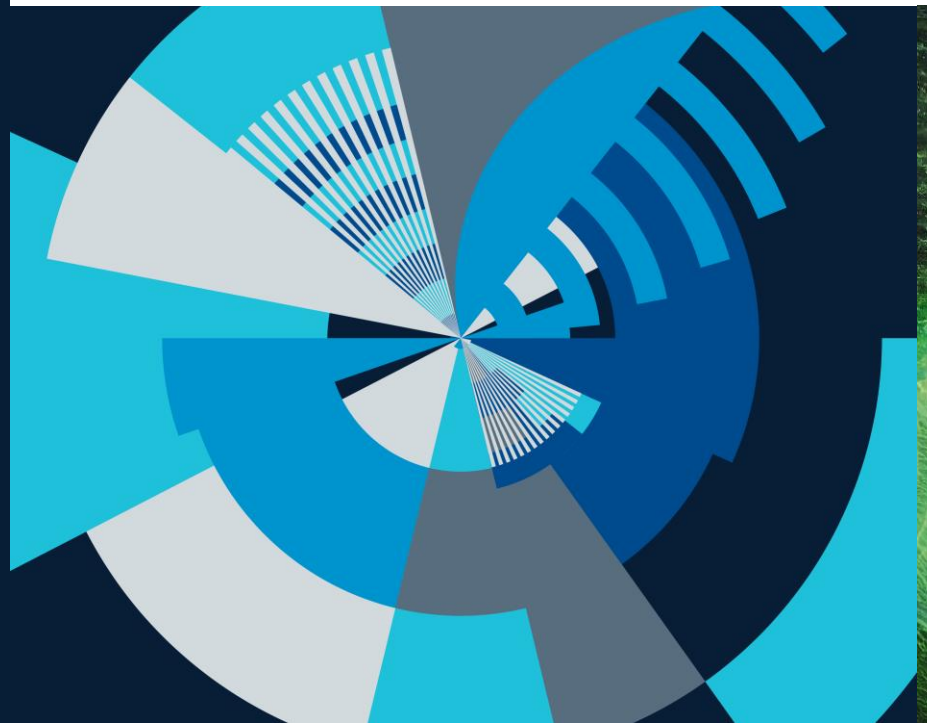
Our solutions can also recover valuables from residual waste streams

TOMRA

The essential nature of mining means that the industry needs to make a leap towards a more sustainable future







- *15% to 50% of the ROM can be rejected in an early stage of the process (application dependent)*
- *low grade waste rocks don't need to be transported, crushed, grinded, or further treated*

Our ore sorting solutions enable the mining industry to reduce their footprint

Ore sorting is used to:

- Reduce operational footprint by splitting the “good” and the “bad” materials early in the process
- Extend the lifetime of a mine
- Reclaim valuables for stockpiles

	VALUE-ADD:		
EFFECT OF SENSOR-BASED SORTING (SBS)	ENVIRONMENT	COST & PRODUCTIVITY	SAVINGS
Decreased energy consumption (Transport, pumping & dewatering, disposals)	✓	✓	• 15 kWh saved per ton of material • 2% to 3% of the world energy consumption is used for crushing, screening and milling
Decreased water consumption (Cooling, transport in the process)	✓	✓	• 3 to 4 m³ water saved per ton of material
Reduced carbon footprint	✓	✓	• CO2/Green counter, 7.5 kg per ton of material sorted • TOMRA Sorters saved ~124,000 metric tons of CO2 in 2018
Decreased Transport cost		✓	• Costs down €0.30/ton/km
Chemical usage decrease (Flotation reagents, acid for leaching and cyanide)	✓	✓	• A few grams up to a few kilos per ton
Reduced tailings (fine particles)	✓	✓	• 3 m³ tailings volume per ton (2 m³ material plus 1 m³ water)
Productivity increase (De-bottleneck conventional process)		✓	• Per ton of waste 1 additional ton of ore production
Lifetime of Mine increased	✓	✓	• 30-50% longer life of a mine
Waste into value (Create sellable product)	✓	✓	• The coarse waste rejected can be sold (for a low price)
Legislation		✓	• Up to 3 years quicker approvals
Reduced cut-off grade (Higher dilution in the mine, process marginal dumps)		✓	• 30-50% more reserves

Our technology and innovations continue to push the boundaries of the recycling sorting market

