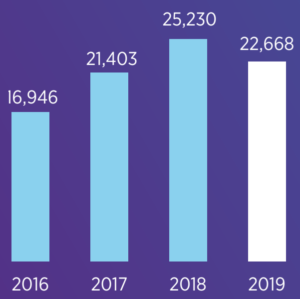
DELIVERING
YOUR POTENTIAL

Elkem

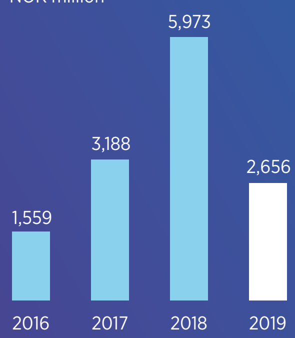
Annual report **2019**

Elkem at a glance

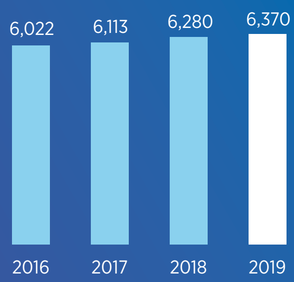
Total operating income
NOK million

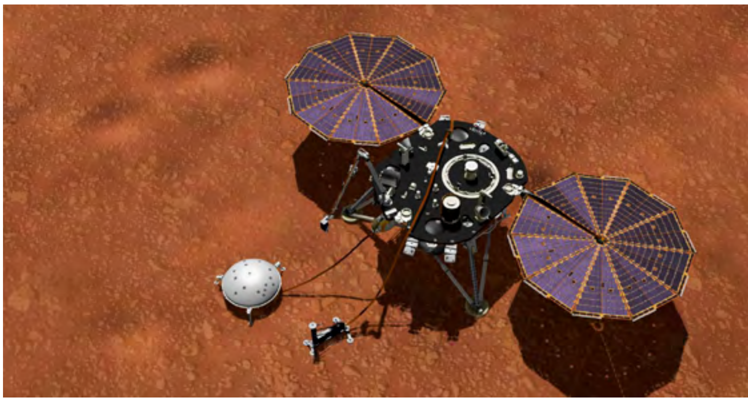


EBITDA
NOK million



Number of employees
Full time equivalent





Who we are and what we do

Established in 1904, Elkem is one of the world's leading companies for environmentally responsible manufacturing of metals and materials. Elkem is a fully-integrated producer with operations throughout the silicon value chain from quartz to silicon and downstream silicone specialities, as well as speciality ferrosilicon alloys and carbon materials.

Elkem has 6,370 employees and consists of four business areas: Silicones, Silicon Materials, Foundry Products and Carbon.

Headquartered in Oslo, the company's 29 production sites and extensive network of sales offices and agents around the world ensure proximity to customers and access to attractive end markets. Elkem was re-listed on the Oslo Stock Exchange in March 2018.

Elkem's total operating income in 2019 amounted to NOK 22,668 million, with an EBITDA of NOK 2,656 million.

Contents

Elkem – key figures and highlights

Key figures

	Metric	2019	2018	2017	2016
Total operating income	*NOK million*	**22,668**	25,230[1]	20,985	16,594
Operating income growth	*%*	**(10)**	202	26	
EBITDA	*NOK million*	**2,656**	5,793	3,188	1,559
EBTIDA margin	*%*	**12**	22	15	9
EBIT	*NOK million*	**1,189**	4,522	1,927	264.0
Profit (loss) for the year	*NOK million*	**897**	3,367	1,249	(268.0)
Cash flow from operations	*NOK million*	**2,140**	4,030	2,336	1,051
Reinvestments of D&A	*%*	**80**	84	72	57
Total assets	*NOK million*	**29,004**	31,129	25,507	23,092
Net interest-bearing debt	*NOK million*	**5,722**	3,264	8,111	9,502
Debt leverage	*Net debt/LTM EBITDA*[3]	**2.2**	0.6	2.5	6.1
Equity	*NOK million*	**12,952**	13,722	8,565	5,830
Equity	*%*	**45**	44	34	25
ROCE	*%*	**7**	28	13	2
Earnings per share	*NOK*	**1.47**	5.74	2.08	(0.52)
Number of employees	*Full time equivalent*	**6,370**	6,280	6,113	6,022
Total recordable injury rate H1+H2	*Injuries per million working hours*	**2.1**	2.2	3.1	5.3
NOx emissions	*Tonnes*	**6,718**	7,068	7,109	7,309
CO_2 emissions	*Million tonnes*	**2.15**	2.54	1.77	1.49
Energy consumption	*TWh*	**6.01**	6.23	5.28	4.40

1) *2018 figures have been restated, see note 13 Changes in accounting policies.*
2) *Figures for 2018 to 2016 is restated as a result of Elkem's change in accounting principles for presentation of sale of power. For more information se note 35 in Consolidated financial statements. The restatement of 2016 and 2017 figures are unaudited.*
3) *Last twelve months earnings before interest, taxes, depreciation and amortization.*

Realised cost improvements of NOK 596 million, surpassing 2019 goal.

NOx emissions reduced by 13% since 2015

Female participation in Elkem's leadership training programmes increased to 32% in 2019.

Highlights 2019

- Elkem Limpio, Paraguay milestone: production based on 100% biocarbon and hydro power
- Elkem Fiskaa, Norway to establish battery graphite pilot plant
- Elkem awarded gold rating by business sustainability rating company EcoVadis
- Elkem Silicones expand product offering in Mexico and India
- Construction start of Elkem's largest energy recovery project so far at Elkem Salten, Norway
- Elkem acquires Basel Chemie, a leading Korean producer of specialty silicones gels
- Construction start of new R&D center in Lyon, France
- Michael Koenig new CEO of Elkem ASA
- Elkem acquires Polysil, a leading Chinese silicone elastomer and resins company


1 NO POVERTY
2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS
THE GLOBAL GOALS
For Sustainable Development

Letter from the CEO

Steady course in stormy seas

After an extraordinary 2018, with solid markets and the strongest financial results in the company's history, 2019 has been more challenging. Elkem's growth ambitions remain firm, supported by global trends that will drive demand for our products.

The weaker macro climate has taken its toll and shows financial impact, but it also reveals the robustness and advantageous cost positions of Elkem.

While we are continuing our growth strategy, we have also started a cost reduction programme that will make us stronger.

We must improve further, as the difficult times do not seem to be over. The market environment has changed, ongoing geopolitical trade conflicts have created tensions and we have seen the lowest prices on silicon and ferrosilicon since before the financial crisis.

Global megatrends like urbanisation, digitalisation, increased standards of living and the rising demand for renewable energy drive growth in demand for Elkem's products.

We want to grow faster than the market by combining acquisitions, organic growth projects and specialisation.

Elkem's silicones business is already capturing on the exponential growth in the market for electric vehicles (EV), as the average EV contains approximately four times more silicones than a conventional car. By 2030 one out of three cars sold could be an EV, which will fuel the demand for battery technology and capacity.

Elkem has decided to build a pilot plant for battery graphite located at Fiskaa, Elkem's industrial site in the southern part of Norway. Our ambition is to qualify products and evaluate full-scale industrial production.

We also strengthen our focus on R&D. With the opening of the new R&D centre in Saint Fons, France we are investing to assure that our high value-added silicone specialities will remain at the very forefront also in the future.

In addition to organic projects, Elkem made two acquisitions in 2019.

Korea based Basel Chemie will strengthen Elkem's position in silicones to cosmetics and building protection.

The acquisition of Polysil, a leading Chinese silicone elastomer and resins materials manufacturer, will substantiate Elkem's stand in rubber production and reinforce our growth position in the South China market.

Elkem's mission is to contribute to a sustainable future by providing advanced silicon, silicones and carbon solutions, adding value to our stakeholders.

We are improving production processes, managing energy recovery initiatives and further developing our bio carbon strategy to improve our environmental footprint.

In Paraguay, our plant produced ferrosilicon based on 100% sustainable biocarbon and hydro power in 2019.

The construction of our new energy recovery facility at Elkem Salten is one of Elkem's largest ongoing projects. The facility will position the silicon plant as one of the most environmentally friendly in the world, recovering energy equal to 15,000 Norwegian households.

By applying new technology at several of our furnaces, Elkem's NOx emissions have been reduced by 18% since 2015. In 2020, two additional furnace upgrades will be completed and further reduce Elkem's NOx emissions.

Our environmental projects are important, not only in combating climate change and in aligning our business with the United Nations Sustainable Development Goals, but also because of increased attention in the financial markets. More and more investors find that management of sustainability is a proxy for general management.

We strive every day towards our goal of zero accidents. Regretfully, the Xinghuo plant in China had a fatality in February 2019. The incident has been thoroughly investigated and corrective actions have been implemented. The event was a tragic reminder that health and safety must remain our number one priority.

Hard work and dedication is key and I would really like to thank all our colleagues in all divisions and locations for their strong efforts throughout the year. We are fully committed to create sustainable value for customers and shareholders as well as safe workplaces for our employees. Our success will depend on our continuous efforts and abilities to improve. I look forward to a new and eventful year.

Michael Koenig,
CEO, Elkem ASA

Elkem's **business** strategy

Being a world leader in environmentally responsible manufacturing of metals and materials, Elkem aims to contribute to a sustainable future by providing advanced silicon, silicones and carbon solutions that add value to our stakeholders globally. The ability to continue our transition into a sustainable, specialty chemicals company is key to support Elkem's vision: Advanced materials shaping the future. To achieve this, Elkem pursues a strategy based on three main building blocks; operational efficiencies and synergies, specialisation and value chain optimisation and organic growth and acquisitions.

OPERATIONAL EFFICIENCIES AND SYNERGIES

A key pillar in Elkem's strategy is to ensure continuous improvements and operational efficiencies and synergies across the group. Elkem Business System (EBS) is the guiding principle for goals, strategic direction and action in Elkem. Together with operational excellence, economies of scale, an integrated value chain and low-cost power with advanced energy recovery systems, EBS will continue to be fundamental for achieving operational improvements.

In 2019, Elkem has completed an accelerated improvement programme to counter weaker market conditions. The realised effects were NOK 596 million, which exceeded the programme target of NOK 500 million. The focus on cost and operational improvements will continue in 2020 to sustain the group's favourable cost positions.

SPECIALISATION AND VALUE CHAIN OPTIMISATION

Several global megatrends are expected to drive growth for Elkem's products and require highly specialised solutions. The group intends to pursue its specialisation strategy to reduce cyclicality and increase sales of higher-margin specialty products across each division. Continued investments in research and development (R&D) will be key to ensure technological improvements and the development of new products and applications.

The group's R&D capabilities have been strengthened in 2019, particularly in China with several new product launches in areas such as automotive, construction and personal care. In France, the construction of the new R&D centre in Lyon has started, which will bring together 130 researchers in a new and innovative setting. In Norway, the construction of a pilot plant for synthetic graphite to battery anodes has started, leveraging on the group's leading research on future materials.

In order to accelerate the specialisation strategy, Elkem has also done selected bolt-on acquisitions. In 2019, the group completed the acquisition of Basel Chemie in Korea and signed the sales and purchase agreement for all of the shares in Polysil in China. Basel Chemie is a highly specialised silicones producer with high-end product technology for skin and colour cosmetics and water repellents for the construction industry. Polysil is a leading manufacturer of silicone elastomer and resins with strong positions in baby care and food grade silicones, as well as silicone products for the electronics and medical markets. The Polysil acquisition is expected to be concluded by the end of first quarter 2020.

ORGANIC GROWTH AND ACQUISITIONS

Elkem's size and global reach, combined with its broad base of skills and resources render it well-positioned to capitalise on growth opportunities. The group continuously evaluates attractive options for growth, particularly through capacity expansion in underserved or growing regions, and will actively continue to pursue such opportunities. Elkem is the market leader in the fast-growing Chinese silicone market and aims to develop this position through further growth and product specialisation. Organic growth projects may be supplemented by selected bolt-on acquisitions as an enabler to speed up growth.

In 2019, the group has pursued several growth opportunities, including a strengthening of the silicones product offering in the US, establishment of a downstream silicones facility in India and the opening of a new sales office in Mexico. The acquisitions of Basel Chemie and Polysil will deliver growth in specialised product areas and have a strong potential to accelerate the growth through Elkem's global sales and distribution network.

Building blocks of continued profitable growth:

- Operational efficiencies and synergies
- Specialisation and value chain optimisation
- Organic growth and acquisitions

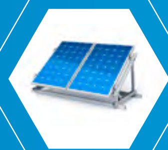
GLOBAL MEGATRENDS DRIVE ELKEM'S GROWTH

Sustainability

- Electrification of the transport sector
- Lightweighting of cars
- Reduced emissions

Energy demand growth

- Increased need for energy storage and batteries
- Growing use of solar panels and wind energy



Rapid urbanisation

- Improved solutions for construction and infrastructure
- Increased need for low emission transportation

Increased standard of living

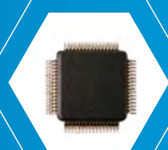
- Higher quality products
- Textiles / clothing
- Affordable comfort and personal care

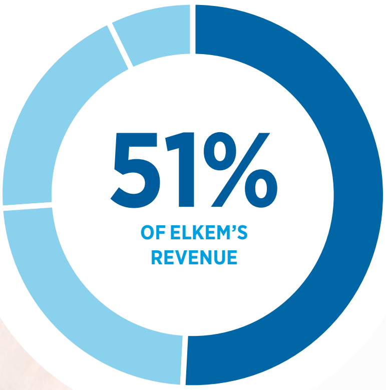
Ageing and growing population

- Healthcare
- Well-being

Digitalisation

- Connected home, work and city
- Sensor tracking technology





PRODUCTS

The Silicones division is a producer of upstream siloxane and downstream silicones products for use in a wide range of industrial and household products, such as release coatings, rubber, textile coating, healthcare, personal care, mould making, speciality fluids, sealing and bonding and construction.

PLANTS

China: Xinghuo Silicones and Shanghai

France: Roussillon and Saint-Fons

Germany: Lübeck

Italy: Caronno

Spain: Santa Perpetua

USA: York

Brazil: Joinville

India: Pune

Korea: Gunsan (Basel Chemie)

Silicones

Delivering your potential

The Silicones division is a leading global and fully integrated silicones producer from upstream siloxane to downstream specialty silicones. Silicones can be found in a large variety of products used in industrial applications and consumer products.

The Silicones division is Elkem's largest business area and plays an important role in the group's specialisation strategy.

PRODUCTS AND APPLICATIONS

Silicones can be manufactured into many forms including solids, liquids, semi-viscous pastes, greases, oils and rubber. They are flexible and can resist moisture, chemicals, heat, cold and ultraviolet radiation and can be encountered every day without noticing them e.g. silicone rubber in cars to protect electronics, silicones in the gel on a wound dressing, and sealing and insulating materials in electrical equipment.

Due to its wide range of application areas, silicones are used in a large number of products and industries, including manufactured goods, construction materials, electronics and consumer items.

PRODUCTION PROCESS AND RAW MATERIALS

The production process of silicones is dependent on a few raw materials, mainly silicon metal and methylchloride. Silicon reacts with methylchloride in the presence of a copper catalyst to make chlorosilanes. Chlorosilanes then react with water to produce siloxanes, the most basic silicone polymer, and is processed further by silicone manufacturers into numerous products such as fluids, elastomers, resins and gels.

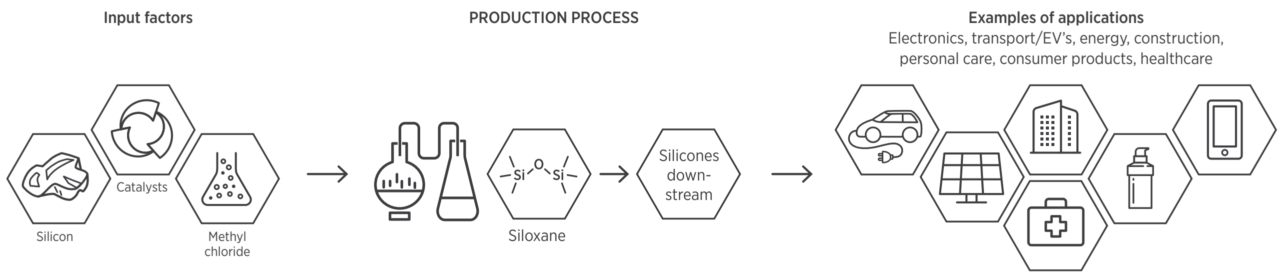
KEY FIGURES 2019

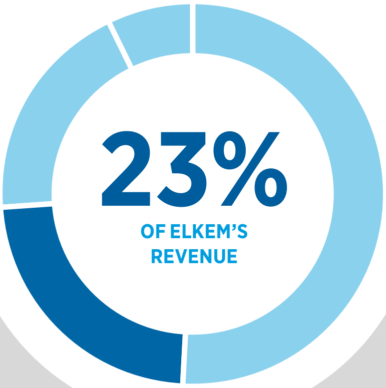
Amounts in NOK million	**2019**	2018	2017
Total operating income	**11,274**	13,059	10,026
EBITDA	**1,523**	3,535	1,515
EBITDA margin	**14%**	27%	15%
Number of employees	**3,260**	3,189	3,089
Sales volume (thousands mt)	**336**	314	300

MARKET POSITION AND MARKET DRIVERS

Elkem is a fully integrated producer from silicon metal to upstream siloxane and downstream silicone specialties with global market positions. The five largest, international producers account for more than 60% of the global production capacity. In terms of siloxane production capacity, Elkem ranks as the second largest producer globally and the largest producer in China.

The market fundamentals for silicones are attractive. Sustainability, energy demand, growth in population, higher standards of living, urbanisation and digitalisation are all megatrends that will increase the use of silicones. Demand for silicones will be driven by (i) higher personal incomes in developing countries, raising consumption of silicone-containing products, (ii) capture of market share from other materials, such as thermoplastics and (iii) rising penetration of silicones into construction, electric vehicles, and electronic markets. Global consumption of silicones is expected to grow by approximately 5% per annum.





PRODUCTS

The Silicon Materials division is a producer of silicon and microsilica. Silicon is used in aluminium alloys, silicones and polysilicon, while Microsilica® is used in construction, refractory, oilfield and polymer industries.

PLANTS

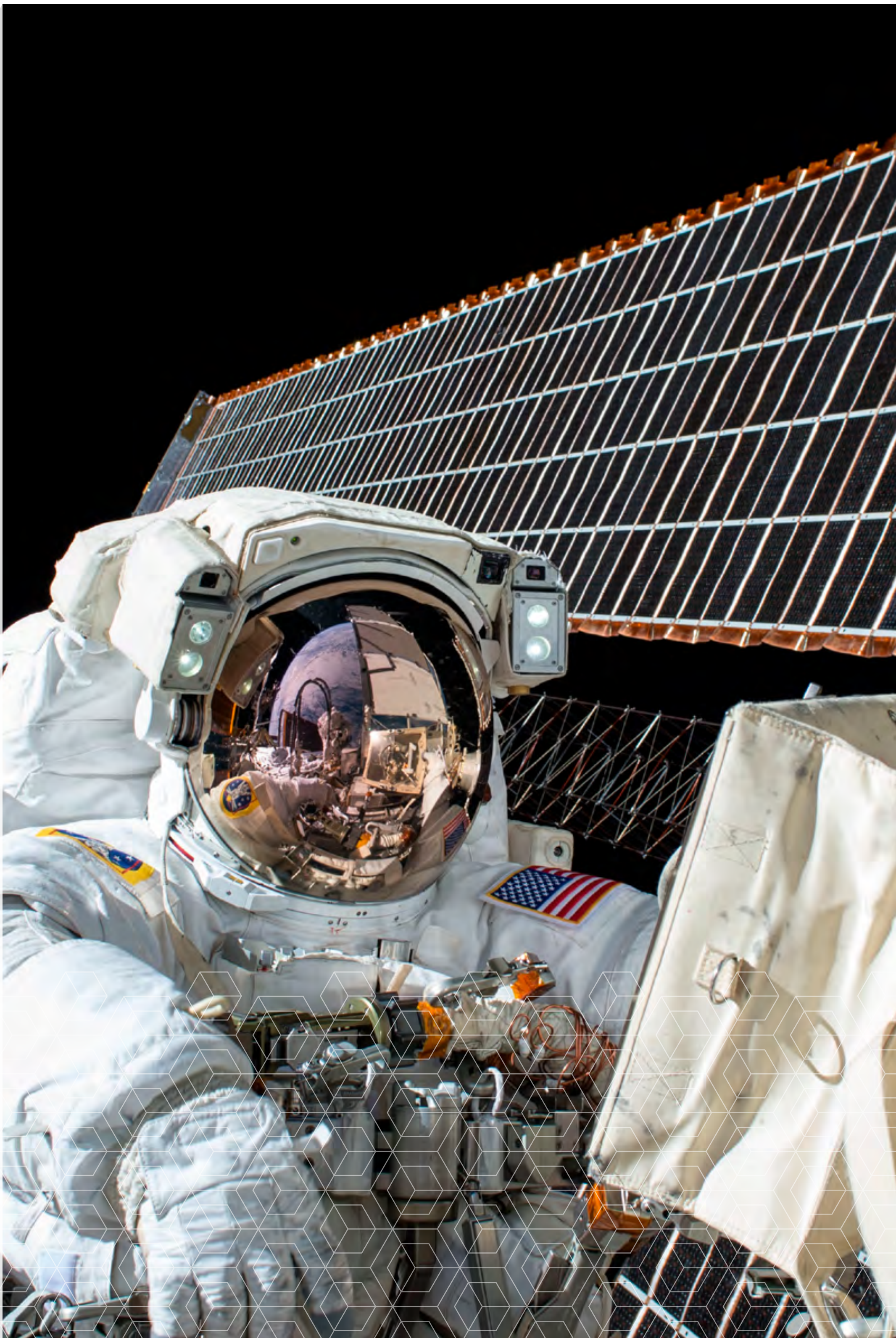
Norway: Salten, Thamshavn, Bremanger and Rana

China: Yongdeng

QUARTZ MINES

Norway: Tana and Mårnes

Spain: Explotacion de Rocas Industriales y Minerals SA (Erimsa)



Silicon Materials

Strong cost positions – tailored solutions

The Silicon Materials division is a world-class supplier of silicon and Microsilica®, providing specialty products and tailored solutions to a wide range of applications and industries worldwide.

Elkem is a world leading producer of silicon materials, with manufacturing plants located in China and Norway and quartz mines located in Norway and Spain.

PRODUCTS AND APPLICATIONS

Silicon has a number of favourable chemical and physical properties, including semi-conductivity, making it highly versatile for numerous industrial and electronic applications.

Silicon is widely used as an alloying agent in the aluminium industry due to its ability to improve the castability, corrosion resistance, hardness, tensile strength of aluminium. The automotive industry commonly uses aluminium alloys to produce engine blocks, transmission housings and aluminium alloy wheels.

Silicon is a key raw material for silicones, which are silicon-based polymers found in both speciality applications and numerous everyday industrial and consumer products. In recent years, silicones have become increasingly more relevant in various sectors, such as healthcare, due to their strong chemical and physical properties relative to other materials.

Polysilicon is a high purity, polycrystalline form of silicon, used in the electronics industry, in semi-conductors and photovoltaic (PV) cells for the solar industry.

PRODUCTION PROCESS AND RAW MATERIALS

The Silicon production process is run by reacting quartz and carbon materials in a high temperature electric arc furnace, giving carbothermal reduction of quarts. Quarts is one of the most abundant minerals on the earth, and Elkem's mines contains quartz with the chemical purity needed for metallurgical applications

KEY FIGURES 2019

Amounts in NOK million	**2019**	2018	2017
Total operating income	**6,533**	6,590	6,412
EBITDA	**601**	1,116	804
EBITDA margin	**9%**	17%	13%
Number of employees	**1,400**	1,416	1,422
Sales volume (thousands mt)	**240**	237	278

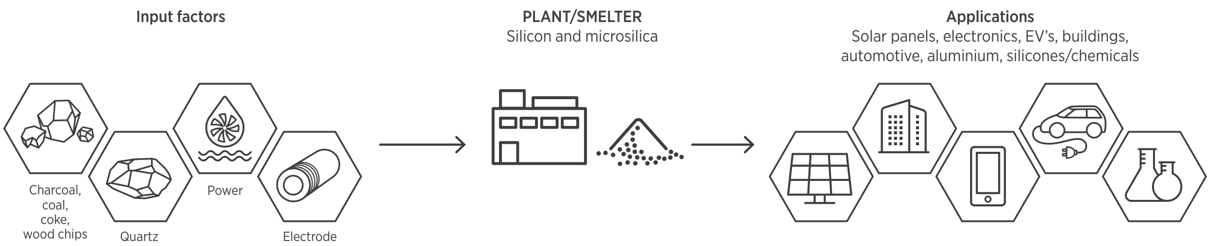
Microsilica® is an ultrafine powder collected as a by-product of the silicon production. Elkem is refining Microsilica® into highly specialised products for use in different industries. Microsilica® is an excellent example of how a by-product can be turned into valuable products with unique properties. In addition, it helps to reduce emissions and waste.

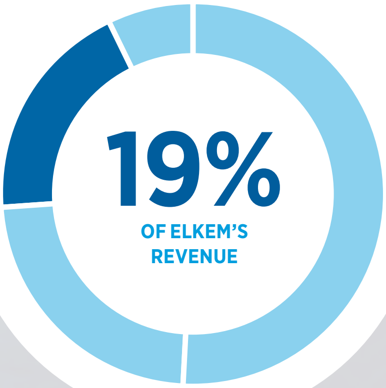
MARKET POSITION AND MARKET DRIVERS

A significant part of the world's silicon production capacity is based in China. Elkem has one plant in China for captive production of silicon to Xinghuo Silicones. Outside of China, Elkem ranks as the third largest producer of silicon and the second largest commercial producer. Elkem has a strong market organisation ensuring a global reach and proximity to customers all over the world.

The demand for Silicon Materials' products is primarily driven by global mega trends, including the need for lighter and stronger materials. Efforts are currently focused on promoting sustainable solutions in order to reduce our own and customer's environmental footprint.

A leading technology standard, skilled organisation and access to sustainable and low-cost power, make Elkem's silicon plants in Norway amongst the lowest cost producers globally.





PRODUCTS

The Foundry Products division provides metal treatment solutions to iron foundries and is a supplier of high-quality ferrosilicon to the steel industry.

PLANTS

Norway: Bremanger and Bjølvefossen

Iceland: Grundartangi

Canada: Chicoutimi

China: Shizuishan

India: Nagpur

Paraguay: Limpio

England: Dronfield

Foundry Products

The metal treatment solution provider

The Foundry Products division provides metal treatment solutions to iron foundries and is a supplier of high-quality speciality ferrosilicon to the steel industry.

KEY FIGURES 2019

Amounts in NOK million	**2019**	2018	2017
Total operating income	**4,505**	5,082	4,241
EBITDA	**342**	931	701
EBITDA margin	**8%**	18%	17%
Number of employees	**890**	894	812
Sales volume (thousands mt)	**258**	275	260

PRODUCTS AND APPLICATIONS

Ferrosilicon (or FeSi) is an alloy of iron and silicon, with silicon content ranging from 45 to 90%. FeSi is used in the steel industry and foundry alloys are used in the iron foundry industry, with end user customers in sectors like automotive, engineering and specialty steel. In the same manner as for silicon metal, Microsilica® is a by-product of the ferrosilicon production, see also Silicon Materials.

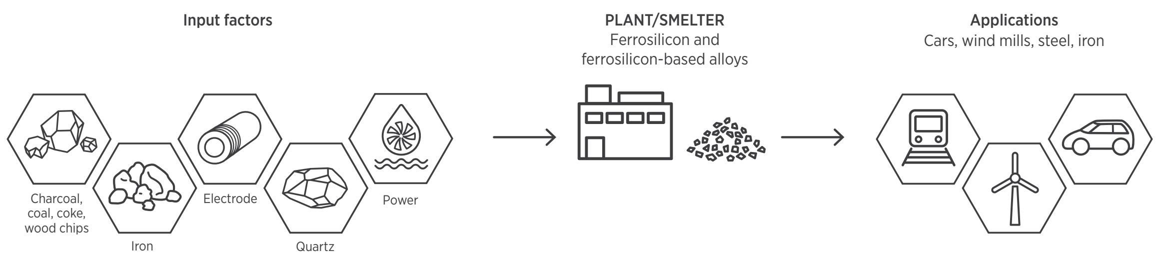
PRODUCTION PROCESS AND RAW MATERIALS

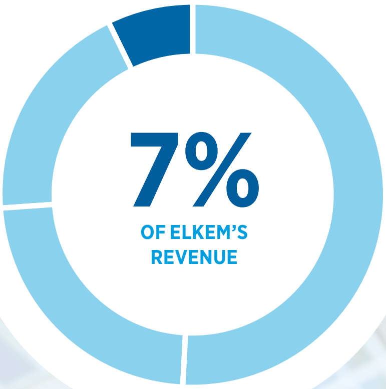
FeSi is produced in an electric arc furnace similar to silicon, where quartz or quartzite is reduced by carbon, normally in the form of coal, coke and woodchips. In contrast to the production of silicon, iron is added into the furnace, by use of steel scrap, millscale or iron ore pellets.

MARKET POSITION AND MARKET DRIVERS

Cast iron and steel are the main demand drivers for ferrosilicon and foundry alloys. Cast iron is widely used in the automotive industry and is used in numerous industries such as water pipes, engines, machines, agriculture, railways, windmills and several more. Steel is used in a wide range of industry sectors such as construction, automotive, energy, packaging, household appliances and industry.

China is the largest producer of cast iron and steel and a substantial part of the production capacity for ferrosilicon is also based in China. Foundry alloys is however, a relatively consolidated industry where Elkem has a leading market position.





PRODUCTS

The Carbon division is a producer of Söderberg electrode paste, ramming paste, lining materials, pre-baked electrodes and other specialty carbon products for various metallurgical smelting processes and primary aluminium industries as well as graphite for Li-ion batteries.

PLANTS

Norway: Kristiansand (Fiskaa)

Brazil: Carboindustrial and Carboderivados, Vitoria

South Africa: Ferroveld JV, eMalahleni

China: Shizuishan

Malaysia: Sarawak

Carbon

The Søderberg electrode – 100 years

Elkem Carbon is the world leading supplier of carbon paste and speciality products to the ferroalloys, silicon and aluminium industries. The division's main product, the Søderberg electrode technology, celebrated 100 years of successful technology leadership in 2019.

KEY FIGURES 2019

Amounts in NOK million	**2019**	2018	2017
Total operating income	**1,836**	1,892	1,577
EBITDA	**308**	335	274
EBITDA margin	**17%**	18%	17%
Number of employees	**420**	420	427
Sales volume (thousands mt)	**257**	289	284

PRODUCTS AND APPLICATIONS

Carbon products are used in electric arc furnaces and by the aluminium and iron foundries industries. Søderberg electrode paste is the most common electrode system used in submerged arc furnaces to ensure that the raw material reaches the required process temperatures. It is used by producers of silicon, ferrosilicon, ferrochromium, ferronickel, ferromanganese, silicomanganese, calcium carbide and copper and platinum matte.

Cathode ramming paste and high-density cathode blocks are used in the aluminium industry and contribute to extended pot life and stable operation. Their main function is to ensure the tightness of the cathodic container to prevent any infiltration of bath and metal.

Recarburisers are carbon additives for iron foundries which are used to achieve certain required properties in final casting parts.

Furnace lining paste is used in ferro alloy and silicon furnaces to ensure a tight lining and life-time of more than 10 years.

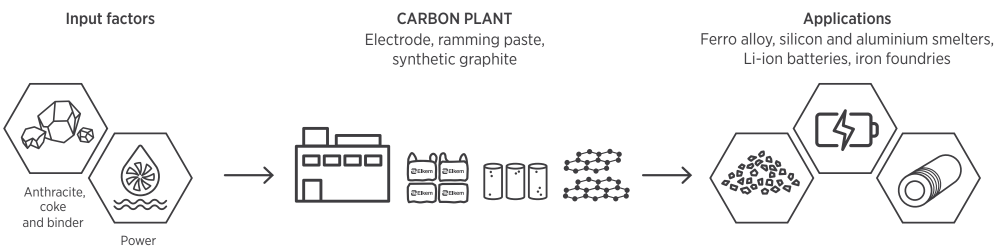
PRODUCTION PROCESS AND RAW MATERIALS

Elkem has developed its own production technology for electrodes and other carbon products. Special raw materials are chosen and electrically calcined, to achieve the best properties. Elkem's processes make it possible to make products with high quality and individual properties, to meet customer demands.

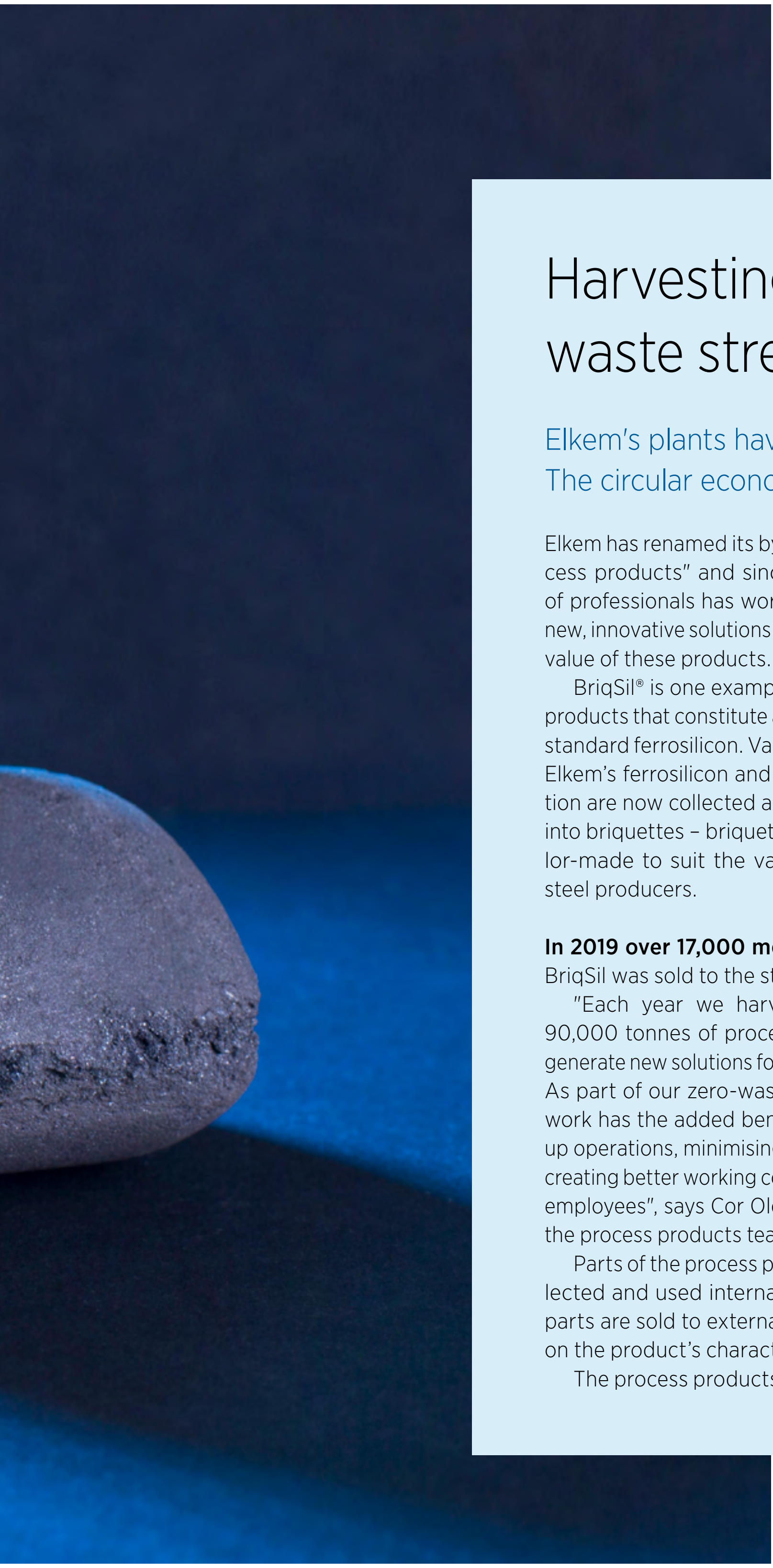
MARKET POSITION AND MARKET DRIVERS

Carbon and carbon-based products are key ingredients for the steel, foundries, silicon, aluminium and chemical industries. The demand for carbon-based products generally follows the trends in these industries.

Elkem is the market leader in the industry and the only producer with a global reach.




Sales BriqSil®
Metric tonnes
14,194
16,316
17,058
2017
2018
2019



Harvesting value from waste streams

Elkem's plants have set goals of having zero landfill. The circular economy and a cost focus go hand in hand.

Elkem has renamed its byproducts "process products" and since 2013 a team of professionals has worked to develop new, innovative solutions that capture the value of these products.

BriqSil® is one example of a recycled products that constitute an alternative to standard ferrosilicon. Various streams in Elkem's ferrosilicon and silicon production are now collected and compressed into briquettes – briquettes that are tailor-made to suit the various needs of steel producers.

In 2019 over 17,000 metric tonnes of BriqSil was sold to the steel industry.

"Each year we harvest a total of 90,000 tonnes of process products to generate new solutions for our customers. As part of our zero-waste initiative our work has the added benefit of cleaning up operations, minimising emissions and creating better working conditions for our employees", says Cor Oldenziel, head of the process products team at Elkem.

Parts of the process products are collected and used internally, while other parts are sold to external parties based on the product's characteristics.

The process products team is, in collaboration with Elkem plants, looking at recycling raw material waste streams. These products are generated through different processes during transport and at the plants.

"By re-using these products, Elkem's production requires less virgin raw materials to produce the same output, thereby contributing to reduced use of natural resources, logistics and cost", Oldenziel says.

To Elkem the circular economy is important as a mean to reduce the environmental footprint, says Elkem's Chief Executive Officer, Michael Koenig.

"We want to commit to the United Nation's 2030 agenda and the Sustainable Development Goals. A circular design is also of great significance in terms of securing the supply of critical raw materials in the future, to differentiating in the market place and to attract new talent", says Koenig, before adding:

"We have several initiatives on circular economy, including establishing new value chains for process products, technological improvements and we are investing significant amounts in energy recovery systems."

The Elkem share

An attractive opportunity

Elkem aims to be an attractive investment for shareholders, delivering competitive return through sustained growth and a consistent dividend policy.

NOK 0.6	8,952	581.3	14.4 bn
Dividend per share 2019	Shareholders	million shares	Elkem's market value

Elkem ASA is a public limited company. The share is listed on Oslo Stock Exchange and the ticker code is ELK. Elkem ASA has one share class with 581.3 million shares. All shares have equal rights and are freely transferable.

Elkem's market value was NOK 14.4 billion as at 31 December 2019.

Nine analysts are covering Elkem, providing market updates and estimates for Elkem's financial development.

SHARE PRICE

Elkem's share price was NOK 21.89 as at 2 January 2019 and closed at NOK 24.76 on 30 December 2019. The highest closing price was NOK 36.12 and the lowest closing price was NOK 20.18.

DIVIDENDS

Elkem intends to pay dividends reflecting the underlying earnings and cash flow and will target a dividend pay-out ratio of 30–50% of the group's net profit for the year.

In 2019 Elkem paid a dividend of NOK 2.60 per share, representing 45% of net profit in 2018.

The proposed dividend for 2019, subject to approval from the annual general meeting in 2020, is NOK 0.60 per share, representing 41% of the net profit.

SHAREHOLDERS

As at 31 December 2019 Elkem had 8,952 shareholders. Non-Norwegian shareholders owned 78% of the shares and China National Bluestar was the majority shareholder with 58% of the shares.