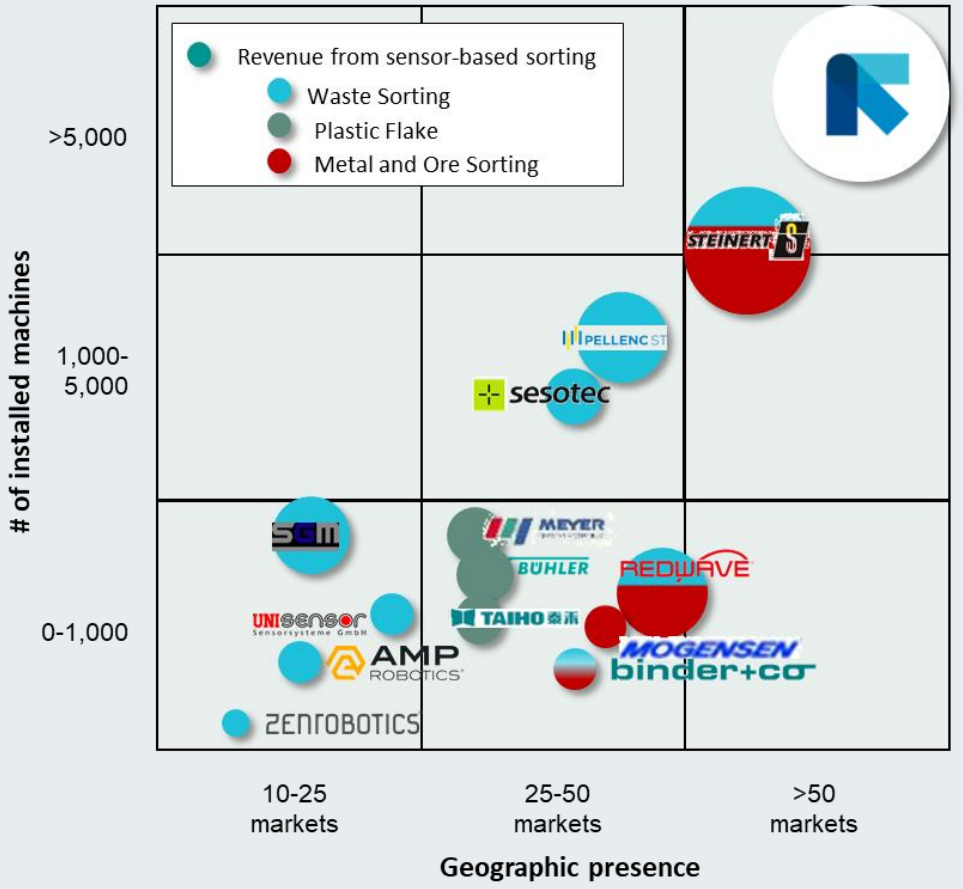
New segments for automated sorting

Increase of automation and performance

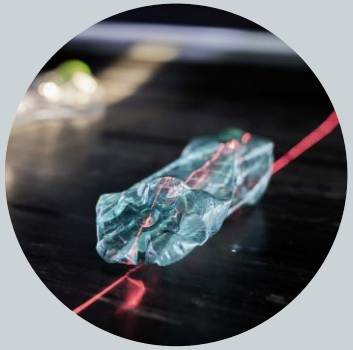
Capacity growth

Recycling sensor-based sorting equipment market

Out of scope for TOMRA addressable market: other non-sensor-based sorting equipment (magnets, ballistics, eddy currents), other waste processing equipment



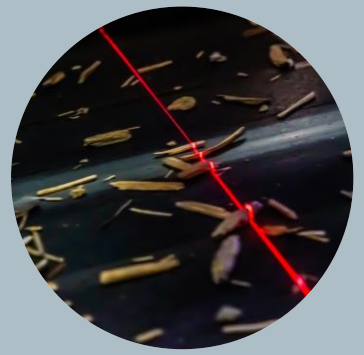
Our solutions close the loop by enabling high quality recycling



Plastics

We are actively pushing the boundaries of plastics recycling by:

- Demonstrating advanced mechanical recycling
- Supporting chemical recyclers



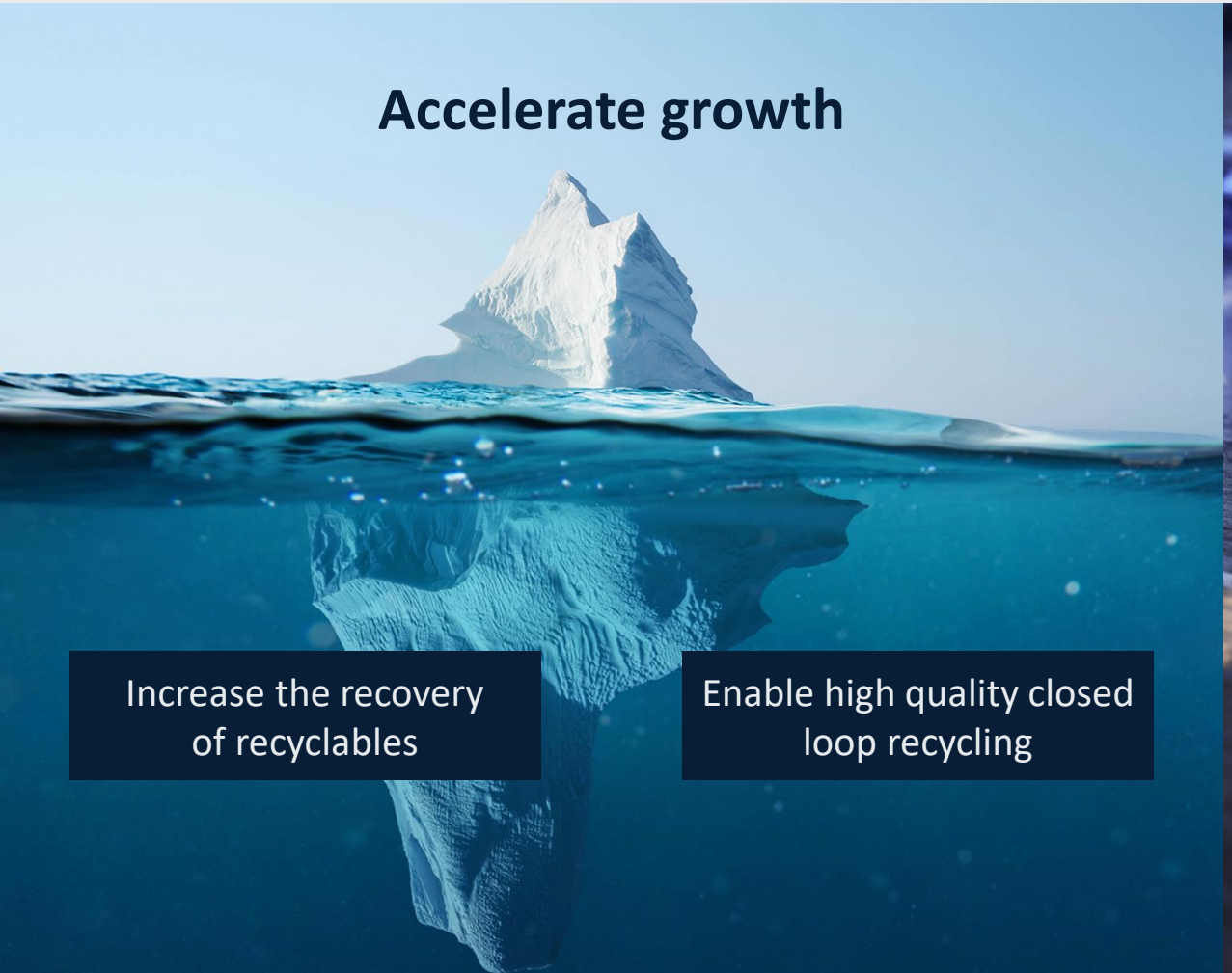
Wood sorting

Textile sorting

Alloy sorting

We are investing into the development of solutions for new segments

We have two strategic priority areas



Accelerate growth

- Increase the recovery of recyclables
- Enable high quality closed loop recycling

Provide leading solutions and innovations

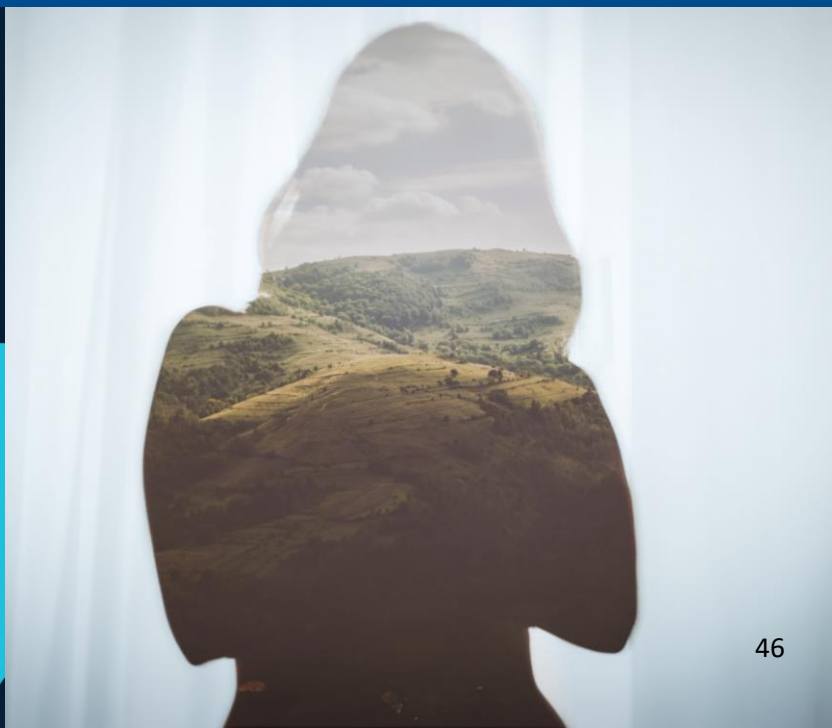
- Utilize cutting edge sensor technology
- Exploit the power of deep learning
- Deep market expertise and partnership
- Develop digital solutions & services

We are here to enable closed loop recycling solutions - material stream by material stream

Our commitment towards plastic packaging by 2030

30%

of post-consumer plastic packaging is recycled in a closed-loop



TOMRA Food

Robust drivers supporting the market

North America, Europe and Oceania

Latin America and South Africa

Asia

Automation Potential (illustrative)

Potential

Current level

- Population growth and rise of the middle class
- Continued loss and waste of food
- Shift to automation and digital tools
- Cyclical investments in different categories, regions and seasons

TOMRA Food with a strong value proposition

Why Automate

Why TOMRA

Know-how

Expertise to transform the food industry

Technology

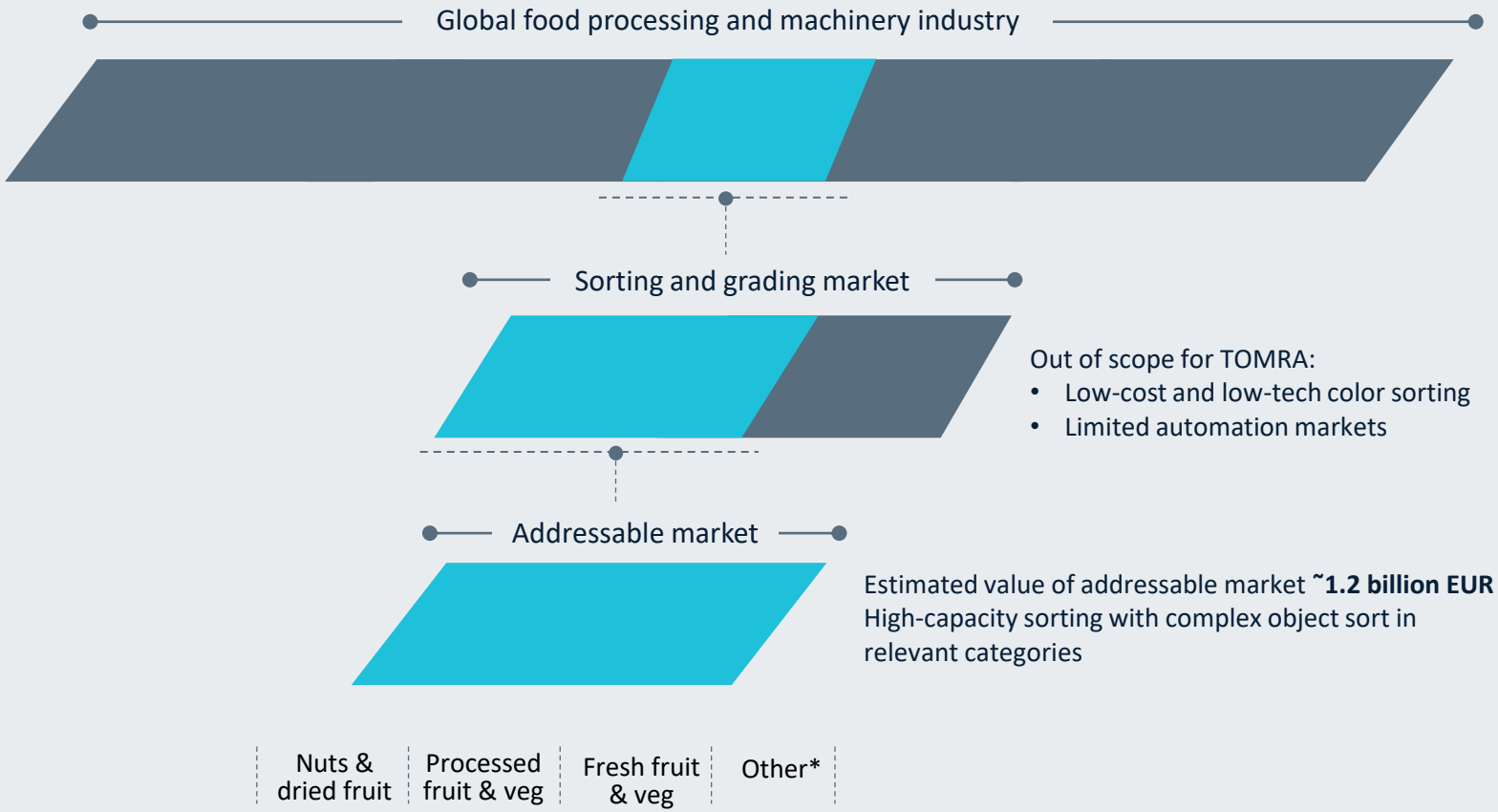
Best-in-class sorting and grading solutions, and digital insight