Dividend overview

Year	Earnings per share	Dividend per amount	Date proposed	Date approved	Recorded date	Payment date
2019	1.47	0.60	13 Feb 2020	8 May 2020	12 May 2020	19 May 2020*
2018	5.74	2.60	11 Feb 2019	30 Apr 2019	3 May 2019	13 Jun 2015

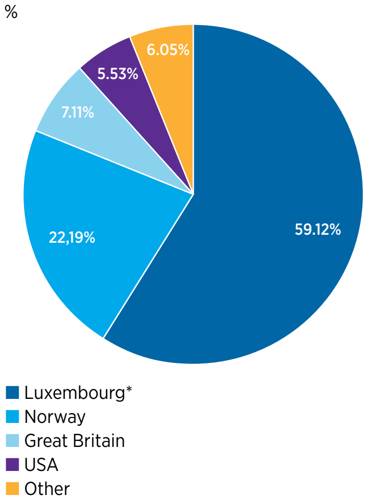
Financial targets

Target metric	Targets	Comment
Revenue growth	5 – 10%	Grow faster than market through specialisation, organic growth and acquisitions
EBITDA margin (%)	15 – 20%	Target average margin through the economic cycle
Reinvestments% of D&A	80 – 90%	Ensure appropriate and disciplined capital allocation following long-term plans
Debt leverage ratio	1.0x – 2.0x	Ensure efficient and robust capital structure
Dividend target	30 – 50% of net profit	Stable and predictable over time

** On or about*

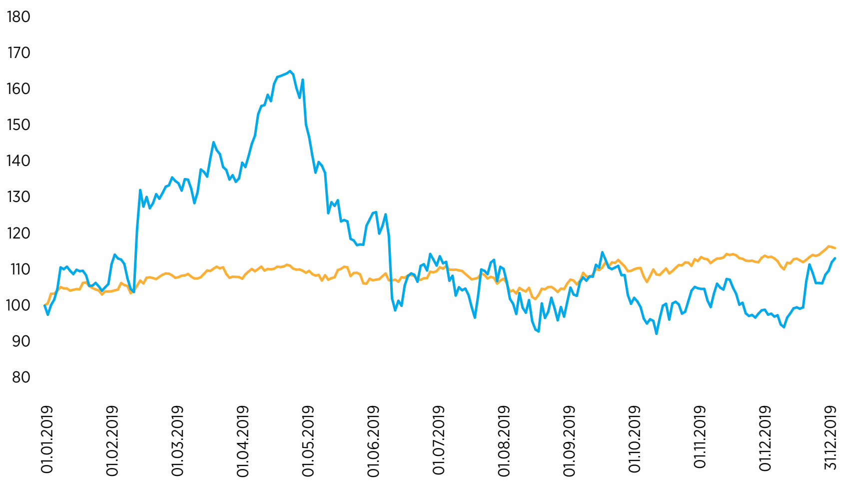
Geographical distribution of shareholders 2019

%



Share price development 2019

Indexed

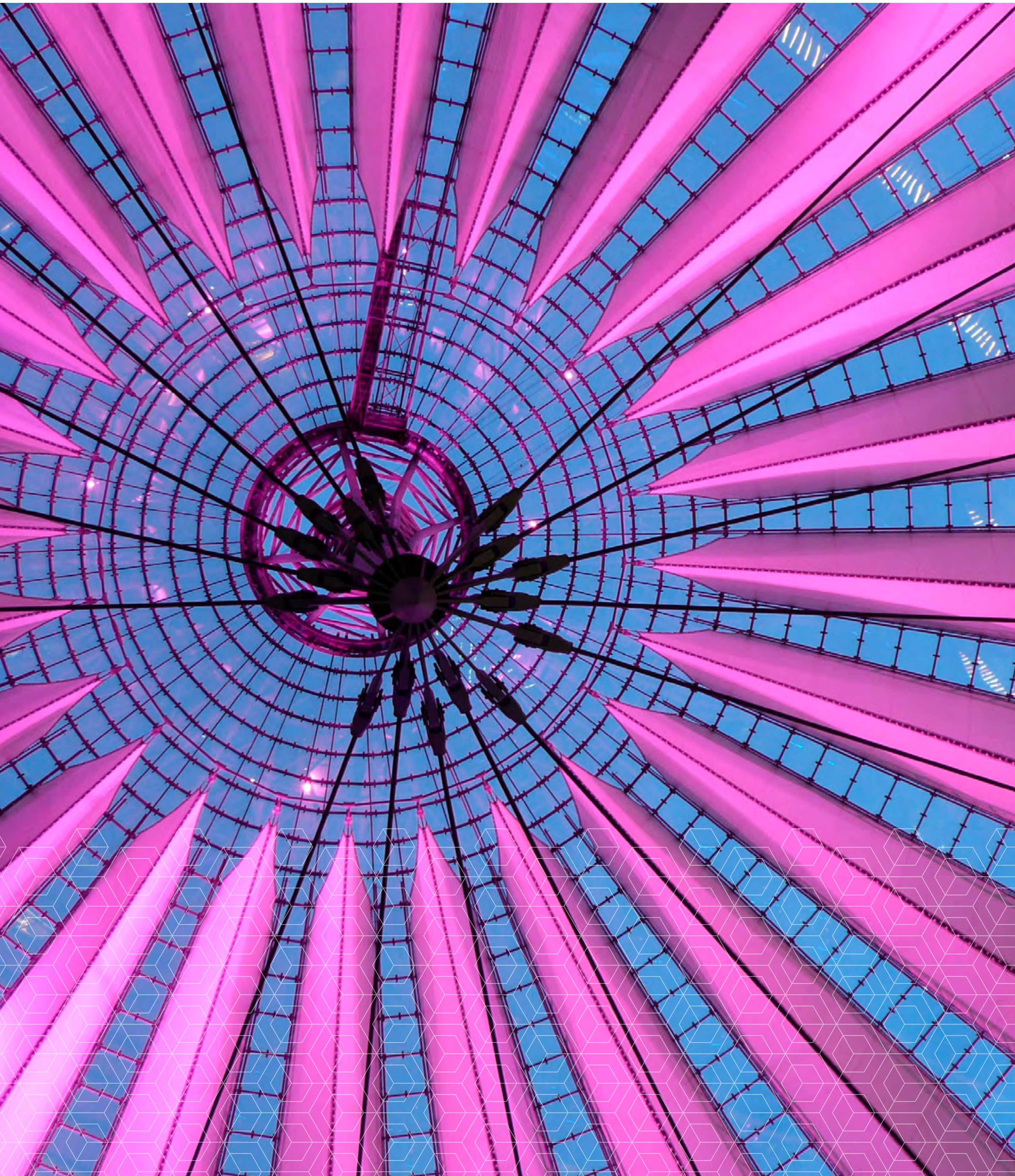


The 20 largest shareholders as at 31 December 2019*

#	Shareholder	Number of shares	Value	Capital
1	Bluestar Elkem International Co. Ltd S.A., Luxembourg**	338,338,536	8,872	58.20%
2	Folketrygdfondet	19,541,034	512	3.36%
3	Eika Kapitalforvaltning	16,210,584	425	2.79%
4	Mondrian Investment Partners Ltd	14,522,404	381	2.50%
5	DNB Funds	13,503 97	354	2.32%
6	Vanguard	9,864,317	259	1.70%
7	Storebrand Asset Management	9,454,384	248	1.63%
8	Alfred Berg Kapitalforvaltning AS	8,315,087	218	1.43%
9	Goldman Sachs Asset Management	6,085,724	160	1.05%
10	Deka Investement	5,905,314	155	1.02%
11	Arctic Fund Management AS	5,791,034	152	1.00%
12	La Financière de l'Echiquier	5,617,805	147	0.97%
13	Wisdom Tree Asset Management Inc	5,280,424	138	0.91%
14	Nordea Funds	5,210,642	137	0.90%
15	KLP Kapitalforvaltning	3,987,677	105	0.69%
16	Erik Must	3,951,888	104	0.68%
17	Pareto Funds	3,884,000	102	0.67%
18	BlackRock	3,546,850	93	0..61%
19	Schroders	3,277,875	86	0.56%
20	Allianz Global Investors	3,070,181	81	0.53%
	Total 20 largest shareholders	473,206,157	12,729	82,91%

* *The data is provided through analysis of beneficial ownership and fund manager information provided in replies to disclosure of ownership notices issued to all custodians on the Elkem share register. Whilst every reasonable effort is made to verify all data, the accuracy of the analysis cannot be guaranteed. For a list of the largest shareholders as of December 31, 2019, from the Norwegian Central Securities Depositary (VPS), see Note 20 in Notes to the financial statements Elkem ASA.*

** *Elkem ASA is owned 58.2% by Bluestar Elkem International Co. Ltd S.A., Luxembourg, which is under the control of China National Bluestar (group) Co. Ltd (Bluestar), a company registered and domiciled in China.*



Board of directors' report

Underlying growth in a challenging market

Following a year with record strong results in 2018, Elkem faced global market challenges in 2019 resulting in a weaker revenue, EBITDA and profit development. The long-term underlying growth prospects are nonetheless unchanged, and the financial position is strong. Operational improvements, specialisation and growth through acquisitions remained key focus areas, through the year. Furthermore, the company has strengthened focus on and improvements within the ESG (Environmental, Social and Governance) -area.

Safety performance continued the positive development in 2019 compared to 2018. Full understanding of health and safety risks and challenges have high priority in the company. The improved results are founded on critical process control combined with a culture of diligence and discipline. Despite delivering the second lowest total recordable injury rate ever, it was deeply regrettable for the company to report the fatality in Xinghuo, China in February 2019. Safety is Elkem's first and most important priority and the company is continuously working to create a safe work environment with zero accidents. Elkem's statistics show that it is possible to run difficult and potentially hazardous operations with a large work force without injuries. Several of Elkem's plants have achieved this for a number of years in succession. Some plants have improvement potential and Elkem will continue having safety as the number one priority.

Although the financial results were weaker in 2019 than the year before, the board of directors is satisfied with Elkem's financial performance in 2019, acknowledging that the year has been challenging with multiple macro parameters at 2009 financial crisis level. The board of directors is of the opinion that Elkem has a solid asset base and financial capability to support further growth creating value to all of the group's stakeholders.

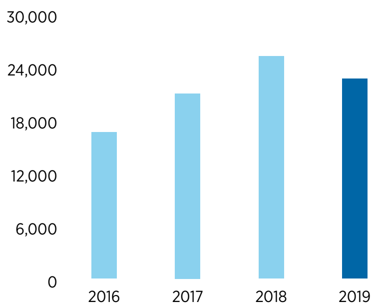
Elkem's consolidated operating revenues fell by 10% year-on-year, reaching NOK 22,668 million. The EBITDA[1] margin ended at 12% compared to record high 23% in 2018. Leverage[2] ratio ended at 2.2 times. This is higher than the target leverage corridor of 1.0 to 2.0 times and is a direct consequence of the market challenges.

Elkem's policy is to pay a dividend of 30-50% of profit for the year. The board of directors has proposed to the annual general meeting a dividend payment of NOK 0.60 per share for 2019, which would represent 41% of profit for the year. The

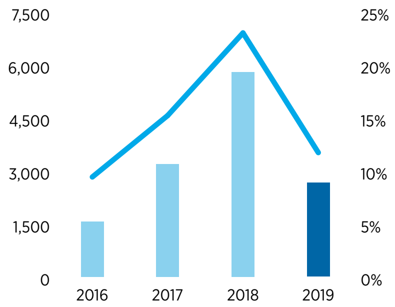
[1] *EBITDA commented under APM section.*

[2] *Leverage ratio: defined as Net interest bearing debt excluding non-current restricted deposits and interest-bearing financial assets / EBITDA.*

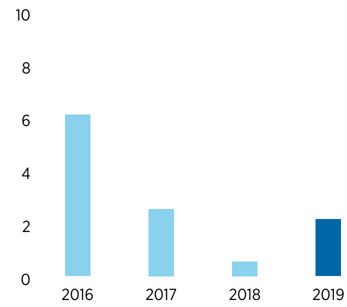
Operating income
NOK million



EBITDA[1]
NOK million



Leverage ratio[2]
(see definition of leverage ratio)



board of directors' view is that proposed dividend is appropriate based on current financial position, market outlook and investment plans.

Elkem is persistent in pursuing responsible growth going forward. With a highly competent organisation, well-invested assets and attractive market positions, Elkem is committed to create value to all stakeholders.

KEY DEVELOPMENTS 2019

Growth through acquisitions

Elkem has an ambitious growth strategy supported by organic growth initiatives in addition to bolt-on acquisitions. During the year, Elkem announced two acquisitions:

- The acquisition of Basel Chemie Co. Ltd. (hereinafter Basel Chemie), a Korean producer of specialty silicone gels for cosmetics and water repellents for the construction industry, was announced on 16 August 2019. The acquisition gives Elkem access to leading technology in attractive end-user silicone segments and provides a solid platform for further development and growth. The acquisition was closed on 30 September 2019.

- The acquisition of Guandong Polysil Technology Co. Ltd. (hereinafter Polysil), was announced on 30 December 2019. Polysil is a leading Chinese silicone elastomer & resins material manufacturer with strong positions in baby care and food grade silicones, as well as silicone products for the electronics and medical markets. Polysil and Elkem's complementary product and market positions provide a solid platform for further specialisation and growth in China and globally. The acquisition is expected to be closed during first half 2020. For more information, please see note 36.

Growth through organic projects

In addition to the above milestones, Elkem carried out several other value creating activities including strengthening its positions in the medical silicones market, expanding silicones prod-

uct offering into Mexico and India, commencing construction of a new R&D centre in Lyon, France, progressing Elkem's partnership construction of the largest energy recovery plant at Salten, Norway and realisation of cost improvements of NOK 596 million.

Investment in pilot plant for battery graphite
In June, Elkem decided to invest NOK 65 million in a pilot plant for battery graphite located at Elkem Carbon's industrial site at Fiskaa, Kristiansand. Elkem's ambition with the project is to do preparatory work related to the production process and qualification of products as a basis for evaluating full scale industrial production. The pilot plant is under construction and is expected to ramp-up to full pilot-production during second half of 2020.

ESG developments
Elkem continued to work on systematic improvements covering Environment, Social and Governance in 2019. For instance, Elkem Paraguay reached a milestone ensuring production based on 100% biocarbon and hydro power. EcoVadis has given Elkem the Gold performance rating for the 2019 CSRCorporate Social Responsibility (CSR) assessment, ranking Elkem in the top 10%. EcoVadis is a recognised provider of business sustainability ratings. The assessment is based on 21 main CSR criteria. Elkem has been assessed annually by EcoVadis since 2015.

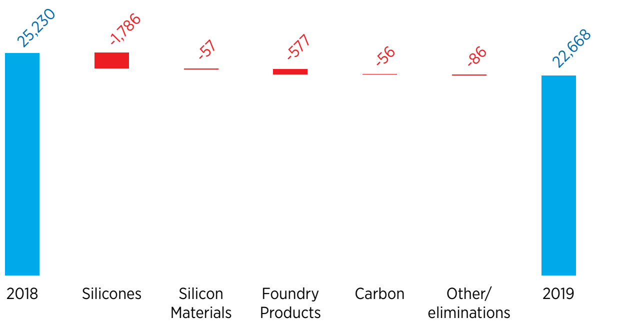
Organisation
On 1 December Michael Koenig succeeded Helge Aasen as CEO after his more than ten years in the position. As chair of the board the last three years, Michael Koenig has worked closely on Elkem's strategy and has in-depth industry knowledge of the company's industries and operations.

ABOUT ELKEM
Founded in 1904, Elkem is one of the world's leading suppliers of silicon-based advanced materials with operations throughout the value chain from quartz to specialty silicones, as well as attractive market positions in specialty ferrosilicon alloys and carbon materials.

Elkem is a publicly listed company on the Oslo Stock Exchange (ticker code: ELK) and is headquartered in Oslo. The company has more than 6,370 employees, 29 production sites and an extensive network of sales offices worldwide. In 2019 Elkem had revenues of NOK 22.7 billion. To learn more, please visit www.elkem.com.

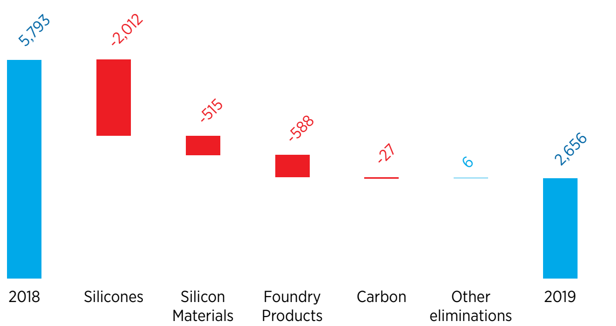
FINANCIAL PERFORMANCE
Consolidated profit and loss statement
Consolidated operating income for the Elkem group amounted to NOK 22,668 million compared to NOK 25,230 million in 2018. The decrease of 10% was due to challenging market situations across all divisions. The Silicones division saw a 14% decrease in operating income due to decreased prices, in particular in China. This was only partly offset by higher sales volume. Operating income for the Silicon Materials division decreased by 1% due to weaker prices, offset by somewhat better sales volumes. Foundry Products' operating income decreased by 11% due to weaker prices and lower sales volume in particular towards the automotive industry. Carbon's operating income decreased by 3% mainly due to lower sales volume.

Operating income
NOK million



Consolidated EBITDA ended at NOK 2,656 million compared to NOK 5,793 million in 2018. The corresponding margin decreased from 23% in 2018 to 12% in 2019. The decline in EBITDA is a result of negative development in earnings from all segments, and in particular from Silicones being faced with multiple challenges in 2019. Silicones delivered higher sales volume in 2019 compared to 2018, however sales prices in particular in China had a major negative impact on earnings. Silicon Materials and Foundry Products also experienced market challenges with historic low prices, in addition to weaker specialty sales towards automotive for Foundry Products. Carbon also experienced weaker demand resulting in lower sales volumes and lower earnings.

EBITDA
NOK million



Consolidated operating profit was NOK 1,384 million in 2019 compared to NOK 4,142 million in 2018, a reduction of NOK 3,333 million explained by fall in EBITDA. Amortisation and depreciation was NOK 1,456 million in 2019 compared to NOK 1,263 million in 2018. Impairment losses were NOK 11 million in 2019 compared to NOK 8 million in 2018. Other items were NOK 195 million positive in 2019 compared to NOK 380 million negative in 2018. Other items are largely related to change in fair value of power contracts, embedded derivatives and IPO expenses in 2018.

Consolidated profit before income tax ended at NOK 1,134 million for the year compared to NOK 3,792 million in 2018. Share of profit from equity accounted financial investments was NOK 12 million negative in 2019 related to Elkem ASA's share of the energy recovery project at Salten Energigjenvinning AS, compared to NOK 23 million negative in 2018.

Finance income was NOK 41 million and foreign exchange gains were NOK 16 million in 2019 compared to NOK 42 million and NOK 19 million in 2018 respectively. Finance expenses were NOK 295 million compared to NOK 388 million last year. The reduction in finance expenses was largely due to lower interest expenses from other items measured at amortised cost explained by reduced interest on bills payables and lower interest bearing current liabilities.

The consolidated profit for the year was NOK 897 million, including a NOK 237 million tax expense for the year, giving an effective tax rate of 21%.

The main items recognised in the consolidated statement of other comprehensive income relate to cash flow hedges (foreign currency hedges and power price hedges). These items had a net expense of NOK 133 million for 2019, compared to a net profit of NOK 634 million in 2018.

The total comprehensive income for the year was NOK 764 million in 2019 compared to NOK 4,001 million in 2018.

The share of consolidated profit attributable to shareholders of Elkem ASA was NOK 855 million giving basic and diluted earnings per share NOK 1.47 per share in 2019 compared to NOK 5.74 per share in 2018.

Elkem's accounting policies related to the reporting of sale of power were changed in 2019. Historically, Elkem's sale of power has been presented as gross revenue, with corresponding raw material and energy use for own production. The new accounting policy results in the sale of power being reported at a net level. The effect is reduced operating revenue of NOK 605 million in 2019 and NOK 656 million in 2018 and no net impact to operating profit. Please see note 35 for more information.

Segment information

Elkem's principal products are silicones, silicon, ferrosilicon, foundry alloys, carbon materials and microsilica. The business activities reflect the product mix and are organised in four divisions; Silicones, Silicon Materials, Foundry Products and Carbon.

The Silicones division (or Silicones) is one of the world's few, fully integrated silicone manufacturers. Elkem Silicones is one of the leaders in this market and has more than 3,260 employees. The division has R&D laboratories and sales offices worldwide and plants in China, France, Germany, Italy, Spain, USA, Brazil, India and South Korea. wo. The Silicones division is Elkem's largest business area and represents 51% of total group revenues.

The market for Silicones' products is large and growing. Demand is driven by a number of megatrends, such as digitalisation and electrification. Elkem's Silicones division serves very diverse markets, from energy to cosmetics, via electronics, aerospace, automotive manufacturing, construction, healthcare, mold-making, paper and textile coating, personal care and more. Elkem has a comprehensive range of silicone products, which includes release coatings, engineering elastomers, specialty fluids, emulsions and resins.

Silicones had an operating income in 2019 of NOK 11,274 million (NOK 13,059 million in 2018). EBITDA was NOK 1,523 million in 2019 compared to NOK 3,535 million in 2018. The 57% EBITDA decrease was impacted by lower sales prices, production problems in France in the second quarter in addition to extra costs in China in the fourth quarter following the National Day. Sales volume increased from 314 kmt in 2018 to more than 336 kmt in 2019, an increase of 7% year-on-year. Average prices decreased by 19% year-on-year, mainly due to steep price decrease in China on intermediate silicone products. The US imposed tariffs on silicone products being imported from China, led to an oversupply situation for silicones in China, pushing prices down during 2019.

The outlook for the silicones market is mixed. Prices on specialities remain stable, but prices on core products are still low.

The Silicon Materials division (or Silicon Materials) is a world-leading supplier of silicon, microsilica, and other specialty products. The Silicon Materials division represents approximately 23% of total group revenues. Silicon Materials has approximately 1,400 employees and plants in Norway and China, and quartz mines in Norway and Spain.

Silicon has a number of favourable chemical and physical properties, including semi-conductivity, making it highly versatile for numerous industrial and electronic applications. As such, it has a wide array of applications predominantly as an alloying material for aluminium and in the production of silicones and polysilicon. The Silicon Materials division serves customers in a number of end markets, such as chemicals, aluminium, electronics, solar, construction, refractories and oil/gas. China has been the largest growth market for silicon over the last years and is expected to remain an important growth engine for global demand.

Silicon Materials had an operating income in 2019 of NOK 6,533 million (NOK 6,590 million in 2018). EBITDA was NOK 601 million in 2019 compared to NOK 1,116 million in 2018. The lower EBITDA was mainly attributable to lower sales prices. Silicon 99 CRU reference price EU fell to record low levels and was on average 17% lower in 2019 compared to 2018. Sales volume was nearly unchanged year-on-year with 240 kmt in 2019 compared to 237 kmt in 2018, however the sales volume mix contributed negatively in the year with lower sales towards electronics. The demand outlook for silicon metals seems to have normalised, following a period of historic low levels, with destocking effects levelling out.

The Foundry Products division (or Foundry Products) is the leading metal treatment solution provider for cast iron and steel. The division has 890 employees and plants in China, Norway, Iceland, Canada, India, Paraguay and England. The Foundry Products division represents approximately 19% of total group revenues.

The market for foundry products can be divided into two segments, ferrosilicon and foundry alloys. Ferrosilicon is used in the steel industry, notably in electrical and engineering steels and stainless steel, whereas foundry alloys are used in the iron foundry industry. The division serves end-user customers within sectors like automotive, engineering, pipe/fittings and specialty steel–segments that can be viewed as key demand drivers.

Foundry Products had an operating income in 2019 of NOK 4,505 million (NOK 5,082 million in 2018). EBITDA was NOK 342 million in 2019 compared to NOK 931 million in 2018. CRU reference ferrosilicon price EU was on average 29% lower in 2019 compared to 2018 and was the main explanation for the steep decline in earnings. In addition, sales volumes decreased from 275 kmt in 2018 to 258 kmt in 2019 with lower sales of speciality products. Operational issues in the fourth quarter at Bjølvefossen in Norway and in Iceland resulted in higher costs and lower production and thus also impacted the result negatively. Ferrosilicon and foundry alloys markets are still hampered by weaknesses in steel and automotive markets.

The Carbon division (or Carbon) is the world leading supplier of carbon paste and specialty products to the ferroalloys, silicon and aluminium industries. The division has approximately 420 employees and plants in Norway, South Africa, Brazil, Malaysia and China. The Carbon division accounts for around 7% of total group revenues. The steel and aluminium industries account for a significant portion of non-energy carbon end-user applications and as a result, drive the demand dynamics in the industry.

Carbon's operating income in 2019 was NOK 1,836 million (NOK 1,892 million in 2018).

Carbon's operating income in 2019 was NOK 1,836 million (NOK 1,892 million in 2018).

EBITDA was NOK 308 million in 2019 compared to NOK 335 million in 2018. The decrease is mainly due to decrease in sales volumes from 289 kmt in 2018 to 257 kmt in 2019. The demand outlook for carbon products is on short term expected to be in line with preceding quarters.

Cash flow and statement of financial position

Cash flow from operating activities was NOK 1,839 million for the year, compared to NOK 4,460 million in 2018, mainly explained by lower operating profit, which has been partly offset by working capital changes. Operating profit (NOK 1,384 million), amortisation, depreciation and impairment (NOK 1,467) and changes in working capital (NOK 649 million) constitute the biggest positive contributors to cash flow from operating activities in 2019, whereas changes in provisions, bills receivable and other (NOK (671) million), income taxes paid (NOK (559) million, interest payments made (NOK (248) million and changes in fair value of commodity contracts (NOK (218) million) account for the main negative contributors.

The accounts on amortisation, depreciation and impairment were fairly similar to 2018 levels, whereas the reduction in working capital was related to lower operating revenues from all divisions resulting in a decrease in accounts receivables. In addition, inventories were reduced in 2019 after being at a high level going into the year due to planned maintenance stop of silicones production in France in April 2019. During the year, management continued with high focus on optimising working capital. Initiatives carried out included reviewing the sales and operational planning process in divisions, redefining minimum and maximum stock levels, establishing plans to sell slow moving stocks, improving number of days to customers and suppliers, and effectuating increased factoring arrangements for the group.

Cash flow from investing activities amounted to NOK 2,285 million for the year, compared to NOK 4,671 million in 2018. The reduced cash flow from investing activities in 2019 is mainly explained by the extraordinary high investment activity in 2018 following the acquisitions of Yongdeng (Silicon Materials) and Xinghuo (Silicones). 2019 figures can be explained as follows: Investments in property, plant and equipment and intangible assets amounted to NOK 2,141 million. Elkem invested NOK 1,162 million into maintenance, EHS, and productivity improvement initiatives during the year. In addition, Elkem invested NOK 963 million into strategic investments.

The strategic investments in 2019 were primarily related to Silicones building a new R&D centre in Lyon, France and increasing specialisation volume of high consistency rubber (HCR) in China. Silicon Materials and Foundry Products carried out multiple strategic initiatives including a furnace upgrade in Norway to reduce NOx emissions and improving the cost position, continuing strategic technical and environmental upgrades at Elkem Rana, and investing in inoculant and ferrosilicon manganese (FSM) production capacity in Elkem Paraguay. Carbon initiated investments to establish a battery graphite pilot plant in Kristiansand, Norway. Acquisition of subsidiaries amounted to NOK 206 million and relates to the takeover of Basel Chemie.

Cash flow from financing activities was negative NOK 2,187 million, compared to positive NOK 5,509 million in 2018. The extraordinary high cash inflow from financing activities in 2018 was related to a capital increase of NOK 5,171 million in connection with Elkem's IPO. The 2019 cash flow from financing activities can be explained as follows: Dividends paid to owners of the parent was NOK 1,511 million and dividends paid to non-controlling interests amounted to NOK 49 million. New interest-bearing loans and borrowings amounted to NOK 2,082 million and was countered by repayment of interest-bearing loans and borrowings amounting to NOK 2,074 million. Repayment of lease liabilities amounted to NOK 78 million and net changes in bills payable and restricted deposits were NOK 556 million negative.

Change in cash and cash equivalents was negative NOK 2,633 million for the year.

Elkem's financial position was strong going into 2019 after delivering the strongest results ever in 2018. Despite a challenging year, the group's equity ratio improved from 44% in 2018 to 45% in 2019. Equity was NOK 12,952 million at the end of 2019, including non-controlling interest. Leverage ratio for the group has developed from 0.6x in 2018 to 2.2x at the end of 2019, somewhat higher than the target leverage ratio between 1.0-2.0x. Management expects leverage ratio to increase in 2020 due to the proposed dividend payout and acquisition of Polysil. The board of directors views the group's underlying competitive positions and a strong equity ratio as a good basis to support further growth of the group.

Net interest-bearing debt[3] amounted to NOK 5,722 million as of 31 December 2019. Cash and cash equivalents amounted to NOK 4,496 million, in addition to NOK 3,105 million in undrawn credit facilities, in total 34% of operating revenues in 2019. Total interest-bearing liabilities was NOK 10,489 million as of 31 December 2019 whereof NOK 2,149 million matures in 2020. Debt maturities in 2020 mainly consist of local Chinese working capital financing, which is short-term by nature. The board views the group's cash and financial position to be strong.

GOING CONCERN

The board of directors firmly believes that the Elkem Group has the ability to continue its operations in the foreseeable future and hence confirms that the accounts have been prepared on a going concern basis and in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU for Elkem Group and Norwegian accounting principles (NGAAP) for Elkem ASA, and that the Group, after the proposed dividend, has sufficient equity and liquidity to fulfil its obligations.

STRATEGIC PRIORITIES

The key priority set by the board of directors is that Elkem shall target profitable growth and continue its transition into a specialty chemicals company. Specialication is important to Elkem primarily as a means to achieve more stable, but also higher, margins. In order to achieve this, Elkem pursues a strategy based on three main building blocks; operational efficiencies and synergies, specialisation and value chain optimisation and organic growth and acquisitions.

Operational efficiencies and synergies

Elkem has significant industry experience based on the lean manufacturing principles outlined in Elkem Business System (EBS). The strategy is to ensure that Elkem can remain a low-cost producer based on operational excellence, economies of scale, an integrated value chain from raw materials to end products, and advanced energy recovery systems.

An accelerated improvement programme has been completed in 2019 to counter weaker market conditions. The realised effects were NOK 596 million, significantly above the programme target of NOK 500 million.

[3] *See APM section*

Specialisation and value chain optimisation

The board of directors intends that Elkem continues to pursue its specialty strategy to reduce cyclicality and increase sales of higher-margin specialty products across each division. Continued investments in research and development will be key to ensure technological improvements and the development of new products and applications. In addition, Elkem intends to do selected bolt-on acquisitions to accelerate the specialisation strategy. In 2019, Elkem completed the acquisition of Basel Chemie in Korea and signed the sales and purchase agreement for all of the shares in Polysil in China. Both of these acquisitions will give access to attractive R&D competence and specialised market positions. The target for the group is to generate an EBITDA-margin of 15 to 20% through the economic cycle.

Organic growth and acquisitions

Several global mega trends are expected to drive growth for Elkem's products. Elkem aims to pursue further growth through organic growth and acquisitions. The target is to grow faster than the market and to achieve revenue growth of 5 to 10% per year.

RESEARCH AND DEVELOPMENT, VITAL TO SUPPORT ELKEM'S STRATEGY

430 people are dedicated to Research and Development (R&D) activities and Elkem devotes considerable effort and resources to R&D. R&D is important in order to create and develop innovative products for new market needs, develop environmentally friendly and energy efficient production technologies and to optimise the full value chains, which is why R&D is at the core of the group's strategy.

Elkem's R&D facilities with chemistry and new chemicals, new materials and supporting laboratories play a crucial role for the success of our customers. Elkem's R&D efforts contributes to the development of new products with outstanding properties for high-end markets, new additives for process aids or for reinforced materials and support with critical analysis information needed for trouble-shooting. Elkem's R&D focus will remain imperative in order to reach the group's ambition on specialisation growth based on global megatrends.

Elkem has more than 20 collaborative projects in partnerships with French and Norwegian governments and clusters dealing mainly on:

- Sustainable process and products
- Energy efficiency and CO_2 emission decrease by for example replacing fossil coal with biocarbon in the production of silicon and ferrosilicon alloys
- Digitalisation
- New chemistry and processes

Collaborations also include developing new materials for the future, including batteries and lightweight materials.

The pilot facility at Elkem's corporate R&D centre at Fiskaa industrial site in Kristiansand, Norway, is an important asset for

both process and product development.

Being a part of the Norwegian Catapult Centre, Future Materials, from 2017 has further improved the position of the test centre. The main strategic investments will be related to Elkem's projects on silicon and graphite for lithium-ion battery anodes, with pilot equipment for production of fine powder and a battery test lab.

Furthermore, the silicones division holds a strong position within R&D and innovation. The division has research centres worldwide with Lyon Research & Innovation Centre as the main hub. In pursuing its specialisation strategy, Silicones has increased R&D personnel with more than 20% worldwide the last four years, with a clear strategy to leverage on this capacity worldwide.

In December 2018, Elkem announced the decision to expand capacity and capability by building a new R&D center dedicated to the Silicones division at its Saint-Fons site in Lyon. This new site, operational at the end of 2020, will bring together 130 European researchers and will be at the heart of the Chemistry Valley and the Lyon Metropolis to reinforce innovation within Elkem in partnership with many innovative external actors globally.

In 2019 Elkem's R&D expenses related to processes, products and business development, including improvement projects and technical support to customers were NOK 494 million.

ENVIRONMENT, SOCIAL AND GOVERNANCE

Elkem's mission is *to contribute to a sustainable future by providing advanced silicones, silicon and carbon solutions, adding value to our stakeholders globally.*

Elkem is committed to contribute to a sustainable future. The sustainability work is defined as continuous efforts to maximise the positive impact on the environment and societies around us, as well as to minimise any negative impact.

Elkem's values form the foundation for the way we do business. Our dedicated employees base their work on involvement, respect, precision and continuous improvement. *Involvement* ensures that people are committed. *Respect* is about being fair, open and honest and appreciating diversity. *Precision* expresses itself through our work to develop and follow standards of best practice and safe and stable production. *Continuous improvement* means to always look for improvement potential.

Elkem is a signatory to the UN Global Compact and has made a strong commitment to socially responsible and sustainable business practices. Our definition of corporate social responsibility is based on the Global Compact's ten principles for human rights, labour rights, environment and anti-corruption. All employees are obliged to follow Elkem's policies and principles and to report discrepancies according to company guidelines.

Elkem is subject to sustainability reporting requirements under section 3-3c of the Norwegian Accounting Act. The group uses the GRI Standards for voluntary reporting of sustainable development and issues a separate sustainability report based on the framework of the Global Reporting Initiative and it also complies with the section 3-3c in the Norwegian Accounting Act.

The sustainability report can be found on page 52 in this annual report.

Environment, health and safety

Environment, health and safety (EHS) is the backbone of Elkem's business and is always our first priority. Our EHS efforts are based on a zero-harm philosophy.

As a global company, Elkem affects the environment and communities around the world every day.

One of Elkem's key priorities is to minimise the environmental impact through the value chain. This is why Elkem is always looking for new and innovative ways to reduce waste and emissions, and to increase the yield from raw materials. This implies using highly developed production technology and running operations with resource-efficient processes.

The safety of our employees is the most important aspect of our philosophy. We strongly believe, and have shown, that our production can be done without any harm on our people. Elkem uses considerable resources to identify hazards and implement appropriate measures to reduce risk to an acceptable level, so that all employees and contractors performing work at Elkem can leave their jobs with no harm and just as healthy as they were when they arrived.

Elkem has a strict reporting regime for injuries and requires all injuries to be reported, investigated and mitigated independent of severity. Of a lost workday rate of 1.1 injuries per million work hours, three injuries were defined as high severity in 2019. Deeply regrettable one of these injuries resulted in the death of a young operator. This incident at the Xinghuo plant in China has been thoroughly investigated and corrective actions have been implemented. In addition, learnings from the incident have been implemented at all sites with similar equipment.

Diversity and gender equality – equal opportunities for all our employees

Elkem is committed to provide equal opportunities for all our employees in an inclusive work culture. We appreciate and recognise that every individual is unique and valuable and should be respected for his or her individual abilities.

Elkem does not accept any form of harassment or discrimination based on gender, religion, race, national or ethnic origin, cultural background, social group, disability, sexual orientation, marital status, age or political opinion. The group seeks to provide equal employment opportunities and treat all employees – and job seekers – fairly.

The company has a well-established policy and practice to ensure that there is no discrimination. The policy and established practises include code of conduct, recruitment, compensation and benefits, working conditions, possibilities for promotion, development and protection against harassment.

In 2019, 24% of the leaders in Elkem were female. One concrete action to improve the share of female leaders is to actively encourage women to apply for management positions internally. We strive to have at least 50% women among the participants invited to Elkem's leadership training programmes. The female participation rate in the programme increased from 25% in 2018 to 32% in 2019. The total female share of employees in Elkem was 25% in 2019.

Other initiatives include a greater emphasis on age diversity. In 2019, Elkem started tracking the age distribution of employees on two different hierarchical levels.

Governance

The board of directors recognises that the importance of good corporate governance with appropriate division of roles is vital to build confidence, protect all shareholders' interests and facilitate the creation of sustainable shareholder value.

Elkem is subject to corporate governance reporting requirements under section 3-3b of the Norwegian Accounting Act and the Norwegian Code of Practice for Corporate Governance, cf. section 7 of the continuing obligations of stock exchange listed companies. The Accounting Act may be found (in Norwegian) at www.lovdata.no. The Norwegian Code of Practice for Corporate Governance may be found at www.nues.no.

The annual statement on corporate governance can be found on page 39 in the annual report. More information on Elkem's work on environment, health and safety is found in the sustainability report.

BOARD AND MANAGEMENT CHANGES

Helge Aasen stepped down as CEO of Elkem with effect from 1 December 2019 and became a member of the board of the company. Zhigang Hao, previous member of the board simultaneously assumed the position as chair of the board, while previous chair of the board, Michael Koenig, was appointed new CEO of Elkem.

Elkem had nine board meetings in 2019. A detailed overview of the board members' attendance may be found in Note 10 of the financial statement.

Elkem has a corporate social responsibility (CSR) steering committee.

The steering committee defines, obtains approval and follows up CSR governing documents in Elkem. The purpose is to safeguard basic human rights, the employees' rights as workers, environmental concerns, sustainable utilisation of natural resources and business integrity. Elkem does not permit or tolerate engagement in any form of corruption and has implemented policies for anti-corruption, competition law compliance and whistle blowing.

RISK MANAGEMENT

Elkem has global operations and advanced industrial activities that in combination create a complex risk picture. Elkem's board of directors and management conduct business reviews on a regular basis to monitor the business performance and to verify that adequate risk assessments are in place. The group is exposed to several risks, which could have considerable effect on its business performance, such as strategic, financial, raw material, production and process, market and product and compliance related risks.

Elkem's model for risk management

Elkem's model, according to Elkem Business System (EBS), is to organise resources close to the value chain. This principle also applies to compliance and internal control. Elkem has therefore integrated its risk management and internal control activities as part of the line management's responsibility. This means that the management of each company in Elkem shall ensure:

- Adherence to laws and regulations
- Operations according to Elkem's governing documents, including code of conduct and social responsibility policy
- Qualitative financial reporting
- Realisation of business opportunities and strategy
- Efficient operations

Elkem's total risk exposure and business performance is analysed, evaluated and summarised regularly at corporate, segment and business unit level. The process is bottom up where each of the divisions and key corporate functions go through a defined process to identify and quantify the main risks. The key risks on group level are further analysed both in terms of impact and likelihood. Based on this, the top 10 risks on group level are identified and further discussed with the board based on mitigating actions and risk tolerance. The purpose is to identify and decide if risks are within Elkem's risk tolerance or if further mitigating actions must be taken. A summary of the risk analysis is presented on page 49 in this annual report.

Business risk

The principal risk is related to prices and sales volumes for silicon related materials, as well as costs for key raw materials, energy and other consumables. The demand for silicon related materials has increased over the past years and the growth is expected to exceed the growth in global GDP. Demand and prices will however fluctuate based on economic cycles and competition, and significant price and volume changes can be observed depending on the overall business sentiment. Elkem is seeking to mitigate and reduce financial impact by investing into R&D, capture specialised market positions and over time reduce commodity price exposure. In addition, Elkem aims to keep a strong financial profile with adequate equity and liquidity reserves to handle and mitigate the effects of economic downturns.

Compliance related risks

Compliance related risks, including failure to comply with all applicable local legislation, international standards on issues such as human rights, labour rights and corruption, are all risk factors that Elkem seeks to mitigate with clear code of conduct and policies, tone at the top, training of our people and internal audits.

Compliance is monitored centrally by corporate help chains, including EHS, CSR, HR, EBS, Legal and Finance. Elkem's governing documents are available to all employees via Elkem's intranet. Corporate help chains are responsible for internal control within their respective functions including policy and awareness building and conduct of audits.

Financial related risks

Elkem operates in an international industry which exposes the business to a variety of financial risks. Through its operations, Elkem's result, cash flow and equity are exposed to fluctuations in currency exchange rates. Elkem seeks to reduce the impact from changes in currency exchange rates by a currency hedge programme and loans in foreign currencies. Counterparty credit risk is considered low due to close monitoring of the receivables portfolio, credit insurance on a big portion of the receivables and the fact that Elkem's transactions and deposits are with solid and reputable banks. Liquidity risk related to the company's ability to meet financial obligations is considered low based on satisfactory long-term financing, adequate leverage ratio and equity and access to ample, un-used credit facilities. See note 28 in the financial statements for more details on financial risk.

ACCOUNTING REPORTING PROCESS

Elkem has routines to ensure that the financial statement is reported according to applicable laws and regulations and in accordance with adopted accounting policies. These routines are described in internal reporting manuals, which are updated regularly according to new accounting principles.

The accounting plan includes controls and check reports that shall ensure consistency of the financial reporting. The financial information is consolidated and controlled at several levels within the respective divisions.

The audit committee performs reviews of the quarterly, half year and annual financial statement with special focus on accounting topics such as provisions and liabilities, estimates and judgements, or issues with major impact on the financial statement. The external auditors participate in these meetings in addition to representatives from the management and finance function of Elkem.

FUTURE PROSPECTS

Elkem's fundamental long-term prospects are positive. It is the board of directors' assessment that growth in all of Elkem's divisions is driven by global mega trends, including sustainability, energy demand growth, urbanisation, digitalisation and an aging and growing population.

Despite solid underlying fundamentals, the near-term market conditions will be dependent on the macro economic development and demand in key end-user segments. The macro economic situation has been challenging in 2019 and sectors such as construction and automotive have been weak. Furthermore, the board of directors would like to underline that there is in general considerable uncertainty associated with any assessments of future market conditions and developments.

The macro-economic outlook for 2020 is uncertain and end-user segments such as construction and automotive are still mixed, primarily as a result of the macro situation. This development is likely to also be reflected in Elkem's divisions for 2020.

The overall demand is expected to be relatively stable with some potential for price recovery for basic products from the historic lows in 2019. Prices for specialised products are expected to remain stable, but the demand development will depend on end-user segments such as automotive.

While Elkem's financial position remains strong with solid equity and liquidity, the board will continue to emphasize its strategic initiatives and ensure continuous improvements to counter the weaker short-term outlook.

As part of subsequent events, Elkem board of directors decided on 3 March 2020 to implement a new global productivity improvement programme to improve the company's cost position and streamline the organisation as a basis for future growth and specialisation. Elkem has identified a potential of more than NOK 350 million in annual improvements from the programme. The company expects positive EBITDA contributions from early 2021 and the full potential to be realised from the end of 2021. Restructuring costs are expected to be around NOK 200 million, which will be taken as a provision in Other items in Q1 2020. Elkem aims to maintain an investment grade profile and targets a leverage ratio in the range of 1.0x – 2.0x.

Elkem will pursue its main strategic initiatives and focus on further cost optimisation and operational improvements. The specialisation strategy will continue with focus on R&D resources and integration of the bolt-on acquisitions in 2019.

Elkem's policy is to pay a dividend of 30-50% of net profit of the year. The board of directors has proposed to the annual general meeting a dividend payment of NOK 0.60 per share for 2019, which would represent 41% of profit for the year. The board of directors' view is that proposed dividend is appropriate based on current financial position, market outlook and investment plans.

ELKEM ASA

Elkem ASA is the parent company of the Elkem group. The company's accounts have been presented in accordance with the Norwegian Accounting Act and generally accepted accounting practices in Norway. The accounts are prepared on the basis of a going concern assumption.

For Elkem ASA the operating income amounted to NOK 6,268 million in 2019 compared to NOK 6,288 million in 2018. The operating profit ended at NOK 371 million in 2019, compared to NOK 263 million in 2018.

For Elkem ASA the financial position improved during the year. Elkem ASA's equity was NOK 9,150 million at the end of 2019. The equity ratio ended at 41%, which is an increase from 40% in 2018. Profit for the year was NOK 512 million. The net interest-bearing debt amounted to NOK 3,870 million per 31 December 2019. Cash and cash equivalents amounted to NOK 3,512 million.

Allocation of 2019 net profit

The net profit for the year was NOK 512 million. The board of directors proposes the following allocation (in NOK million):

From other paid in capital	(349)
Proposed dividend	349
Transfer to retained earnings	512
Allocated	**512**

The board of directors of Elkem ASA
Oslo, 3 March 2020

Zhigang Hao
Chair of the Board

Dag Jakob Opedal
Deputy chair

Caroline Catherine Juliette Mazza
Board member

Yougen Ge
Board member

Anja Isabel Dotzenrath
Board member

Olivier de Clermont Tonnerre
Board member

Marianne Elisabeth Johnsen
Board member

Helge Aasen
Board member

Terje Andre Hanssen
Board member

Marianne Færøyvik
Board member

Per Tronvoll
Board member

Michael Koenig
Chief Executive Officer

Board of directors

Zhigang Hao (1978)
Chair of the board
(representing majority shareholder)

Other directorships: Chair of Bluestar Adisseo Co., Ltd.

Number of Elkem shares: 0*

Chair since 2019, and board member in 2017

Dag Jakob Opedal (1959)
Vice chair of the board
(independent)

Other directorships: Board member at Bertel O. Steen Holding, Bertel O. Steen Kapital, Odin Forvaltning, Kavli Holding, Kavlifondet, Isola, Lundhs, Bygimpuls and Nammo.

Number of Elkem shares: 40,000*

Member of the board since: 2018

Helge Aasen (1963)
Board member
(representing majority shareholder)

Other directorships: Chair at Norwegian Industry Association (Norsk Industri) and board member at China National Bluestar Group and Borregaard.

Number of Elkem shares: 86,206*

Member of the board since: 2019

Olivier Louis Marie Gérard Tillette de Clermont-Tonnerre (1951)
Board member
(representing majority shareholder)

Other directorships: Board member of China National Bluestar Corp., Bluestar Elkem International Luxembourg, REC Solar, Nouvel Institut Franco-Chinois de Lyon and Société des Cincinnati de France.

Number of Elkem shares: 15,517*

Member of the board since: 2011

Yougen Ge (1969)
Board member
(representing majority shareholder)

Number of Elkem shares: 0*

Member of the board since: 2019

Anja Isabel Dotzenrath (1966)
Board member
(independent)

Number of Elkem shares: 0*

Member of the board since: 2018

** Shareholdings as of 31 December 2019.*

Caroline Catherine Juliette Mazza (1957)
Board member
(independent)

Other directorships: Five current directorship positions, including director of Groupama, board of director at Wienberger AG, Vinci SA and Fnac Darty.

Number of Elkem shares: 2,300*

Member of the board since: 2018

Marianne Elisabeth Johnsen (1963)
Board member
(independent)

Other directorships: Chair of the Norwegian Seafood Council and board member and chair of the Audit Committee in Norway Royal Salmon ASA in, in addition to serving on the board of several other companies.

Number of Elkem shares: 0*

Member of the board since: 2019

Marianne Færøyvik (1967)
Board member
(employee representative)

Number of Elkem shares: 2,700*

Member of the board since: 2016

Terje Andre Hanssen (1963)
Board member
(employee representative)

Number of Elkem shares: 0*

Member of the board since: 2010

Per Tronvoll (1955)
Board member
(employee representative)

Number of Elkem shares: 0*

Member of the board since: 2006

For more information on Elkem's board of directors, please visit:
https://www.elkem.com/about-elkem/Corporate-management-and-Board-of-directors/

** Shareholdings as of 31 December 2019.*

Management team

Michael Koenig (1963)
Chief Executive Officer

Directorships: Board member of China National Bluestar (group) Co. Ltd. Quenos and Symrise.

Number of Elkem shares: 68,965*

Morten Viga (1964)
Chief Financial Officer

Number of Elkem shares: 46,896*

Katja Lehland (1968)
Senior Vice President Human Resources

Number of Elkem shares: 0*

Asbjørn Søvik (1963)
Senior Vice President Business Development

Number of Elkem shares: 10,000*

Håvard Moe (1966)
Senior Vice President Elkem Technology

Directorships: Chair of Future Materials

Number of Elkem shares: 17,241*

Louis Vovelle (1958)
Senior Vice President Innovation and R&D

Number of Elkem shares: 6,896*

** Shareholdings as of 31 December 2019.*

Frédéric Jacquin (1967)
Senior Vice President Silicones

Number of Elkem shares: 6,551*

Trond Sæterstad (1960)
Senior Vice President Silicon Materials

Directorships: Board member at Mo Industrial Park

Number of Elkem shares: 0*

Inge Grubben-Strømnes (1974)
Senior Vice President Carbon

Number of Elkem shares: 35,189*

Jean Villeneuve (1958)
Senior Vice President Foundry Products

Number of Elkem shares: 0*

For more information on Elkem's executive management, please visit:
https://www.elkem.com/about-elkem/Corporate-management-and-Board-of-directors/

** Shareholdings as of 31 December 2019.*

The board of director's report on corporate governance

Good corporate governance is important to ensure confidence in the company and value creation in the best interest of shareholders, employees and other stakeholders. Environment, Social and Governance (ESG) criteria are increasingly used to evaluate how companies perform. In that respect, this report, combined with Elkem's sustainability report, annual report and website, document the group's activities and results.

Elkem is subject to corporate governance reporting requirements according to section 3-3b of the Norwegian Accounting Act and the Continuing obligations of stock exchange listed companies at Oslo Stock Exchange. Further, Elkem's board of directors endorses "The Norwegian Code of Practice for Corporate Governance" (the "Code"), most recently revised on 17 October 2018 and issued by the Norwegian Corporate Governance Policy Board. The Code of Practice is available at www.nues.no.

This report follows the system used in the Code, and forms part of the board of directors' report.

1. IMPLEMENTATION AND REPORTING ON CORPORATE GOVERNANCE

Elkem's corporate governance policy is based on the Code, and as such designed to establish a basis for good corporate governance to support achievement of the company's core objectives on behalf of its shareholders, including the achievement of sustainable profitability.

Elkem believes good corporate governance involves openness and trustful cooperation between all parties involved in the group: the shareholders, the board of directors and executive management, employees, customers, suppliers, public authorities and society in general.

By pursuing the principles of corporate governance, the board of directors and management contributes to achieving open communication, equal rights for all shareholders and good control and corporate governance mechanisms. The board of directors assesses and discusses Elkem's corporate governance policy on a yearly basis.

Elkem aspire to comply with the recommendations of the Code. If the Code is deviated from, the deviation is described and explained in the relevant section of this statement.

2. BUSINESS

Elkem's mission is to contribute to a sustainable future by providing advanced silicon, silicones and carbon solutions, adding value to our stakeholders globally. Elkem's business scope is clearly described in section 3 of the articles of association:

The object of the company is to develop and engage in industry, mining, trade and transportation as well as exploration and exploitation of natural resources. The company may also develop, acquire and exploit patents, inventions and technical knowhow. The company may participate directly or by other means in companies engaged in activities outlined above or activities that promote or support such objects.

Elkem was founded in 1904 and is a market leader in the production of silicon-based advanced materials. Elkem is a fully integrated producer with operations throughout the silicon value chain from quartz to silicon and downstream silicone specialities, as well as speciality ferrosilicon alloys and carbon materials.

Elkem is operating in capital intensive industries and has 29 production sites and an extensive network of sales offices around the world. While this gives competitive strengths, it also gives exposure to a range of risk factors. The board of directors has defined goals and strategies for the business and has a clear focus on risk profiles and risk management to create value for the company's shareholders. More details on the main risks and risk management principles are presented in the annual report and the board of directors' report.

The board has set out a strategy based on three main pillars, operational efficiencies, specialisation and value chain optimisation and continued growth. Elkem's strategy is to ensure operational excellence and cost-effective production based on the lean manufacturing principles in Elkem Business System (EBS). An important part of Elkem's strategy is further product specialisation through R&D and selected acquisitions to improve and stabilise the group's profitability. The target is also to grow Elkem's business both organically and through acquisitions as an entrance to new markets and product segments.

Risk management and internal control systems are in place to manage operational risks. The company aims to maintain a strong

financial profile with a robust capital structure. The target is to have a leverage ratio of 1.0x – 2.0x, defined as net interest-bearing debt to EBITDA.

Sustainability is central in Elkem's business strategy. Elkem defines sustainability work as continuous efforts to maximise the positive impact on the environment and societies, as well as to minimise any negative impact. Elkem is a signatory to the UN Global Compact and apply sustainability in line with the principles of the UN Global Compact. Elkem is committed to develop its business in support of the ambitions of the Paris climate agreement and the UN Sustainable Development Goals (SDGs). Elkem is also committed to follow the United Nations Guiding Principles on Human Rights and Business. Elkem's silicones division is a member of the Responsible Care Global Charter which is the chemical industry's global initiative to drive continuous improvement in environment, health, safety and security.

Elkem has implemented guidelines and procedures in accordance with section 3-3c of the Accounting Act, including code of conduct, policy on anti-corruption and CSR polices.

Elkem's objectives, strategy and financial targets are evaluated by the board of directors on an annual basis. The board also reviews the group's CSR and risk profile and make regular assessments of these processes to ensure high quality standards.

No deviations from the Code.

3. EQUITY AND DIVIDENDS

As of 31 December 2019, the group's equity was NOK 12,952 million, which is equivalent to 45% of total assets. The total issued share capital of Elkem amounted to NOK 2,907 million divided into 581,310,344 shares, each with a nominal value of NOK 5.

Elkem aims to maintain an investment grade profile and targets a leverage ratio, defined as net interest bearing debt to EBITDA, in the level of 1.0 – 2.0 times. As of 31 December 2019, the leverage ratio was 2.2 times, which is above target, due to challenging market conditions lowering the EBITDA. The board of director's target is to ensure a leverage ratio in line with policy over the business cycle. In addition, Elkem aims to keep a robust liquidity reserve and a smooth maturity profile on its loan portfolio to mitigate financing and liquidity risk. As of 31 December 2019, available cash amounted to NOK 4,496 million providing a strong liquidity position. In addition, Elkem has undrawn credit facilities amount to NOK 3,105 million.

The board of directors considers Elkem's capital structure, including equity and debt structure, to be appropriate to the company's objective, strategy and risk profile.

The company's dividend policy is to aim for dividends distributions to reflect the underlying earnings and cash flow of the group and targets a dividend pay-out ratio of 30-50% of the group's net profit for the year. The proposed dividend pay-out for the financial year ended 31 December 2019 is NOK 0.60 per share. The proposed dividend represents 41% of the group's net profit in 2019.

The board of directors has not been granted any authorisation to approve distribution of dividends.

At the annual general meeting on 30 April 2019, the board of directors was granted the following authorisations:

i. In order to give the board of director's financial flexibility and enable quick access to the market in the event of an acquisition in return of shares or for general corporate purposes, the board of directors was granted an authorisation to increase the share capital with an amount up to NOK 290,655,172 corresponding to 10% of the current share capital. The authorisation covers share capital increases against contribution in kind and share capital increase in connections with mergers. The shareholders' preferential rights to new shares may be deviated from. The authorisation is valid until the annual general meeting in 2020, but no longer than to and including 30 June 2020.

ii. The board of directors was granted an authorisation to increase the share capital up to NOK 40,000,000 to be used in connection with the issuance of new shares under the company's share incentive scheme. The authorisation is valid until the annual general meeting in 2020, but no longer than to and including 30 June 2020.

iii. In order to allow the board of directors to utilise the mechanisms permitted by the Norwegian Public Limited Liability Companies Act to acquire own shares, the board of directors was granted an authorisation to acquire own shares with a total nominal value of up to NOK 290,655,172 corresponding to 10% of the current share capital. The maximum amount that can be paid for each share is NOK 150 and the minimum is NOK 1. The authorisation is valid until the annual general meeting in 2020, but no longer than to and including 30 June 2020.

Deviations from the Code: The board of directors' authorisation to increase the share capital with an amount up to NOK 290,655,172, corresponding to 10% of the current share capital can be used for several purposes. Elkem believes that this authorisation is important in order to allow the board of directors, in the interest of time, to act quickly in connection with a transaction or other corporate events where it is in the shareholders and Elkem's interest to increase the share capital. This authorisation was not utilised in the financial year ended 31 December 2019.

4. EQUAL TREATMENT OF SHAREHOLDERS AND TRANSACTIONS WITH CLOSE ASSOCIATES

All shareholders shall be treated on an equal basis, unless there is just cause for treating them differently.

In the event of an increase in share capital through the issue of new shares, a decision to waive the existing shareholders' pre-emptive rights will be publicly disclosed in a stock exchange announcement issued in connection with the share issuance. Elkem did not resolve any share capital increases in the financial year ended 31 December 2019.

If Elkem should carry out any transaction in its own shares, this will be carried out either through the stock exchange or at prevailing stock exchange prices to ensure equal treatment of all shareholders. Elkem did not carry out any transactions in its own share in the financial year ended 31 December 2019.

In the event of a not immaterial transaction between the company and its shareholders, a shareholder's parent company, members of the board, executive management or closely-related parties of any such parties, the board will arrange for a valuation to be obtained from an independent third party. In 2019, there were no significant transaction between the company and related parties, except for ordinary commercial transactions at arm's length market terms.

No deviations from the Code.

5. FREELY NEGOTIABLE SHARES

The shares in Elkem are freely negotiable and there are no restrictions on any party's ability to own, trade or vote for the share in the company.

No deviations from the Code.

6. GENERAL MEETINGS

The board of directors will ensure that as many of the company's shareholders as possible can participate in the general meeting. The board of directors will further ensure that:

- notices for the general meetings are sent to all shareholders individually, or to their depository banks, at least 21 days in advance, that all matters to be considered by the meeting are specified and that relevant documents are made available on the company's website;
- the resolutions and any supporting documentation are sufficiently detailed, comprehensive and specific, allowing shareholders to understand and form a view on all matters to be considered at the general meeting;

- the CEO, the chair of the board of directors and the chair of the nomination committee are present at the general meeting; and
- the general meeting is able to elect an independent chair for the general meeting.

The articles of association of Elkem does not provide for any deadline for the shareholders to give notice of their attendance at the general meeting. The board of directors may still encourage shareholders to give such notice within a set deadline.

Shareholders who are unable to be present at the general meeting will be given the opportunity to vote by proxy or through written voting in a period prior to the general meeting. The company will in this respect provide information on the procedure and prepare a proxy form/written voting form.

All board members and members of the nomination committee are encouraged, but not obliged, to be present at the annual general meeting. Elkem has chosen not to follow the recommendation to vote separately on each candidate nominated for the board of directors and the nomination committee. The process of the nomination committee is focused on the combined qualification and experience of the proposed members to the board of directors and the nomination committee and the voting should therefore also be combined.

Deviations from the code:
Voting on members to the board of directors and the nomination committee takes place as a combined vote.

7. NOMINATION COMMITTEE

Establishment and composition

According to section 7 of Elkem's articles of association, the company shall have a nomination committee consisting of two or three members in accordance with the decision of the general meeting. The members of the nomination committee are elected by the annual general meeting, which has also approved guidelines for the duties of the nomination committee.

The nomination committee comprise the following members, all of whom were elected on the annual general meeting in 2019:

- **Sverre Sellæg Tysland** / Chair / Practicing lawyer / Independent / Elected for a period of one (1) year;
- **Olivier Tillette de Clermont-Tonnerre** / Committee member and member of the board of directors representing the majority shareholder / Elected for a period of two (2) years; and
- **Anne Kjølseth Ekerholdt** / Committee member / Practicing lawyer / Independent / Elected for a period of two (2) years.

The members of the nomination committee have been elected to take into account the interests of shareholders in general. The majority of the members are independent of the board of directors and the executive management.

The nomination committee shall make recommendations to the general meeting for the election of shareholder elected board members and members of the nomination committee, and the remuneration of the board of directors and the nomination committee. When nominating shareholder representatives to the board of directors, the nomination committee presents relevant information about the candidates, together with an evaluation of their independence.

In connection with the nomination committee's work with proposing candidates, and to ensure that the candidates represent a broad group of the company's shareholders, the nomination committee is in contact with the board of directors, the CEO and major shareholders. Furthermore, the nomination committee ensures that the board of directors is composed to comply with legal requirements and the corporate governance code.

The nomination committee have justified its proposal for the board of directors. While the nomination committee presents relevant information about each candidate separately, the nomination committee focuses on the combined qualifications and experience of the proposed members of the board of directors when presenting its proposal to the general meeting. Information for how to propose candidates are available on Elkem's webpage.

Deviations from the Code: The nomination committee justifies its proposals combined and not separately for each board member.

8. COMPOSITION AND INDEPENDENCE OF THE BOARD

The board of directors of Elkem comprises 11 members, of which eight of the board members, including the chair, are shareholder elected. The remaining three board members are elected by the company's employees. The board of directors was extended from eight to 11 members at the annual general meeting in 2019.

An extraordinary general meeting was held on 15 November 2019 to elect new members to the board of directors with effect from 1 December 2019. Michael Koenig stepped down as chair of the board to become new CEO of Elkem ASA. Subsequently, board member Zhigang Hao replaced Michael Koenig as chair and Dag Jakob Opedal was appointed vice-chair. At the extraordinary general meeting, Helge Aasen was elected as a new member of the board of directors in accordance with the recommendation from the nomination committee.

As of 31 December 2019, the board of directors of Elkem comprise the following persons:

- **Zhigang Hao** / Chair / Representing the majority shareholder / Elected for a period of two (2) years;
- **Dag Jakob Opedal** / Vice chair / Independent / Elected for a period of one (1) year;
- **Olivier Tillette de Clermont-Tonnerre** / Board member / Representing the majority shareholder / Elected for a period of one (1) year;
- **Yougen Ge** / Board member / Representing the majority shareholder / Elected for a period of one (1) year;

- **Helge Aasen** / Board member / Representing the majority shareholder / Elected for a period of two (2) years;
- **Anja-Isabel Dotzenrath** / Board member / Independent / Elected for a period of two (2) years;
- **Caroline Catherine Juliette Mazza** / Board member / Independent / Elected for a period of one (1) year;
- **Marianne Elisabeth Johnsen** / Board member / Independent / Elected for a period of two (2) years;
- **Marianne Færøyvik** / Board member / Employee representative / Elected until the annual general meeting in 2020;
- **Terje Andre Hanssen** / Board member / Employee representative / Elected until the annual general meeting in 2020;
- **Per Tronvoll** / Board member / Employee representative / Elected until the annual general meeting in 2020.

The composition of the board of directors is considered to attend to the common interests of all shareholders and meet the company's need for expertise, capacity and diversity. Four of the board members are women, and none of the members of the company's executive management are members of the board of directors.

The board of directors is composed so that it can act independently of any special interests. The majority of the shareholder elected board members are independent of the executive management and material business connections of the company. Further, four out of the eight shareholder elected board members are independent of the company's majority shareholder.

Further information on each of the board members is presented at www.elkem.com and information on their record of attendance at board meetings can be found in note 12 in the annual report.

Members of the board of directors are encouraged to own shares in the company, however, with caution not to let this encourage a short-term approach which is not in the best interests of the company and its shareholders over the longer term. As of 31 December 2019, the following board members owned shares in the company: Helge Aasen (86,206 shares), Olivier de Clermont-Tonnerre (15,517 shares), Caroline Catherine Juliette Mazza (2,300 shares), Dag J. Opedal (40,000 shares) and Marianne Færøyvik (2,700 shares).

No deviations from the Code.

9. THE WORK OF THE BOARD OF DIRECTORS

The board of directors' work follows an annual plan, with particular focus on objectives, strategy and implementation. The plan is evaluated and approved around the beginning of each calendar year. The board of directors also annually evaluates its performance and expertise.

The board of directors has implemented instructions for the board of directors and the executive management, which are focused on determining allocation of internal responsibilities and duties. The objectives, responsibilities and functions of the board of directors and the CEO are in compliance with rules and standards applicable to the group and are described in the company's annual report. The board of directors have also implemented procedures to ensure that members of the board of directors and executive personnel make the company aware of any material interests that they may have in items to be considered by the board of directors. The board of directors will also be chaired by some other member of the board if the board is to consider matters of a material character in which the chair of the board is, or has been, personally involved.

The board of directors held 9 board meetings in 2019. One board member was excused from one of the board meetings and was absent from another board meeting. Five board members were absent from one board meeting in 2019. One board member was absent from two board meetings in 2019. The remaining board members attended all board meetings in 2019.

The board of directors reports on any transactions with related parties in the annual report.

The board of directors has established an audit committee and a remuneration committee.

The audit committee

The board of directors has established an audit committee which is a working committee for the board of directors, preparing matters and acting in an advisory capacity. The audit committee is responsible for overseeing financial reporting and disclosure, and assists the board of directors with assessments of the integrity of the company's financial statements, financial reporting processes and internal controls, risk management and performance of the external auditor.

The board of directors has issued instructions for the work of the audit committee, and the duties and composition of the committee are in compliance with the Norwegian Public Limited Liability Companies Act.

The members of the audit committee are elected by and amongst the members of the board of directors for a term of up to two years and comprise the following persons:

- **Dag J. Opedal** / Chair / Independent
- **Marianne Elisabeth Johnsen** / Member from 21 October 2019 / Independent
- **Olivier Tillette de Clermont-Tonnerre** / Member / Representing the majority shareholder

The committee members have the overall competence required to fulfil their duties based on the organisation and operations of the group and at least one member of the audit committee is competent in respect of finance and audit and independent of the business.

The remuneration committee

The board of directors has appointed a remuneration committee which comprise the following persons:

- **Zhigang Hao** / Chairperson, replaced Michael Koenig from 1 December 2019 / Representing the majority shareholder
- **Anja-Isabel Dotzenrath** / Member / Independent
- **Caroline Catherine Juliette Mazza** / Member / Independent

The remuneration committee is a preparatory and advisory committee for the board of directors in questions relating to the company's compensation of the executive management. The purpose of the remuneration committee is to ensure thorough and independent preparation of matters relating to compensation to the executive personnel. The remuneration committee puts forth a recommendation for the board of directors' guidelines for remuneration to senior executives in accordance with section 6-16a of the Norwegian Public Limited Liability Companies Act.

The members of the remuneration committee are elected by and amongst the members of the board of directors for a term of up to two years and are independent of the company's executive management.

The board of directors has issued instructions for the work of the remuneration committee.

No deviations from the Code.

10. RISK MANAGEMENT AND INTERNAL CONTROL

It is ultimately the responsibility of the board of directors to ensure that the company has sound and appropriate internal control systems and risk management systems reflecting the extent and nature of the company's activities. Sound risk management is an important tool to create trust, ensure good environment, health and safety standards and enhance value creation. Internal control should ensure effective operations and prudent management of significant risks that could prevent the group from attaining its targets. Elkem's internal controls and systems also cover the company's corporate values, ethical guidelines and principles of corporate social responsibility.

Elkem complies with all laws and regulations that apply to the group's business activities. The group's code of conduct describes the main principles for compliance and how the compliance function is organised.

The company has a comprehensive set of relevant corporate manuals and procedures, which provide detailed descriptions of procedures covering all aspects of managing the operational business. The procedures and manuals are continuously revised to reflect best practice derived from experience or adopted through regulations.

The board of directors conducts annual reviews of the company's most important areas of exposure to risk and such areas' internal control arrangements. A summary of the main risks is presented in the annual report.

The board of directors describes the main features of the company's internal control and risk management systems connected to the company's financial reporting in the company's annual report. This covers the culture of control, risk assessment, controlling activities and information, communication and follow-up. The board of directors is obligated to ensure that it is updated on the company's financial situation, and to continuously evaluate whether the company's equity and liquidity are adequate in terms of the risk from, and the scope of, the company's activities, and shall immediately take necessary actions if it is demonstrated at any time that the company's capital or liquidity is inadequate. The company focuses on frequent and relevant management reporting to the board of directors. The reports contain matters related to health and safety, market development, operations and financial performance. The purpose is to ensure that the board of directors has sufficient information for decision-making and is able to respond quickly to changing conditions or important incidents. Board meetings are held regularly, and management reports are provided to the board on a monthly basis.

No deviations from the Code.

11. REMUNERATION OF THE BOARD OF DIRECTORS

The remuneration to the board of directors is determined by the shareholders at the annual general meeting based on a proposal from the nomination committee. The level of remuneration to the board of directors is considered to reflect the board of directors' responsibility, expertise, the complexity of the company and its business, as well as time spent and the level of activity in both the board of directors and any board committees.

The remuneration of the board of directors is not linked to the company's performance and Elkem does not grant share options to its members of the board of directors.

The board members, or companies associated with board members, have not been engaged in specific assignments for the company in addition to their appointments as members of the board of directors.

The remunerations for the period from May 2019 until the annual general meeting in 2020 are as follows:

Board of directors:

- Chair and board members representing the majority shareholder: No compensation
- Vice chair, independent: NOK 475,000
- Independent shareholder elected and employee elected board members: NOK 375,000
- Observers: NOK 187,500

Audit committee:

- Leader: NOK 135,000
- Independent member: NOK 90,000
- Member representing majority shareholder: No compensation

Remuneration committee:

- Leader: No compensation
- Independent members: NOK 90,000

The total compensation to members of the board of directors in 2019 is disclosed in note 12 to the consolidated financial statements.

No Deviations from the Code.

12. REMUNERATION OF EXECUTIVE PERSONNEL

The board of directors prepares guidelines for the remuneration of executive management which support Elkem's prevailing strategy and values. These guidelines include the main principles for the company's remuneration policy and contributes to aligning the interests of the shareholders and the executive management. The guidelines are communicated to the annual general meeting and the board of director's statement will be presented in a separate appendix to the agenda for the general meeting.

Performance-related remuneration of the executive management in the form of share options, bonus programmes or similar are linked to value creation for shareholders or the company's profit over time. As of 31 December 2019, 15,850,000 options have been granted to members of the management and certain other key employees, of which 7,850,000 were granted in 2018 and 8,000,000 were granted in 2019. Each option granted in 2018 gives the option holder the right to subscribe or purchase one share in Elkem ASA at an exercise price of NOK 38.52, which is equal to the share price at closing on 13 September 2018. Each option granted in 2019 gives the option holder the right to subscribe or purchase one share in Elkem ASA at an exercise price of NOK 23.53, which is equal to the average of the share price at closing on the first 20 trading days in July 2019. The options will vest over a period of three years from grant with one-third vesting each year. Participants may not in any calendar year realise a total gain on exercise of options which is in excess of two times (four times for the CEO) the employee's base salary.

No deviations from the Code.

13. INFORMATION AND COMMUNICATIONS

Elkem is under an obligation to continuously provide its shareholders, Oslo Børs and the financial markets in general with timely and precise information about the company and its operations. Relevant information is given in the form of annual reports, quarterly reports, press releases, notices to the stock exchange and investor presentations in accordance with what is deemed appropriate from time to time. Elkem maintains an open and proactive policy for investor relations and has given regular presentations in connection with annual and quarterly results. The goal is that Elkem's information work shall be in accordance with best practice at all times and all communications with shareholders shall be in compliance with the provisions of applicable laws and regulations and in consideration of the principle of equal treatment of the company's shareholders.

Investor contact/investor relations (IR) activities are conducted in accordance with the IR policy and by the IR team only. The IR team comprises the CEO, the CFO and the VP Finance and Investor relations.

The company publishes an annual, electronic financial calendar with an overview of dates for important events, such as the annual general meeting, interim financial reports, public presentations and payment of dividends, if applicable.

In addition to the board of directors' dialogue with the company's shareholders at general meetings, the board of directors promotes suitable arrangements for shareholders to communicate with the company at other times. The board of directors have delegated this task to the IR team. Elkem has held regular roadshows in Oslo, London and other cities in connection with each of the quarterly presentations in 2019. The plan is to arrange regular roadshows and a capital market day when it is considered expedient in order to keep the market up-to-date about the company's development, goals and strategies.

No deviations from the Code.

14. TAKE-OVERS

Elkem has one major shareholder controlling 58% of the shares as of 31 December 2019. Elkem has not been subject to any takeover bids in 2019.

In the event of a takeover bid, the board of directors and executive management each have an individual responsibility to ensure that the company's shareholders are treated equally and that there are no unnecessary interruptions to the company's business activities. The board of directors has a particular responsibility in ensuring that the shareholders have sufficient information and time to assess the offer.

In the event of a take-over process, the board of directors shall abide by the principles of the Code, and also ensure that the following take place:

- the board of directors will not seek to hinder or obstruct any takeover offer for the company's operations or shares unless they have valid and particular reasons for doing so;
- the board of directors shall not exercise mandates or pass any resolutions with the intention of obstructing the takeover offer unless this is approved by the general meeting following announcement of the offer;
- the board of directors shall not undertake any actions intended to give shareholders or others an unreasonable advantage at the expense of other shareholders or the company;
- the board of directors shall not enter into an agreement with any offeror that limits the company's ability to arrange other offers for the company's shares, unless it is self-

evident that such an agreement is in the common interest of the company and its shareholders;
- the board of directors and executive management shall not institute measures with the intention of protecting the personal interests of its members at the expense of the interests of the shareholders; and
- the board of directors must be aware of the particular duty it has for ensuring that the values and interests of the shareholders are protected.

In the event of a take-over offer, the board of directors will, in addition to complying with relevant legislation and regulations, seek to comply with the recommendations in the Code. This includes obtaining a valuation from an independent expert. On this basis, the board of directors will make a recommendation as to whether or not the shareholders should accept the offer.

A takeover process gives rise to a particular duty of care to disclose information, where openness is an important tool for the board of directors to ensure equal treatment of all shareholders. The board of directors shall strive to ensure that neither inside information about the company, nor any other information that must be assumed to be relevant for shareholders in a bidding process, remains unpublished.

There are no other written guidelines for procedures to be followed in the event of a takeover offer. The company has not found it appropriate to draw up any explicit basic principles for Elkem's conduct in the event of a take-over offer, other than the actions described above. The board of directors otherwise concurs with what is stated in the Code regarding this issue.

No deviations from the Code.

15. AUDITOR

The board of directors is responsible for ensuring that the board and the audit committee are provided with sufficient insight into the work of the auditor. In this regard, the board of directors ensured that the auditor submitted the main features of the plan for the audit of the company to the audit committee in 2019. Further, the board of directors invited the auditor to participate in the board meeting that dealt with the annual accounts. At these meetings, the auditor (i) reports on any material changes in the company's accounting principles and key aspects of the audit, (ii) comments on any material estimated accounting figures, and (iii) reports all material matters on which there has been disagreement between the auditor and the executive management of the company.

Once a year, the board of directors reviews the company's internal control procedures with the auditor, including weaknesses identified by the auditor and proposals for improvement. In this regard, a review of the company's internal control procedures with the auditor, including weaknesses identified by the auditor and proposals for improvement, was carried out by the board of directors in 2019.

In order to ensure the auditor's independence of the company's executive management, the board of directors has established guidelines in respect of the use of the auditor by the management for services other than the audit.

No deviations from the Code.

The board of directors of Elkem ASA
Oslo, 3 March 2020

Zhigang Hao *Chair of the Board*	**Dag Jakob Opedal** *Deputy chair*	**Caroline Catherine Juliette Mazza** *Board member*	**Yougen Ge** *Board member*
Anja Isabel Dotzenrath *Board member*	**Olivier de Clermont Tonnerre** *Board member*	**Marianne Elisabeth Johnsen** *Board member*	**Helge Aasen** *Board member*
Terje Andre Hanssen *Board member*	**Marianne Færøyvik** *Board member*	**Per Tronvoll** *Board member*	**Michael Koenig** *Chief Executive Officer*

Main risk areas

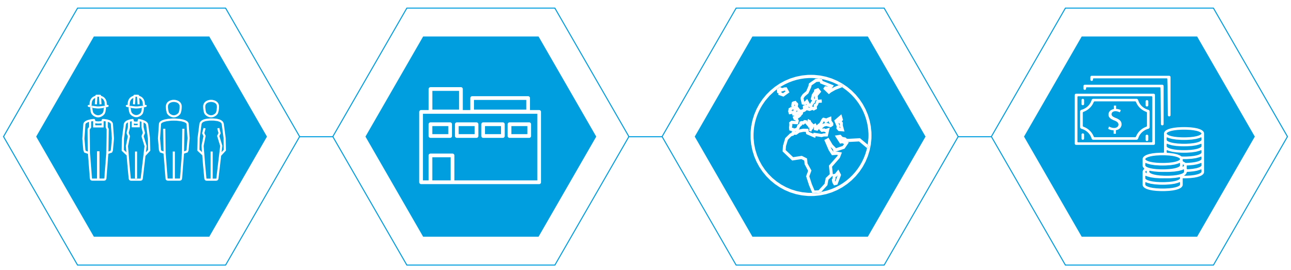
Elkem's risk management processes aim to identify, evaluate and manage risk factors that could affect the group's performance.

Elkem is operating in capital intensive industries and has 29 production sites and an extensive network of sales offices around the world. While this gives competitive strengths, it also gives exposure to a range of risk factors. The board of directors has defined goals and strategies for the business and has a clear focus on risk profiles and risk management to create value for the company's shareholders. Risk management and internal control systems are in place to manage operational risks.

The board of directors conducts annual reviews of the company's most important risk factors, risk mitigating actions and internal control arrangements. A summary of the main risks is presented below.

Elkem's key risks are divided into five categories, structured to follow Elkem's value chain. The risk assessment is based on estimated financial impact, frequency/likelihood and possible risk mitigating acitivities.

- Strategic risks including Environmental, Social and Governance
- Financial risks
- Raw material risks
- Production and process risks
- Market and product risks



6,370 employees

29 plants

Worldwide presence

22.7 BNOK operating income in 2019

Risk management

No	Description	Inherent risk	Mitigating actions
1	**Sales prices**	Sales prices for Elkem's products have traditionally been volatile and may fluctuate significantly depending on economic cycles and/or market balance.	Elkem has specialised products positions which provide certain a price and margin stability. Part of the group's product portfolio is however, still exposed to commodity dynamics, which has been evident during 2019. The strategy is to pursue further product specialisation to improve and stabilise earnings.
2	**Raw material cost**	Price changes to externally sourced main raw materials such as methanol/methyl chloride, coal, charcoal, woodchips and rare earth materials may significantly impact the cost base.	Raw material prices tend to vary with economic cycles and hence fluctuate with Elkem's expected earnings. This provides some degree of natural hedging and also tend to affect the whole industry and hence not give rise to company specific exposure. Elkem aims to match the tenor of raw material contracts and sales contracts to limit timing risk.
3	**Currency**	Elkem is exposed to currency fluctuations on results, cash flow and equity, as the group records its sales, operating costs, assets and liabilities in various currencies, mainly EUR, USD, RMB and NOK.	Elkem seeks to match assets and interest-bearing liabilities in the same currencies to reduce translation risk. It is also a target to match sales and operating costs in the same currencies. Currecy risk is managed centrally according to a predefined hedging policy. RMB position is not hedged. For more informationa, please see note 28 in the consolidated financial statement.
4	**Explosion / fire**	Elkem's operations include complex chemical processes and high temperature smelting processes. Such processes carry an inherent risk of fire, explosion and emission of chemical substances.	Elkem has extensive programmes in place to reduce hazard risk and to promote health and safety. Management conducts extensive follow-up to monitor and reduce risks. Insurance policies are in place to cover property damage, business interruption and environmental claims.
5	**Environment**	Environmental risks include risk of major emissions or other incidents with negative impact on the environment. Elkem's plants are subject to environmental regulations, which have become stricter in recent years, particularly in China.	Each production unit is continously monitoring the emissions and have programmes and procedures in place to ensure regulatory compliance. Programmes and investments to reduce dust, increase energy efficiency and improve waste water treatment are implemented in line with Elkem's strategy to minimise the environmental footprint.

No	Description	Inherent risk	Mitigating actions
6	**Regulatory framework conditions**	Regulatory framework conditions may affect competitive position and access to markets. Regulatory framework conditions include, tarriffs, anti dumping duties, export taxes, CO_2 allowance regulations and possible restrictions on silicones intermediates such as D4, D5 and D6.	Elkem's broad geographical presence is mitigating the risk related to trade barriers. In addition, Elkem is working with governmental bodies and industry organisations to promote fair and balanced industry conditions. Elkem has on-going projects and actions to reduce residual D4, D5, and D6 in our materials.
7	**Industry overcapacity**	New and cost efficient capacity may impact sales prices and sales volumes and challenge Elkem's profitability.	Elkem's strategy is to increase product specialisation through R&D and selected acquisitions to reduce price volatility and exposure to commodity markets. In addition, Elkem is continously working to reduce cost and ensure continued cost competitiveness.
8	**Operating performance**	Elkem's production processes are complex and operational excellence is key to be cost efficient and meet quality requirements. Weak operating performance may impact revenue and profitability significantly.	Elkem seeks to deploy Elkem Business System into all critical processes to ensure good planning and mitigate production instability. Maintenance projects are part of Elkem business and sufficient planning and monitoring reduces risk of delayed ramp-up after routine maintenance stops. Benchmarking across plants is also carried out to seek improvements in the group.
9	**Project risk and M&A**	Large project cost overruns or failure to identify financial risk may impact the group's liquidity and financing position. There is also a risk that an acquired entity does not deliver profit or synergies as anticipated.	Project risks are mitigated by diligent follow-up according to Elkem's governing documents and project manuals. M&A projects follow comprehensive diligence processes with professional support in all areas, i.e. legal, financial, audit and industry expertise.
10	**Governance, corruption and ethics**	All large organisations have an inherent risk of unacceptable business behaviour, either corruption, embezzlement, breach of sanctions or other unethical activities of employees and/or business relationships.	Elkem is continously working to provide proper guidelines for ethical conduct, training of employees and ensure good internal control measures. Insurance cover for D&O, Employment Practices Liability, Cyber and Crime are in place as further risk mitigating meassures.

Elkem Sustainability Report 2019

Message from the CEO

New technology has contributed to reducing Elkem's NOx emissions by 13% since 2015. Sustainability remains a fundamental pillar as our improvement efforts continues with full force in 2020.

Elkem is among the world's most environmentally friendly manufacturers of silicon-based materials.

At the same time, Elkem, like the rest of the process industry, emits climate gasses through the production processes because there are no viable technological alternatives today.

Our products are a very important part of the solution for the low carbon society that is necessary to combat climate change at the same time as we understand that we have some sustainability challenges that we must manage.

> "A zero-harm workplace protecting labour rights will continue to be our organisation's main focus.

Setting ambitious, but achievable sustainability goals is important to Elkem, and we are taking initiatives to improve every year.

By applying new technology developed by Elkem's experts at several of our furnaces, NOx emissions have been reduced by 13% since 2015. In 2020, two additional furnace upgrades will be completed, targeting a reduction of Elkem's NOx emissions by an additional 10 percentage points.

For reducing fossil CO_2 emissions Elkem continues to increase the amount of bio-carbon used as a reductant in its silicon and ferrosilicon production and has for the first time in Elkem's history run a furnace close to 100 percent on sustainable biocarbon in Paraguay.

Simultaneously, electrical energy input for most of our furnaces is produced with renewable hydro power.

Later this year the new energy recovery plant at Elkem Salten will allow us to recover enough heat energy from furnace off-gas to generate 275 GWh per year of new electricity from heat that was previously wasted, equal to 15,000 Norwegian household´s electricity consumption.

This increases resource-use efficiency and secures greater adoption of clean and environmentally friendly energy.

Globally all plants are continuously working to reduce waste and dust emissions.

At the Yongdeng plant in China we continue to invest substantially in dust reduction, and at the group level Elkem targets a 30% reduction in dust by 2025.

In addition to efforts to make our production processes more environmentally friendly and sustainable, Elkem's ferrosilicon, silicon, carbon and silicones products are important in the development of the solar and wind industry and are also significant components within the battery industry.

Specialty silicones products contribute to prolonging the life of thousands of other products, thereby reducing waste and the need for replacements.

These are essential examples of Elkem's work to promote sustainable industrialisation, foster innovation and combat climate change.

Recognising Elkem's efforts and position as part of the solution, the Norwegian Ministry of Trade, Industry and Fisheries asked Elkem in 2018 to chair Process21, a three-year project that will give the Norwegian government strategic advice on how the process industry can reach the goal of increased value creation with zero emissions in 2050. Process21 will submit its recommendations in December 2020.

Last and not least, health and safety continue to be one of Elkem's core pillars.

Decent working conditions and healthy and productive employees are key in order to promote economic development and growth.

Without safety, we can forget about all the rest. A zero-harm workplace protecting labour rights will continue to be our organisation's main focus. Fundamentally we have a good status, but we must always continue in our efforts to improve further.

Michael Koenig
CEO, Elkem ASA

Introduction:
Sustainability in Elkem 2019

The UN's Sustainable Development Goals and the Paris Agreement have set a new course. Stakeholders' expectations to non-financial reporting continue to increase as ESG considerations become an integrated part of financial decision making.

The financial sector is, together with other stakeholders, putting more emphasis on the financial risks related to insufficient sustainability initiatives. Non-financial reporting is gaining more traction in investment analysis, and ESG (Environmental, Social and Governance) reporting has clearly become more important in financial decision making.

Elkem's mission is to contribute to a sustainable future by providing advanced silicon, silicones and carbon solutions, adding value to stakeholders globally.

Adding value to stakeholders means that Elkem is committed to securing sustainable economic growth with a responsible environmental footprint. Simultanously, Elkem strives to be a positive and accountable social actor within the company's sphere of responsibility.

Elkem's sustainability agenda is divided into four areas based on dialogue with internal and external stakeholders. These are energy and environment, societal impact, attractive employer, and compliance and governance.

In 2017, a set of sustainability targets were developed to allow stakeholders to monitor progress through annual reporting. The targets are linked to the four focus areas that are considered challenges and opportunities for Elkem. We were therefore pleased to receive a gold rating by the business sustainability rating company EcoVadis for the first time in 2019.

As an international company with a global presence, Elkem welcomes the increased focus on sustainability and supports transparency in these issues. Elkem will continue to increase efforts in order to understand and improve the organisations sustainability footprint.

SUSTAINABLE SOLUTIONS FOR GLOBAL CHALLENGES

The UN Sustainable Development Goals (SDGs) and goal of the Paris Agreement to limit global waming to well below 2 degrees Celsius have given the world a clear direction for the coming ten years.

Regulatory requirements, market demands, and reputational risks drive the demand for sustainable products with the lowest possible environmental footprint in order to reach the global targets.