Partnerships

With local understanding, global know-how and long-term relationships

Market position and addressable market

We are addressing approximately 60% of the total food sorting and grading market



*includes protein, pet food, confectionary, etc.

Our Technology…

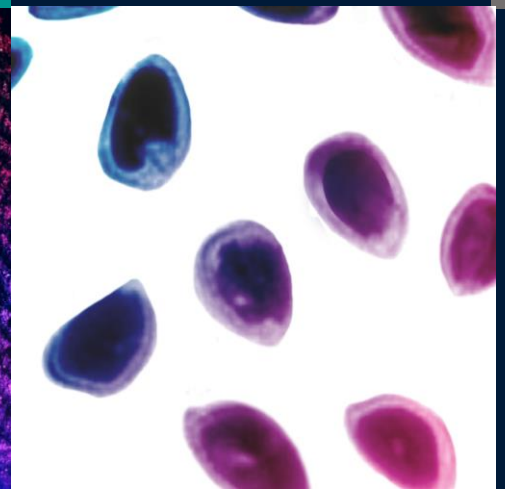
Camera

Laser

Digital

Pulsed LED

Spectroscopy



X-ray

...are detecting a wide range of parameters

Foreign Material

Removal of foreign material in a material stream, e.g. insects, glass, metal, wood & plastics

Blemishes

Objects with spots or other (small) blemishes are removed

Toxins

Removal of produce contaminated with aflatoxin

Structure

Removal of soft, molded or rotten food

Biometric Characteristics

Sort based on chemical composition such as water, protein content, sugar content (Brix) and dry matter

Shape & Size

Sort on length, width, diameter, area, broken-piece recognition

Color

Grading by color or removal of discolorations in mono- and mixed-color material

Defects

Removal of visible and invisible small and substantial defects

Damage

Broken, split and damaged objects are detected and removed

Fluo

Based on the chlorophyll level present in produce defects are removed

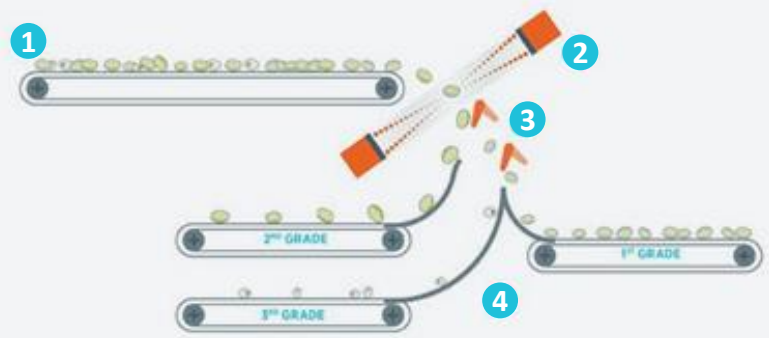
Density

Detection of density differences

- **Visible**
- **Invisible**
- **Both**

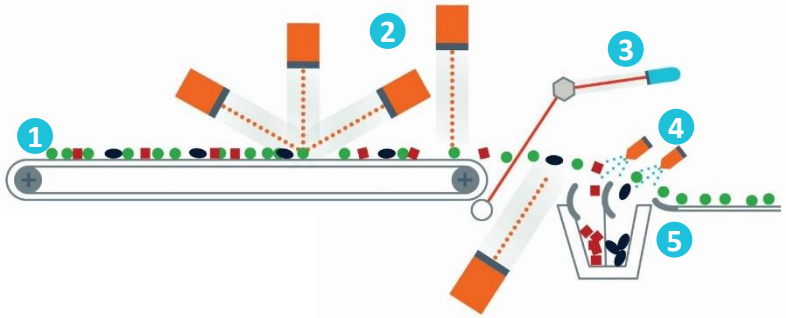
Working principles in Food sorting

Air inspection



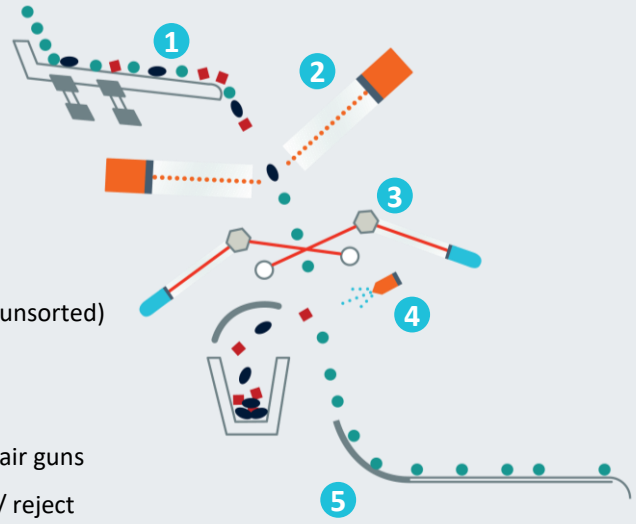
1. Infeed belt (unsorted)
2. Full width NIR and Color Vision sensors
3. Intelligent finger ejectors
4. Accept/reject