For Elkem, the changing landscape is an opportunity as well as a challenge. The opportunity is found in products that are critical input factors to a vast number of applications that are necessary to meet the increased demands for renewable energy, energy storage, mobility solutions, infrastructure improvements, digitalisation and health care.

Ferro-alloys, silicon and silicones present a clear opportunity for Elkem and the demand is expected to increase in parallel to the expected demand growth for low-carbon technologies.

The challenges are found in current technologies for producing the same critical raw materials that are necessary to build wind turbines, solar panels, batteries, electric vehicles and other environmentally friendly applications.

The current production technology is both energy intensive and emits CO_2. Elkem is committed to reducing energy consumption and CO_2 emissions as far as technically feasible with current technology, in addition to developing new technology that will make production carbon neutral.

For more information, please visit our chapter on energy and environment on page 62.

MATERIALITY ASSESSMENT

Corporate social responsibility includes a wide range of issues for a global and complex group like Elkem. Over the past years, Elkem has expanded its operations from solely being a producer of silicon and ferrosilicon. Today Elkem's value chain includes silicones, thus creating a vertically integrated value chain covering all steps of the process from quartz mining to a wide range of advanced silicon and silicone-based speciality products.

Following the changes, Elkem has worked to identify topics that may be considered material for the whole Elkem value chain. The analysis identifies the economic, social, governance and environmental impact of Elkem's operations and the consequences this has on our stakeholder's assessment of us.

In 2018, Elkem surveyed key internal and external stakeholders that are either impacted by the company's operations, or whom, in different ways, have an impact on the company. The stakeholder engagement process improved the analysis of materiality and was done to ensure compliance with the Global Reporting Initiative (GRI). Emphasis in 2019 has been on reporting progress on the topics identified as material in 2018.

MATERIAL TOPICS RELATED TO SUSTAINABILITY IN ELKEM:

Importance: External stakeholders	Importance: Internal — 3. priority	Importance: Internal — 2. priority	Importance: Internal — 1. priority
1. priority	Supply chain Environmental management	GHG Emissions Stakeholder dialogue/relations Climate change and risk adaption	**Compliance** **Occupational health and safety** **Energy efficiency** **Anti-corruption** **Diversity and equality** **Water management** **Waste management**
2. priority	Resources/materials sourcing and use Spills Biodiversity Circular economy/product life cycle Contributions to local communities Noise	Sustainable product innovation Soil pollution Risk management Emergency/crisis preparedness Employee training and development Supply chain: Ethics and governance	Chemicals Human rights Corporate governance
3. priority	Supply chain: Labour rights and conditions Indigenous rights Contributions to charities/NGOs Public policy and lobbying	Anti-competitive behaviour Security and data privacy Attractive workplace Job creation and retention Labour rights and condtitions	Customer health and safety

In addition to the focus areas identified in the analysis in 2018, several areas have been added based on expectations identified as a result of dialogue with stakeholders with regards to ESG reporting. As a listed company since March 2018 Elkem is subject to close scrutiny from investors. A key focus in the 2019 reporting has therefore also been to increasingly improve the group's responses to these expectations:

	Energy and environment	Attractive employer	Societal impact	Governance and Compliance
Prioritised material topics, based on materiality assessment 2018	Energy efficiency Water management Waste management	Occupational health and safety Diversity and equality	Compliance Occupational health and safety Anti-corruption	Compliance Anti-corruption
Additional external (ESG) expectations in 2019	Water stress Chemical safety Climate change risk and mitigation	Gender equality	Product stewardship	Challenges in mining and restoration

STAKEHOLDER ENGAGEMENT

Elkem's operations have significant impact on societies through the value chain. Many of Elkem's plants are cornerstone employers and important contributors in local communities, securing safe jobs and infrastructure, paying taxes and supporting local community development. As a long-term partner, Elkem values open dialogue with all of its stakeholders including local communities, governments and other partners such as research institutions, customers and suppliers. Respect is one of Elkem's core values .Our stakeholder dialogue is based on respect for individuals, society and the environment. Maintaining contact with the various stakeholders helps Elkem understand the role we play in local communities and society as a whole, as well as building long term, mutual trust.

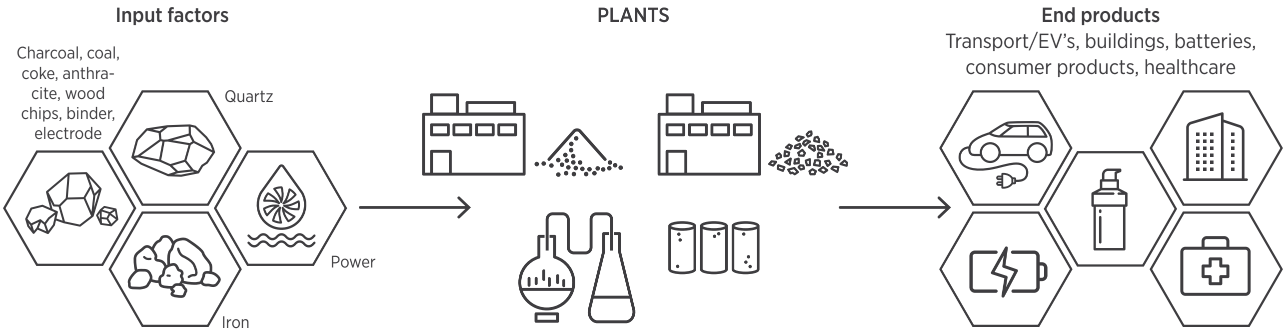
In 2019, we continued to develop our stakeholder management tool to ensure that each location has a structured way of securing stakeholder engagement. Implementation of the tool is planned for 2020. For more information about our stakeholder dialogue and community work, please visit the societal impact chapter on page 80.

In the table you find Elkem's key stakeholders, typical dialogue and what issues the stakeholders find most important, according to our dialogue with them. The table is based on the input given in our annual internal stakeholder survey, sent to our plant and line managers.

Stakeholder	Type of dialogue	Issues of interest
Employees	• Regular meetings • Email/phone dialogue • Shift meetings • Annual meetings • Joint meetings for all • Employee satisfaction survey • Personal development conversations, • Training and mentoring • Family day/visits at plant • EBS training	• Proper and safe working environment • Personal and professional development/ right competence • Job satisfaction • Fair wages, benefits, welfare • Work-life balance • Staffing/ Turn over • Transparent, good and secure communication and information • Support system (HR) • Stable/safe jobs • Regulatory issues
Customers and suppliers	• Regular meetings • Email/phone dialogue • Conferences/ trade shows • Visits at plant and visit customers/ supplier • Audits • Technical meetings	• Quality and stability of products • Reliability, confidentiality • Service • Delivery on time • Right price • Smooth administration, trust and compliance • Strong on CSR – social and environment • Environmental footprint • Financial performance /taxes • Innovation
Local and national authorities	• Regular meetings • Planned and unplanned inspections/ audits	• Development and regulation plan • Future plans and status of plant/company • Regulatory compliance and permits • Safety/EHS • Environment and resource management • Sustainability / CSR /social responsibility • Grants allocation • Innovation and R&D
Corporate management team	• Monthly/regular meetings • Workshops • Regular dialogue (phone/email/ meetings) • Internal board meetings • Reporting • Audits • Technical and commercial meetings	• Efficiency and improvement • Processes under control • Deliver projects on time, quality and budget • Cost efficiency • Reliable performance • Continuous improvement programmes • Organisational challenges • Competitiveness
Local community and organisations (NGOs, clusters, research)	• Community events • Sponsorships • Town hall meetings • Social events • Partnerships	• Environmental issues • Political conditions • Plant safety • Emergency response plan • R&D - academic
Investors and shareholders	• Regular meetings • Corporate reporting • Regular phone/email dialogue	• Value creation • CSR/ ESG performance • Financial opportunities • Strategy development • Corporate governance
Unions	• Monthly/ weekly/ regular meetings • Labour committee • Informal contact / phone /email	• Working conditions • Contract/tariff negotiations • Environmental issues • Positive communication

SUSTAINABILITY CHALLENGES AND OPPORTUNITIES

A complex value chain like Elkem's includes a wide range of risks that need to be considered and managed. In addressing these risks, we have uncovered challenges that need to be monitored and regulated, as well as opportunities that we can capitalise on going forward. Our risk management includes assessments throughout the whole value chain for EHS, CSR, finance, legal, compliance and other relevant issues that may impact our business. The matrix on page 59 shows an overview of our main sustainability risks, opportunities and challenges, and how they are embedded in our value chain. Below you will find a simplified version of Elkem's value chain:



MANAGEMENT OF CORPORATE SOCIAL RESPONSIBILITY

Elkem's management of Corporate Social Responsibility and sustainability is defined in the following policies:

- Corporate governance policy of Elkem ASA
- Elkem policy for corporate social responsibility
- Mandate for the CSR steering committee
- Code of conduct
- Speak up policy
- Anti-corruption policy
- Competition law compliance policy
- Elkem Code of Conduct for business partners

The corporate governance policy for Elkem ASA is approved by the Board of directors and provides the overall strategic approach while the other procedures are approved by corporate management. A dedicated steering committee for CSR is responsible for initiating and following up corporate CSR efforts.

Elkem's sustainability report is the main channel for CSR reporting and has been prepared in accordance with the GRI Standards: Core option and complies with the requirements set out in the Oslo Stock Exchange guidance on the reporting of corporate responsibility.

For investor relations purposes, we have also prepared an index listing key ESG topics for Elkem (with referrals to corresponding ESG reporting). The index is found on www.elkem.com.

The sustainability targets developed in 2017 will be reported on for the second time this year. You find the targets and progress in each chapter of the report.

TARGETS FOR SUSTAINABILITY REPORTING

The targets below reflect how Elkem overall manages engagement and reporting on sustainability. Each chapter in this report includes specific targets, aligned to our material sustainability topics.

Targets	Timeline	Status	Comments
Integrate the Sustainable Developments Goals (SDGs) more into the report and consider reporting on selected targets	2019-2020	On track	Will be finalised in 2020
Consider reporting to the Carbon Disclosure Project (CDP)	2020	To be decided	
Consider reporting on climate risk in alignment with Task Force on Climate-related Financial Disclosure (TCFD)	2020	To be decided	Pre-assessment conducted in 2019

	RAW MATERIALS	METALLURGIC PLANTS	SILICONES PRODUCTION	END PRODUCTS
OPPORTUNITIES	• Biocarbon • Hydropower • Environmental and social • Procurement standards	• Energy efficiency • Energy recovery • PAH free products • Recycling of silicon • Closed furnace, CCS/CCU	• Long lasting product • Replace oil-based plastics • Product safety • Product stewardship • Silicones recycling	• Carbon footprint in value chain/LCA • Products for renewable energy, energy storage/ batteries, EVs, resilient infrastructure and urbanisation, electronics and health care • Circular economy • Product stewardship
CHALLENGES	• Fossil coal • Sustainable biocarbon availablility • Forced labour at suppliers • Child labour at suppliers • Land resources in mining and forestry • Human rights abuse	• CO_2 emissions/ CO_2 prices • NOx emissions • SO_2 emissions • Dust emissions • Landfill • Coal tar pitch/PAH	• Water stress • Water management • Hazardous waste • Chemical safety • Spill to water	• Technology leap • Product safety • Chemical reputation

TOPICS OF FOCUS FOR THE WHOLE VALUE CHAIN

- Strong compliance and ethical business standards
- Occupational health and safety
- Attractive work place and employer retention
- Climate change and climate risks
- Community impact and stakeholder dialogue
- Innovation and R&D
- Regulatory and political changes – changes in industry reputation
- Financial strength

COMPANY STRATEGY

Operational efficiencies and synergies	Specialisation and value chain optimisation	Organic growth and acquisitions

COMMITMENTS

Elkem is committed to conducting business in support of the United Nations Sustainable Development Goals (SDGs) and the Paris Agreement ambitions. As a member of the United Nations Global Compact, Elkem ensure that our business is aligned with the ten UN Global Compact principles. Elkem is committed to following the United Nations Guiding Principles on Business and Human Rights and have made available an updated UK Modern Slavery Act statement.

Elkem adheres to the principles of "the Norwegian Code of Practice for Corporate Governance" issued by the Norwegian Corporate Governance Board ("NUES" or the "Code"). The objective of this Code is that companies listed on regulated markets in Norway will practice corporate governance that regulates the division of roles between shareholders, the board of directors and executive management more comprehensively than is required by legislation.

Elkem's silicones division is a member of the Responsible Care Global Charter, the chemical industry's global initiative to drive continuous improvement in environment, health, safety and security performance. Membership entails a commitment to managing chemicals safely throughout their life cycle. For more information, please visit the societal impact chapter on page 80.

Elkem is committed to complying with international regulatory requirements and provides safety data sheets (SDS) for all its products in accordance with the UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS) or its national implementations.

SUSTAINABLE DEVELOPMENT GOALS

United Nations Global Compact

Responsible Care® OUR COMMITMENT TO SUSTAINABILITY

Global Reporting Initiative™

Climate risk and opportunities

A transition to a low carbon emission society involves both risks and opportunities for Elkem. Both climate change and climate policy will impact our business and financial conditions in the decades ahead.

Understanding the challenges and opportunities this entails, have been one of the drivers for the Task Force on Climate-Related Financial Disclosure (TCFD) that was established in 2015.

Climate risk management helps ensure competitiveness in the green transition. By applying the TCFD framework, Elkem assessed the most important drivers for cutting emissions in Elkem's value chain in 2019. Prioritised transitional risk drivers were identified as CO_2 price and emission trading systems, the battle over biocarbon and increased demand for green products.

The development of the EU Emissions Trading System (EU ETS) and other greenhouse gas emission pricing mechanisms are key regulatory risks for Elkem. In the coming ten years, the EU ETS will be tightened, reducing the number of allowances annually by 2%. In addition, China is set to introduce a regional quota system and Canada already has a carbon trading system that Elkem is a part of with its production presence in Quebec. As the main source of electricity for our smelting production is renewable with hydroelectric power, we already have a low CO_2 footprint compared to the industry average. Using more biocarbon, ensuring energy efficiency, establishing energy recovery, entering long-term renewable energy agreements, and recycling of waste streams are all measures put in place to meet the risk of higher carbon prices.

Silicones, silicon, microsilica and ferrosilicon are all used in green products or to improve the energy efficiency and sustainability of existing products. Examples of important green end-products include more energy efficient devices, electrical motors and transformers. The demand for these types of products is expected to increase substantially in the future. One example is the demand for high purity ferrosilicon to electrical steel that is expected to increase by 40% by 2025.

Elkem has made a commitment to a minimum 40% reduction in fossil CO_2 emissions by 2030 at the Norwegian smelters, in connection with efforts to reduce the carbon footprint of producing silicon and ferrosilicon. Long term access to biocarbon is essential to meet this goal and Elkem is involved in a number of activities around the world to develop sustainable sources of biocarbon. The volume needed to replace 40% fossil coal with biocarbon at Elkem's smelters is equal to 7% of Norway's annual forest extraction and competes with other demand for bio-based products like bio-fuel. Our sourcing and research activities are therefore looking closely at alternative sources of bio-carbon and alternative methods to develop it.

Energy and environment:

Driving a transition

Using highly developed production technology, Elkem converts natural resources into products that today's society is fully dependent on. This demands a lot of energy and affects the environment – directly and indirectly.

698
GWh energy recovery in 2019

>20%
reduction of fossil emissions

3%
annual energy consumption reduction target

SO_2 emissions falling

Targets – energy and environment	Unit	2017	2018	2019	Comment
Energy recovery increase year on year	GWh	689	645	698	
Energy recovery project in Salten on track for completion	Status	N/A	On track	On track	On track for production start in 2020.
CO_2 emissions, direct (scope 1)	Million tonnes	1.77	2.54	2.15	Due to lower production and increased use of bio-carbon.
CO_2 emissions, indirect (scope 2)	Tonnes	Not reported	Not reported	Not reported	
CO_2: 20% reduction of direct fossil emissions for Norwegian smelters by 2021	%	21	19	18	Will be reported from 2020.
CO_2: 40% reduction of direct fossil emissions for Norwegian smelters by 2030.	%	N/A	N/A	N/A	Challenges with sourcing of sustainable biocarbon.
CO_2 goal: Complete overview of CO_2 indirect carbon emission footprint	Status	N/A	N/A	On track	Started reporting in 2019.
NOx emissions	Tonnes	7,110	7,070	6,718	
NOx: Reduce emissions from Norwegian smelters by 1000 tonnes	Tonnes	N/A	(312)	(553)	Baseline year: 2015
SO_2: Reduction (to be defined) in direct SO_2 from processs by 2030	Tonnes	7,900	9,000	7,309	Set back due to technical issues at plants.
Elkem Fiskaa Carbon SO_2 scrubber and energy recovery unit fully operational	Status	N/A	N/A	Some delay	Technical issues.
Dust emissions	Million tonnes	2	1.8	1.2	
Dust goal: 30% reduction	%	(14%)	(10%)	(38%)	Baseline year: 2015
Waste:% reduction (to be defined) of process waste to landfill or destrcution	%	N/A	N/A	N/A	
Water goal: No deviation in water requirements	Number of deviations	N/A	0	0	
Fresh water consumption	m^3 million	N/A	36.2	80	
Process waste water discharge	m^3	N/A	14.9 million	12.7 million	
Water goal: Compliance with mandated remidation on Fiskaa water body to lowest cost	Number of deviations	N/A	N/A	N/A	Compliant.
D4/D5 goal: Zero spills/emissions	Number of deviations	N/A	0	0	
Analyse and develop a climate risk overview	Status	N/A	N/A	Finished	Memo on climate risk finished in 2019.

The process of converting quartz to silicon is a high temperature smelting process that consumes vast amounts of energy. Even though the energy base for most of Elkem's production is renewable, it has an environmental effect. The production process itself uses carbon sources like fossil coal, charcoal and wood chips as a reductant in the chemical conversion giving emissions of CO_2, NOx and SO_2. These emissions are inherent to the process and cannot be fully removed with today's technology. In Elkem's downstream business, there are also potential environmental impacts to air and water when converting silicon to silicones.

All of these environmental impacts are identified and documented with measurements or calculations showing performance compared to permits given by government authorities where Elkem operates, and/or improvement targets set by Elkem. Key environmental parameters are reported quarterly at corporate level. In addition to this, environmental deviations are reported, investigated and closely followed up in a timely manner. In 2019 there were no serious environmental incidents.

Because of the potential environmental impacts, all applicable Elkem sites are required to have an appropriate Environmental Management System and many are also ISO14001 certified. In addition, applicable sites are required to have Energy Management Systems and some are also ISO50001 certified (see certification list on www.elkem.com).

ENVIRONMENTAL STRATEGY

In 2018, Elkem renewed its environmental strategy confirming its commitment to:

- Full compliance with all applicable environmental regulations wherever Elkem operates worldwide.
- Creating and sustaining a strong environmental reputation wherever Elkem operate worldwide.
- Ensuring sustainable production and emissions/discharge control based on our knowledge of the environmental effects of our production. This also applies in countries where applicable environmental regulation is weak or non-existent.
- Strengthening our position in the development of technology and materials that enable reduction in greenhouse gas emissions throughout the world.

The strategy introduced a comprehensive set of KPIs with quarterly reporting on energy consumption, emissions to air and water and waste/process-products. It is also followed up at production sites with detailed road maps showing how targets can be met. The main environmental KPIs are:

KPI	Targets
CO_2	• 20% reduction in direct fossil CO_2 emissions for Norwegian smelters by 2021, 40% by 2030 • Full understanding of indirect CO_2 emissions
SO_2	• % reduction (to be defined) in direct SO_2 from process gas by 2030
NOx	• 1000 tonnes reduction at Norwegian smelters by 2025
Dust	• 30% reduction by 2025 (2015 base)
Waste	• % reduction (to be defined) of process waste to landfill or destruction by 2025
Energy	• Energy recovery increase year on year
Water (COD / PAH / fresh water consumption)	• Meet new water directive requirements in Europe, and new water requirement in China (national and local) • Compliance with mandated remediation of Fiskaa water body to lowest cost
D4/D5	• Zero spills of D4/D5

REDUCING OUR ENVIRONMENTAL FOOTPRINT

Elkem's environment, health and safety (EHS) efforts are based on a zero-harm philosophy. For the environmental part this means running operations with resource-efficient processes where negative environmental impacts are minimised throughout the value chain.

Efforts focus on four main areas:

- Increasing material and energy efficiency including energy recovery
- Substitution of raw materials
- Development of new production technology
- Using efficient air and water treatment systems when necessary

Successful examples of these efforts include replacing fossil carbon with bio-carbon (wood chips and charcoal), furnace design implementation and operational parameter changes to reduce NOx generated in the smelting process. This is done by using more low-sulphur raw materials to reduce SO_2 emissions, and a number of energy recovery projects to utilise heat generated in the different processes. For more information, please visit the chapter on energy and environment on page 60 and www.elkem.com.

ENERGY: CONSUMPTION, RECOVERY AND EFFICIENCY

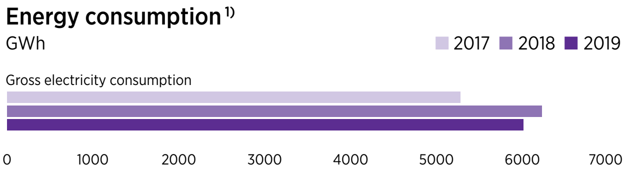
Energy is of upmost importance to secure necessary supply while at the same time reducing Elkem's global greenhouse gas footprint. A new regulatory framework, such as concessions, directives, taxes and positive stimuli in the form of public support substantiates the importance of increased focus on energy efficiency.

Parts of Elkem's value chain are highly energy intensive, with silicon, ferrosilicon and foundry alloys being produced in electric arc furnaces. Elkem's smelting furnaces consume just under 5 TWh of electrical energy per year.

Elkem was an industrial pioneer in the utilisation of waste heat, with the first energy recovery system on a smelting furnace being installed already in the 1970s. Recovered heat from smelting furnaces can be utilised as hot water for district heating, steam for other production processes and to generate new electricity. Electricity is sold back to the grid while hot water and steam are used both internally and externally to supply other companies and communities in the vicinity of each plant.

Energy consumption

Total gross electricity consumption in Elkem in 2019 was 6,010 GWh, down from 6,228 GWh in 2018. Most of this change is related to reduced production because of the general global market situation for Elkem's main products. More than 83% of the total gross electricity consumption is based on renewable power production. With the exception of one smelter in China, all smelting furnaces in Elkem run on renewable electrical energy.



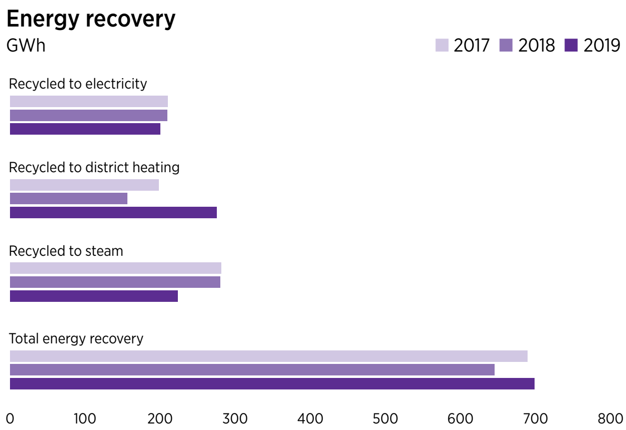
[1)] *2017 numbers do not include Elkem Yongdeng.*

In addition to electrical energy, Elkem also consumes approximately 1.4 TWh of other types of energy for internal vehicle operation and heating/cooling of facilities and processes. Most of this is fossil based energy.

Target specification	2019	Annual reduction ambition
Elkem infrastructure and utility energy consumption (GWh)	1,398	
Different energy reduction efforts (GWh)	51	
Sum% reduction:	**4**	**3**

Energy recovery

Elkem has a long-term strategy to increase energy recovery year on year as part of its climate programme. A number of Elkem's production processes generate surplus heat that traditionally has been emitted through off-gas systems or cooling systems. Much of this can be recovered to hot water for district heating, both internally on site and to other public facilities and industries close to the plants, and to steam used in industrial processes and/or to generate electricity.



The potential for energy recovery has been mapped at all smelters. Three of Elkem's smelters already have large boilers attached to their off-gas systems to recover substantial amounts of energy to steam or electricity. A fourth facility will come online in 2020 giving another 270 GWh of electrical energy.

Globally, a total of 698 GWh heat and electricity was recovered from our plants in 2019. This represents an increase of 54 GWh from 2018.

Energy efficiency

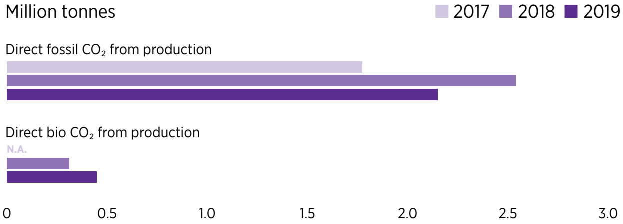
All Elkem sites are required to have an appropriate energy management system and an energy inventory showing the potential to increase energy efficiency and thereby save energy. Examples of this could be replacing old, inefficient electrical motors with new motors with advanced digital energy control. For examples, please visit www.elkem.com.

In 2019, Elkem realised energy reduction efforts of 51 GWh in projects related to infrastructure and utility consumption, of which several initiatives received public support.

CO_2 EMISSIONS AND TRADING SCHEMES

Elkem emitted a total of 2.15 million tonnes of CO_2 from fossil carbon in 2019, down from 2.54 million tonnes in 2018. This is mainly because of lower production, but also because of increased use of bio-carbon in the smelting process. About 81% of direct CO_2 emissions are generated in the smelting furnace reduction process where carbon (C) reacts with oxygen in quartz to produce silicon/ferrosilicon. As we are not able to measure this type of emission directly, they are calculated based on third party certificates of carbon content (TC) in raw materials. Numbers for CO_2 from other sources, including heating and fuel, are based on standard conversion factors in accordance with EU/ETS Guidelines.

CO_2 emissions
Million tonnes



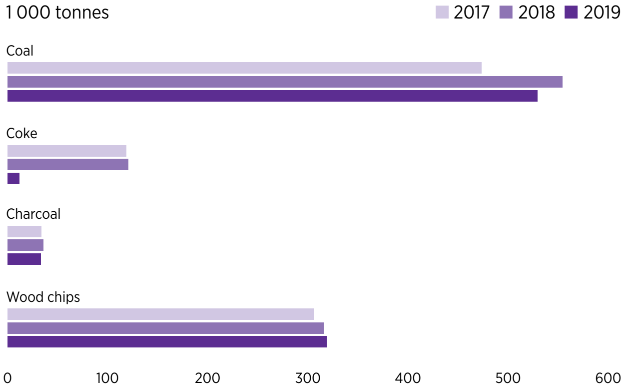
As CO_2 emission is inherent to the smelting process with current technology, total emissions will vary year on year based on market conditions and capacity utalisation. As CO_2 is inherent to the smelting process with current technology, total emissions will vary year on year based on market conditions and capacity utilisation. During the past few years Elkem has seen an increase in the group's total CO_2 emissions. All of this can be related directly to production expansion. From 2017 Elkem has increased production with five smelting furnaces; two in Norway, four in China and one in Paraguay. The furnace in Paraguay runs solely on hydroelectric power and uses only bio-carbon as a reductant, making its operations close to carbon neutral. The increase in CO_2 is also connected to the acquisition of upstream silicone activities in China, which uses a coal fired boiler to produce steam used in the production process.

Elkem has a number of ongoing activities to reduce its CO_2 footprint. These activities are basically grouped in three main areas; Increasing material and energy efficiency, replacing fossil carbon with bio-carbon and developing new carbon neutral smelting technology.

Examples of progress in all these areas are detailed on www.elkem.com.

One of Elkem's main CO_2 reduction strategies is replacing fossil carbon with bio-carbon in our smelting operations. The goal is to reduce the fossil carbon footprint at our Norwegian smelters with 20% by 2021, and by 40% by 2030. In 2019 the group had already met the 2021 goal and continues to work closely with partners to develop efficient and more environmentally friendly production of bio-carbon for silicon and ferrosilicon production.

Consumption – redution materials
1 000 tonnes



Increase material and energy efficiency

- Stabilise and increase the furnace's silicon yield.
- Reduce silicon losses from tap hole to final product.
- Install energy recovery systems at furnace off gas.

Reduce fossil Co_2 emissions

- Increased biocarbon portion of total CO_2 emissions (>20% in 2020 and >40% in 2030.
- Establish concepts and industrial production of biocarbon, tailormade as FeSi/Si reductants, utilising all material and energy – at competitive cost levels.

Development of "Closed furnace" technology

- Develop furnace technology for silicon alloy production with no (direct) CO_2 emissions to the atmosphere.
- Facilitate for future CO_2 capture and storage.

Trading schemes

Most of Elkem's smelters are subjects to the EU/ETS system and its external revision schemes (plants in Norway and Iceland). From the start in 2013, Elkem was granted on average 1.2 million free allowances per year as part of the EU system to avoid carbon leakage where production would be moved out of Europe to other countries without carbon trading schemes. When it was identified that smelters in Norway had been allocated fewer free quotas than other countries in Europe, the allocation was successfully appealed increasing the number of free quotas allocated to Elkem's Norwegian smelters.

OTHER EMISSIONS TO AIR

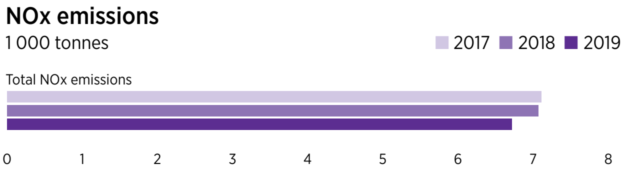
Elkem emits both NOx, SO_2, and dust. These emissions are mainly from the carbon calcining process, the silicon/ferrosilicon smelting process and the upstream silicone-based product process. Major emission variations are tied to changes in production volume, but can also be affected by the quality of raw materials, process control and investment in filter systems.

DID YOU KNOW

That Elkem's NOx emissions decreased by approximately 5% from 2018 to 2019?

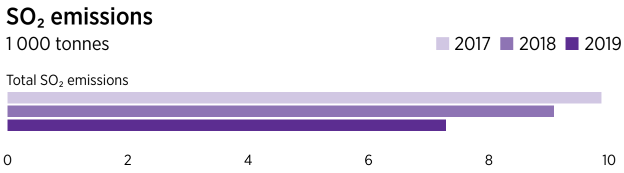
NOx

Elkem continues its efforts to reduce emissions of NOx through equipment design and process control. Numbers for 2019 show a reduction of approximately 5% from 7,070 tonnes in 2018 to 6,718 in 2019.



SO_2

In 2019 Elkem emitted 7,309 tonnes SO_2, down from 9,000 tonnes in 2018. Most of the reduction is based on reduced production because of global market conditions for Elkem's main products. For SO_2 the main focus has traditionally been on sourcing raw materials with a lower Sulphur content. As this potential is limited, scrubbing systems are also being considered where this is feasible. In 2018, Elkem Carbon Norway finished the installation of a large SO_2 filter with support from the Norwegian SO_2 fund. Unfortunately, the installation has not operated as expected due to technical issues and has therefore been out of operation for most of 2019. Most of the technical issues have now been solved, but there still are challenges attaining the full effect of this major investment. Elkem Bjølvefossen is also evaluating a similar project.



Dust

Elkem allocates significant resources to combat dust. However, extremely high temperatures and ultrafine particles that disperse very quickly make it especially difficult to capture dust generated in some of the production processes.

WATER MANAGEMENT

Historically, the majority of Elkem's production facilities were located in areas where freshwater supplies were abundant and more than sufficient for Elkem's production activities without any water stress issues. Water management activities were mainly focused on discharge control to ensure that public permits are respected, and that water bodies close to our production sites were duly protected against harmful discharge. As Elkem has expanded globally and migrated more into chemical processing, water economisation, recovery and reuse on site have become more important parts of the water management programmes.

Water is an important raw material in the production of base and intermediate silicones and is also used extensively in the different processing steps. The fact that Elkem's upstream silicones production is located close to important freshwater bodies in both France and China, where effluent from chemical production is closely regulated, has also increased the focus on water management.

Water body monitoring (both fresh and saltwater bodies) has been done at Elkem's plants for decades in accordance with applicable regulations and permits. In Europe this means compliance with the EU Water Framework Directive, while other regulations apply in other regions around the world where we operate. There are three main groups of pollutants from Elkem's production that can have a negative effect on water bodies close to production sites;

- Heavy metals found naturally in raw materials used in the production of silicon, ferrosilicon and carbon products can be released during the production process and emitted to air. Rain and water run-off will enable these to find their way to water bodies.
- Polycyclic aromatic hydrocarbons (PAH) components found in raw materials used in carbon products are harmful for aquatic life. These find their way to water bodies either

through direct discharge of process water, or by wash-off of particles emitted to air and end up in marine life and sediments. Potential and real effects are closely followed up at applicable plants.

- Organic substances that reduce the oxygen content in water bodies, so called chemical oxygen depletion (COD) substances are the main challenge in the production of silicones. This is especially critical for the two upstream plants located in China and France that produce upstream silicones.

In addition to discharge from current production there is a potential from the ground on and around production sites. A number of Elkem's older plants are situated where industrial production has existed for more than a century. Through the years, facilities were built on landfills and/or had their own landfills as this was permitted at that time in history.

All of these, both historical and current discharges are closely followed up and effective water treatment plants are used where necessary to reduce the effect to an acceptable level. Remediation efforts are also implemented and/or planned where needed.

The total freshwater consumption in Elkem was approximately 80 mil m^3 in 2019. Most of this consumption is in areas with abundant freshwater supplies and no signs of water stress. Approximately 10%, is however, located in areas where the availability of fresh water is a concern like South Africa and parts of China.

WASTE MANAGEMENT

Elkem operates with a zero-waste philosophy closely tied to our business system (EBS). This includes a strong commitment to reduce the generation of waste at its source, to recycle or regenerate byproducts to the extent this is feasible on site, and to separate any remaining waste before delivery to external waste management to enable recycling.

Historically, waste from Elkem's smelting activities consisted mainly of non-hazardous inorganic materials such as slag, product fines, quartz fines and a smaller quantity of organic fines from wood-chips and charcoal. For all of these, extensive projects have been initiated to re-cycle and re-use instead of depositing in landfills. Many of these have been very successful by both creating new products and by better utilisation of raw materials (see www.elkem.com).

With silicones there is much higher content of organic waste and hazardous waste from the different production processes. Destruction of hazardous waste is managed by certified external suppliers, while other waste will either be incinerated or landfilled in accordance with local regulations. Many projects have also been initiated to reduce waste at its source and to regenerate chemicals for re-use instead of destroying or depositing them.

Waste to landfill in 2019 was 340,000 tonnes including 3,500 tones hazardous waste managed by certified third party service suppliers. Recovery of biproducts and consumables that could be used in own production or sold to others constituted 67,000 tonnes. In addition, 136,000 tonnes of recovered smelting furnace dust was processed to Microsilica which is a full value product with many uses including concrete strengthening for the construction and building industry.

ENVIRONMENTAL DEVIATIONS

There were no significant spills, defined as those that have a lasting environmental impact, or significant environmental incidents in 2019.

A total of 66 environmental deviations were reported globally in Elkem for 2019. Most of these were small brief permit deviations from Elkem's upstream and intermediate silicone production in France and China.

Because of its location close to one of China's largest freshwater bodies, Elkem Xinghuo is subject to very strict requirements for discharge to water and has been under close follow-up from the authorities during 2019 as water treatment facilities were not sufficient to meet these requirements. Production reduction has been necessary in 2019 to meet the requirements.

PRODUCT STEWARDSHIP, SUBSTANCES OF CONCERN AND CONFLICT MATERIALS

Product stewardship focuses on the environmental, health and safety effects of Elkem's products through storage, transportation and use by the group's customers. It includes fully understanding potential hazards with our products and giving clear information on safe use and handling through safety data sheets and other information to customers and partners.

Elkem has a high focus on product stewardship with resources at both corporate, divisional and plant level.

Substances of very high concern (SVHC) in Elkem's products

Elkem has three main product areas where substances of concern occur:

- For silicon products and ferroalloys, heavy metals are naturally occurring elements in raw materials.
- For carbon products, coal tar pitch high temperature is used as an intermediate in the production process.
- For silicones, D4 and D5 are generated as intermediates in the production process and used to produce downstream silicone products. In addition, some additives used in the production process are listed as SVHC in Europe.

Silicon products and ferroalloys

For the production of Elkem's silicon products and ferroalloys, natural raw materials are carefully selected in order to meet the product specifications. Natural raw materials, as well as the final products, may contain trace amounts of "elements of concern", i.e. heavy metals. However, the concentration of such elemental impurities is as low as a few ppm (parts per million) and thus, far below the generic threshold value of 0.1% that would trigger regulatory action. No SVHC's currently listed on REACH annex XIV, are intentionally added to Elkem's silicon and ferroalloy products. A number of leaching tests have been carried out on Elkem's products in order to assess bioavailability of elements of concern. Leaching of critical elements is so low that the products would comply with European regulations for the use in toys (EN 71-3, safety of toys) or in electronic equipment (RoHS directive), and even meet the recommendations of the Federal Institute for Risk Assessment Germany for fillers in polymers with food contact (BfR LII).

Carbon products

Elkem Carbon is one of the world's largest manufacturer of Søderberg electrode paste that is used in metal production around the globe. Historically, Søderberg electrode paste has been made of coal tar pitch and coke. The use of coal tar pitch, high temperature, requires authorisation under the European REACH regulation. However, since the use of coal tar pitch in Søderberg electrodes is considered as intermediate, it is exempted from authorisation. Elkem Carbon has been working successfully on the replacement of hazardous pitch with green substitutes and can now offer an increasing range of products free of polycyclic, aromatic hydrocarbons (PAH). This is an important step towards a non-toxic workplace environment, for both Elkem and customers.

Silicones

D4, D5 and D6 are key intermediates for all silicones products. There has been extensive research and discussion the past years to identify and verify possible hazards with these products, but environmental authorities around the world have still not come to a common understanding of the possible environmental effects. As final environmental classification in Europe is still ongoing, Elkem continues to take all necessary steps to reduce any environmental risk (see www.elkem.com for more information on D4, D5 and D6).

For some downstream products certain acids and catalysts defined as SVHC are currently in use for the formulation of some products. These are kept under close control and substituted whenever possible. As they are only part of the production process, they do not cause any hazard in the final product.

Conflict materials

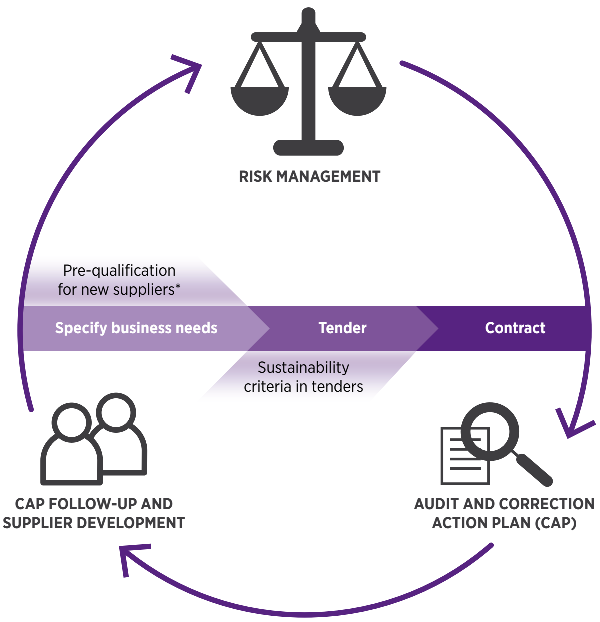
Conflict minerals refers to raw materials or minerals that come from a particular part of the world where conflict is occurring and affects the mining and trading of those materials. These conflict minerals are tin, tantalum, tungsten (the "3T's") and gold. Elkem uses chemical compounds made from some of these in small quantities in the silicones production process and has strict sourcing controls to ensure that procurement of these are done in full compliance with applicable European regulations.

Safe transportation of hazardous goods

Potential hazards in connection with the transportation, handling and storage of all of Elkem's raw materials and products are fully analysed, and measures to ensure this can be done safely are documented and made available to logistics supplier and customers. The main risks include loss of containment leading to the possibility of fire or toxic release from raw materials and products under transportation. Logistics suppliers that handle hazardous goods for Elkem are closely screened and required to have all applicable certifications for vehicles and drivers. In Europe there is also close cooperation between different chemical producers with agreements to give assistance to each other in case of emergency situations with the transportation of hazardous goods.

OUR PROCESS FOR RESPONSIBLE SOURCING

Risk assesments and audits can be conducted prior to pre-qualification at any stage of the supplier contract:

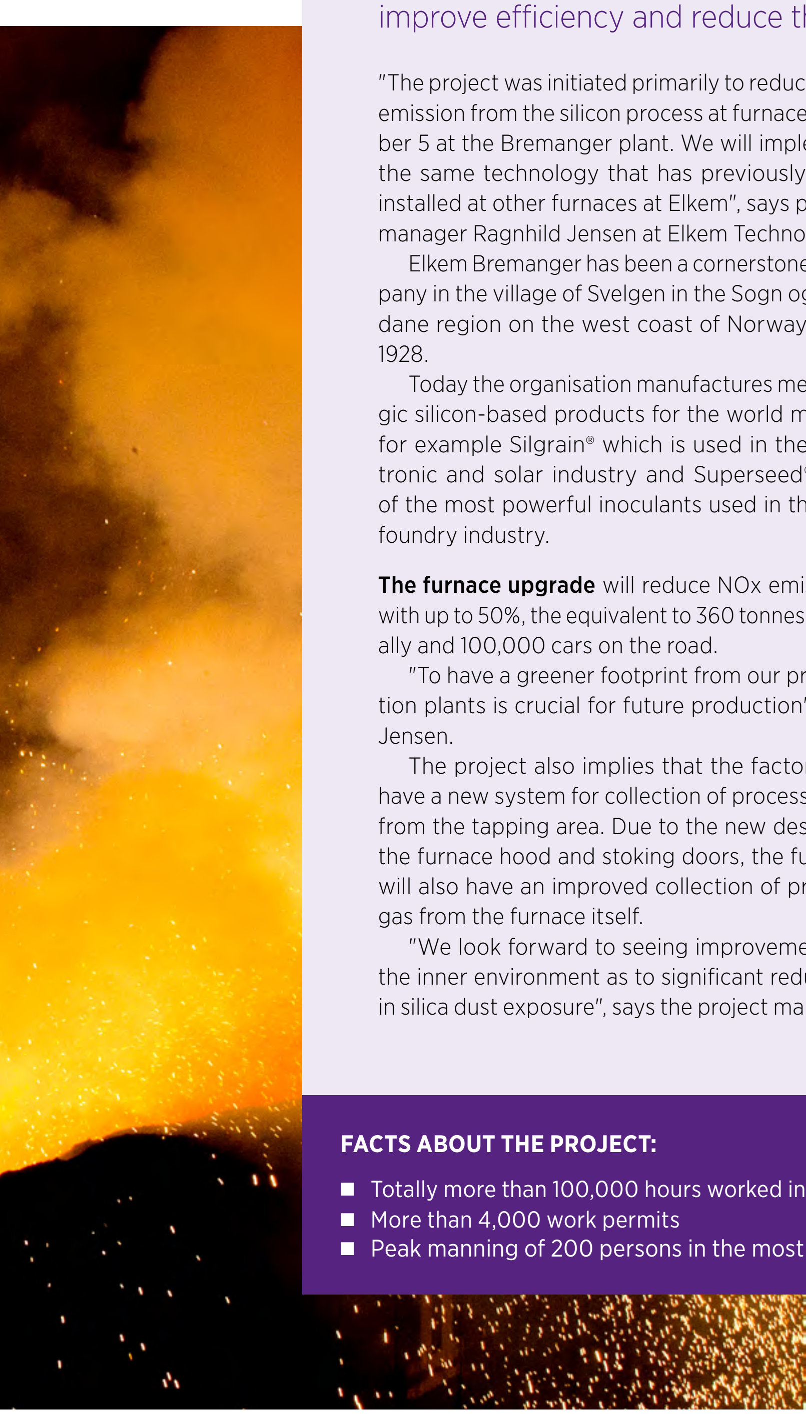


** Not all pre-qualified suppliers enter our sourcing process.*

Energy and emission tracking	Unit	2016	2017	2018	2019
Net sales	MNOK	16,722	21,133	24,968	22,246
Energy consumption (electrical)	GWh	4,399	5,279	6,228	6,010
Energy consumption per net sales	GWh/MNOK	0.26	0.25	0.25	0.27
VOC emissions	Tonnes	N/A	N/A	32	82
VOC emissions per net sales	T/MNOK	N/A	N/A	0.001	0.004
Freshwater use	m^3	N/A	N/A	36,208,744	79,745,341
Freshwater use per net sales	Dam^3/MNOK	0	0	1,450.2	3,584.7
COD flow	Kg	N/A	N/A	413,389	324,665
COD emissions per net sales	Kg/MNOK	N/A	N/A	16.6	14.6
Total waste	Tonnes	N/A	N/A	339,477	466,443
Total waste per net sales	Tonnes/MNOK	N/A	N/A	13.6	20.7

Purifying the smelting process

Elkem invests more than NOK 250 million in a new furnace at Bremanger to improve efficiency and reduce the environmental footprint.



"The project was initiated primarily to reduce NOx emission from the silicon process at furnace number 5 at the Bremanger plant. We will implement the same technology that has previously been installed at other furnaces at Elkem", says project manager Ragnhild Jensen at Elkem Technology.

Elkem Bremanger has been a cornerstone company in the village of Svelgen in the Sogn og Fjordane region on the west coast of Norway since 1928.

Today the organisation manufactures metallurgic silicon-based products for the world market, for example Silgrain® which is used in the electronic and solar industry and Superseed®; one of the most powerful inoculants used in the iron foundry industry.

The furnace upgrade will reduce NOx emissions with up to 50%, the equivalent to 360 tonnes annually and 100,000 cars on the road.

"To have a greener footprint from our production plants is crucial for future production", says Jensen.

The project also implies that the factory will have a new system for collection of process fume from the tapping area. Due to the new design of the furnace hood and stoking doors, the furnace will also have an improved collection of process gas from the furnace itself.

"We look forward to seeing improvements in the inner environment as to significant reduction in silica dust exposure", says the project manager.

The furnace project has total capital expenditures of NOK 259 million, of which NOK 90 million is provided by the Norwegian NOx fund.

According to Jensen the upgrade also increases the production capacity.

"The new annual production will be 4,500 tonnes Silgrain feedstock", says Jensen.

The final equipment installations and cold commissioning was done in December 2019, and the production started in January 2020.

Jensen, who has more than 20 years experience from Elkem, characterises the project as very complex.

"We have changed parts and installed new equipment all the way from the bottom plate of the furnace and to the mid of the off-gas channel towards the filter. We are talking about a quite narrow work space and people have physically been working on top of each other. It's a real puzzle to assure that everyone completes their job at the right time without accidents. The safety has been the first priority", assures Jensen.

Plant manager Arne Werge-Olsen is very pleased with the project.

"The upgrade of Furnace 5 will secure our continued specialisation strategy within silicon products, here at Elkem Bremanger. In addition, I am really glad that this will improve the work environment around the furnace, amongst other things reducing dust emissions. This is a very important upgrade", he says.

FACTS ABOUT THE PROJECT:

- Totally more than 100,000 hours worked in the execution phase of the project
- More than 4,000 work permits
- Peak manning of 200 persons in the most intense weeks

Attractive employer:

Building an even better workplace

Elkem´s skilled and dedicated employees are the basis for success and Elkem strives to remain an attractive employer, both to retain existing employees, and to attract new ones. Key priorities in these efforts are ensuring a safe and healthy working environment, facilitating training and competence building, as well as promoting equality and diversity.

65%	50%	ZERO	25%
of Elkem employees had an annual development discussion in 2019	of women employees invited to Elkem's leadership training programmes	reports of child or forced labour in Elkem or with suppliers in 2019	female share total

Target – social employer topics	Unit	2017	2018	2019	Comment
Zero recordable injuries: Employees	Total recordable injury rate	3.1	2.2	2.2	
Zero recordable injuries: Contractors		8	5.3	Not reported	
Fatalities: Employees	Number	0	0	1	Fatality commented on in text.
Fatalities: Contractors	Number	0	0	0	
Zero cases of serious occupational illness	Number	5	9	Not reported	
EHS training of all new employees at 100%	%	95	100	Not reported	
Increased female share year on year	%	21	25	25	
Increased female share in management teams	%		23	23	
Development discussions at 100%	%	100	59*	65*	* Implementation rate was not available from three Asian Elkem units at the time of reporting.
Implement a mentor programme for women	Status	N/A	N/A	Started	Will be implemented in 2020

Environment, health and safety (EHS) are part of the foundation of the company and is always our first priority. EHS efforts are based on a zero-harm philosophy. The safety of our employees is paramount. Elkem strongly believe, and have shown at many plants, that our production can be conducted without any harm to our employees. Elkem takes responsibility for all activities on Elkem property and is committed to ensuring that employees and contractors working at Elkem sites can do so without harm.

Supported by a strong company culture, Elkem continuously work to be a safe and attractive employer for current and future

employees. Organisational development, continuous talent management and systematic competence development are key to ensure the successful growth of the company.

COMMON CULTURE: ELKEM BUSINESS SYSTEM

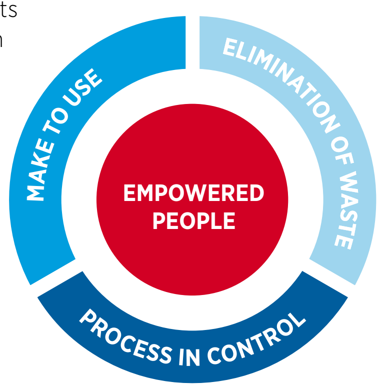
Elkem has more than 6,370 employees working at 29 production sites and a wide range of sales and administration offices spread around the world.

As in all organisations, Elkem evolves and develops over time and the company culture evolves with it. Elkem's values are involvement, respect, precision and continuous improvement. Along with the Elkem Business System (EBS), these are at the core of Elkem's company culture. EBS is Elkem's business and leadership philosophy and also a toolbox that enables a common language and working methods for all employees to achieve both personal and business success. EBS covers all areas of work, including productivity, quality and cost efficiency. At the heart of EBS, is a dedication for involving our people in improvement work and empowering them to solve problems. Training and competence development at all levels of the organisation is a central part of the philosophy.

Elkem has considerable expertise in understanding and controlling processes which generally trend toward instability. During the 90's, bringing our processes into stable and predictable operation was a cornerstone of the company's profitability. Today, Elkem's processes are better understood and optimised, but the focus on Elkem's people is as important as ever. Only people can identify and solve problems. In doing so, they will gain valuable experience, knowledge and personal development. That's why Elkem in 2019 decided to move empowered people to the centre of the EBS Logo. Everything starts and ends with our people.

EBS assessments to promote involvement and continuous improvement

- All sites are assessed by a corporate EBS team bi-yearly to measure involvement and improvements, and to encourage further development. In addition, all business units are encouraged to perform self-assessments yearly.
- Topics in the assessment include learning and competence development and structure / formalisation of improvement work at all levels. Units are expected to show current



mapping of knowledge and skills in their work force, and a plan for closing any competence gaps as well as for further development of their employees.

- Focus from the corporate team is on involvement, knowledge and information sharing, and on management commitment to empowering their employees in continuous improvement work through shared goals and tools.

DIVERSITY AND EQUALITY

Elkem is an international company with a presence in many countries around the world. Having employees that match this global presence, representing diverse cultural and individual backgrounds, is necessary for the company to succeed. Elkem is a local employer and values the strength of local management and staff wherever Elkem is present.

Elkem is committed to ensuring equal opportunities for all our employees and an inclusive work culture. We appreciate and recognise that every individual is unique and valuable and should be respected for his or her individual abilities. We do not accept any form of harassment or discrimination based on gender, religion, race, national or ethnic origin, cultural background, social group, disability, sexual orientation, marital status, age or political opinion.

Our focus on equality and diversity, our corporate values and our code of conduct are essential topics in the Elkem Onboarding Programme (EOP), which is part of the mandatory training for all new employees. All managers in Elkem are expected to be strong ambassadors of diversity and equality, and diversity has been a key topic in the Elkem Leadership programme for several years. Elkem's new leadership development programme for first line managers worldwide also includes training on diversity. Each manager is responsible for following up the principle of non-discrimination.

Due to Elkem's growth in the Asian region over the recent years, several initiatives have been implemented to ensure applicable training in our code of conduct and the principle of non-discrimination in this region. The Asian branch of our compliance department has adapted the corporate code of conduct training with content and ethical dilemmas based on a local business context. Training sessions have been conducted in order to ensure that all employees fully understand and commit to the code of conduct.

In order to further strengthen an inclusive and diverse work culture globally, Elkem launched a pilot project on diversity and inclusion in 2018. In 2019, several workshops were conducted in three Asian countries where Elkem is present. Key activities in these workshops included addressing different forms of discrimination, training in the Elkem code of conduct and increasing awareness among employees by discussing possible ethical dilemmas in our workday. The workshops will be continued as diversity and inclusion training for selected target groups in 2020.

DID YOU KNOW

that Asia is the region with the highest proportion of female employees in Elkem?

Putting the spotlight on Elkem as an attractive employer for candidates with diverse backgrounds, comprehensive work was done in 2019 to review existing practices. This work resulted in several specific measures, such as implementation of mandatory diversity awareness training for recruiting managers, showcasing role models to display the diversity in the organisation, and revision of templates for job advertisements and related communications materials.

Incidents in 2019

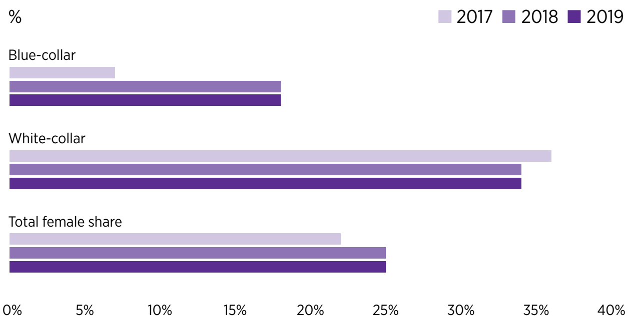
There was one incident reported to corporate level in 2019 regarding diversity and equality, which was handled according to company procedures. The incident was partly due to cultural differences and was managed through coaching and training of the involved parties.

FEMALE SHARE

Elkem values gender diversity and aims to achieve a better gender balance year on year.

The process industry is generally male dominated. Women are, however, increasingly expressing an interest in working in our industry as increased automation leads to less heavy manual work. A high focus on environment, health and safety ensures a better working environment and more sustainable operations.

Female share in Elkem



The female share in Elkem was 25% in 2019, and Asia was the region with the highest proportion of female employees, with 28%. The substantial increase in female share from 2017 to 2018 was due to the integration of the Chinese plants Elkem Xinghuo Silicones and Elkem Yongdeng Silicon Materials, with a higher proportion of female employees.

In 2019, 24% of the leaders in Elkem were female. One concrete action to improve our share of female leaders is to actively encourage women to apply for management positions internally. Elkem strives to have at least 50% women among the participants invited to Elkem's leadership training programmes. The female participation rate in the programme increased from 25% in 2018 to 32% in 2019.

The female share in Elkem has been stable over the past

years. It has been decided to intensify the focus on attracting and retaining more women, especially in management positions. We have launched several initiatives specifically aimed at our female employees. A mentor programme targeting female mentees was established as a pilot in 2019 and will be conducted throughout 2020. The programme will be evaluated and considered for global application after the pilot period. The corporate recruitment policy and related training materials have been updated to include topics such as including female recruiters and/or managers in each recruitment process and tracking the proportion of female candidates throughout the process.

BOARD OF DIRECTORS AND MANAGEMENT

Elkem's board of directors consists of 11 members from Germany, France, China and Norway. The female share of the board is 36%. Two of the eleven board members are in the age group 30–50 years old. The rest of the members are 51 years or older.

The corporate management team of Elkem consists of ten people from France, Norway, China and Canada. The management team consists of nine men and one woman. One of the members is in the age group of 30 to 50 years old and the rest are 51 years or older.

In 2018, Elkem started mapping the female share of management teams in our divisions and corporate functions to get a better overview and start tracking developments. The mapping continued in 2019, excluding internal boards. The mapping showed that the female share in management teams reporting to top management in Elkem is 23%, which is the same number as 2018. Furthermore, the mapping showed great differences within the organisation. Some places in the organisation, women accounted for over 50% of plant management where in other locations, there were no women in management at all.

Age distribution

Age distribution of employees in Elkem	2019
< 30 years	16%
30-50 years	59%
> 50 years	25%

In 2019, Elkem started tracking the age distribution of employees. The tracking indicates that almost two thirds of the employees are 30-50 years. The age distribution for blue-collar and white-collar employees is very similar to the overall age distribution for employees.

DEVELOPMENT AND TRAINING

Elkem is active in many demanding markets and the need for continuous development and improvement is constant. The organisation's improvement work needs to be targeted, fast-paced and of high quality. Elkem actively uses employees' day-to-day work situation as the primary arena for learning. We believe that the best way to develop new skills is to participate in actual improvement processes and problem-solving cases based on the EBS principles. We also consider taking on new responsibilities as a very important way of learning and developing. In order to strengthen our learning-by-doing approach we also offer several in-house training programmes.

Agreeing on an individual development plan is part of the annual development discussion that all employees in Elkem shall have with their leader. Elkem's global target is that 100% of employees of all positions and locations shall have an annual development discussion with their leader.

Implementation of development discussions

Region	2019
Americas	84%
Europe, Middle-East and Africa	66%
Asia*	48%

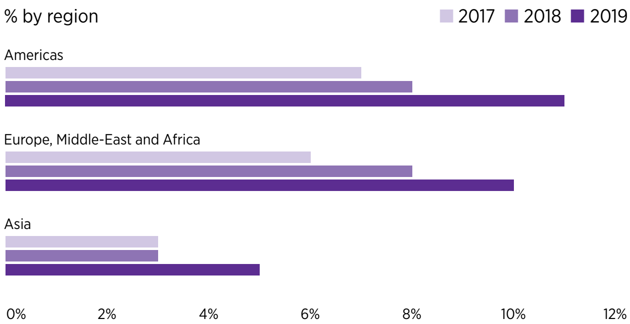
* *Implementation rate was not available from three Asian Elkem units at the time of reporting, among them Elkem Xinghuo Silicones. These units are therefore removed from this reporting.)*

In 2019, 65% of Elkem employees had an annual development discussion. This is a substantial increase from 2018, when 59% of employees had such discussions. Overall, 76% of all reporting Elkem units achieved 90% or higher implementation rate. 65% of our locations met our 100% target in 2019. In 2020, we will increase our efforts and strive towards our goal of 100% in the whole organisation.

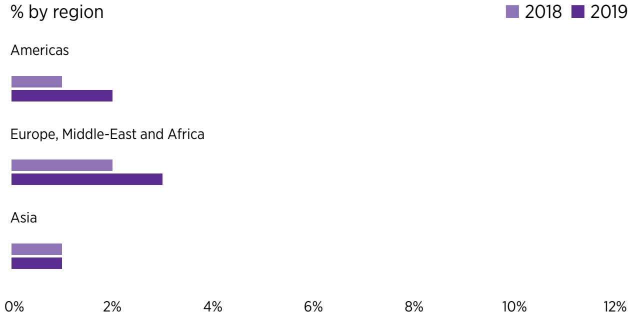
TURNOVER

Turnover rate is an indication of attractiveness and how well Elkem manages to retain our employees. Total turnover rate in the Elkem group was 8% in 2019.

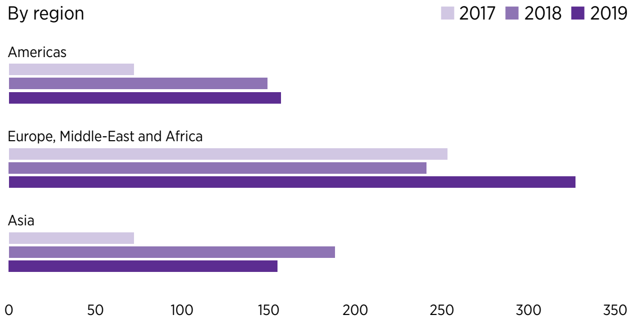
Turnover rate



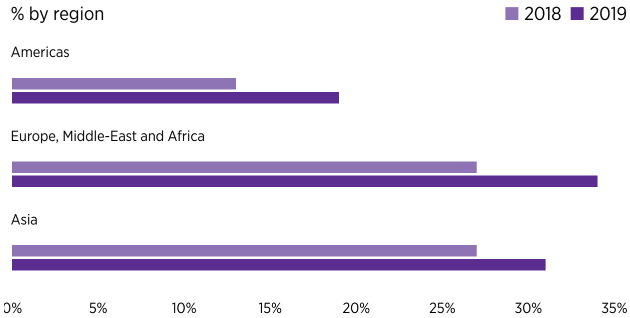
Turnover rate – female share



Number of new hires



New hires – female share



Region	Total 2019	Female share 2019
Americas	157	19.1%
Europe, Middle-East and Africa	327	34.2%
Asia	155	30.9%

The female share of new hires was overall 30% and the female share of leavers was 17%. These numbers indicate a positive effect of our efforts to attract and retain female employees.

COLLECTIVE BARGAINING AGREEMENTS

Elkem fully endorses employees' freedom of association and collective bargaining rights. These rights give employees the ability to create changes and find solutions with their employer and have a long tradition and strong standing in some of the countries where we operate, like Norway and France. Elkem is also present in regions where collective bargaining agreements and freedom of association is less prevalent. Our corporate CSR policy clearly states that all employees should receive information about the ability to organise and collectively bargain with management, to the extent that it is legally possible. This topic is of high importance to Elkem.

Elkem complies with local statutory requirements regarding freedom of association in all countries where we are present. Pursuant to the provisions of the Norwegian Companies Act, employees have three representatives and two observers on the board of Elkem ASA.

The level of organisation varies from country to country. In some countries the operators are organised under one collective bargaining agreement. In other countries there are no unions represented in Elkem's entities. Elkem supports the right to exercise freedom of association and collective bargaining and in general cooperates well with the unions. This also includes our suppliers' employees, where information about these rights are found in contractual agreements.

In 2019, Elkem started tracking the number of employees covered by collective bargaining agreements/union agreements. In total, 61% of our employees are covered by such agreements, but there are significant local and regional variations.

% of employees covered by collective bargaining agreements / union agreements

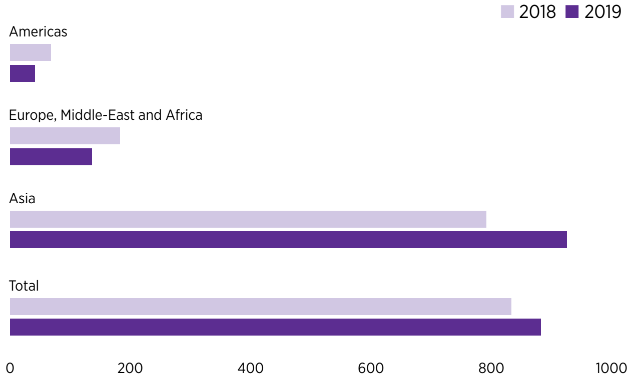
Region	2019
Americas	77%
Europe, Middle-East and Africa	62%
Asia	50%

CONTRACTORS

Contractors provide services of many kinds at Elkem's plants and other locations around the world and are subject to the same EHS requirements as our own employees. All contractors receive full training and follow-up to ensure that they work in a safe and healthy environment.

The number of contract employees in Elkem was 882 in 2019, defined as non-Elkem employees working full-time for more than three months as a substitute for hired employees.

Contractors



CHILD AND FORCED LABOUR

Elkem has operations in several countries where there is a risk of child labour and forced labour, such as Asia, South America and Africa. We take this risk most seriously, and we will not tolerate the use of child or forced labour in any of our operations and facilities. We expect the suppliers and contractors with whom we do business to uphold the same standards.

Elkem adheres to the UN Guiding Principles on Business and Human Rights, and commits to the UK Modern Slavery Act. We have a clear CSR policy to secure the rights of our employees, as well as a Code of Conduct for Elkem's Business Partners as part of all new contracts to ensure the compliance of our suppliers.

Working at some supplier production sites or at some of our own plants is considered high risk work and must only be done by trained and qualified people.

The age limit for working in Elkem is 18 years, with exception for vacation substitutes and vocational students, where the limit is 16 years. Vacation substitutes and vocational students are only allowed to do light and simple work that is deemed safe and does not conflict with school participation.

To ensure compliance with these procedures and our CSR policy, several measures are in place. Elkem has strict routines to ensure that all official permits and registrations are in accordance with local law, and that all employees have written employment contracts, insurance coverage, correct tax payments, etc. EHS and CSR audits are regularly conducted in all plants, with specific focus on these topics for plants in high risk areas. CSR workshops are also conducted to provide knowledge and training and ensure awareness of these issues.

Elkem's suppliers have contractual obligations to ensure that no children under the age of 15 (14 in some selected countries) work at our suppliers' plants and that they limit hazardous work and night work to persons over 18 years of age. These standards are secured by pre-audit for approval of new suppliers and regular audits for existing suppliers, legally by contract.

Incidents in 2019:

There were no reports of child or forced labour in Elkem or with our suppliers in 2019.

Societal impact:

Social responsibility in the DNA

Elkem believes that sustainability is a core responsibility as well as a prerequisite in order to be at the forefront of our industry and to remain competitive in the future. Apart from our own operations, Elkem also has a significant social, environmental and economical footprint through procurement of raw materials, capital goods and services. The process industry plays a major role in the transition to a low carbon society and in mitigating the climate change effects.

100%
participation of target group in human rights training goal

100%
new raw material suppliers subject to supplier audits in 2019

ZERO
human rights incidents for Elkem's operations or in the supply chain in 2019

16 bill.
NOK 16 billion total procurement spend in 2019

Targets – societal impact	Unit	2017	2018	2019	Comment
Implement new harmonised process for supplier management and global supplier management system	Status	N/A	In progress	In progress	Target deadline is 2020/2021
Conduct human rights impact assessment, identify top human right priorities and develop human rights action plan	Status	N/A	N/A	N/A	Target deadline is 2020
Update our Human Rights Statement and publish a Human Rights Policy, launch a human rights training programme, and develop a compliance monitoring programme on the top priority human rights	Status	N/A	N/A	N/A	In progress for 2019
100% participation of target group in human rights training.	Status	N/A	Goal not attained	Goal not attained	Training will start in 2020. Refresher course to be completed every year
All new raw material suppliers are subject to risk assessment and pre-qualification screening (ex. China)	%	N/A	80%	73%	Target is 100% screening
All new raw material suppliers are subject to supplier audit (ex. China)	%	N/A	100%	100%	Target is 100% auditing
Implement templates and reporting procedures for more systematic stakeholder engagement	Status	N/A	N/A	On track	Introduced to pilot group in 2019, will be rolled out in organisation in 2020.
Number of human rights incidents identified for Elkem's operations or in the supply chain	Number	0	0	0	
Percentage of new suppliers that have signed the Code of Conduct for Elkem's Business Partners	%	N/A	N/A	N/A	Tracking will start in 2020

Possibilities and challenges inherent in moving towards a more sustainable world is part of Elkem's company risk assessments, divided into relevant areas such as market risk, EHS risk, CSR risk and financial risk. For more information about sustainability risks, please visit the introduction chapter.

Global megatrends affect our business strategy and drive Elkem's growth, requiring that we specialise our operations and focus our products and solutions on future needs. Six megatrends have been identified as strategically important to Elkem, driving the demand for our products: Sustainability, energy demand growth, rapid urbanisation, increased standard of living, ageing and growing population, and digitalisation.

SUSTAINABILITY IMPACT OF ELKEM'S PRODUCTS

For many years, Elkem has been in close dialogue with several customers when it comes to sustainability. Through initiatives like the sustainability rating company EcoVadis' CSR rating, we have been able to track our performance on sustainability and expectations from our customers. 2019 has been a milestone in many other ways, as our customers have notably increased their demands for information on the actual environmental impact of our products.

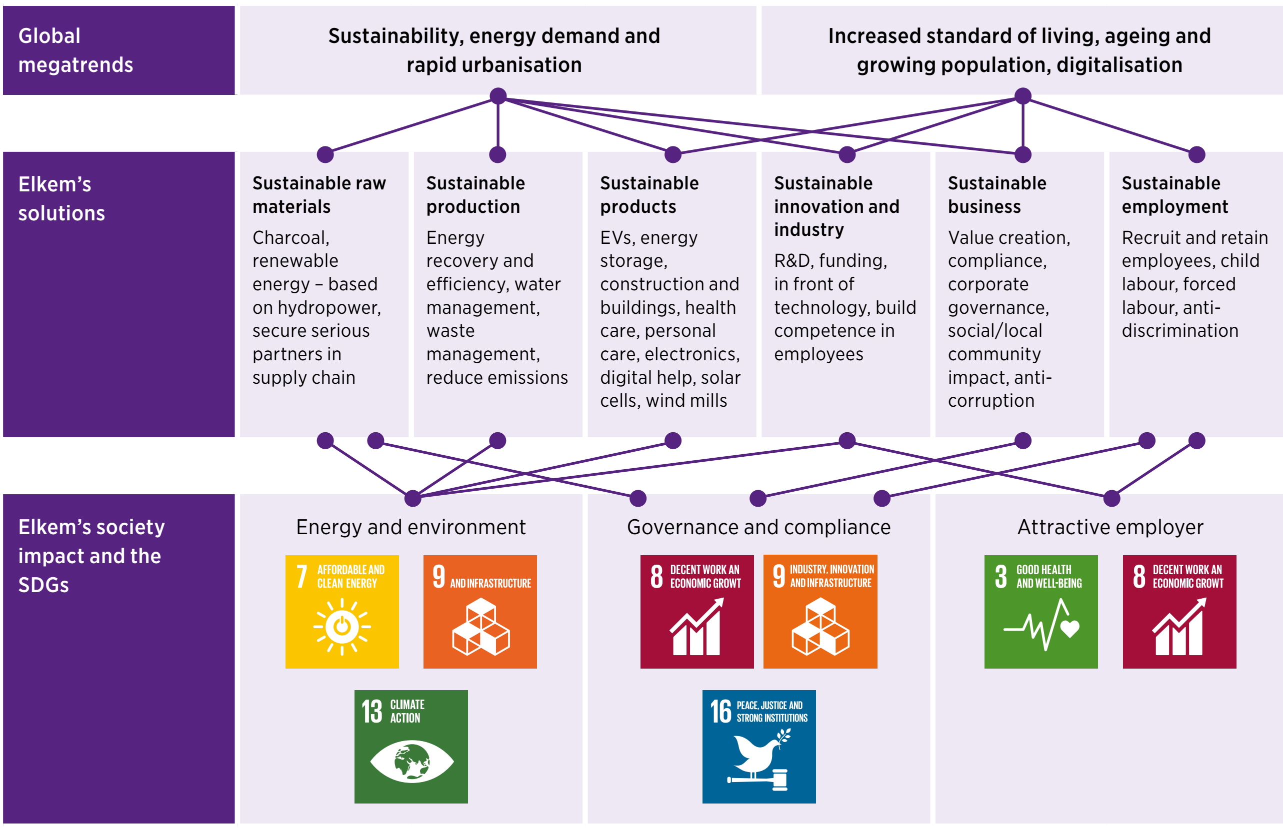
DID YOU KNOW

that Silicon produced by Elkem has approximately one third of the emissions compared to world average?

Elkem supports this development and works closely with customers on product life cycle analysis (LCA). We work continuously to improve the environmental footprint of our products; footprints from both CO_2 and other emissions such as NOx, SO_2, dust and PAH. For more information on these topics, please visit the chapter on energy and environment on page 62.

Elkem is also focusing on improving calculation and tracking of emissions. Elkem has a zero-harm vision and strives to be able to offer customers sustainable solutions. Preparing our product portfolio today will give us a competitive advantage going forward, as we expect to see an increased demand for LCA information and environmentally friendly products.

Most of Elkem's CO_2 emissions occur in the silicon and ferrosilicon processes. Our products, however, are mainly based on electricity from hydropower and are therefore characterised by lower environmental footprints than many competitor products. On average, our silicon has one third of the world average emissions calculation, which is 12 kilogram CO_2 per kilogram produced of silicon.



Also, when calculating cradle-to-grave greenhouse gas emissions of silicones, the production of silicon materials is the most relevant contribution, as it accounts for 66% of total emissions for silicones products.

The regional origin of silicon materials therefore plays a significant factor for the CO_2 emissions of silicone, because of the variation of electricity production in the different regions. Here, Elkem's electricity mix will be a green comparative advantage when calculating LCAs.

Elkem provides products to the automotive industry. The big automotive companies have strategies to evaluate and integrate LCA in their development processes of cars, which impacts our deliveries. Elkem Silicon Materials is working on evaluating and improving the CO_2 footprint of our products and will continue to be an environmentally friendly provider of products to the automotive industry in the future.

There are CO_2 emission abatement effects from the use of silicone products, reducing the end-life effect of silicones versus competing materials. Silicone products enable more efficient transport, contribute to lighter vehicles, reduce the need for heating energy and electricity consumption and help increase efficiency. The features of silicones contribute to extend material lifetime, ensure more efficient use of materials, and can also replace oil-based plastic products, lowering the carbon footprint in material production and recovery. A study published by CES (Silicones Europe) in 2018 showed that the largest net-benefit of using silicones was found in automotive, construction and solar energy applications, and that compared to alternatives it is estimated that a net 48 kilogram of CO_2 equivalents abatement per kilogram of silicones applied.

PRODUCT STEWARDSHIP IN ELKEM

Elkem works to ensure safe handling, use and disposal of our products. Product stewardship is defined as responsible and proactive management of health, safety and environmental aspects of a product throughout its lifecycle.

Elkem is committed to comply with international regulatory requirements and provides safety data sheets (SDS) for all products in accordance with UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS). In all markets where Elkem's products are promoted, the products must meet specific requirements and comply with certain technical, regulatory, health and environmental standards.

This is especially important for our silicones division. Proactive chemical management and protection of the environment and human health are fundamental prerequisites for conducting our business and securing our licence to operate. Compliance with chemical product regulations include product registrations, product authorisations, safety data sheets and product labels. There are also industry specific regulations that Elkem complies with, for example regulations on products that are in contact with food and water (packaging) or healthcare (band aid/wound care).

In addition to complying with chemical production regulations, the Silicones division is a signatory to the Responsible Care Global Charter of the International Council of Chemical Associations (ICCA). Product stewardship is a key pillar of the Responsible Care® programme, and by participating we are committed to manage chemicals safely throughout product life cycles. This includes both proactively identifying and managing chemical risks and concerns throughout our operations and replacing substances in the portfolio that pose unacceptable risk to human health, safety and environment.

With a portfolio of more than 4,000 different products that are used in a multitude of applications, regulatory and product compliance is key for silicones. The document management system OSCAR has been implemented and ensures that compliance, certificates and regulatory statements are easily available for distribution to customers.

Our customers have their own health, safety and environmental requirements for their products. The majority of Elkem's safety data sheets (SDS) are available for download on www.elkem.com. The SDS for some selected products are only available on request, due to the protection of confidential business information.

COMMUNITY ENGAGEMENT AND DIALOGUE

Input from local communities is valuable and helps us improve. Important topics that have emerged from our dialogue with local communities include community development projects, job security, safe operations, emissions and other environmental issues and traffic generated by the plant. Complaints raised by local communities and traffic incidents related to our operations are registered and managed in accordance with good practices for incident and deviation management. More information on Elkem's procedures for handling external complaints is found in the governance and compliance chapter on page 92.

Dialogue with local communities is the responsibility of each plant or site manager and is carried out both formally and on an informal day-to-day basis. It is the plant (or site) manager's responsibility to be aware of all relevant stakeholders and engage in dialogue where relevant, such as when changes are happening at the plant/site, and hold emergency training.

Identifying relevant stakeholders and structuring an action plan towards them is included in the certification of ISO 9001 – quality management system. In addition, we have developed our own stakeholder tool for projects and plants. The tool was piloted in 2019 and is due to be implemented in 2020.

Local community support

A number of Elkem plants have implemented local initiatives and support programmes. Elkem's community support includes initiatives for better education and local infrastructure, sports activities, local community poverty reduction and food support, and other social impact initiatives.

A number of Elkem plants have local initiatives and support programmes. Our local initiatives and support programmes are subject to guidelines for what is permitted and what is not, to avoid corruption. Any financial support shall be given in a fully open and transparent manner according to local legislation. It is up to the local plant or unit to set goals and to evaluate the local community programme support.

Examples of events or programmes that Elkem support locally or regionally:

- Local sports clubs, both for children and adults
- Scholarships (high school and universities)
- School programmes with focus on building technology skills
- Summer school/camps
- Cancer research programmes
- Safety training and first aid kits to local organisations
- Poor family support programmes

Elkem's expenditures related to community support amounted to NOK 521,000 in Norway in 2019.

In 2019 we have worked on developing a universal guideline on community support for all our local engagement. The purpose of the guideline is to assist local decision makers at our plants when they engage with local stakeholders in monetary or other formal support. The support guideline is based on the principles of the UN Global Compact and, once implemented, any support shall be based on these principles. The guideline is due to be implemented in 2020.

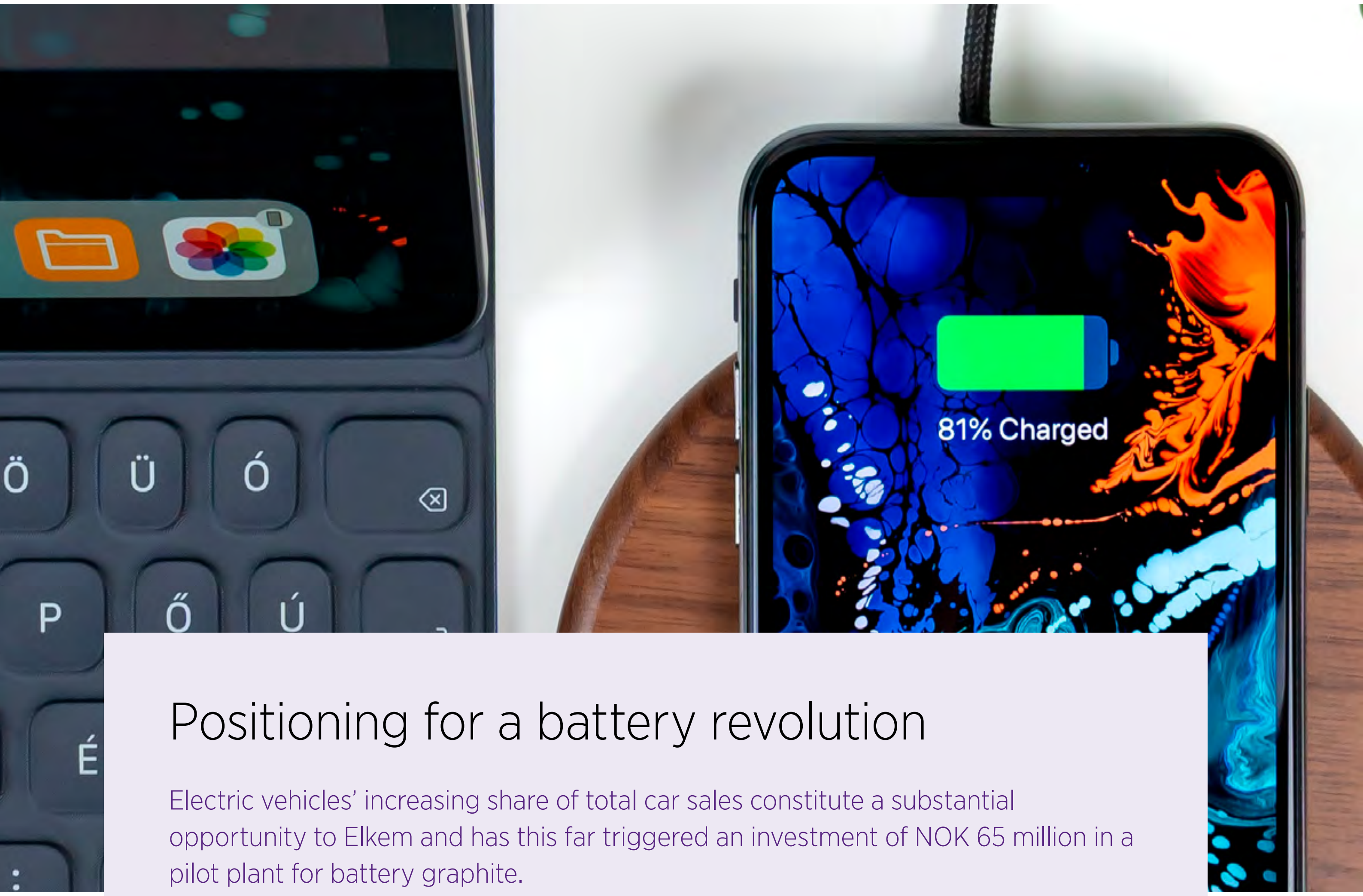
Lobbying positions

Elkem seeks to obtain a satisfactory regulatory framework for all its operations. In Europe, this entails a sufficient allocation of CO_2 allowances as well as compensation for CO_2 expenses in the power

Partnership for 40 years

The Tana quartz mine has been operating for more than 40 years. It is based in Austertana, a small community in the North of Norway.

A long-term and transparent dialogue with local stakeholders, such as local community organisations, local politicians and Sami reindeer herders have been key activities to ensure continued operations. Elkem is currently looking into expanding our operations at the Tana mine, to secure access to quartz after the current open-cast is finished. In the application process for the expansion, dialogue with the Sami reindeer herders have been initiated, as the reindeers migrate through the relevant area. Elkem's ambition is to reach an agreement with the relevant parties as soon as possible. In the application process, dialogue with different stakeholders such as local community representatives and politicians to inform about the process, is also prioritised.



Positioning for a battery revolution

Electric vehicles' increasing share of total car sales constitute a substantial opportunity to Elkem and has this far triggered an investment of NOK 65 million in a pilot plant for battery graphite.

The lithium-ion battery market is expected to grow significantly in the coming years and Elkem is currently exploring opportunities to capture on the growth trajectory.

"The forecast for 2030 is that anything between 22 and 30% of the new sale of vehicles will be electric and there are strong growth projections for other segments requiring battery technology and capacity", says Inge Grubben-Strømnes, Senior Vice President Carbon.

Graphite is the dominating anode material in lithium-ion battery cells and demand is expected to increase more than ten times, from today's annual level of 150,000 to 200,000 tonnes over the next decade.

New production capacity is required in order to meet the anticipated future demand, which is why Elkem has invested NOK 65 million in a new pilot plant for battery graphite.

Elkem will use the experience from operating the pilot as a basis for evaluating full-scale industrial production strategically located to serve the emerging European lithium-ion battery cell market, as the supply of anode graphite today is dominated by Asia based companies

A full-scale production facility will constitute a substantial business opportunity in a complex value chain for high end products, where Elkem's advantages include a robust cost structure and a green footprint.

"The aim of the pilot is to conclude process route and qualify products. This is a natural step towards an industrial line for battery graphite in Norway", says Grubben-Strømnes.

Elkem's battery graphite activities have received grants from Innovation Norway, The Research Council of Norway and the European Commission's Horizon 2020 programme.

price. For Norway specifically, Elkem seeks a favourable outcome of the ongoing revision of the industrial grid tariff scheme, as well as to limit the number of interconnectors between Norway and other countries as this will likely increase the domestic power price. For information about lobbying activities, please visit www.elkem.com.

RESPONSIBLE SOURCING AND THE SUPPLY CHAIN

Elkem sources raw materials, capital goods and services for our operations around the world. Elkem's total procurement spend is approximately NOK 16 billion, covering supplies of raw materials, materials, energy, goods, services and logistics. The active supply base consists of about 15,000 suppliers globally.

Responsible sourcing is a strategic priority for Elkem. Responsible sourcing means looking at what we procure beyond the more traditional aspects such as cost, quality and delivery time. It means that Elkem is committed to consider ethics, labour rights, social and environmental issues when sourcing products and services across all procurement categories and across all operations.

Procurement in Elkem

Corporate supply chain has the overall global responsibility for developing and maintaining Elkem's procurement and logistics strategy, as well as Elkem's global procurement policies and procedures.

Elkem's procurement organisation is decentralised, with procurement functions both at corporate level, at divisional and plant level. We further differentiate between procurement of raw materials, and procurement of indirect materials. Suppliers of raw materials are always considered critical suppliers, and suppliers of indirect materials may be considered critical, depending on several factors.