Belt inspection



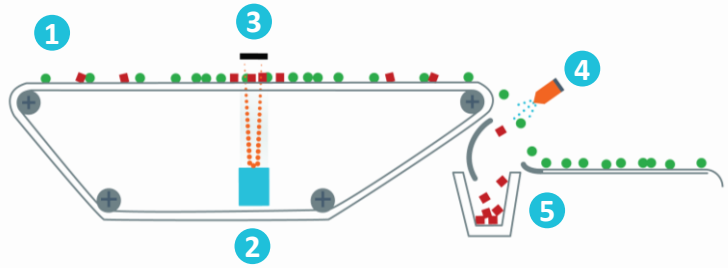
1. Infeed Belt (unsorted)
2. Cameras
3. Lasers
4. Precise air guns
5. Accept / reject

Chute or Channel sorter



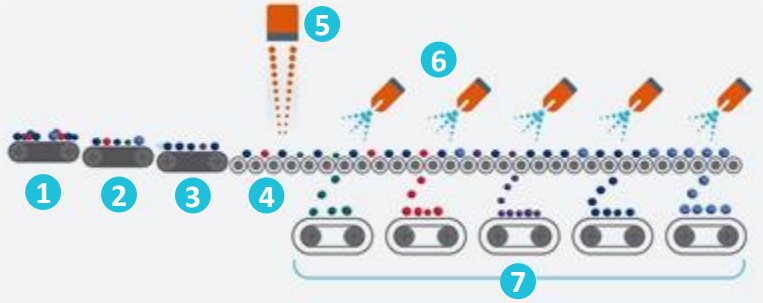
1. Infeed (unsorted)
2. BSI+
3. Laser
4. Precise air guns
5. Accept / reject

Xray sorter



1. Infeed (unsorted)
2. X-ray source
3. X-ray detector
4. Precise air guns
5. Accept / reject

Singulated grading



1. Accumulation conveyor
2. Singulation conveyor
3. Acceleration conveyor
4. Roller rotation units
5. Cameras and NIR sensors
6. Gentle tipping or air jets
7. Specified grade

Food technology platforms

Solutions for fresh and processed produce

TOMRA A Product Line

TOMRA 3A Series

TOMRA 5A Series

TOMRA B Product Line

TOMRA 5B

TOMRA C Product Line

TOMRA 3C

TOMRA 5C

TOMRA X Product Line

TOMRA 5X

Peeling Lines

Peeling

Integrated sorting solutions for fresh produce

TOMRA S Product line

TOMRA 5S Advanced

Single/Dual lane sorter

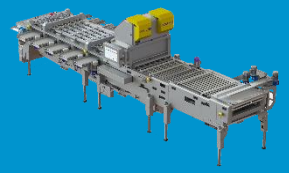
ULTRAVIEW

SPECTRIM

INSPECTRA²

Small Fruit Sorter and KATO260 Line

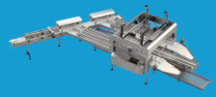
Small Fruit Sorter



KATO260 with LUCAi

TOMRA NEON 3

CURO16



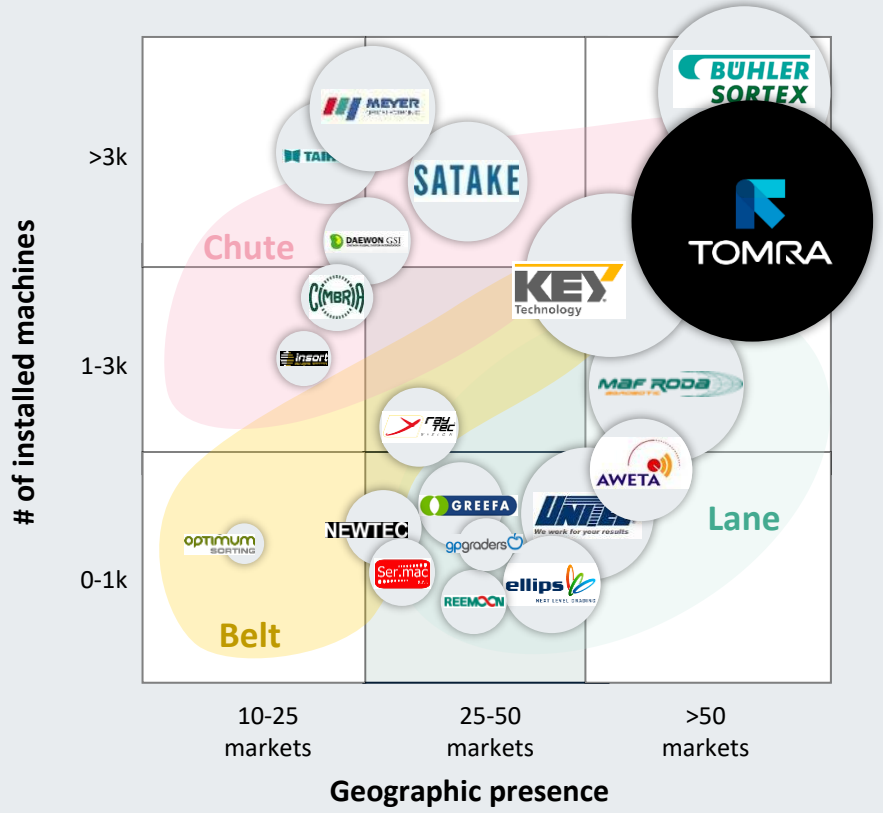
KETE16

Leading position globally

Total Food Sorting and Grading Market

Addressable Food market

TOMRA 2022: ~0.4 EUR billion



Size of bubble = Estimated revenue from sensor-based sorting and related peripherals within the addressable market

Food Categories

Potatoes

Nuts & Dried Fruit

Vegetables

Apples

Citrus

Berries

Cherries

Fresh Cut

Avocados

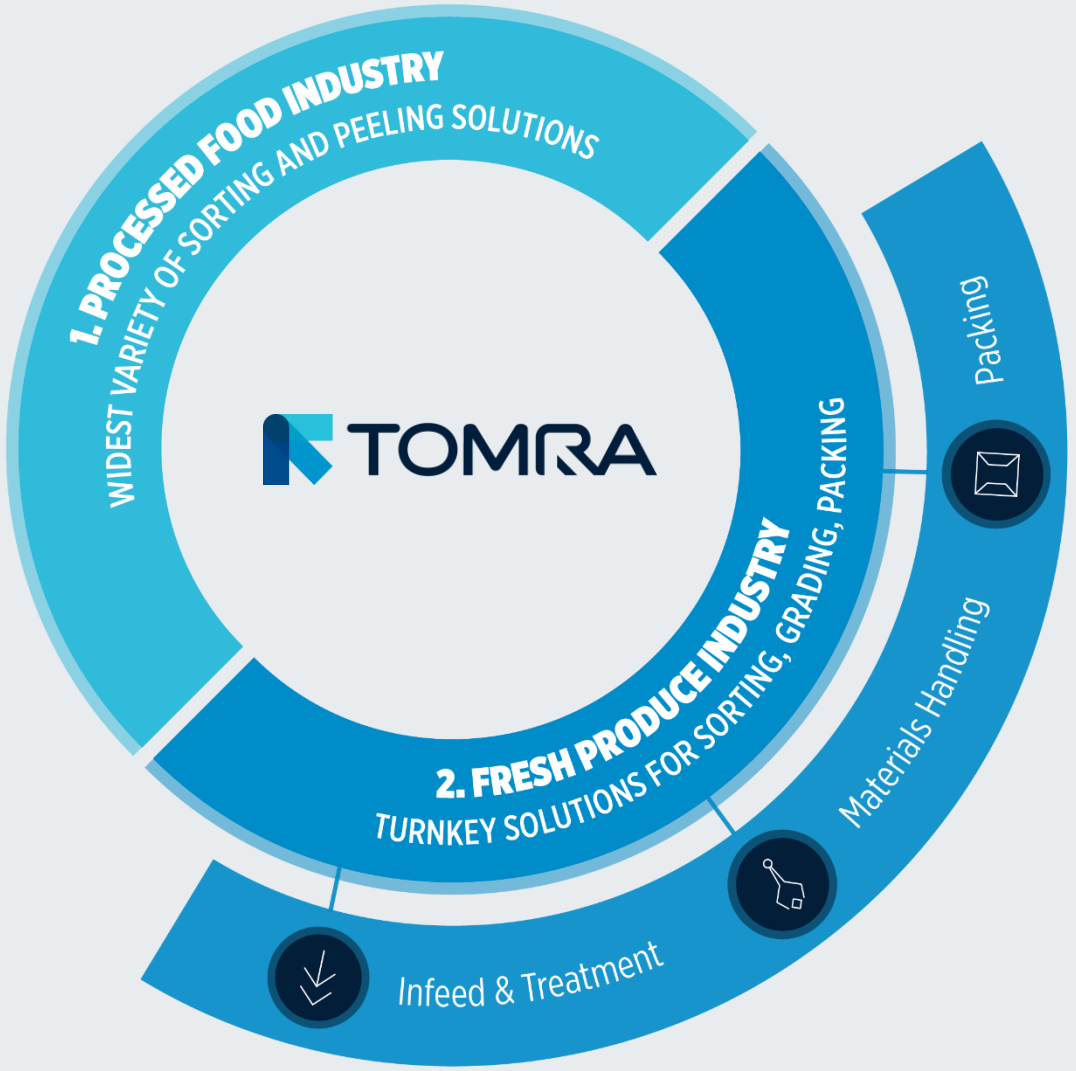
Kiwifruit

Grains & Seeds

Leading technology

Sorting & Grading

Artificial Intelligence



Data & Analytics

Service & Support

TOMRA

Some of our customers

Processed Food

Orkla

Nomad Foods

vitafoods

BY APPOINTMENT TO THE ROYAL DANISH COURT
Royal Greenland

Apetit

bama

Intersnack

Fresh Food

PROPAL®

costa
fresh is our passion

Cuties

peelz

FILLMORE · PIRU CITRUS
· SINCE 1897 ·

Wonderful halos

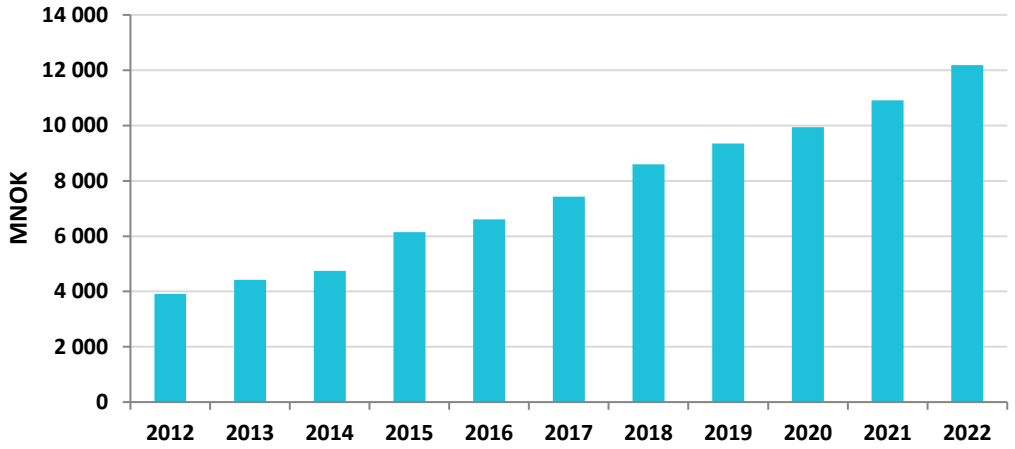
Giacovelli
È QUALITÀ

PerlaFruit

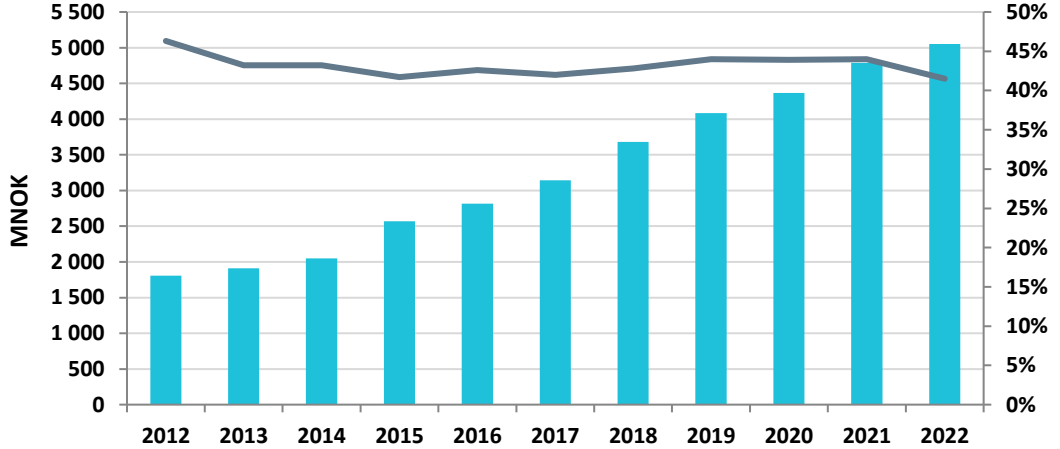
Corporate strategy and sustainable growth

Group financials development

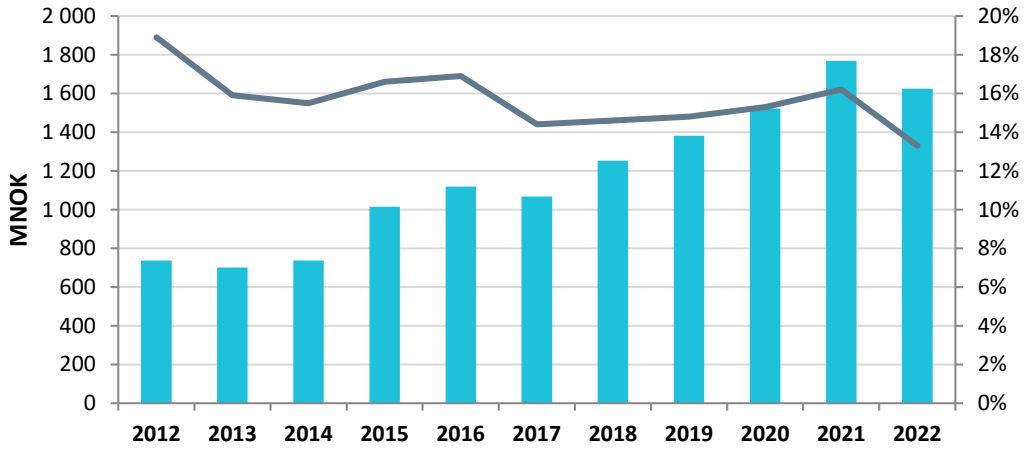
Revenues



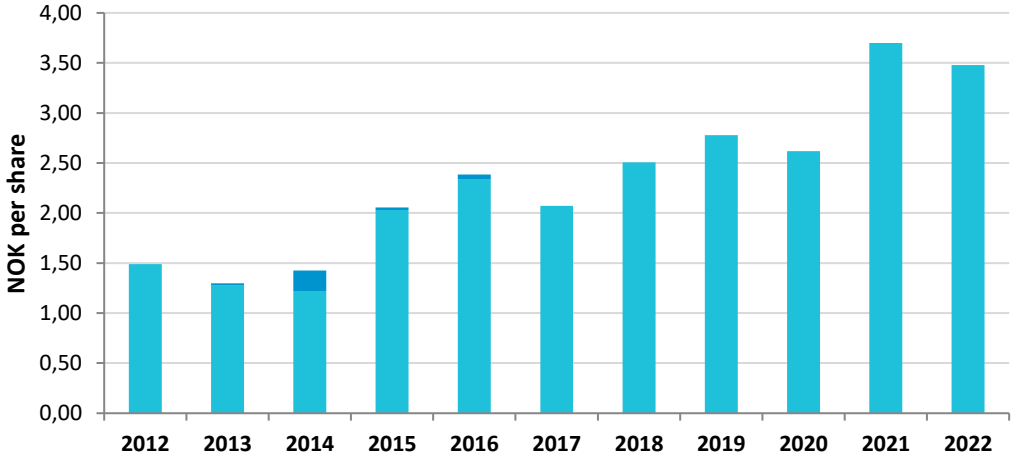
Gross contribution and margin



EBITA and margin



Earnings per share



Not including discontinued operations (Orwak divested 2014), except for EPS

Recycling and Food

Connect to POSSIBILITIES

TOMRA INSIGHT


Our strategy is to
accelerate growth in core
business
and
develop adjacent