Supplier due diligence and screening against environmental and social criteria

The procurement function is responsible for carrying out pre-qualification and risk assessments of suppliers based on corporate requirements within environment, health and safety, social responsibility, anti-corruption and compliance with laws and regulations.

Where the risk is identified as high, additional due diligence (integrity due diligence) or on-site audits are required.

In 2019, 73% (ex. China) of new suppliers of raw material were screened against environmental and social criteria. For high risk suppliers, additional due diligence was conducted (integrity due diligence). One supplier was excluded based on due diligence findings.

In 2020/2021, Elkem is updating its supplier due diligence process, aiming for a harmonised approach to screening using social criteria. All new suppliers will be screened against the topics in the GRI 400 series.

SUPPLIER AUDITS

The number of raw material suppliers is relatively low. A structured auditing program is in place to ensure all suppliers receive regular audits.

For suppliers of goods and services such as hardware, plant equipment and services, the number of suppliers is high. Regular audits are performed by plant personnel or corporate personnel, focusing on supplies that are associated with risk.

Relevant Elkem policies on responsible sourcing are:

- **EHS and CSR approval of Elkem's suppliers and business partners:** Outlines Elkem's procedure for pre-qualification and management of suppliers.
- **Corporate standard for sourcing bio-carbon:** Outlines Elkem's commitment to sustainable forest management and the requirements for procuring bio-based reductants in Elkem.

Code of conduct for Elkem's business partners

In October 2019, Elkem launched the code of conduct for Elkem's business partners ("the business partner code"). The business partner code sets out Elkem's expectations of our suppliers with regards to ethics, labour rights and social and environmental issues.

We require all new suppliers to endorse the business partner code and maintain their commitment throughout the relationship. The business partner code is considered an integral part of any agreement that regulates the relationship between Elkem and a supplier.

EHS IN THE SUPPLY CHAIN

Elkem has developed detailed requirements for high risk suppliers and contractors regarding health, safety and environmental standards for operations like mining, transportation, storage and loading, and is actively involved in the promotion and monitoring of safe and decent working conditions. This includes health and safety training and providing correct personal protection equipment for suppliers' employees when necessary. Age control to prevent child labour and ensure responsible working conditions for young employees is also carried out. Elkem requires suppliers and contractors to engage their employees with written contracts on fair terms, and to give them information about their right to organise and collectively bargain with management where this is legally possible.

Elkem's requirements are regularly discussed in meetings with suppliers. High-risk suppliers must document their understanding of legal requirements and hazards in their operations and present plans showing how risk will be eliminated or controlled while working for Elkem. Elkem performs audits and inspections, both in connection with routine visits for quality, technical and business follow-up, and as unannounced site visits. External auditors also conduct supplier audits on Elkem's behalf.

Violations of Elkem's requirements are registered and addressed with verbal or written warnings in addition to requests for improvements when necessary. Repeated violations may lead to requirements for speedy implementation of improvement plans, financial penalties, or termination of contracts with immediate effect.

Strategic partnership with Achilles

In 2018, Elkem entered into partnership with supply chain risk management solution Achilles. A large portion of our Norwegian and Islandic suppliers are pre-qualified through this solution. Achilles also performs 10,000 audits per year.

Continuous improvement

As one of the world's leading suppliers of silicon-based advanced materials with operations throughout the value chain from quartz to specialty silicones, we are continually improving the way we source our supplies. As Elkem is growing into new emerging markets, we recognise the need to optimise, streamline and digitalise our supply chain management and run projects to improve our capabilities to this end.

New harmonised process for supplier management

In 2020/2021, Elkem will implement a global supplier management system and introduce a new harmonized process for supplier prequalification, supply chain management, supply chain risk management and contract management.

This will allow for a unified process for screening and vetting suppliers across all divisions and jurisdictions, tracking and monitoring suppliers' compliance throughout the contract lifecycle, as well as identifying and managing supplier risk.

HUMAN RIGHTS

Elkem's operations cover challenging markets such as China, Malaysia, Korea, India, South Africa, Russia, Brazil, Mexico and Paraguay. Human rights issues are often deeply embedded in the local culture and can only be mitigated by engaging with stakeholders, governments and local communities.

Elkem is committed to the UN Guiding Principles on Business and Human Rights. We also respect and follow the requirements of the UK Modern Slavery Act and the French Duty of Vigilance Law.

Compliance with these principles require Elkem to identify and assess the human rights risks and impact of our operations and our supply chain.

Relevant Elkem policies on human rights include:

- **Elkem Code of Conduct:** Expresses our respect for human and labour rights.
- **Elkem Code of Conduct for Business Partners:** Requires our suppliers to commit to global human rights principles.
- **Policy for Corporate Social Responsibility:** Describes how Elkem and the Social Corporate Responsibility (CSR) Committee is working to protect human rights and protect workers' rights.

Human rights impact assessment (HRIA)

Our policies on human rights express our commitment to human rights and how we work to protect human rights in Elkem and in the supply chain. Human rights, and especially workers' rights, have always been a top priority for Elkem, and an integral part of our EHS audits. More information on our policies regarding child and forced labor can be found in the attractive employer chapter on page 72.

As we grow and enter into new and challenging markets, we see the need to take on a more systematic approach to our human rights strategy. We have therefore initiated a Human Rights Impact Assessment (HRIA), where we work to identify Elkem's actual impact and the risk of impact on human rights throughout our value chain.

Elkem recognises that human rights impact is constantly evolving. We are therefore committed to update our impact assessment on a regular basis, or whenever external factors or Elkem's operations require it, for instance where we enter new markets, develop new products or acquire new business entities.

Human rights priorities

Based on the HRIA, we will identify Elkem's human rights priorities and launch a human rights action plan. In 2020, we are also launching a human rights training programme and developing a compliance monitoring programme on human rights.

Grievance mechanisms

In accordance with the UN Guiding Principles on Business and Human Rights, Elkem is committed to remedy situations where Elkem's activities have caused or contributed to adverse human rights impacts. If something is not right, Elkem wants to know about it. That is why we have set up an external Speak up channel that allows for anonymous reporting and engaging with stakeholders. The Speak up channel is available to external stakeholders through the Elkem webpage.

How we respond to adverse events

Even with the best practices, a business may cause or contribute to an unforeseen adverse human rights impact that was not foreseen or which it was unable to prevent. In such events, Elkem will do its outmost to prevent or mitigate the impact:

- Where Elkem causes an adverse human rights impact, we take the necessary steps to cease or prevent the impact.
- Where Elkem contributes to an adverse human rights impact, we take the necessary steps to cease or prevent our contribution and use our leverage to remediate any impact to the extent possible. Whenever we have leverage to prevent or mitigate the adverse impact, we exercise it.
- Where we have no leverage, we terminate the relationship.

When necessary, we consult externally with credible, independent experts, including governments, civil society, national human rights institutions and relevant multi-stakeholder initiatives.

Focus on CSR work pays off

PT Kendi Arindo contributes to substantial values for local communities.

Sumatera based PT Kendi Arindo (PTKA), having Elkem as main customer of charcoal for more than 25 years, was last year awarded the Governor of South Sumatera Provincial Government, CSR award in the Processing and Manufacturing Industry.

Local communities are of great significance, not only to Elkem, but also for local partners which is why Elkem encourages suppliers to engage locally.

PTKA was awarded the prize in competition with more than 100 companies. The jury particularly emphasises the company's efforts on Creating Shared Value (CSV) including increased quality of life and positive long-term effects for the local communities.

In addition to assuring proper maintenance and production, PTKA is praised for sustainable utilisation of resources, health, school and clean water programmes and for maintaining roads and infrastructure.

The goal of the CSV programme is to encourage interaction between the population and those doing business in the area.

The jury points out crime reduction, reduced unemployment, and no forest fires as important results from the CSV programme from PTKA.

"PTKA's local initiatives are impressive and important. To Elkem, PT Kendi plays an important role in our ambition to increase the utilisation of sustainable biocarbon to 40% by 2030", says Grim Terje Øberg, vice president raw materials, Elkem Silicon Materials.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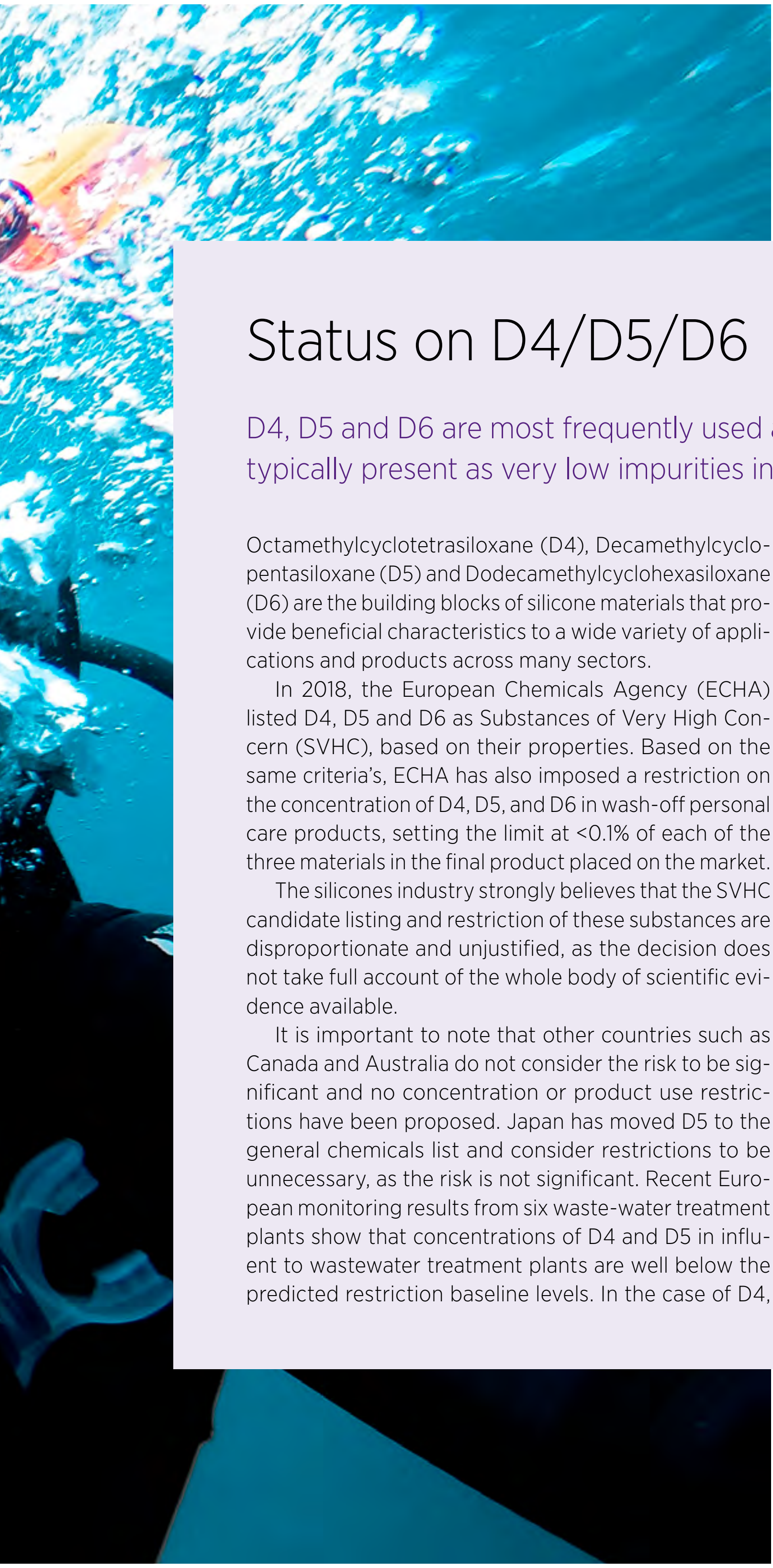


Status on D4/D5/D6

D4, D5 and D6 are most frequently used as key chemical intermediates and are typically present as very low impurities in end products.

Octamethylcyclotetrasiloxane (D4), Decamethylcyclopentasiloxane (D5) and Dodecamethylcyclohexasiloxane (D6) are the building blocks of silicone materials that provide beneficial characteristics to a wide variety of applications and products across many sectors.

In 2018, the European Chemicals Agency (ECHA) listed D4, D5 and D6 as Substances of Very High Concern (SVHC), based on their properties. Based on the same criteria's, ECHA has also imposed a restriction on the concentration of D4, D5, and D6 in wash-off personal care products, setting the limit at <0.1% of each of the three materials in the final product placed on the market.

The silicones industry strongly believes that the SVHC candidate listing and restriction of these substances are disproportionate and unjustified, as the decision does not take full account of the whole body of scientific evidence available.

It is important to note that other countries such as Canada and Australia do not consider the risk to be significant and no concentration or product use restrictions have been proposed. Japan has moved D5 to the general chemicals list and consider restrictions to be unnecessary, as the risk is not significant. Recent European monitoring results from six waste-water treatment plants show that concentrations of D4 and D5 in influent to wastewater treatment plants are well below the predicted restriction baseline levels. In the case of D4, concentrations are already consistent with predicted post-restriction levels. D5 is near or at predicted post-restriction concentrations.

Consequences of SVHC listing for downstream users

An SVHC listing is not a ban or a restriction on the use of D4, D5 and D6 as such. Nor is it a ban on the use of silicone polymers.

Silicone polymers can be used safely in all products. Silicone manufacturers will need to implement on site, and recommend to downstream users, risk management measures which minimise exposure and emissions, throughout the lifecycle of the substance that results from the manufacture or identified use.

The relevant Elkem European Safety Data Sheets (SDS) have been updated as applicable (when the substance(s) is (are) individually present at levels ≥ 0.1%). SVHC attestations indicating D4, D5 or D6 content are also available for applicable products.

The data reported reflects the D4, D5 and D6 content in the product as supplied by us and not after use and curing by end user. In accordance with our strong commitment to Responsible Care® and product stewardship, The Silicones division is actively working to implement improvements to our manufacturing processes that will reduce the final D4, D5 and D6 levels in its polymers and products.

Silicone improves food crop yields, saves water and energy resources.

Silicone antifoams are reducing waste in maximising food crop production and saving precious water and energy resources in industrial processes. Used in agrochemicals, water treatment and plastic recycling industries, silicone antifoams contribute greatly to circular economy initiatives by reducing waste.

To meet the agricultural challenges to feed the world, agrochemicals protect and enhance crop yields. The formulations often produce foam that hinders the efficiency and application on plants.

Silcolapse™ silicone foam control agents and Bluesil™ silicone surfactants enhance manufacturing processes and improves productivity by facilitating spreading and wetting performances on the plant.

All ingredients for crop and plant treatments are safe for people and the environment and comply with national and international regulatory standards. The role of the silicone components is to “grow more with less”. They aid to reduce:

- the dose of active ingredients (non-silicone products)
- water consumption for the crop spraying operation
- hazardous waste of residual crop spraying formulation

The ingredients are used in a wide range of agrochemical applications and at all stages in the manufacturing and growing process, as processing aids and formulation ingredients, and in can or tank mix adjuvants. Diminishing the dose of the active ingredients reduces pollution in crops and the mobility of actives in the soil. This increases farmers’ income through higher crop yields and contributes to the slowing down of soil desertification and salinisation.

Laboratory, greenhouse and field trials carried out in Hunan province in China and in Norway, Sweden and Russia have proved the effectiveness of the foam control agents in improving crop quality and yield and reducing environmental impact. In addition to the series of products dedicated to agrochemicals, there are many solutions for application in water treatment and plastic recycling. These contribute to circular economy initiatives by offering many of the same benefits as waste reduction.

Civic and industrial companies, environmental service companies and wastewater treatment plants processes create foam. The water-based solutions contain non-toxic, chemically inert silicones that are environmentally friendly with very low COD. Applied at very low doses, they are easy to use and provide durable efficiency, enhancing process reliability for the water treatment plant and ultimately reducing water waste and energy consumption.

DID YOU KNOW

that Elkem's active supply base consists of approximately 15,000 suppliers globally?

Governance and compliance:

Integrity in everything we do

Elkem considers good corporate governance to be a prerequisite for value creation, trustworthiness and for access to capital. In order to secure strong and sustainable corporate governance, Elkem strives for good and healthy business practices, reliable financial reporting and an environment of compliance with legislation and regulations across the group.

3	**ZERO**	**ZERO**	**100%**
substantiated misconduct reports resulting in disciplinary actions in 2019	anti-competitive practices identified for Elkem in 2019	bribery- and corruption incidents identified for Elkem in 2019	All employees have confirmed their commitment to the code of conduct

Targets – governance and compliance	Unit	2017	2018	2019	Timeline	Comments
Total number of misconduct reports received	Number	N/A	N/A	6	Continuous	
Number of substantiated misconduct reports		N/A	N/A	4		
Number of substantiated misconduct reports resulting in disciplinary actions		N/A	N/A	3		
Number of unsubstantiated misconduct reports		N/A	N/A	2		
Adverse human rights events identified in Elkem or in the supply chain	Number	0	0	0	Continuous	
Bribery- and corruption incidents identified for Elkem	Number	0	0	0	Continuous	
Anti-competitive practices identified for Elkem	Number	0	0	0	Continuous	
Number of employees who received face-to-face anti-bribery and corruption training	Number	Data not availible	Data not availible	42	Continuous	Online-training to be implemented in 2020
Number of employees who received face-to-face competition law compliance training	Number	Data not availible	Data not availible	373	Continuous	Online-training to be implemented in 2020
% of employees who have confirmed their commitment to the Code of Conduct	%	100%	70%	100%	Continuous	For 2018, target met, except for newly acquired Xinghou and Yongdeng plant in China
% of employees in the target group who have confirmed their commitment to the Anti-bribery and corruption policy	%	100%	70%	100%	Continuous	For 2018, target met, except for newly acquired Xinghou and Yongdeng plant in China
% of employees in the target group who have confirmed their commitment to the Competition law policy	%	100%	70%	100%	Continuous	For 2018, target met, except for newly acquired Xinghou and Yongdeng plant in China
Revise policies available online	Status	N/A	N/A	Completed	2019	

CORPORATE GOVERNANCE

Elkem's framework for corporate governance is outlined in Elkem's corporate governance policy, which covers the instructions for the audit committee, the instructions for the nomination committee, the instruction for the remuneration committee, rules for primary insiders and instructions for handling inside information. The document is reviewed annually by the board of directors and was last amended on 21 October 2019.

Elkem endorses the Norwegian Code of Practice for Corporate Governance ("NUES" or the "Code"). The principles of the Code are reflected in the corporate governance policy and in all other governance documents.

Governance documents:

- Articles of association
- Corporate governance policy
- Policy for corporate social responsibility
- Global code of conduct
- Code of conduct for Elkem's business partners
- Speak up policy
- Anti-bribery and corruption policy
- Competition law compliance policy

Risk management and internal control

It is ultimately the responsibility of the board of directors to ensure that Elkem has sound and appropriate internal control systems and risk management. To that end, the board of directors conducts an annual review of the company's most important areas of exposure to risk and such areas' internal control arrangements.

Operative management has ownership, responsibility and accountability for directly assessing, controlling and mitigating risk and assuring adequate internal controls. Management provides frequent and relevant reporting of both operational and financial matters to the board of directors, ensuring that the board has adequate information for decision-making and can respond quickly to changing conditions.

Corporate help chains, such as EHS, quality, product stewardship, compliance, Corporate Social Responsibility (CSR), legal, IT, finance and other control departments, oversee, facilitate and report on the risk management activities of operative management.

Due to Elkem's size and risk exposure in China, Elkem has recently (2019), set up an Internal audit and compliance function for Asia. The function reports to VP finance and accounting.

Audit Committee

The audit committee is a sub-committee of the board of directors and its objective is to act as a preparatory body in connection with the board's supervisory roles with respect to financial reporting and the effectiveness of the company's internal control system.

The CFO reports on Elkem's internal control and compliance work to the audit committee of the board upon request, in cooperation with VP finance and accounting, and General Counsel.

For more information on Elkem's internal control and risk management systems, please see the board of directors report and information on the investor relation pages on www.elkem.com.

COMPLIANCE

In 2019, Elkem engaged a corporate compliance officer to lead the company's compliance programme. The corporate compliance officer reports to general counsel.

Corporate compliance is further supported by the newly appointed internal audit and compliance function in China on compliance and human rights issues.

Network of compliance champions set up in 2019

Corporate compliance is supported by a network of compliance champions across Elkem's operations. The compliance champions are members of management or support functions, stationed in each business unit, that assist the corporate compliance function in implementing Elkem's compliance programme, including training and guidance to their respective units.

Corporate Social Responsibility Committee

Elkem has a CSR committee, which is headed by Senior Vice President (SVP) HR with participants from key functions such as compliance, legal, EHS, communications, HR, procurement and sales. The committee meets on a regular basis and is tasked with promoting a culture that emphasises and sets high standards for corporate social responsibility, as well as review of corporate performance against those standards. SVP HR is responsible for reporting CSR issues to the CEO and for reporting major issues to the board of directors.

Compliance programme audit in 2020

Elkem is committed to continuous improvement. As a measure to improve, Elkem will engage external consultants to conduct an independent assessment of the compliance programme in 2020.

SPEAK UP CHANNEL

At Elkem, openness is key, and employees and stakeholders are encouraged to speak up if something is not right. Employees should feel free to discuss issues with management, or report misconduct to HR or the legal/compliance department without risk of facing consequences.

Global tool for external misconduct reporting

In 2019, Elkem rolled out an external Speak up channel for misconduct reporting and updated the company's Speak up policy. The Speak up channel is available to all employees and allows for anonymous reporting in all Elkem languages. The policy gives clear guidance on how to report a concern.

The Speak Up channel and the Speak up policy are available and communicated through our intranet site, the Elkem webpage, through training and physical posters and handouts at plants and offices.

This channel also functions as a grievance mechanism for external stakeholders, such as suppliers, costumers, local communities where Elkem operates. The Speak up channel is available on the Elkem webpage and grievances can be reported in the several languages.

Handling of misconduct reports

Misconduct reports are handled by corporate compliance and in accordance with applicable legislation on misconduct reporting. Elkem has a zero tolerance for retaliation against those who report a concern and will sanction those who retaliate.

TRAINING

Global online training programme

Elkem is committed to providing up-to-date, relevant and engaging compliance training. In 2020 Elkem will roll out a new global online training programme with relevant e-learning to all employees, including training in ethics, anti-bribery and corruption, and anti-competitive practices. The training is refreshed on a regular basis, providing employees with new and updated content each year. Employees can choose to complete the training in all key Elkem languages.

Risk based face-to-face trainings

The online training is supplemented by face-to-face trainings in high risk jurisdictions and for high risk employee groups. The trainings are tailored to the specific risks and needs of the target group.

ANTI-COMPETITIVE PRACTICES

Elkem is committed to avoiding anti-competitive practices across all operations. The competition law compliance policy outlines what behaviour is considered acceptable or not.

To improve preventive measures a full overview of operations and employee groups that are most exposed and to what anti-competitive practices needs to be updated. We are therefore conducting an anti-competitive practice risk assessment to identify high risk jurisdictions and employee groups, as well as identifying red flags and mitigate gaps. The assessment is due in 2020.

ANTI-BRIBERY AND CORRUPTION

Elkem has a zero-tolerance policy against corruption. Elkem has multiple operations across jurisdictions and in several high-risk countries. Elkem also deals with government officials for permits and other administrative issues.

In order to enhance the efficiency of Elkem's internal controls and measures to prevent bribery and corruption, compliance is conducting an anti-bribery and risk assessment (ABC risk assessment) of the company's global operations. The assessment is due 2020 and will form the basis for the anti-bribery and corruption programme going forward. The 2020 assessment will be updated on a regular basis and upon entering new markets and introducing new products.

WORKING WITH BUSINESS PARTNERS

It is important to Elkem to work with business partners of high ethical integrity. Elkem does not accept bribery, environmental breaches, or human rights violations on behalf of our business partners. Relation managers are required to carry out the adequate due diligence on business partners before entering the business relationship. In Norway and Island, suppliers are required to prequalify through Achilles.

Code of conduct for business partners

In 2019, Elkem rolled out a new code of conduct for business partners, which builds on the global code of conduct, anti-corruption policy, CSR policy and human rights policy. All new suppliers are required to commit to and sign the code to become business partners of Elkem.

Third-party risk management system

Bribery cases, human rights breaches, environmental disasters and EHS scandals routinely involve business partners, such as agents, consultants, suppliers, joint venture partners and distributors. In order to ensure that we handle the risk associated with such business partners in an efficient way, Elkem is rolling out a Third-party Risk Management System (TPRM). The system will allow for risk assessment of all business parties, screening against sanction lists and adverse media, as well as risk based due diligence, audits and monitoring of business partners throughout their lifecycle. The system is due to be implemented in 2020/2021.

Elkem compliance champions

"We have launched a network of compliance champions", says corporate compliance officer Julie Leypoldt.

Colleagues from a wide range of functions and geographical locations serve as compliance champions. They act as the "voice of compliance," assisting in implementing compliance-lead initiatives and encouraging a Speak-up culture. They keep their ear to the ground, informing us of any developments that may be relevant from a Compliance perspective, escalating adverse events and identifying opportunities to share successes and lessons, Leypoldt explains.

"I am excited to represent our plant in the compliance champion network for Americas", says procurement manager at Elkem Carbon Brazil, Antonio Passos.

Business integrity is a vital part to success for all of Elkem's plants.

"That is why I am looking forward to sharing experiences with other members of the Americas and global compliance champion network going forward", Passos adds.

***Compliance champion**: Antonio Passos, Elkem Carbon Brazil.*

Speak up to misconduct

Elkem is upgrading the misconduct reporting system for all employees and partners.

Corporate compliance officer Julie Leypoldt has led Elkem's Speak up project, which now is being rolled out globally.

"Elkem has undergone an important change in recent years and has become a truly global company. We saw the need to set up a single visible channel that people can reach out to in their local language. We want to make sure that everybody knows where to turn if they witness misconduct", says Leypoldt.

Misconduct reporting, that is reporting unacceptable circumstances in the business to anyone who can do something about it, can constitute an important resource for organisations.

Elkem encourages its 6,370 employees and external parties to report possible dishonest or illegal conduct in the business.

We prefer to talk about speaking up. We encourage employees to discuss ethical issues freely and report when something is not right," says Leypoldt.

In order to assure that issues of concern reach top management, the Compliance function has engaged an external service provider.

The external partner provides a software service that will be accessible to all employees and partners. Employees can access the service through the intranet pages, and suppliers and other stakeholders through the Elkem web page.

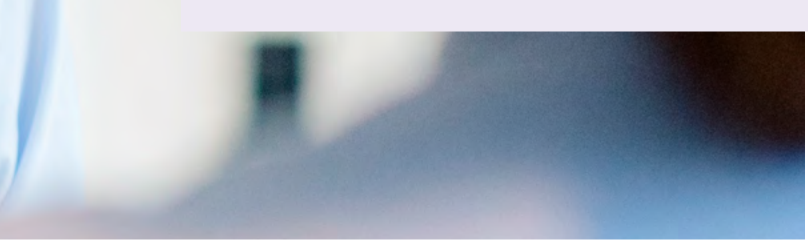
"You can choose your own language and either record a voice or written message. The message will be translated to English and sent to the compliance department. Compliance will be able to communicate with the sender in their native language. Our response will be translated back to the language of the sender", says Leypoldt.

One important aspect of the service is that the person can choose to remain anonymous, also towards the compliance department. The reporter will receive an access code and can log on to the system to follow up on the case and will not be required to leave their name or contact information.

"In some cases, employees will not feel comfortable discussing the matters with local management, maybe because the management is involved, or simply because the employee wishes to remain unidentified. We think that the chances of getting information increases with this solution", says Leypoldt.

The awareness around the Speak up channel is to be increased primarily through internal communication methods, such as intranet, trainings, posters and business cards.

"The posters will be installed at the physical premises, and we will print business cards that employees can take home, all of which will be available in different languages. Rollout of the posters and business cards started in the end of 2019 and will continue through first half of 2020", according to the compliance officer.



Financial statements 2019

Elkem group

Elkem ASA

Consolidated statement of income

Amounts in NOK million	*Note*	**2019**	2018 Restated[1)]
1 January - 31 December			
Revenue	*7, 35*	**22,246**	24,968
Other operating income	*7*	**392**	244
Share of profit (loss) from equity accounted companies	*5*	**31**	18
Total operating income	*6*	**22,668**	25,230
Raw materials and energy for production	*35*	**(11,512)**	(11,366)
Employee benefit expenses	*9*	**(3,696)**	(3,449)
Other operating expenses	*12, 35*	**(4,804)**	(4,622)
Amortisation and depreciation	*17, 18, 19*	**(1,456)**	(1,263)
Impairment losses	*17, 18, 19*	**(11)**	(8)
Operating profit (loss) before other items		**1,189**	4,522
Other items	*14*	**195**	(380)
Operating profit (loss)		**1,384**	4,142
Share of profit (loss) from equity accounted financial investments	*5*	**(12)**	(23)
Finance income	*15*	**41**	42
Foreign exchange gains (losses)	*15*	**16**	19
Finance expenses	*15, 18*	**(295)**	(388)
Profit (loss) before income tax		**1,134**	3,792
Income tax (expense) benefit	*16*	**(237)**	(425)
Profit (loss) for the year		**897**	3,367
Attributable to:			
Non-controlling interests' share of profit (loss)		**42**	29
Owners of the parent's share of profit (loss)		**855**	3,337
Earnings per share in NOK:			
Basic	*31*	**1.47**	5.74
Diluted	*31*	**1.47**	5.74

1) See note 35 Changes in accounting policies

Consolidated statement of other comprehensive income

Amounts in NOK million	*Note*	**2019**	2018
1 January - 31 December			
Profit (loss) for the year		**897**	3,367
Items that will not be reclassified to profit or loss			
Remeasurement of defined benefit pension plans	*9*	**(26)**	17
Tax effects on remeasurement of defined benefit pension plans	*16*	**3**	(6)
Change in fair value of equity instruments		**10**	2
Share of other comprehensive income (loss) from equity accounted companies	*5*	**0**	(0)
		(13)	14
Items that may be reclassified to profit or loss in subsequent periods			
Currency translation differences		**33**	112
Hedging of net investment in foreign operations		**24**	(29)
Tax effects hedging of net investment in foreign operations	*16*	**(5)**	7
Cash flow hedges	*27*	**(182)**	873
Tax effects on cash flow hedges	*16*	**40**	(200)
Share of other comprehensive income (loss) from equity accounted companies	*5*	**(14)**	(8)
		(104)	755
Reclassification adjustments for the period			
Currency translation differences		**-**	0
Cash flow hedges	*27*	**(21)**	(176)
Tax effects on cash flow hedges	*16*	**5**	40
		(16)	(135)
Other comprehensive income (loss) for the year, net of tax		**(133)**	634
Total comprehensive income for the year		**764**	4,001
Attributable to:			
Non-controlling interests' share of comprehensive income		**45**	32
Owners of the parent's share of comprehensive income		**720**	3,969
Total comprehensive income for the year		**764**	4,001

Consolidated statement of financial position

Amounts in NOK million	*Note*	**31.12.2019**	31.12.2018
ASSETS			
Property, plant and equipment	*17*	**13,202**	12,445
Right-of-use assets	*18*	**580**	-
Goodwill	*19*	**466**	342
Other intangible assets	*19*	**777**	922
Deferred tax assets	*16*	**66**	60
Investments in equity accounted companies	*5*	**129**	134
Derivatives	*26, 27*	**66**	131
Other assets	*23*	**407**	441
Total non-current assets		**15,692**	14,474
Inventories	*21*	**5,224**	5,467
Trade receivables	*22*	**2,269**	2,391
Derivatives	*26, 27*	**38**	303
Other assets	*23*	**1,013**	836
Restricted deposits	*24*	**271**	577
Cash and cash equivalents	*24*	**4,496**	7,082
Total current assets		**13,311**	16,656
Total assets		**29,004**	31,129
EQUITY AND LIABILITIES			
Paid-in capital	*30*	**6,616**	8,102
Retained earnings		**6,240**	5,520
Non-controlling interests		**96**	101
Total equity		**12,952**	13,722
Interest-bearing liabilities	*18, 24*	**8,340**	7,131
Deferred tax liabilities	*16*	**243**	207
Employee benefit obligations	*9*	**584**	563
Derivatives	*26, 27*	**210**	450
Provisions and other liabilities	*25*	**158**	232
Total non-current liabilities		**9,536**	8,583
Trade payables		**2,767**	2,731
Income tax payables		**51**	330
Interest-bearing liabilities	*18, 24*	**1,262**	2,052
Bills payable	*24*	**887**	1,740
Employee benefit obligations	*9*	**640**	671
Derivatives	*26, 27*	**37**	79
Provisions and other liabilities	*25*	**871**	1,221
Total current liabilities		**6,516**	8,824
Total equity and liabilities		**29,004**	31,129

The Board of Directors of Elkem ASA – Oslo, 3 March 2020

Zhigang Hao
Chair of the Board

Dag Jakob Opedal
Deputy chair

Caroline Catherine Juliette Mazza
Board member

Yougen Ge
Board member

Anja Isabel Dotzenrath
Board member

Olivier de Clermont Tonnerre
Board member

Marianne Elisabeth Johnsen
Board member

Helge Aasen
Board member

Terje Andre Hanssen
Board member

Marianne Færøyvik
Board member

Per Tronvoll
Board member

Michael Koenig
Chief Executive Officer

Consolidated statement of cash flows

Amounts in NOK million	*Note*	**2019**	2018
Operating profit (loss)		**1,384**	4,142
Amortisation, depreciation and impairment	*17, 18, 19*	**1,467**	1,270
Changes in working capital[1)]		**649**	(712)
Equity accounted companies	*5*	**(4)**	14
Changes in fair value of commodity contracts		**(218)**	321
Changes in provisions, bills receivable and other		**(671)**	46
Interest payments received		**38**	41
Interest payments made		**(248)**	(390)
Income taxes paid		**(559)**	(272)
Cash flow from operating activities		**1,839**	4,460
Investments in property, plant and equipment and intangible assets	*17, 18, 19*	**(2,141)**	(1,996)
Received investment grants	*8*	**34**	80
Proceeds from sale of property, plant and equipment	*17, 18, 19*	**25**	40
Acquisition of subsidiaries, net of cash acquired	*32*	**(206)**	(4,049)
Acquisition of joint ventures	*5*	**-**	(21)
Payment received on loan to related parties		**-**	1,303
Other investments / sales		**3**	(28)
Cash flow from investing activities		**(2,285)**	(4,671)
Dividends paid to non-controlling interests		**(49)**	(33)
Dividends paid to owners of the parent		**(1,511)**	-
Capital increase	*30*	**-**	5,171
New interest-bearing loans and borrowings	*24*	**2,082**	6,643
Payment of interest-bearing loans and borrowings	*24*	**(2,074)**	(5,586)
Payment of lease liabilities	*18, 24*	**(78)**	-
Net changes in bills payable and restricted deposits		**(556)**	(445)
Repayment of short- term loan from related parties		**-**	(241)
Cash flow from financing activities		**(2,187)**	5,509
Change in cash and cash equivalents		**(2,633)**	5,298
Currency exchange differences		**47**	33
Cash and cash equivalents opening balance		**7,082**	1,751
Cash and cash equivalents closing balance	*24*	**4,496**	7,082

1) See note 6 Operating segments for definition of working capital.

Consolidated statement of changes in equity

2019 *Amounts in NOK million*	Share capital	Other paid-in capital	**Total paid-in capital**	Foreign currency translation reserve
Opening balance	2,907	5,195	**8,102**	839
Profit (loss) for the year	-	-	**-**	-
Other comprehensive income for the year	-	-	**-**	52
Total comprehensive income for the year	-	-	**-**	52
Share-based payment (note 11)	-	25	**25**	-
Dividends to equity holders	-	(1,511)	**(1,511)**	-
Closing balance	2,907	3,709	**6,616**	891

2018 *Amounts in NOK million*	Share capital	Other paid-in capital	**Total paid-in capital**	Foreign currency translation reserve
Opening balance	2,010	908	**2,918**	751
Profit (loss) for the year	-	-	**-**	-
Other comprehensive income for the year	-	-	**-**	89
Total comprehensive income for the year	-	-	**-**	89
Capital increase (note 30)	897	4,281	**5,177**	-
Business combination under common control (note 4)	-	-	**-**	-
Share-based payment (note 11)	-	6	**6**	-
Dividends to equity holders	-	-	**-**	-
Closing balance	2,907	5,195	**8,102**	839

Cash flow hedge reserve	Other retained earnings	**Total retained earnings**	**Total owners share**	Non-controlling interests	**Total**
85	4,595	**5,520**	**13,622**	101	**13,722**
-	855	**855**	**855**	42	**897**
(158)	(29)	**(135)**	**(135)**	2	**(133)**
(158)	827	**720**	**720**	45	**764**
-		**-**	**25**	-	**25**
-	-	**-**	**(1,511)**	(49)	**(1,560)**
(73)	5,422	**6,240**	**12,855**	96	**12,952**

Cash flow hedge reserve	Other retained earnings	**Total retained earnings**	**Total owners share**	Non-controlling interests	**Total**
(453)	5,247	**5,545**	**8,463**	102	**8,565**
-	3,337	**3,337**	**3,337**	29	**3,367**
538	5	**632**	**632**	2	**634**
538	3,343	**3,969**	**3,969**	32	**4,001**
-	-	**-**	**5,177**	-	**5,177**
-	(3,995)	**(3,995)**	**(3,995)**	-	**(3,995)**
-	-	**-**	**6**	-	**6**
-	-	**-**	**-**	(33)	**(33)**
85	4,595	**5,520**	**13,622**	101	**13,722**

Notes to the consolidated financial statements

Note 01 General information

Elkem ASA is a limited liability company located in Norway and whose shares are publicly traded on Oslo Børs. Elkem ASA is owned 58.2% by Bluestar Elkem International Co. Ltd S.A., Luxembourg, which is under the control of China National Chemical Group Co. Ltd (ChemChina), a company registered and domiciled in China.

Elkem is one of the world's leading companies in the environmentally responsible manufacture of metals and materials. The main activities are related to production and sale of silicon materials, silicones, ferrosilicon, speciality alloys for the foundry industry, carbon products and microsilica. The group serves several global industries, such as construction, transport, engineering, packaging, aluminium, chemicals, release coatings, healthcare products and electronic markets, and has organised its business to handle market presence and customer focus. Elkem has multiple production facilities located in Europe, North America, South America, Africa and Asia, and an extensive network of sales offices and agents covering most important markets. Core production processes are focused on converting high quality raw material to specialised metals and materials through high temperature smelting processes and further processing. Thus, the business has a high consumption of electrical power, and is also capital intensive due to the requirement for large and complex processing plants.

The consolidated financial statements for Elkem ASA (hereafter Elkem/the group), including notes, for the year 2019 were approved by the Board of Directors of Elkem ASA on 3 March 2020 and will be proposed to the Annual General Meeting on 8 May 2020.

Note 02 Basis for preparing the consolidated financial statements

COMPLIANCE

The consolidated financial statements are prepared and based on International Financial Reporting Standards (IFRS) as endorsed by the European Union (EU) and effective at 31 December 2019. All subsidiaries are using accounting policies consistent within the group, and all intra-group transactions, balances, income and expenses are eliminated in full on consolidation.

Relevant financial reporting principles are described in each note to the consolidated financial statements.

PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements are prepared on a historical cost basis, with the exception of derivative financial instruments and financial assets available for sale, which are measured at fair value.

The presentation currency of Elkem is Norwegian Krone (NOK). All financial information is presented in NOK million, unless otherwise stated. As a result of rounding adjustments, the amounts shown in one or more columns included in the consolidated financial statements, may not add up to the total.

In text, the comparative figures are presented in parantheses following the current year's figures outside parantheses.

The consolidated financial statements have been prepared based on the going concern assumption.

FOREIGN CURRENCY TRANSLATION

Separate financial statements

Each entity in the group determines its functional currency based on the economic environment in which it operates, and items included in the financial statements of each entity are measured using that functional currency. When preparing the financial statements of each individual group entity, transactions in currencies other than the entity's functional currency are recognised in the functional currency, using the transaction date's currency rate.

Monetary items denominated in foreign currencies are translated using the closing rate at the end of the reporting period, and any gains (losses) are reported in the statement of income. Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rate at the date when the fair value was measured. Currency gains (losses) related to operating activities, i.e. receivables, payables, bank accounts for operating purposes including short-term intragroup balances, are classified as a part of other items. Currency effects recognised in finance income and expenses are only related to financing activities like loans, lease liabilities, long-term placements and dividends.

Foreign currency differences are recognised in other comprehensive income for the following items:

- a financial asset or liability designated as a hedging instrument in a cash flow hedge, to the extent that the hedge is effective
- loans in foreign currencies designated as hedging instruments in a hedge of a net investment in a foreign operation

Consolidated financial statements
In consolidation of the statement of income and the statement of financial position, separate group entities with other functional currency than the group's presentation currency, are translated directly into the presentation currency as follows:

- Assets and liabilities are translated using the exchange rate at the end of the reporting period
- Income and expenses are translated using an average exchange rate per month
- Equity transactions, except for net profit or loss for the period, are translated using the transaction date rates
  All resulting exchange differences are booked as a separate component in other comprehensive income (OCI)

Any goodwill arising on acquisition of a foreign operation and any fair value adjustment to the carrying amount of assets and liabilities arising on the acquisition, are treated as assets and liabilities of the foreign operations. On disposal of a foreign entity, the deferred cumulative amount recognised in other comprehensive income relating to that particular foreign operation, is recognised in the statement of income.

STATEMENT OF CASH FLOWS
The statement of cash flows is prepared under the indirect method. Cash inflows and outflows are shown separately for investing and financing activities, while operating activities include both cash and non-cash effect items. Interest received and paid and other financial expenses, such as bank guarantee expenses, are reported as a part of operating activities. Net currency gains or losses related to financing activities are reported as part of financing activities. Dividends received from joint ventures and associates that do not operate within Elkem's main business areas are included in investing activities.

CHANGES IN ACCOUNTING POLICIES AND ERRORS
Changes in accounting policies and errors are recognised retrospectively by restating the comparative amounts for the prior period presented, including the opening balance of the prior year.

New and revised standards – adopted
IFRS 16 Leases
Implemented as of 1 January 2019. The new standard represents a change in Elkem´s accounting for leases as a lessee. The accounting model for Elkem as a lessor is mainly unchanged. See note 18 Right-of-use assets and 35 Changes in accounting policies.