opportunities

Ideally positioned to develop adjacent opportunities

TOMRA's competitive edge, market position and technology can be applied in areas beyond our current operations

Strong macro trends and emerging business models within **circular economy** and **resource efficiency**

Enabling automation in textiles recycling

Digital business models

Examples of what we are exploring

Collection systems for reusable packaging

Closing the gap in plastic recycling

The gap in plastics recycling

Majority of plastics are lost today

- In Europe alone, 24 million tons of plastics are lost to incineration and 14 million tons to landfill
- The volume of each waste plant and incinerator is too low for sophisticated sorting to ensure the quality and fractions required for recycling

GAP

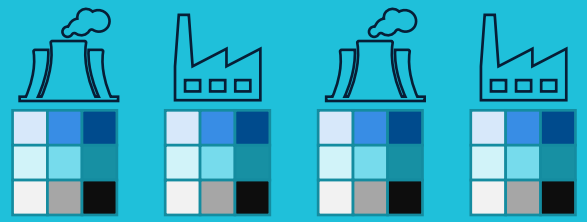
Demand for recycled plastics

- Already a strong demand for recycled plastics will increase significantly in the next few years (more than 10 million tons from major plastic producers)
- Mechanical and chemical recyclers need an individual polymer fraction at sizeable volumes to justify investments

TOMRA

Closing the circularity gap

Suppliers

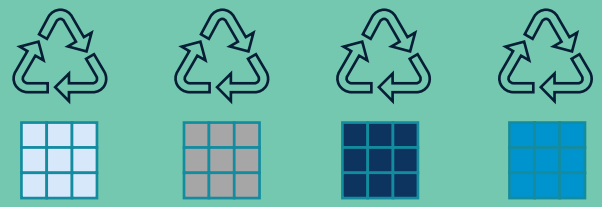


Mixed plastics fraction needs to be made available by incinerators, landfills, and other sources

TOMRA

Connecting the value chain

Customers



Sorted polymer fractions (e.g., HDPE, PS, PP, etc.) to be supplied to recyclers with the right quality

TOMRA is uniquely positioned along global megatrends


TOMRA
Our ambitions 2022 – 2027
Revenue growth
15% CAGR
EBITA margin
at 18%
Dividend payout
40 – 60% of EPS
Capital structure
Investment grade
Net Zero
Holistic sustainability strategy

Our ambition is to keep an investment grade status

A-

Scope Ratings
June 2022

Financial Risk Profile
A

Business Risk Profile
BBB+

Green Bond Framework

Investment grade

TOMRA Green Bond Framework

The Green Bond Principles

°CICERO Dark Green

Use of proceeds

ICMA category: Pollution prevention and control	
Expenditures related to:	Examples of eligible assets:
Collection, sorting and processing of beverage containers	• Manufacturing, installation, maintenance, and operation of reverse vending machines (RVMs) • Sorting and processing facilities • R&D related to the development and design of RVMs • Collection systems for reusable packaging • Outreach to raise awareness and support for deposit return schemes
Recovery and upgrading of valuable materials from waste streams for recycling	• Software development for waste sorting machines • Assembly lines for manufacturing of sorting machines • R&D to improve performance or enable sorting of new types of materials (e.g., textiles) • Investments in the sorting and processing of post-consumer materials
Minimizing the carbon footprint of operations	• Renewable energy equipment • Clean transportation • R&D to increase the use of sustainable materials

Highlights form Cicero Second Party Opinion

"TOMRA's RVMs and waste sorting machines are **well-aligned with circular economy solutions and a low-carbon future"**

By improving material recovery for recycling and reuse, TOMRA's RVMs and waste sorting machines are an **important contribution to the climate transition, a more circular economy, and improved waste management**"

"RVM solutions have the potential to **limit climate emissions, local pollution, and harmful biodiversity impacts**"

"TOMRA has **significantly strengthened** its sustainability strategies"

"The overall assessment of TOMRA's **governance structure** and processes gives it a rating of **Good**."

°CICERO Shades of Green

Dark Green is allocated to projects and solutions that correspond to the long-term vision of a low-carbon and climate resilient future.

Targets for Sustainable Growth

Double the avoided emissions enabled by TOMRA products in use

Commitment to Net Zero emissions and setting Science Based Targets (to be externally verified by 2024)

100% renewable electricity

>80% reduction in operational transport emissions

>90% sustainable materials and components in all new products

>50% of our products are circular at their end of life

Strive for zero work-related injuries and illness in providing a safe place for people and the environment

Attract diverse talents from all the colorful facets of humanity, with a goal of 50% women and men joining annually

Grow female representation in senior management to >30%

Improve employee satisfaction and engagement with top quartile NPS Score

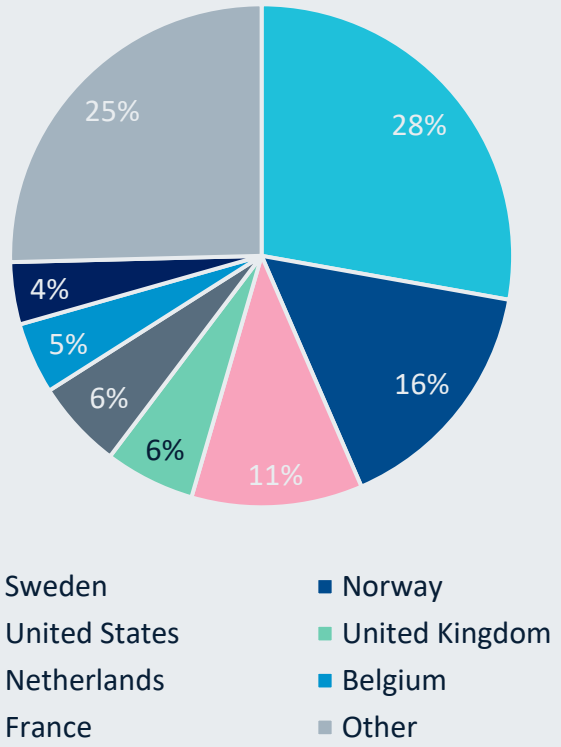
Resource Productivity | Climate Impact | Sustainable Product Design | Employee Value Proposition | Supply Chain Sustainability

Shareholder structure

Top 10 shareholders as of 31 December 2022*)			
1	Investment AB Latour	62 400 000	21,1 %
2	Folketrygdfondet	19 738 040	6,7 %
3	BlackRock	14 461 568	4,9 %
4	APG Asset Management	14 220 630	4,8 %
5	Candriam	12 265 935	4,1 %
6	Handelsbanken	9 534 039	3,2 %
7	Swedbank Robur Fonder	7 762 035	2,6 %
8	Vanguard	7 036 234	2,4 %
9	Alliance Bernstein	6 306 358	2,1 %
10	Impax Asset Management	5 207 880	1,8 %
	Sum Top 10	**158 932 689**	**53.7%**
	Other shareholders	137 107 467	46.3%
	TOTAL (12 287 shareholders)	**296 040 156**	**100.0%**

**) ultimate ownership accounts based on available information*

Shareholders by country**)



***) ownership data includes nominee accounts*

Source: IPREO, VPS


For a sustainable planet for generations to come


we have an obligation to grow

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