IFRIC 23 Uncertainty over Income Tax Treatments
Implemented as of 1 January 2019. The new interpretation provides further guidance related to uncertain tax treatments and does not represent a significant impact to Elkem`s group accounting policies.

Change in presentation
Presentation of sale of power is changed and affects the segment reporting, see note 6 Operating segments and 35 Changes in accounting policies.

New standards, interpretations and amendments – not yet effective
The consolidated financial statements will be affected by future changes in IFRS. No standards, interpretations or amendments published at the balance sheet date are expected to have significant effect on the group.

Note 03 Accounting estimates

The preparation of the consolidated financial statements according to IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. When management makes estimates and assumptions concerning the future, the resulting accounting estimates will, by definition, seldom equal the actual outcome.

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Revisions of reported estimates are recognised in the period in which the estimates are revised and in any future period affected. Changes in accounting estimates are recognised prospectively by including them in the statement of income in the period of the change and future periods, if the change affects both.

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed in the different notes. Information about judgements, assumptions and estimation uncertainties at 31 December 2019 that have the most significant effects on the amounts recognised in the financial statements is included in the following notes:

- Note 4 Composition of the group
- Note 9 Employee benefits
- Note 11 Share-based payments
- Note 16 Taxes
- Note 17 Property, plant and equipment
- Note 18 Right-of-use assets
- Note 19 Intangible assets and goodwill
- Note 20 Impairment assessment
- Note 25 Provisions and other liabilities
- Note 26 Financial assets and liabilities

Note 04 Composition of the group

PRINCIPLE

Consolidation

The consolidated financial statements include the financial statements of Elkem ASA and entities controlled directly or indirectly by Elkem ASA. The group controls an entity when the group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which the group obtains control, and are deconsolidated from the date that control ceases.

Profit or loss and each component of OCI are attributed to the equity holders of the parent of the group and to non-controlling interests, presented on separate lines in the financial statements.

All intra-group assets and liabilities, equity, income and expenses and unrealised gains and losses are eliminated in full on consolidation.

Business combinations

Business combinations are accounted for using the acquisition method in accordance with IFRS 3. The consideration transferred in a business combination, is measured at fair value, and goodwill is measured as the excess of the sum of consideration transferred, and net identifiable value of transferred assets and liabilities. Acquisition-related costs are expensed as incurred.

Acquisitions of non-controlling interests are accounted for as transactions with owners in their capacity as owners, and therefore no goodwill is recognised as a result. Adjustments to non-controlling interests arising from transactions that do not involve the loss of control, are based on a proportionate amount of the net assets of the subsidiary.

During a measurement period of maximum one year provisional amounts recognised at the acquisition date are adjusted to reflect new information obtained about facts and circumstances that existed on the date of acquisition. Any adjustments of identified assets or liabilities in the acquisition are offset by a corresponding increase/decrease in goodwill.

Business combinations under common control

Business combinations involving entities under common control, are accounted for on a historical cost basis by applying book value accounting (also known as the "pooling of interest method"), which is applied in the following manner:

- Assets and liabilities of the combining entities are reflected at their carrying amounts.
- No new goodwill is recognised as a result of the combination.
- The statement of income reflects the result of the combining entities for the full year, irrespective of when the combination took place.
- Comparative figures are restated.
- The purchase price is booked against equity at the acquisition date.

JUDGEMENTS AND ESTIMATES

Business combinations

Elkem uses valuation models as a basis for the measurement of the fair value of net identifiable value of transferred assets and liabilities in a business combination. Fair values are normally not readily observable in an active market for individual assets and liabilities in the business Elkem operates.

Property, plant and equipment is valued using the cost approach and by estimating the current cost to purchase or replace the asset, at today's current condition. Intangible assets are identified and valued based on a relief from royalty method and multi-period excess earnings method, whereby; relief from royalty method considers the discounted estimated royalty payments that are expected to be avoided as a result of the patents being owned, and the multi-period excess earnings method considers the present value of net cash flows expected to be generated by the customer relationships, by excluding any cash flows related to contributory assets.

Valuations are subject to numerous assumptions, the fair value estimates may impact assessment of possible impairment of assets and / or goodwill in future periods.

Elkem ASA and the following subsidiaries and joint operations make up the composition of the group and are included in the consolidated financial statement

Company	Functional currency	Country of incorporation	**31.12.2019 Equity interests**	31.12.2018 Equity interests	Owner
Basel Chemie Co., Ltd.	KRW	Republic of Korea	**100%**	-	Elkem ASA
Bluestar Silicon Material Co., Ltd.	CNY	China	**100%**	100%	Elkem ASA
Elkania DA	NOK	Norway	**50%**	50%	Elkem ASA
Elkem GmbH	EUR	Germany	**100%**	100%	Elkem ASA
Elkem Ltd.	GBP	United Kingdom	**100%**	100%	Elkem UK Holdings Ltd.
Elkem S.a.r.l.	EUR	France	**100%**	100%	Elkem ASA
Elkem S.r.l.	EUR	Italy	**100%**	100%	Elkem ASA
Elkem Carbon (China) Co., Ltd.	CNY	China	**100%**	100%	Elkem Carbon Singapore Pte. Ltd.
Elkem Carbon AS	NOK	Norway	**100%**	100%	Elkem ASA
Elkem Carbon Malaysia Sdn. Bhd.	MYR	Malaysia	**100%**	100%	Elkem Carbon AS
Elkem Carbon Singapore Pte. Ltd.	SGD	Singapore	**100%**	100%	Elkem Carbon AS
Elkem Chartering Holding AS	NOK	Norway	**80%**	80%	Elkem ASA
Elkem Distribution Center B.V.	EUR	Netherlands	**100%**	100%	Elkem ASA
Elkem Dronfield Ltd.	GBP	United Kingdom	**100%**	100%	Elkem UK Holdings Ltd.
Elkem Egypt for Industry, Contracting & Trading S.A.E.	USD	Egypt	**100%**	100%	Elkem International AS
Elkem Ferroveld JV	ZAR	South Africa	**50%**	50%	Elkem Carbon AS
Elkem Foundry (China) Co., Ltd.	CNY	China	**100%**	100%	Elkem ASA
Elkem Iberia S.L.U	EUR	Spain	**100%**	100%	Elkem ASA
Elkem International AS	NOK	Norway	**100%**	100%	Elkem ASA
Elkem International Trade (Shanghai) Co., Ltd.	CNY	China	**100%**	100%	Elkem International AS
Elkem Ísland ehf.	NOK	Iceland	**100%**	100%	Elkem ASA
Elkem Japan K.K.	JPY	Japan	**100%**	100%	Elkem ASA
Elkem Korea Co., Ltd. [3)]	KRW	Republic of Korea	**100%**	-	Elkem ASA
Elkem Madencilik Metalurji Sanayi Ve Ticaret Ltd. STI	EUR	Turkey	**100%**	100%	Elkem International AS
Elkem Materials Delaware, Inc.	USD	USA	**100%**	100%	Elkem Materials, Inc.
Elkem Materials, Inc.	USD	USA	**100%**	100%	NEH LLC
Elkem Materials Processing (Tianjin) Co., Ltd.	CNY	China	**100%**	100%	Elkem ASA
Elkem Materials Processing Services BV	EUR	Netherlands	**100%**	100%	Elkem ASA
Elkem Materials South America Ltda.	BRL	Brazil	**100%**	100%	Elkem Materials, Inc.
Elkem Metal Canada Inc.	CAD	Canada	**100%**	100%	Elkem ASA
Elkem Milling Services GmbH	EUR	Germany	**100%**	100%	Elkem ASA
Elkem Nordic A.S.	DKK	Denmark	**100%**	100%	Elkem ASA
Elkem Oilfield Chemicals FZCO Ltd.	AED	UAE	**51%**	51%	Elkem ASA
Elkem Paraguay S.A. [1)]	USD	Paraguay	**100%**	100%	Elkem Uruguay S.A.
Elkem Participacòes Indústria e Comércio Limitada	BRL	Brazil	**100%**	100%	Elkem Carbon AS
Elkem Rana AS [2)]	NOK	Norway	**-**	100%	Elkem ASA

1) Previously Aleaciones Yguazú S.A.
2) On 15 October 2019 Elkem Rana AS merged with Elkem ASA. For accounting purposes the merger is effective from 1 January 2019.
3) The companies are incorporated during the second half of 2019. The companies had limited activity in 2019.

Company	Functional currency	Country of incorporation	**31.12.2019 Equity interests**	31.12.2018 Equity interests	Owner
Elkem Siliconas España S.A.U	EUR	Spain	**100%**	100%	Elkem ASA
Elkem Silicones (UK) Ltd.	GBP	United Kingdom	**100%**	100%	Elkem UK Holdings Ltd.
Elkem Silicones Brasil Ltda.	BRL	Brazil	**100%**	100%	Elkem ASA
Elkem Silicones Canada Corp.	CAD	Canada	**100%**	100%	Elkem ASA
Elkem Silicones Czech Republic, s.r.o.	CZK	Czech Republic	**100%**	100%	Elkem ASA
Elkem Silicones Finland OY	EUR	Finland	**100%**	100%	Elkem ASA
Elkem Silicones France SAS	EUR	France	**100%**	100%	Elkem ASA
Elkem Silicones Germany GmbH	EUR	Germany	**100%**	100%	Elkem ASA
Elkem Silicones Hong Kong Co., Ltd.	HKD	Hong Kong	**100%**	100%	Elkem ASA
Elkem Silicones México S. De R.L. De C.V. 3)	MXN	Mexico	**100%**	-	Elkem ASA
Elkem Silicones Poland sp. z o.o.	PLN	Poland	**100%**	100%	Elkem ASA
Elkem Silicones Scandinavia AS	NOK	Norway	**100%**	100%	Elkem ASA
Elkem Silicones Services S.à.r.l	EUR	France	**100%**	100%	Elkem ASA
Elkem Silicones Shanghai Co., Ltd.	CNY	China	**100%**	100%	Elkem ASA
Elkem Silicones USA Corp.	USD	USA	**100%**	100%	Elkem ASA
Elkem Siliconi Italia S.r.l.	EUR	Italy	**100%**	100%	Elkem ASA
Elkem Singapore Materials Pte. Ltd.	SGD	Singapore	**100%**	100%	Elkem ASA
Elkem South Asia Private Limited	INR	India	**100%**	100%	Elkem ASA
Elkem (Thailand) Co., Ltd. 3)	THB	Thailand	**100%**	-	Elkem ASA
Elkem UK Holdings Ltd.	GBP	United Kingdom	**100%**	100%	Elkem ASA
Elkem Uruguay S.A.	USD	Uruguay	**100%**	100%	Elkem ASA
Euro Nordic Logistics BV	EUR	Netherlands	**80%**	80%	Elkem Chartering Holding AS
Euro Nordic Netherlands BV	EUR	Netherlands	**80%**	80%	Euro Nordic Logistics BV
Explotación de Rocas Industriales y Minerales S.A. (ERIMSA)	EUR	Spain	**100%**	100%	Elkem ASA
Iniconce, S.L.	EUR	Spain	**100%**	100%	Explotación de Rocas Industriales y Minerales S.A.
Jiangxi Bluestar Xinghuo Silicones Co., Ltd.	CNY	China	**100%**	100%	Elkem ASA
NEH LLC	USD	USA	**100%**	100%	Elkem ASA
NorenoComercial Importada e Exportadora Limitada	BRL	Brazil	**100%**	100%	Elkem Participacòes Indústria e Comércio Limitada
Norsil, S.A.	EUR	Spain	**100%**	100%	Iniconce, S.L
Tifwer Trade S.A.	UYU	Uruguay	**100%**	100%	Elkem Uruguay S.A.

1) Previously Aleaciones Yguazú S.A.
2) On 15 October 2019 Elkem Rana AS merged with Elkem ASA. For accounting purposes the merger is effective from 1 January 2019.
3) The companies are incorporated during the second half of 2019. The companies had limited activity in 2019.

CHANGES IN THE COMPOSITION OF THE GROUP IN 2019, BUSINESS COMBINATIONS

In 2019, Elkem invested NOK 206 million related to the acquisition of new subsidiaries and businesses (business combinations). The amount comprises cash consideration transferred, reduced by cash and cash equivalents of the acquiree.

On 30 September 2019 Elkem acquired 100% of the shares in Basel Chemie Co. Ltd. a Korean producer of specialty silicone gels for cosmetics and water repellents for the construction industry. The acquisition gives Elkem access to leading technology in attractive end-user silicone segments and provides a solid platform for further development and growth. Acquisition-related costs of NOK 2 million are recognised as other items in the statement of income.

The table below summarises the amounts recognised for assets acquired and liabilities assumed at the date of acquisition.

Amounts in NOK million	Basel Chemie Co. Ltd
Consideration	
Cash	222
Contingent consideration	-
Consideration transferred	222
Non-controlling ownership interest in subsidiary	-
Fair value of previously held equity interest	-
Total recognised for assets acquired and liabilities assumed	222

Assets acquired and liabilities assumed

Amounts in NOK million	Carrying amount	Excess value	Fair value
Property, plant and equipment	46	24	70
Other intangible assets	-	31	31
Other assets, non-current	4	-	4
Inventories	15	-	15
Trade receivables	9	-	9
Other current assets	1	-	1
Cash and cash equivalents	16	-	16
Interest-bearing liabilities, non-current	(23)	-	(23)
Deferred tax liabilities	0	(12)	(12)
Employee benefits obligations, non-current	(1)	-	(1)
Interest-bearing liabilities, current	(1)	-	(1)
Trade payables	(6)	-	(6)
Income tax payables	(1)	-	(1)
Employee benefits obligations, current	(0)	-	(0)
Provisions and other liabilities, current	(2)	-	(2)
Total identifiable net assets	57	43	100
Non-controlling interests	-	-	-
Goodwill	-	122	122
Total recognised	57	165	222

The goodwill of NOK 122 million is attributable to the know-how in the acquired business and synergies for the Silicones segment. The allocation is based on provisional assessment of the fair value.

The fair value of acquired receivables, NOK 9 million, is adjusted for NOK 0.4 million in expected uncollectable receivables at the date of acquisition.

For the period of purchase to 31 December 2019 Basel has contributed NOK 0.1 million to the profit (loss) for the period. If the acquisition date of the business combination was on 1 January 2019, the operating income of Elkem would have increased with NOK 58 million and the profit would have increased by NOK 1 million.

Changes in the composition of the group in 2018, business combination under common control

22 March 2018 Elkem acquired all the shares in Bluestar Silicone Material Co. Ltd. (hereafter Yongdeng Silicon Materials) and Jiangxi Bluestar Xinghuo Silicones (hereafter Xinghuo Silicones) for a purchase price of CNY 3,274 million, (NOK 3,995 million) from Bluestar

Elkem Investment Co. Ltd., a subsidiary of China National Bluestar (group) Co. Ltd. Both Elkem, Yongdeng Silicon Materials and Xinghuo Silicones are under common control of China National Chemical Group Co. Ltd. Business combinations involving entities under common control, are accounted for on a historical cost basis and comparable figures are restated. An effect of this principle is that the purchase price of NOK 3,995 million is booked directly against equity. Xinghuo Silicones had a receivable to related parties of NOK 1,303 million and Yongdeng Silicon Materials had a loan from related parties of NOK 241 million that were settled in connection with the transaction. Acquisition-related costs of NOK 1 million are classified as other items in the statement of income.

Changes in the composition of the group in 2018, business combination

Elkem has in 2018 invested NOK 54 million related to the acquisition of new subsidiaries and businesses (business combinations). The amount comprises cash consideration transferred, reduced by cash and cash equivalents of the acquiree.

Elkem acquired 100% of the shares in the UK company TM (Technology) Holdings Limited (Elkem Dronfield Ltd.) and its production of the foundry alloy, Tenbloc® on 16 March 2018. Tenbloc® is used in the mould inoculation of ductile and grey iron. The purchase includes purchase of a "Ball Mill" and related business that were completed through purchase of assets.

Acquisition-related costs of NOK 2 million are classified as other items in the statement of income. The table below summarise the amounts recognised for assets acquired and liabilities assumed at the date of acquisition.

Amounts in NOK million	T M (Technology)Holdings Ltd
Consideration	
Cash	59
Contingent consideration	-
Consideration transferred	59
Non-controlling ownership interest in subsidiary	-
Fair value of previously held equity interest	-
Total recognised for assets acquired and liabilities assumed	59

Assets acquired and liabilities assumed

Amounts in NOK million	Carrying amount	Excess value	Fair value
Property, plant and equipment	7	-	7
Other intangible assets	-	3	3
Inventories	27	-	27
Trade receivables	5	-	5
Other current assets	2	-	2
Cash and cash equivalents	5	-	5
Provisions and other non-current liabilities	(0)	-	(0)
Trade payables	(1)	-	(1)
Income tax payables	(1)	-	(1)
Provisions and other current liabilities	(2)	-	(2)
Total identifiable net assets	41	3	44
Non-controlling interests	-	-	-
Goodwill	-	15	15
Total recognised	41	18	59

The goodwill of NOK 15 million recognised is attributable to the assembled workforce of the companies and synergies. The business combination is carried out as a part of Elkem's growth strategy.

The fair value of acquired receivables, NOK 5 million, is equal to the gross contractual amount of receivables.

For the period from purchase to 31 December 2018, Elkem Dronfield has contributed NOK 18 million to operating income and contributed positively NOK 5 million to profit (loss) for the year. If the acquisition date of business combination was on 1 January 2018, the operating income of Elkem group would have increased by NOK 4 million and profit would have increased by NOK 1 million. The figures do not include business combinations completed through purchase of assets (the "Ball Mill"), for which no separate financial statements exist, and intra group transactions.

Note 05 Investments in equity accounted companies

PRINCIPLE

Joint arrangements

Investments in joint arrangements are classified as either joint operations or joint ventures, depending on the contractual rights and obligations of each investor.

Joint ventures are accounted for using the equity method. Under the equity method, the investment is initially recognised at cost, and the carrying amount is increased or decreased to recognise Elkem's share of the profit or loss and other comprehensive income of the investee after the date of acquisition. In cases where a joint venture's loss or other comprehensive income increase the initially recognised cost the carrying amount is presented to reflect Elkem's liability to finance the joint venture. Any liability to finance a joint venture is presented either as part of provisions and other liabilities, current, or netted against Elkem's receivables towards the joint venture.

The group's interest in joint operations is recognised in relation to its interests in the joint operation:

- Assets, including its share of any assets held jointly
- Liabilities, including its share of any liabilities incurred jointly
- Revenue from the sale of its share of the output arising from the joint operation
- Share of the revenue from the sale of the output by the joint operation
- Expenses, including its share of any expenses incurred jointly

Investment in associates

Associates are those entities in which the group has significant influence, but no control over the financial and operating policies. Significant influence is presumed to exist when the group holds between 20% and 50% of the voting power of another entity. Investment in associates are accounted for using the equity method. Under the equity method, the investment is initially recognised at cost, and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss and other comprehensive income of the investee after the date of acquisition. The group's investment in associates includes goodwill identified on acquisition.

Upon disposal of an associate that results in the group losing significant influence over that associate, any retained investment is measured at fair value at that date.

Share of profit from investments in associates and joint ventures

Share of profit (loss) from investments in associates and joint ventures is recognised in the statement of income depending on the purpose of the investments. Investments that are closely related to the group's main activities are recognised as share of profit from equity accounted companies, included in operating income. Investments in associates and joint ventures that do not operate within Elkem's main business areas are recognised as share of profit from equity accounted financial investments.

Elkem has interests in the following joint arrangements and associates

Name of entity	Business office	Country	Principal activities	Classification	**% equity interests 2019**	% equity interests 2018
Elkem Ferroveld JV	Ferrobank Emalahleni	South Africa	Electrode paste production	Joint operation	**50%**	50%
Elkania DA	Hauge i Dalane	Norway	Microfine weighting material	Joint operation	**50%**	50%
Klafi ehf	Grundartangi, Akranes	Iceland	Transportation / harbour services	Joint venture	**50%**	50%
North Sea Container Line AS	Haugesund	Norway	Shipping services	Joint venture	**50%**	50%
North-Sea Management AS	Haugesund	Norway	Shipping services	Joint venture	**50%**	50%
Salten Energigjenvinning AS	Oslo	Norway	Energy production	Joint venture	**50%**	50%
Combined Cargo Warehousing BV	Moerdijk	Netherlands	Warehousing	Associate	**33%**	33%
EPB Chartering AS (formerly Elkem Chartering AS)	Oslo	Norway	Deep sea charter services	Associate	**25%**	25%
Euro Nordic Agencies Belgium NV	Antwerpen	Belgium	Ship agencies services	Associate	**50%**	50%
Euro Partnership BV	Moerdijk	Netherlands	Ship management services	Associate	**50%**	50%
Future Materials AS	Kristiansand	Norway	Marketing of reasearch facilities	Associate	**25%**	25%

Of the entities above, Salten Energigjennvinning AS (SEAS) is classified to not operate within Elkem's main business areas.

Future Materials AS was incorporated on 10 April 2018.

There is no quoted market price for the investments.

See note 33 Transactions with related parties for commitments and transactions related to SEAS and the other joint ventures and associates.

Movements in equity accounted investments

	2019			2018		
Amounts in NOK million	**Joint ventures**	**Associates**	**Total**	Joint ventures	Associates	Total
Opening balance	**72**	**62**	**134**	98	61	159
Acquired shares	**-**	**-**	**-**	21	0	21
Disposal of shares	**-**	**-**	**-**	-	-	-
Dividend received	**(15)**	**(11)**	**(27)**	(23)	(9)	(32)
Share of profit (loss) from equity accounted companies	**23**	**8**	**31**	7	10	18
Share of profit (loss) from equity accounted financial investments	**(12)**	**-**	**(12)**	(23)	-	(23)
Part of other comprehensive income	**(14)**	**0**	**(14)**	(8)	(0)	(8)
Currency translation differences	**-**	**(0)**	**(0)**	-	0	0
Closing balance	**54**	**58**	**112**	72	62	134
Recognised in investments in equity accounted companies	**71**	**58**	**129**	72	62	134
Recognised in provisions and other liabilities, current (note 25)	**(17)**	**-**	**(17)**	-	-	-

Share of profit and carrying amount for equity accounted companies

Amounts in NOK million	**2019 Share of profit**	**31.12.2019 Carrying amount**	2018 Share of profit	31.12.2018 Carrying amount
Klafi ehf	**(1)**	**3**	(0)	3
North Sea Container Line AS	**22**	**67**	7	59
North-Sea Management AS	**1**	**1**	1	1
Salten Energigjenvinning AS	**(12)**	**(17)**	(23)	9
Combined Cargo Warehousing BV	**2**	**4**	2	4
EPB Chartering AS	**(2)**	**22**	2	24
Euro Nordic Agencies Belgium NV	**0**	**2**	(0)	1
Euro Partnership BV	**8**	**30**	7	31
Future Materials AS	**-**	**0**	-	0
Total	18	112	(5)	134

Summary of financial information for joint ventures

Amounts in NOK million	**2019**	2018
Current assets, including cash and cash equivalents NOK 97 million (NOK 50 million)	**221**	162
Non-current assets	**327**	143
Current liabilities, including current financial liabilities NOK 0 million (NOK 1 million)	**64**	47
Non-current liabilities, including non-current financial liabilities NOK 377 million (NOK 114 million)	**377**	114
Net assets/equity	**108**	144
Elkem's carrying amount	**54**	72
Total operating income	**593**	552
Total expenses, including depreciation and amortisation NOK 7 million (NOK 7 million) and other items	**(568)**	(582)
Financial income, including interest income NOK 0 million (NOK 1 million)	**1**	1
Financial expenses, including interest expenses NOK 4 million (NOK 0 million)	**(5)**	(2)
Tax expense	**(0)**	(1)
Total profit for the year	**21**	(32)
Other comprehensive income	**(29)**	(16)
Total comprehensive income	**(8)**	(48)
Elkem's share of profit for the year	**11**	(16)
Elkem's share of other comprehensive income	**(14)**	(8)

Summary of financial information for associates

Amounts in NOK million	**2019**	2018
Total operating income	**94**	124
Total expenses	**(81)**	(98)
Total profit for the year	**13**	26
Other comprehensive income	**0**	(1)
Total comprehensive income	**13**	26
Elkem's share of profit for the year	**8**	10
Elkem's share of other comprehensive income	**0**	(0)
Net assets/equity	**164**	177
Elkem's carrying amount	**58**	62

Note 06 Operating segments

PRINCIPLE

Elkem's operating segments are based on the organisation of the group and correspond to the internal management reporting to the chief operating decision maker, defined as the CEO. Elkem identifies its segments according to the organisation and reporting structure as decided and followed up by group management. Operating segments are components of a business that are evaluated regularly by the chief operating decision maker, defined as the CEO, for the purpose of assessing performance and allocating resources. Elkem operating segments represent separately managed business areas with unique products serving different markets.

Segment performance is evaluated based on EBITDA and operating profit (loss) before other items (EBIT), see definitions below. Elkem's financing and taxes are managed on group basis and are not allocated to operating segments.

Transactions between operating segments are conducted on an arm's length basis in a manner similar to transactions with third parties.

The accounting policies used for segment reporting reflect those used for the group, except for the following intersegment transactions:

Internal commodity contracts may meet the definition of a financial instrument in IFRS 9 Financial instruments or contain embedded derivatives that are required to be reported separately and measured at fair value under IFRS 9. In the segment reporting these contracts are recognised in their entirety on delivery, similar to contracts that meet the own use exemption in IFRS 9. Realised effects from the group's power and foreign exchange hedging program, including embedded derivatives, on the different group segments are specified in separate table below. IFRS 16 Leases is implemented with effect from 1 January 2019, see note 35 Changes in accounting policies. In the segment reporting lease payments under internal lease agreements are recognised as operating expenses on a straight-line basis over the lease term.

Revenues are, in addition, dissaggregated by geographical market based on the location of the customer.

Non-current assets by geographical areas are based on the location of the entity owning the assets.

ELKEM'S OPERATING SEGMENTS

Elkem has four reportable segments; Silicones, Silicon Materials, Foundry Products and Carbon.

The Silicones division produces and sells a range of silicone-based products across various sub-sectors including release coatings, engineering elastomers, healthcare products, specialty fluids, emulsions and resins. The Silicones division produces siloxanes and a comprehensive range of silicones, which are a family of specialty, high performance products and materials, as well as commoditised products produced by reacting silicon with methyl chloride through various chemical reactions and formulations.

The Silicon Materials division produces and sells various grades of metallurgical silicon and microsilica for use in a wide range of end applications. The Silicon Materials division manufactures and sells silicon and microsilica for a large number of applications, including for the production of silicones.

The Foundry Products division provides metal treatment solutions to iron foundries and is a supplier of high-quality speciality ferrosilicon to the steel industry.

The Carbon division produces carbon electrode materials, lining materials and speciality carbon products for metallurgical processes for the production of a range of metals. The Carbon division produces carbon materials used in the production of silicon and ferroalloys.

Other comprise Elkem group management and centralised functions within finance, sales, logistics, power purchase and technology.

Eliminations comprise mainly of intersegment sales and unrealised profit on sale of goods between the group segments. Unrealised profit on goods purchased from group companies fluctuate with production flow, volumes and margin.

Major customers

Elkem has a range of customers, but no single customer amounts to 10% or more of total operating income.

Amounts in NOK million	Silicones	Silicon Materials	Foundry Products	Carbon	Other	Elimina-tions	**Total**
2019							
Revenue from sale of goods (note 7)	11,047	4,781	4,223	1,635	203		**21,890**
Other revenue (note 7)	80	36	34	12	195		**356**
Other operating income (note 7)	132	166	63	10	22		**392**
Share of profit from equity accounted companies (note 5)	-	-	(1)	-	31		**31**
Total operating income from external customers	11,259	4,982	4,320	1,657	451		**22,668**
Operating income from other segments	15	1,551	185	179	452	(2,382)	**-**
Total operating income	11,274	6,533	4,505	1,836	903	(2,382)	**22,668**
Operating expenses	(9,750)	(5,932)	(4,162)	(1,528)	(1,035)	2,397	**(20,012)**
EBITDA	1,523	601	342	308	(133)	15	**2,656**
Operating profit (loss) before other items (EBIT)	742	270	100	232	(170)	15	**1,189**
Cash flow from operations	1,224	532	291	309	(215)	-	**2,140**
Working capital	1,164	1,303	1,285	256	(294)	(32)	**3,681**
Capital employed	8,980	4,026	3,275	906	114	(32)	**17,269**
Reinvestments							**(1,162)**
Strategic investments							**(963)**
Movement CAPEX payables							**18**
Cash flow from investments in property, plant and equipment and intangible assets, including received investment grants							**(2,107)**

Amounts in NOK million	Silicones	Silicon Materials	Foundry Products	Carbon	Other	Elimina-tions	**Total**
2018							
Revenue from sale of goods (note 7)	12,909	5,003	4,827	1,677	246		**24,662**
Other revenue (note 7)	29	34	44	8	191		**306**
Other operating income (note 7)	108	75	31	7	23		**244**
Share of profit from equity accounted companies (note 5)	-	-	(0)	-	18		**18**
Total operating income from external customers	13,046	5,113	4,902	1,692	478		**25,230**
Operating income from other segments	14	1,477	180	200	343	(2,214)	**-**
Total operating income	13,059	6,590	5,082	1,892	821	(2,214)	**25,230**
Operating expenses	(9,524)	(5,474)	(4,151)	(1,558)	(957)	2,226	**(19,438)**
EBITDA	3,535	1,116	931	335	(136)	12	**5,793**
Operating profit (loss) before other items (EBIT)	2,864	833	710	267	(164)	12	**4,522**
Cash flow from operations	2,500	458	634	215	221	3	**4,030**
Working capital	1,376	1,524	1,440	331	(321)	(47)	**4,303**
Capital employed	8,610	3,920	3,333	893	(80)	(47)	**16,631**
Reinvestments							**(1,064)**
Strategic investments							**(726)**
Movement CAPEX payables							**(125)**
Cash flow from investments in property, plant and equipment and intangible assets, including received investment grants							**(1,916)**

Realised effects from hedging programs by operating segment

Amounts in NOK million	Silicones	Silicon Materials	Foundry Products	Carbon	Other	Elimina-tions	**Total**
2019							
Revenue from sale of goods, Currency (note 27)	-	4	-	-	(70)		**(66)**
Operating expenses, Power (note 27)	-	101	33	-	(47)		**87**
Total realised effects hedge accounting	-	105	33	-	(116)		**21**
2018							
Revenue from sale of goods, Currency (note 27)	-	12	-	-	(52)		**(40)**
Operating expenses, Power (note 27)	-	183	67	0	(34)		**216**
Total realised effects hedge accounting	-	195	67	0	(86)		**176**

DEFINITIONS

EBIT, also referred to as operating profit (loss) before other items is defined as Elkem's profit (loss) for the period, less income tax (expenses), finance expenses, foreign exchange gains (losses), finance income, share of profit from equity accounted financial investments and other items.

EBITDA is defined as Elkem's profit (loss) for the period, less income tax (expenses), finance expenses, foreign exchange gains (losses), finance income, share of profit from equity accounted financial investments, other items, impairment loss and amortisation and depreciation.

Cash flow from operations is EBITDA including reinvestments, changes in working capital and equity accounted companies.

Reinvestments generally consist of capital expenditure to maintain existing activities or that involve investments designed to improve health, safety or the environment.

Strategic investments generally consist of investments which result in capacity increases at Elkem's existing plants or that involve an investment made to meet demand in a new geographic or product area.

Working capital is defined as accounts receivable, inventory, other current assets, accounts payable, employee benefit obligations (current) and other current liabilities. Accounts receivable are defined as trade receivables less bills receivable. Other current assets are defined as other current assets less current receivables to related parties, current interest-bearing receivables, tax receivables, grants receivable and accrued interest income. Accounts payable are defined as trade payables less CAPEX payables. Other current liabilities are defined as provisions and other current liabilities less current provisions and liabilities to related parties.

Capital employed consists of working capital as defined above, property, plant and equipment, investments in equity accounted companies, accounts payable and prepayments related to purchase of non-current assets.

Elkem's definitions may be different from other companies.

Total revenue by geographic market based on customer location

Amounts in NOK million	**2019**	2018
Norway	**784**	491
Other Nordic countries	**660**	781
United Kingdom	**769**	790
Germany	**2,209**	2,416
France	**535**	731
Italy	**787**	829
Poland	**566**	520
Spain	**512**	554
Other European countries	**2,050**	2,321
Europe	**8,874**	9,433
Africa	**203**	196
USA	**2,733**	2,519
Canada	**290**	334
Brazil	**879**	883
Other South American countries	**191**	250
America	**4,093**	3,985
China	**5,924**	7,977
Japan	**829**	752
South Korea	**367**	670
Other Asian countries	**1,944**	1,919
Asia	**9,064**	11,320
Rest of the world	**78**	75
Total revenue before hedging effects	**22,312**	25,009
Realised effects from hedging programs (note 27)	**(66)**	(40)
Total revenue	**22,246**	24,968

Non-current assets by geographical areas based on entity location

Amounts in NOK million	**2019**	2018
Norway	**3,521**	2,992
Other Nordic countries	**514**	512
United Kingdom	**30**	26
Germany	**89**	55
France	**2,841**	2,612
Italy	**114**	109
Poland	**1**	0
Spain	**250**	202
Other European countries	**52**	95
Europe	**7,413**	6,604
Africa	**75**	69
USA	**534**	465
Canada	**414**	394
Brazil	**288**	323
Other South American countries	**408**	317
America	**1,643**	1,499
China	**5,986**	5,921
Japan	**3**	4
Other Asian countries	**441**	187
Asia	**6,430**	6,112
Total non-current assets	**15,561**	14,283

Non-current assets are presented less financial instruments, deferred tax assets, post-employment benefit assets, and rights arising under insurance contracts.

Note 07 Operating income

PRINCIPLE

Operating income consists of:
(a) Revenue
(b) Other operating income
(c) Share of profit (loss) from equity accounted companies (note 5)

(a) Revenue

Revenue is measured based on the consideration specified in a contract with a customer. Elkem recognises revenue when it transfers control over a good or service to a customer.
A five-step process is applied before revenue can be recognised:

- identify contracts with customers
- identify the separate performance obligation
- determine the transaction price of the contract
- allocate the transaction price to each of the separate performance obligations, and
- recognise the revenue as each performance obligation is satisfied.

Sale of goods

Elkem's main performance obligation is related to sale of goods where the performance obligations are the delivery of an agreed volume of products within the agreed specification. Elkem has both short- term and long-term contracts. Short-term contracts, normally within one month, cover delivery of an agreed volume at market price at the date the order is placed. These types of contracts are most common for the commodity products sales within Foundry Products and sales to customers in China. The long-term contracts cover a period of a few months and up to one year, where the prices normally are fixed within a volume range. Elkem has within the Silicon Material segment some contracts that cover a period longer than one year. In these contracts the prices are normally negotiated on an annual basis. Some of Elkem's sales contracts include an element of freight services, see separate section below for accounting policies.

Revenue is recognised when control of the goods is transferred to the customer, at an amount that reflects the consideration to which Elkem expects to be entitled in exchange for those goods. Control is transferred to the buyer, according to the agreed delivery term for each sale. Delivery terms are based on Incoterms 2010 issued by International Chamber of Commerce, and the main terms are

"F" terms, where the buyer arranges and pays for the main carriage. The risk is transferred to the buyer when the goods are handed to the carrier engaged by the buyer.

"C" terms, where the group arranges and pays for the main carriage but without assuming the risk of the main carriage. The risk is transferred to the buyer when the goods are handed over to the carrier engaged by the seller.

"D" terms, where the group arranges and pays for the carriage and retains the risk of the goods until delivery at the agreed destination. The ownership is transferred to the buyer upon arrival at the agreed destination, usually the purchaser's warehouse.

The goods are normally sold with standard warranties that the goods comply with the agreed-upon specifications. These standard warranties are accounted for using IAS 37 Provisions, Contingent Liabilities and Contingent Assets. Elkem does not have any other significant obligations for returns or refunds.

Freight services included in sale of goods
Freight components included in sale of goods on incoterms "C" terms are considered as a separate performance obligation and recognised over the period the service is performed. Shipping and handling services that occur before the customer takes control of the goods for sales on "D" terms are considered to be part of fulfilling the sale of the goods.

Sale of power and revenue connected to energy recovery
Sale of electric power and revenue connected to energy recovery, mainly heat supply in the form of steam and hot water, el-certificates and el-tax, are recognised in income based on the price agreed with the customer. Revenue connected to energy recovery is mainly based on long-term contracts where the prices are regulated yearly based on changes in CPI or government regulated prices, except for the el-certificates where the price is based on the observable market price at date of delivery.

Revenue from sale of services
Revenue from sale of services is recognised when the services have been provided. Sale of services are mainly related to management agreements with related parties based on a cost plus a margin and sale of shipping and handling related services.

(b) Other operating income
Insurance settlements
Income from insurance settlement is recognised when it is virtually certain that the group will receive the compensation, and is presented as other operating income.

Grants
See note 8.

Details of revenue from contracts with customers 2019

Amounts in NOK million	Silicones	Silicon Materials	Foundry Products	Carbon	Other	**Total**
Sale of goods, Silicones	11,047	-	-	-	4	**11,051**
Sale of goods, Silicon Materials	-	4,056	-	-	-	**4,056**
Sale of goods, Foundry Products	-	721	4,223	-	269	**5,213**
Sale of goods, Carbon	-	-	-	1,635	-	**1,635**
Revenue from energy recovery and other energy related income	-	7	21	-	34	**62**
Service agreements with related parties (note 33)	7	5	0	6	50	**68**
Other revenue from contracts with customers	71	22	12	5	110	**221**
Total revenue from contracts with customers	11,125	4,812	4,256	1,647	467	**22,307**
Rental income	2	1	1	1	1	**5**
Realised currency hedging effects (note 27)	-	4	-	-	(70)	**(66)**
Total revenue	11,127	4,816	4,257	1,647	398	**22,246**

Details of revenue from contracts with customers 2018

Amounts in NOK million	Silicones	Silicon Materials	Foundry Products	Carbon	Other	**Total**
Sale of goods, Silicones	12,909	-	-	-	8	**12,917**
Sale of goods, Silicon Materials	-	3,916	-	-	-	**3,916**
Sale of goods, Foundry Products	-	1,075	4,827	-	289	**6,192**
Sale of goods, Carbon	-	-	-	1,677	-	**1,677**
Revenue from energy recovery and other energy related income	-	6	32	-	47	**85**
Service agreements with related parties (note 33)	4	5	0	4	62	**76**
Other revenue from contracts with customers	22	23	11	3	82	**140**
Total revenue from contracts with customers	12,935	5,024	4,870	1,685	489	**25,003**
Rental income	3	1	1	1	1	**6**
Realised currency hedging effects (note 27)	-	12	-	-	(52)	**(40)**
Total revenue	12,938	5,037	4,871	1,685	437	**24,968**

Sale of Foundry Products in Silicon Materials is mainly related to sales from Elkem Rana AS.

Details of other operating income

Amounts in NOK million	**2019**	2018
Gain on disposal of fixed assets	**5**	7
Insurance settlements	**20**	21
Grants (note 8)	**332**	211
Other	**35**	6
Total other operating income	**392**	244

Grants relating to cost of production of goods are recognised in profit or loss when the produced goods are sold.

Note 08 Grants

PRINCIPLE

Grants are recognised when it is reasonably assured that Elkem will comply with the conditions attached to them and the grants will be received. Tax credits related to R&D projects are classified as government grants if they ultimately are settled with cash, tax credits settled only via taxes are classified as tax allowances.

Grants are recognised in the statement of income as other operating income, over the periods necessary to match them with the cost they are intended to compensate. Grants relating to cost of production of goods are recognised in profit or loss when the produced goods are sold. Grants relating to property, plant and equipment (fixed assets) and intangible assets are deducted from the carrying amount of the asset and recognised in profit or loss as a reduction of the depreciation charge over the lifetime of the asset.

Details of grants

Amounts in NOK million	2019 Other operating income	2019 Deduction of carrying amount FA/IA	2018 Other operating income	2018 Deduction of carrying amount FA/IA
R&D grants from the Norwegian government	**30**	**9**	32	-
R&D grants from the French government	**55**	**-**	47	-
Other R&D grants	**10**	**-**	15	-
CO_2 compensation from the Norwegian Environment Agency	**162**	**-**	85	-
Energy recovery related grants	**22**	**17**	0	40
Other government grants	**51**	**8**	30	5
Total government grants	**329**	**34**	211	45
Norwegian NOx fund for reduced emission of NOx	**-**	**68**	-	15
Norwegian emission fund for reduced emission of SO_2	**-**	**-**	-	22
Other grants	**3**	**-**	-	-
Total grants from other than governments	**3**	**68**	-	36
Total grants	**332**	**102**	211	81
Grants receivable related to fixed (FA) and intangible assets (IA) (note 23)		**69**		1
Grants receivable related to income (note 23)		**445**		319
Grants payable (note 25)		**(15)**		-
Grants, deferred income (note 25)		**(5)**		(8)

CO_2 allowances

CO_2 allowances allocated from the government are classified as grants, measured at nominal value (zero). The scheme pertains to the group's plants in Europe. If actual emissions exceed the amount of allocated emission allowances, additional allowances are purchased. Purchased CO_2 allowances are recognised at cost as other operating expenses and any gain on sale of CO_2 allowances are classified as revenue. The current framework for the allocation of free CO_2 allowances lasts until 2020, and the number of free allowances allocated is known and will not change unless there is a substantial change in production at the plants. Allocation of free allowances for the period 2021-2030 is not known as the national authorities are currently working on this in cooperation with the EU Commission. We expect the work to be finalised in second half of 2020.

As at 31 December 2019, Elkem owns approximately 215,000 allowances measured at nominal value zero. The estimated fair value of the allowances is NOK 52 million.

The Icelandic government has amended its allocation of free CO_2 allowances with approximately 500,000 to Elkem Iceland, for the period from 2013 to 2018. The amendment is subject to approval by ESA.

CO_2 compensation

The Norwegian government has, from 2013, established a CO_2 compensation scheme to compensate for CO_2 costs included in the power price. The amount being compensated is based on the market price of CO_2 allowances, and as such varies with the price development. The percentage of the costs compensated is approximately 75% in 2019 (80% in 2018) and 75% for 2020. The current CO_2 compensation scheme will end in 2020 but is likely to be extended, however, the details of the scheme post 2020 are yet to be decided. The CO_2 compensation scheme applies for Elkem's Norwegian plants and is recognised when there is reasonable assurance that the entity will comply with the conditions attached and the grants will be received. As the grant compensates power costs, which are costs recognised as part of the cost price of inventory during the production process, the compensation is recognised in statement of income when the produced goods are sold.

NOx and SO_2 Fund

The industry in Norway pays a fee for their emission of NOx and SO_2 to two different foundations. The two foundations are self-financed by the fees and their purpose is to support projects that reduces SO_2 and NOx emissions from the industry in Norway.

Other

The remaining grants, mainly R&D and energy recovery, are related to specific projects.

Note 09 Employee benefits

PRINCIPLE

Employee benefits are all forms of consideration given by an entity in exchange for service rendered by employees or for termination of employment.

Employee benefits include both short-term and long-term benefits, and are expensed as incurred, together with any social security taxes applicable. For management remuneration and share-based payment see note 10 and 11.

Short-term benefits consist of wages and salaries, bonuses, holiday payments and other short-term benefits that are expected to be settled within 12 months after the balance sheet date. Long-term benefits consist mainly of jubilee and long-service benefits, post-employment benefits and post-retirement benefits, not expected to be wholly settled within the next twelve months.

Defined contribution plans

Defined contribution plans comprise of arrangements whereby the company makes monthly contributions to the employees' pension plans, and where the future pensions are determined by the amount of the contributions and the return on the individual pension plan asset. The contributions are expensed as incurred and there is no further obligation related to the contribution plans. Prepaid contributions are recognised as an asset.

Defined benefit plans

Defined benefit plans are recognised at present value of future liabilities considered retained at the end of the reporting period, calculated separately for each plan. Plan assets are measured at fair value and deducted in calculating the net pension obligation. Actuarial assumptions are used to measure both the obligation and the expense and effects of changes in estimates due to financial and actuarial assumptions are recognised as other comprehensive income. Service costs are classified as part of employee benefit expenses and net interest on pension liabilities / assets are presented as a part of finance expenses. Past service costs arising due to amendments in benefit plans are expensed as incurred.

Multi-employer defined benefit plans where available information is insufficient to be able to calculate each participant's obligation, are accounted for as contribution plans.

JUDGEMENTS AND ESTIMATES

Estimation uncertainty is mainly related to defined benefit pension plans, where the calculation of pension obligations is based on financial and actuarial assumptions, such as discount rates, future salary and pension adjustments, expected turnover and mortality. Deviations between applied assumptions and actual results in future periods will have effects on the calculated obligation. See information about sensitivity on pension liabilities based on changes in main actuarial assumptions below.

Employee benefit expenses

Amounts in NOK million	**2019**	2018
Salaries, holiday pay and variable compensation	**(2,852)**	(2,702)
Employer's national insurance contributions / social security tax	**(610)**	(549)
Pension expenses	**(109)**	(105)
Share-based payment (note 11)	**(25)**	(6)
Other payments / benefits	**(100)**	(87)
Total employee benefit expenses	**(3,696)**	(3,449)
Average number of full-time equivalents	**6,523**	6,486

Project bonuses expensed in 2018 related to the IPO process are classified as other items, NOK 25 million.

Employee benefit assets and obligations

	Non-current		Current	
Amounts in NOK million	**31.12.2019**	31.12.2018	**31.12.2019**	31.12.2018
Pension plan assets (note 23)	**-**	6	**-**	-
Pension contribution fund (note 23)	**3**	1	**2**	2
Employee prepayments etc.	**-**	-	**9**	8
Total employee benefit assets	**3**	7	**11**	10
Salaries, holiday pay and variable compensation	**-**	-	**478**	512
Social security tax / contributions	**-**	-	**149**	151
Pension plans	**474**	440	**-**	-
Other benefit plans	**110**	123	**13**	8
Total employee benefit obligations	**584**	563	**640**	671

(a) Salaries, holiday pay and variable compensation
The obligations are related to incurred employee benefits, not paid.

(b) Pension plans
The group has both defined contribution and defined benefit plans. For defined contribution plans the cost is equal to the group's contribution to the employee's pension savings during the period. For defined benefit plans the cost is calculated based on actuarial valuation methods, taking assumptions related to the employee's salary, turnover, mortality, discount rate, etc. into consideration.

Defined contribution plans
Defined contribution plans comprise arrangements whereby the company makes annual contributions to the employee's pension plan, and where the employee's future pension is determined by the amount of the contributions and the return on the individual pension plan asset. Defined contribution plans are the main pensions plan for Elkem's Norwegian entities, where the contribution to each individual pension plan is 5% of annual salary up to 7.1G and 15% of annual salary between 7.1-12G. 1G refers to the Norwegian national insurance scheme's basic amount, which is NOK 99,858 as at 1 May 2019. Pension on salary above 12G is not supported by external service providers and is therefore handled as a separate plan and included under defined benefit plans.

In addition, a Norwegian multi-employer early retirement scheme called AFP, where sufficient information to calculate each participant's pension obligation is not available, is accounted for as it is a defined contribution plan in accordance with the Ministry of Finance's conclusion. The participants in the pension plan are jointly responsible for 2/3 of the plan's pension obligation, the government is responsible for the remaining part. The yearly pension premium in 2019 is 2.5% of the employees' salary between 1 and 7.1G, covering this year's pension payments and contribution to a security fund for future pension obligations. The premium for 2020 in per cent of salary will be equal to previous year.

Defined benefit plans
Defined benefit plans are pension plans where the group is responsible for paying pensions at a certain level, based on employees' salaries when retiring. The group has funded and unfunded benefit plans in Norway, France, Germany, UK, Canada, Japan and South Africa, distributed as follows: Norway 16%, France 48%, other Europe 19%, Canada 15%, other countries 2%, based on net pension obligation per 31 December 2019. In Canada provisions are also made for medical insurance as well as pension benefit plans.

The Norwegian pension plans are unfunded and comprise pension on salaries above 12G, where the expense is 15% of annual base salary that exceeds 12G plus interest on the individual calculated pension obligation and some individual retirement schemes that are closed.

Net interest is calculated based on net pension liability at the start of the period, multiplied by the discount rate. Any difference between actual return on pension assets and the interest income calculated as a part of the net interest, will be recognised directly in OCI. Interest on net pension liabilities are presented as a part of finance expenses.

Breakdown of net pension expenses

Amounts in NOK million	**2019**	2018
Current service expenses	**(27)**	(28)
Accrued employer's national insurance contribution	**(1)**	(1)
Administration expenses	**(1)**	(0)
Curtailment/settlement of pension plans	**2**	(0)
Net pension expenses, defined benefit plans	**(28)**	(30)
Defined contribution plans	**(64)**	(61)
Early retirement scheme AFP (Norway)	**(18)**	(14)
Total pension expenses	**(109)**	(105)
In addition, interest expenses on net pension liabilities are recognised as a part of finance expenses	**(10)**	(10)

Net liabilities arising from defined benefit obligations

Amounts in NOK million	**2019**	2018
Present value of funded pension obligations	**(455)**	(387)
Fair value of plan assets	**434**	367
Net funded pension obligations	**(21)**	(20)
Present value of unfunded pension obligations	**(453)**	(414)
Net value of funded and unfunded obligations	**(474)**	(434)
Net pension assets	**-**	6
Net pension liabilities	**(474)**	(440)
Net pension plan liabilities	**(474)**	(434)

Movements in the defined benefit liabilities and plan assets

	2019			2018		
Amounts in NOK million	**Defined benefit obligations**	**Defined benefit plan assets**	**Net pension plan liabilities**	Defined benefit obligations	Defined benefit plan assets	Net pension plan liabilities
Opening balance	**(800)**	**367**	**(434)**	(830)	386	(444)
Current service expenses incl. social contribution tax	**(28)**	**-**	**(28)**	(29)	-	(29)
Interest (expenses) income	**(24)**	**14**	**(10)**	(22)	12	(10)
Administration expenses	**-**	**(1)**	**(1)**	-	(0)	(0)
Remeasurement gains (losses)	**(66)**	**40**	**(26)**	29	(12)	17
Contributions from employer	**-**	**14**	**14**	-	14	14
Benefits paid	**33**	**(21)**	**12**	47	(24)	23
Curtailments / settlements	**2**	**-**	**2**	-	-	-
Other changes	**(1)**	**(0)**	**(1)**	(1)	(1)	(2)
Currency translation	**(22)**	**20**	**(2)**	5	(8)	(2)
Closing balance	**(908)**	**434**	**(474)**	(800)	367	(434)

Breakdown of pension plan assets

	31.12.2019		31.12.2018	
Amounts in NOK million	**Distribution%**	**Fair value of plan assets**	Distribution%	Fair value of plan assets
Cash, cash equivalents and money market investments	**1%**	**4**	2%	9
Bonds	**13%**	**56**	32%	117
Shares	**28%**	**124**	50%	184
Property	**1%**	**5**	1%	5
Other plan assets [1)]	**57%**	**245**	14%	53
Total pension plan assets	**100%**	**434**	100%	367
Actual return on plan assets	**14.9%**	**54,496**	0%	0

1) Includes insurance contracts (Buy in policies and Annuity insured contracts)

In addition, some Norwegian entities have pension contribution funds, mainly based on excess pension assets from settlement of the defined benefit plans in 2010. The pension contribution funds are classified as non-current pension funds, except next year's expected contributions which are classified as current (see note 23 Other assets).

Pension contribution funds

Amounts in NOK million	**2019**	2018
Current part of contribution fund	**2**	2
Non-current part of contribution fund	**3**	1
Total pension contribution funds	**5**	4

Principal assumptions used for the actuarial valuations in 2019 and 2018

	Norway		France		Canada		Germany		UK	
Discount rate	**2.0%**	(2.5%)	**0.5%**	(1.5%)	**3.1%**	(4.0%)	**0.8%**	(1.8%)	**2.0%**	(2.8%)
Expected rate of salary increase	**2.0%**	(2.5%)	**2.1%**	(2.5%)	**3.5%**	(3.5%)	**3.0%**	(3.0%)	**-**	(3.4%)
Annual regulation of pensions paid	**1.5%**	(1.5%)	**-**	-	**-**	-	**2.0%**	(2.0%)	**-**	-
Change in public pension base rate (G)	**2.0%**	(2.5%)	**-**	-	**-**	-	**-**	-	**-**	-

Assumptions regarding future mortality are based on actuarial advice in accordance with published statistics and experience in each country.

Sensitivity on pension liabilities based on changes in main actuarial assumptions

The defined benefit pension schemes expose the group to actuarial risks such as investment risk, interest rate risk, salary growth risk, mortality risk and longevity risk.

A decrease in corporate bond yields, a rise in inflation or an increase in life expectancy would result in an increase to plan liabilities.

The sensitivity analysis below shows estimated effects in the defined pension liabilities based on reasonable changes in the main assumptions.

The calculations are based on a change in one assumption while holding all other assumptions constant. Negative amounts show an expected decrease in the net pension liability.

Assumption

	Discount rate		Life expectancy		Salary growth	
Amounts in NOK million	0.5% increase	0.5% decrease	1 year increase	1 year decrease	0.5% increase	0.5% decrease
2019: Effect on the pension liability in NOK million	**(56)**	**62**	**25**	**(25)**	**21**	**(20)**
2018: Effect on the pension liability in NOK million	(51)	57	24	(24)	22	(22)

As the group's main pension plans are defined contribution plans, there are no group policies for funding of the defined benefit plans. This is managed locally, based on the terms and status for the individual plan.

Expected contribution for the pension plans next year and average duration for the main defined benefit plans

Amounts in NOK million	Norway	France	Canada	Germany	UK
Contribution to be paid to defined pension plans next year	5	9	18	2	4
Weighted average duration of the defined benefit obligation	8 years	13 years	17 years	14 years	13 years

(c) Other benefit plans

Other employee benefits consist of provisions related to jubilee and long-service benefits, and post-employment benefits to be paid until ordinary retirement age for former employees in Elkem's Chinese entities.

Of total non-current provisions, NOK 70 million (NOK 68 million) relate to jubilee and long-service benefits in the Silicones segment, mainly in France. Estimated duration of the obligation is 8 years. The provisions for Elkem's Chinese entities are calculated to NOK 31 million (NOK 46 million), mainly consisting of post-employment benefits. The benefits are related to employees laid off due to reorganisation, mainly in the Silicon Materials segment, no further obligations are expected to be incurred. Payments in 2019 are about NOK 12 million (NOK 5 million) and the estimated remaining duration of the obligation is 14 years.

A profit-sharing plan is applicable for French entities with more than 50 employees, where the bonus liability must be calculated based on profit after tax, using a specific formula given by the authorities. There are no incurred benefits related to such plans at the reporting date.

Note 10 Management remuneration

The board of directors' declaration on stipulation of salary and other remuneration for corporate management

In accordance with the Norwegian Public Limited Companies Act § 6-16a, the board of directors prepares a separate statement related to the determination of salary and other benefits for the corporate management. The statement shall be subject to an advisory vote by the annual general meeting in accordance with § 5-6 (3).

The board of directors has appointed a dedicated Remuneration Committee as a preparatory and advisory committee concerning questions relating to Elkem's compensation of the corporate management. The purpose of the remuneration committee is to ensure thorough and independent preparation of matters relating to the corporate management compensation as well as the overall principles for compensation in Elkem. In addition, the committee advises the board of directors and the CEO in the work on the principles and strategy for the compensation. The members of the remuneration committee are elected by and amongst the members of the board of directors and are independent of Elkem's corporate management. The Senior Vice President of Human Resources participates in the committee meetings. The board of directors has issued instructions for the work of the remuneration committee.

Key principles for determination of remuneration

The main purpose of Elkem's remuneration policy is to encourage a strong, sustainable and performance-based culture, aimed at continuous improvement. The remuneration policy should also ensure that Elkem has a strong ability to attract, retain and develop qualified people with adequate leadership and professional skills, in order to support and contribute to profitable growth and the creation of long-term shareholder value.

The fundamental principle in Elkem's determination of remuneration for its corporate management is that the terms are to be competitive. Determination of remuneration also takes into account the breadth and complexity of Elkem's worldwide operations and reflects its objectives for sustainability and growth. Elkem seeks to offer a remuneration level on market terms satisfying its need to recruit and retain highly qualified personnel in the corporate management.

More specifically, this implies that the total compensation of the corporate management consists of a fixed compensation and variable remuneration at a level reflecting the principles mentioned above.

Remuneration includes

1. Fixed compensation - The fixed base salary will be determined based on the level of the position in the organisation, local labour market conditions, individual performance, budget and guidelines for annual salary review in line with general salary trends. The fixed compensation shall be reasonable and competitive and represent a significant component of corporate management compensation.

2. Benefits, pension and insurances – The benefits are determined considering market standards and the level of the position, including elements such as private use of mobile phone, private access to Wi-Fi, private use of laptop and a car allowance. The corporate management participate in the relevant local pension schemes in their countries of residence in line with established market practices. The corporate management are covered by insurance arrangements applicable to Elkem employees in their respective countries of residence.

3. Variable compensation – short-term incentive scheme (STI) - The corporate management participate in an annual bonus scheme linked to achievement of financial, strategic and operational targets. The financial targets are linked to EBITDA, net profit and working capital. The annual bonus is limited to 12 months' salary for the CEO and 6 months' salary for the rest of the corporate management.

   The CEO is also entitled to a supplementary bonus limited to 6 months' salary, linked to special target achievements, including financial, strategic, people / organisational and personal objectives subject to the Elkem Remuneration Committee approval.

   The corporate management and other key employees involved in major strategic projects, such as major mergers and acquisitions, may also receive specific project related bonuses. Such bonuses for members of the corporate management, including the criteria and target group, will normally be proposed and approved by the board of directors. Other employees may also participate in individual bonus schemes in line with the corporate guidelines – and the maximum bonus is normally limited to one to three months' salary.

4. Long-term incentives (LTI) –The annual general meeting of Elkem ASA resolved in March 2018 to establish a long-term share incentive scheme (the 2018 Share Option Program) for the corporate management and selected other key employees of Elkem. The annual general meeting authorised the board of directors to approve the size and the terms and conditions of the scheme at its discretion. In 2019 the annual general meeting resolved to continue the LTI-program by implementing a 2019 share option program with similar terms and conditions as the 2018 program.

   The share option program shall be part of the total compensation package of the target group employees to strengthen their commitment and ownership to the business value creation and to contribute to the retention of the corporate management and the key employees. The share option program will also ensure alignment of the financial interests of the senior management and key employees with the financial interest of the shareholders.

   In September 2018, the board of directors resolved to implement the 2018 share option program on the following criteria:

   Options were granted on an individual basis to Elkem corporate management and certain other key employees of Elkem ASA and its subsidiaries, in total 40 individuals located world-wide. In total 7,850,000 options were granted under the program and the maximum number of options granted to each employee in each category was as follows:

   - CEO (Helge Aasen): 500,000 options;
   - Other members of the corporate management: 300,000 options; and
   - Other key employees: 150,000 options.

   Each option gives the holder the right to subscribe or purchase one share in Elkem ASA at an exercise price of NOK 38.52 per share – which is equal to the share price (trading price) at closing on 13 September 2018. The options will vest over a period of three years from the grant date, with one-third vesting each year and the first one-third vesting on 18 September 2019. The options will expire two years after vesting, i.e. on 18 September 2021, 2022 and 2023, respectively.

   Vested options may be exercised at any time in the period starting on the day following the day of Elkem's release of its annual and quarterly results and for 15 Norwegian business days thereafter. Should the employment of an option holder be terminated, unvested options shall lapse and vested options must be exercised within certain deadlines. Elkem may honour options when exercised by the delivery of either new shares, treasury shares or settlement in cash, at its discretion. The exercise price shall be adjusted for extraordinary dividends and other factors relevant to the share capital of Elkem (changes in capitalisation, rights issues etc.). Participants may not in any calendar year realise a total gain on exercise of options which is in excess of two times (four times for the CEO) the employee's base salary.

   The total number of options granted under the 2019 program is 8,000,000. Each option gives the holder the right to subscribe or purchase one share in Elkem ASA at an exercise price of NOK

23.53 per share – which is equal to the average share price (trading price) at closing of the first 20 working days in July 2019. The options will vest over a period of three years from the grant date, with one-third vesting each year and the first one-third vesting on 29 July 2020. The options will expire two years after vesting, i.e. on 29 July 2022, 2023 and 2024, respectively.

Continuation of the long-term incentive scheme:
The board of directors wishes to continue the long-term incentive scheme, so that the board of directors may grant up to eight million new share options under the long-term incentive scheme in 2020.

5. Loan and guarantees - There are no loans or guarantees to the corporate management.

Termination of employment
The employment agreements for corporate management have a 6-month period of notice from the last day of the month in which written notice is given, and a termination payment equal to 12 months' fixed base salary if Elkem initiates the termination.

The CEO has a 3-month period of notice from the last day of the month in which written notice is given, and a severance pay equal to 12 months' fixed base salary. The CEO is only entitled to the severance pay in the event the CEO's employment is terminated unilaterally by Elkem. Elkem can only terminate the employment due to prolonged serious sickness or prolonged lack of performance against payment of the severance pay. Furthermore, in case of change of majority shareholder, the CEO has the right to resign from Elkem without further justification and receive the severance pay.

REMUNERATION TO CORPORATE MANAGEMENT

Members of corporate management team 2019

Amounts in NOK thousand *Name*	Position	Fixed compen-sation	Variable compen-sation - STI	Variable compen-sation - LTI	Other benefits	Pension benefits	**Total**
Michael Koenig [1)]	CEO	497	75	-	21	69	**662**
Helge Aasen [2)]	CEO	6,650	745	326	8,204	1,573	**17,498**
Morten Viga	CFO	3,146	232	1,088	146	570	**5,182**
Katja Lehland	SVP Human Resources	2,704	201	1,088	148	399	**4,540**
Asbjørn Søvik	SVP Business development	2,901	213	1,088	153	641	**4,996**
Håvard Moe	SVP Elkem Technology	2,290	163	1,088	150	402	**4,093**
Louis Vovelle	SVP Innovation R&D	2,045	156	1,088	240	1,108	**4,637**
Frédéric Jacquin	SVP Silicones	3,505	313	1,088	97	3,164	**8,167**
Trond Sæterstad	SVP Silicon Materials	2,584	246	1,088	142	401	**4,461**
Jean Villeneuve	SVP Foundry Products	2,872	219	1,088	192	434	**4,805**
Inge Grubben-Strømnes	SVP Carbon	2,796	407	1,088	138	596	**5,025**

1) Michael Koenig was appointed CEO as of 1 December 2019. In addition to the above, the CEO has during 2019 received remuneration from China National Bluestar (group) Co. Ltd which, is Elkem's majority shareholder, under control of ChemChina. This remuneration is not in relation to his responsibilities in the Elkem Group.

2) Helge Aasen's employment as CEO ended as of 30 November 2019. He currently serves as a Board member of Elkem ASA. Helge Aasen's other benefits include NOK 6.771 million termination costs and CNY 1 million ChemChina Award paid in May.

Members of corporate management team 2018

Amounts in NOK thousand *Name*	Position	Fixed compen-sation	Variable compen-sation - STI	Variable compen-sation - LTI	Other benefits	Pension benefits	**Total**
Helge Aasen 2)	CEO	5,407	12,394	429	146	710	**19,086**
Morten Viga 2)	CFO	2,850	5,366	258	141	348	**8,963**
Katja Lehland	SVP Human Resources	2,429	1,078	258	149	286	**4,200**
Inge Grubben-Strømnes 1) 2)	SVP Business development	2,515	4,621	258	145	297	**7,836**
Håvard Moe	SVP Elkem Technology	2,138	950	258	141	245	**3,732**
Louis Vovelle	SVP Innovation R&D	1,928	882	258	36	213	**3,317**
Frédéric Jacquin 2)	SVP Silicones	2,646	5,257	258	51	595	**8,807**
Trond Sæterstad	SVP Silicon Materials	2,438	1,084	258	141	289	**4,210**
Jean Villeneuve	SVP Foundry Products	2,614	1,206	258	181	431	**4,690**
Asbjørn Søvik 1)	SVP Carbon	2,648	1,238	258	156	316	**4,616**

1) Asbjørn Søvik and Inge Grubben-Strømnes changed positions as of 1 August 2018.
2) STI includes IPO project bonus, on average 70% of the total bonus paid. Of the IPO bonus received, the CEO and the CFO were obligated to invest the net amount of one annual base salary in Elkem shares.

(b) Board of directors
The remuneration policy to the board of directors is presented in the section Corporate governance.

In addition to the remuneration below, the employee representatives receive market based salaries for their ordinary employment in Elkem. The board of directors is not entitled to any severance pay and are not included in the long-term incentive scheme (LTI). There are no loans or guarantees to the board of directors.

Remuneration provided to the board of directors in 2019

Amounts in NOK thousand

Name	Position	Commitee	Board remuneration	Commitee remuneration	Total
Michael Koenig [1)]	Chair of the board	Leader of the remuneration committee	-	-	**-**
Zhigang Hao (from May) [1) 2)]	Chair of the board	Leader of the remuneration committee	-	-	**-**
Olivier de Clermont-Tonnerre [1)]	Board member	Audit committee member	-	-	**-**
Guihua Pei (until April) [1)]	Board member		-	-	**-**
Anja Isabel Dotzenrath	Board member	Remuneration committee member	367	87	**454**
Caroline Catherine Juliette Mazza	Board member	Remuneration committee member	367	87	**454**
Dag Opedal [3)]	Board member	Leader of the audit committee	375	132	**507**
Sverre S. Tysland		Leader of the nomination committee	-	-	**-**
Yougen Ge (from May) [1)]	Board member		-	-	**-**
Marianne Johnsen (from May 2019)	Board member	Audit committee member from December	250	18	**268**
Helge Aasen (from December) [1)]	Board member and CEO		-	-	**-**
Marianne Færøyvik	Board member (employee representative)		307	-	**307**
Terje Andre Hanssen	Board member (employee representative)		307	-	**307**
Per Tronvoll	Board member (employee representative, observer until May 2019)		278	-	**278**
Knut Sande	Observer (employee representative)		153		**153**
Heidi Feldborg	Observer (employee representative from June 2019)		125	-	**125**

1) Representatives for the majority shareholder

2) Zhigang Hao was appointed the Chair of the Board as of 1 December 2019, when Michael Koenig became the CEO. Michael Koenig was thus the Chair for the first 11 months in 2019.

3) Appointed vice Chair as of 1 December 2019.

Remuneration provided to the board of directors in 2018

Amounts in NOK thousand

Name	Position	Commitee	Board remuneration	Commitee remuneration	**Total**
Michael Koenig [1]	Chair of the board	Leader of the remuneration committee	-	-	**-**
Olivier de Clermont-Tonnerre [1]	Board member	Audit committee member	-	-	**-**
Guihua Pei (from March) [1]	Board member		-	-	**-**
Anja Isabel Dotzenrath (from March)	Board member	Remuneration committee member	272	62	**334**
Caroline Catherine Juliette Mazza (from March)	Board member	Remuneration committee member	275	62	**337**
Dag Opedal (from March)	Board member	Leader of the audit committee member	272	97	**369**
Sverre S. Tysland (board member until March)	Board member	Leader of the nomination committee	166	-	**166**
Yougen Ge (until March) [1]	Board member		-	-	**-**
Helge Aasen (board member until March)	Board member and CEO		-	-	**-**
Zhigang Hao (until March) [1]	Board member		-	-	**-**
Marianne Færøyvik	Board member (employee representative)		169	-	**169**
Terje Andre Hanssen	Board member (employee representative)		128	-	**128**
Einar Støfringhaug (until July)	Board member (employee representative)		84	-	**84**
Per Tronvoll	Board member (employee representative, observer)		85	-	**85**
Knut Sande (from July)	Board member (employee representative, observer)		43	-	**43**

1) Representatives for the majority shareholder

Attendance at board meetings and board committee meetings in 2019 for board members

Amounts in NOK thousand	Position	Comittee	Board meetings	Audit committee meetings	Remuneration committee meetings
Michael Koenig [1]	Chair of the board	Leader of the remuneration committee	8/9		6/6
Zhigang Hao (from May) [1] [2]	Chair of the board	Leader of the remuneration committee	5/5		4/5
Olivier de Clermont-Tonnerre [1]	Board member	Audit committee member	9/9	6/6	
Guihua Pei (until April) [1]	Board member		4/4		
Anja Isabel Dotzenrath	Board member	Remuneration committee member	8/9		9/9
Caroline Catherine Juliette Mazza	Board member	Remuneration committee member	8/9		9/9
Dag Opedal [3]	Board member		9/9	6/6	
Yougen Ge (from May) [1]	Board member		3/5		
Marianne Johnsen (from May 2019)	Board member		4/5	1/1	
Helge Aasen (from December) [1]	Board member and CEO		1/1		
Marianne Færøyvik	Board member (employee representative)		8/9		
Terje Andre Hanssen	Board member (employee representative)		9/9		
Per Tronvoll	Board member (employee representative, observer until May 2019)		8/9		
Knut Sande	Observer (employee representative)		9/9		
Heidi Feldborg	Observer (employee representative from June 2019)		5/5		

1) Representatives for the majority shareholder
2) Zhigang Hao was appointed the Chair of the Board as of 1 December 2019, when Michael Koenig became the CEO. Michael Koenig was thus the Chair for the first 11 months in 2019.
3) Appointed vice Chair as of 1 December 2019.

Attendance at board meetings and board committee meetings in 2018 for board members after 22 March 2018 (post IPO)

Amounts in NOK thousand	Position	Comittee	Board meetings	Audit committee meetings	Remuneration committee meetings
Michael Koenig	Chair of the board	Leader of the remuneration committee	9/9		4/4
Olivier de Clermont-Tonnerre	Board member	Audit committee member	8/9	4/4	
Guihua Pei (from March)	Board member		9/9		
Anja Isabel Dotzenrath (from March)	Board member	Remuneration committee member	9/9		4/4
Caroline Catherine Juliette Mazza (from March)	Board member	Remuneration committee member	9/9		4/4
Dag Opedal (from March)	Board member	Leader of the audit committee member	9/9	4/4	
Marianne Færøyvik	Board member (employee representative)		9/9		
Terje Andre Hanssen (from July)	Board member (employee representative)		7/7		
Einar Støfringhaug (until July)	Board member (employee representative)		2/2		

Number of shares owned by the corporate management and board of directors

Name	Position	Number of shares 2019	Number of options 2019	Number of shares 2018	Number of options 2018
Michael Koenig	CEO	68,965	-	68,965	-
Morten Viga	CFO	46,896	600,000	46,896	300,000
Katja Lehland	SVP Human Resources	-	600,000	-	300,000
Asbjørn Søvik	SVP Business development	10,000	600,000	10,000	300,000
Håvard Moe	SVP Elkem Technology	17,241	600,000	17,241	300,000
Louis Vovelle	SVP Innovation R&D	6,896	600,000	6,896	300,000
Frédéric Jacquin	SVP Silicones	6,551	600,000	6,551	300,000
Trond Sæterstad	SVP Silicon Materials	-	600,000	-	300,000
Jean Villeneuve	SVP Foundry Products	-	600,000	-	300,000
Inge Grubben-Strømnes	SVP Carbon	35,189	600,000	35,189	300,000
Zhigang Hao [1) 2)]	Chair of the board	-	-	-	-
Olivier de Clermont-Tonnerre [1)]	Board member	15,517	-	15,517	-
Anja Isabel Dotzenrath	Board member	-	-	-	-
Caroline Catherine Juliette Mazza	Board member	2,300	-	2,300	-
Dag Opedal [3)]	Board member	40,000	-	40,000	-
Sverre Tysland		-	-	-	-
Yougen Ge (from May) [1)]	Board member	-	-	-	-
Marianne Johnsen (from May 2019)	Board member	-	-	-	-
Helge Aasen (from December) [1)]	Board member and CEO	86,206	167,000	86,206	500,000
Marianne Færøyvik	Board member (employee representative)	2,700	-	2,700	-
Terje Andre Hanssen	Board member (employee representative)	-	-	-	-
Per Tronvoll	Board member (employee representative, observer until May 2019)	-	-	-	-
Knut Sande	Observer (employee representative)	-	-	-	-
Heidi Feldborg	Observer (employee representative from June 2019)	-	-	-	-

1) Representatives for the majority shareholder
2) Zhigang Hao was appointed the Chair of the Board as of 1 December 2019, when Michael Koenig became the CEO. Michael Koenig was thus the Chair for the first 11 months in 2019.
3) Appointed vice Chair as of 1 December 2019.

Note 11 Share-based payment

PRINCIPLE

Share-based payment

The fair value of options granted under the share-based payment programme is recognised as an employee benefit expense with a corresponding increase in equity for equity settled awards. The total amount to be expensed is determined by reference to the fair value of the options granted. The total expense is recognised over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. At the end of each period, the entity revises its estimates of the number of options that are expected to vest based on the non-market vesting and service conditions. It recognises the impact of the revision to original estimates, if any, in the statement of income, with a corresponding adjustment to equity.

Social security contributions payable in connection with an option grant are considered an integral part of the grant itself and the charges are treated as cash-settled transactions.

JUDGEMENTS AND ESTIMATES

Estimating fair value for share based payment transactions requires determination of the most appropriate valuation model and inputs to the valuation model. The fair value of the options has been calculated using Black & Scholes option-pricing model, that takes into account the exercise price, the term of the option, the share price at the grant date, expected price volatility of the underlying share, expected dividend and risk-free interest. It is assumed that the employees will exercise the options in average 1.03 years after exercisable date. The expected volatility is on average of 35.83% for the 2019 programme and 31.43% for 2018, is based on historical volatility for Elkem ASA and a selection of comparable listed companies. The risk-free interest rate is set equal to the interest on Norwegian government bonds with same maturity as the option, 1.26%.

Expenses recognised in employee benefit expenses

	2019	2018
Share-based payment	**25**	6
Social security contribution	**0**	-
Total expenses related to share-based payments	**25**	6

The average fair value of options granted in 2019 was NOK 4.08 (NOK 4.85) per option.

Overview of outstanding options

	2019	2018
Outstanding options 1.1.	**7,850,000**	-
Options granted	**8,000,000**	7,850,000
Options forfeited	**(1,083,000)**	-
Outstanding options 31.12	**14,767,000**	7,850,000
Of which exercisable	**2,567,000**	-
Average share price at grant date (NOK per share)	**30.91**	38.52
Weighted average remaining contractual life of outstanding options (years)	**3.14**	3.75

The annual general meeting of Elkem ASA resolved in 2018 to establish a long-term share incentive scheme for members of the management and certain other key employees. 19 September 2018 a total of 7,850,000 options were granted to 40 employees at an exercise price of NOK 38.52. On 29 July 2019 a total of 8,000,000 options were granted to 42 employees at an exercise price of NOK 23.53. Each option gives the holder the right to subscribe or purchase one share in Elkem ASA. The options will vest over a period of three years from grant date with one-third vesting each year. The options will expire two years after vesting. No option holder may in any calendar year realise a total gain on exercise of options which is in excess of the two times the option holder's base salary in the same calendar year, provided however that the maximum gain for Elkem's CEO shall be four times the CEO's base salary. See note 10 Management remuneration for description of the option program and options granted to Elkem's corporate management.

Note 12 Other operating expenses

Details of operating expenses

Amounts in NOK million	**2019**	2018
Loss on disposal of fixed assets	**(10)**	(17)
Freight and commission expenses	**(1,269)**	(1,214)
Leasing expenses (note 13)	**-**	(139)
Leasing short-term and low value contracts (note 18)	**(49)**	-
Machinery, equipment, spare parts and operating materials	**(1,128)**	(1,043)
External services [1)]	**(1,744)**	(1,479)
Insurance expenses	**(85)**	(74)
Impairment losses assets / receivables	**17**	(31)
Other operating expenses [2) 3)]	**(537)**	(626)
Total other operating expenses	**(4,804)**	(4,622)

1) Including services from auditor, see specification below
2) Including change in direct costs on inventory of negative NOK 1 million (NOK 213 million)
3) Including capitalised salary on fixed asset projects of NOK 74 million (NOK 73 million)

Research and development
During 2019, Elkem expensed NOK 494 million (NOK 495 million) as research and development related to processes, products and business development, including technical customer support and improvement projects. In addition, Elkem capitalised development expenses of NOK 74 million (NOK 68 million).

Grants recognised relating to research and development amount to NOK 95 million (NOK 95 million) are recognised in other operating income, and in addition NOK 9 million (NOK 0 million) is recognised as a reduction of intangible assets.

Audit fees
KPMG is the group auditor of Elkem.

Fees to KPMG and other audit firms

Amounts in NOK million	**2019**	2018
KPMG		
Audit fee	**(17)**	(17)
Other assurance services	**(1)**	(2)
Tax services	**(0)**	(1)
Other services	**(2)**	(8)
Other audit firms		
Audit fee	**(2)**	(1)
Other assurance services	**(0)**	(1)
Tax services	**(2)**	(2)
Other services	**(1)**	(2)
Total fees to KPMG and other audit firms	**(26)**	(32)

Fees to auditors are reported exclusive of VAT.

Note 13 Operating lease

PRINCIPLE
Operating lease
The below described principles are relevant for 2018 figures. In 2019 Elkem has adopted IFRS 16 Leases. For transition to the new IFRS see note 35 Changes in accounting policies.

Leases are classified as financial leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, all other leases are classified as operating leases. Assets held under finance leases are initially recognised as assets of the group at the lower of fair value of the asset and the present value of the minimum lease payment. The corresponding liability to the lessor is recognised in the statement of financial position as a finance lease obligation. Each lease payment is allocated between the liability and finance charges, so as to achieve a constant rate on the finance balance outstanding.

2018 *Amounts in NOK million*	Land, buildings and other properties	Machinery and plant	Equipment, furniture, systems and vehicles	**Total**
Leasing expenses (note 12)	(85)	(35)	(19)	**(139)**
Minimum future lease payments due in accordance with non-cancellable operating lease contracts:				
Within one year	(55)	(14)	(13)	**(82)**
Within two years	(48)	(10)	(8)	**(66)**
Within three years	(38)	(5)	(3)	**(46)**
More than three years	(135)	(7)	(5)	**(146)**

Note 14 Other items

PRINCIPLE

Other items

Changes in fair value of financial instruments are classified as part of other items, if not designated as a part of a hedging relationship. In addition, any ineffective part of hedging relationships is recognised in other items.

Foreign exchange gains (losses) related to operating activities such as accounts receivables, accounts payables, bank accounts / overdrafts are classified as a part of operating profit (loss) and are recognised in other items.

Dividends from equity instruments are recognised when shareholders' right to receive dividends is determined by the shareholder's meeting.

Expenses related to the IPO, business combinations, acquisitions classified as asset purchase, and gains / losses on disposal of businesses are classified as other items in the statement of income. In addition, performance incentives for Elkem employees related to such projects are also classified as other items.

Details of other items

Amounts in NOK million	**2019**	2018
Changes in fair value commodity contracts (note 26)	**246**	(319)
Ineffectiveness on cash flow hedges (note 27)	**(13)**	19
Net foreign exchange gains (losses) - forward currency contracts	**23**	29
Operating foreign exchange gains (losses)	**(45)**	32
Total other gains (losses)	**211**	(240)
Dividend from interest in other companies	**1**	2
Change in fair value from shares in other companies	**1**	(2)
Gains (losses) disposal of subsidiaries	**0**	1
Total other income	**3**	1
Expenses IPO [1)]	**-**	(96)
Other [2)]	**(18)**	(47)
Other expenses	**(18)**	(142)
Total other items	**195**	(380)

1) Expenses IPO 2018 include NOK 25 million in success bonuses to employees.
2) Mainly related to provisions for environmental measurements and business projects / acquisitions.

Note 15 Finance income and expenses

PRINCIPLE

Finance income and expenses

Interest income is recognised on an accrual basis and is classified as finance income.

Foreign exchange gains (losses) related to financing activities including group loans are classified as a part of financial income and expenses, and foreign exchange gains (losses) related to operations are classified as a part of other items.

Interest expenses are recognised on an accrual basis using the effective interest method and are classified as financial expenses. Interest is capitalised as a part of the carrying amount of a self-constructed item of property, plant and equipment when the construction period takes a substantial period of time, meaning more than 9-12 months, depending on the total amount, and borrowing costs are being incurred.

Financial expenses also include interest on net pension liabilities, unwinding of discounted non-current provisions, and interest on lease liabilities.

Details of net finance income (expenses)

Amounts in NOK million	**2019**	2018
Interest income on loans and receivables	**40**	41
Other financial income	**1**	1
Total finance income	**41**	42
Net foreign exchange gains (losses)	**16**	19
Interest expenses on interest-bearing liabilities measured at amortised cost	**(221)**	(280)
Interest expenses from other items measured at amortised cost	**(25)**	(92)
Capitalised interest expenses	**-**	0
Interest expenses on lease liabilities	**(17)**	-
Unwinding of discounted liabilities	**(5)**	(5)
Interest expenses on net pension liabilities	**(10)**	(10)
Other financial expenses	**(18)**	(2)
Total finance expenses	**(295)**	(388)
Net finance income (expenses)	**(239)**	(327)

Interest expenses from other items measured at amortised cost mainly consist of interest on bills payable.

Note 16 Taxes

PRINCIPLE

Taxation

Income taxes

Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to the tax authorities. Current tax payable includes any adjustment to tax payable in respect of previous years. Income tax is recognised in the statement of income except to the extent that it relates to items recognised directly in equity or in other comprehensive income. The group includes deductions for uncertain tax positions when it is probable that the tax position will be sustained in a tax review. The group records provisions relating to uncertain or disputed tax positions at the amount expected to be paid. The provision is reversed if the disputed tax position is settled in favour of the group and can no longer be appealed.

Penalties and interest related to income taxes are classified as tax expense in the statement of income. Accrued penalties and interest are recognised in the statement of financial position in income tax payable and provisions for the current and non-current portions respectively.

Deferred tax

Deferred tax assets and liabilities are calculated using the liability method with full allocation of all temporary differences between the tax base and the carrying amount of assets and liabilities in the financial statements, including tax losses carried forward. Deferred tax relating to items outside statement of income are recognised in correlation with the underlying transaction either in other comprehensive income or directly in equity. Deferred tax assets and liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill. Deferred tax assets are recognised in the statement of financial position to the extent that it is more likely than not that the tax assets will be utilised against deferred tax liabilities or future taxable income. Deferred tax assets arising from tax losses are recognised when there is convincing evidence of recoverability. The tax rates substantively enacted at the end of the reporting period and undiscounted amounts are used. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, and Elkem intends to settle current tax liabilities and assets on a net basis, or to realise the tax assets and settle the liabilities simultaneously.

The group performs annual tests for impairment of deferred tax assets.

JUDGEMENTS AND ESTIMATES

Part of the basis for recognising deferred tax assets is based on applying the loss carried forward against future taxable income in the group, which requires use of estimates for calculating future taxable income.

Income tax recognised in profit or loss

Amounts in NOK million	**2019**	2018
Profit (loss) before income tax	**1,134**	3,792
Current taxes	**(178)**	(450)
Deferred taxes	**(59)**	25
Total income tax (expense) benefit	**(237)**	(425)

Income taxes recognised in other comprehensive income (OCI)

Amounts in NOK million	**2019**	2018
Remeasurement of defined benefit pension plans	**3**	(6)
Hedging of net investment in foreign operations	**(5)**	7
Cash flow hedges	**45**	(159)
Total tax charged to OCI	**42**	(158)

Reconciliation of income tax (expense) benefit

Amounts in NOK million	**2019**	2018
Profit (loss) before income tax	**1,134**	3,792
Expected income taxes, 22% of profit before tax (23%)	**(249)**	(872)
Tax effects of:		
Difference in tax rates for each individual jurisdiction	**(36)**	(115)
Preferential tax rates	**50**	200
Permanent differences		
Tax effects of income from Norwegian controlled foreign companies (NOKUS)	**(9)**	(9)
Tax effects share of profit (loss) from equity accounted companies	**(2)**	(1)
Tax effects other permanent expenses	**(17)**	(14)
Tax relief based on value of equity	**-**	17
Tax effects other permanent income	**49**	46
Other effects		
Tax effects of changes in non recognised deferred tax assets	**15**	348
Tax credits utilised	**(3)**	-
Tax effects of change in tax rate	**-**	3
Other current taxes paid	**(39)**	(30)
Previous year tax adjustment	**4**	1
Total income tax (expense) benefit	**(237)**	(425)
Effective tax rate	**21%**	11%

Two companies in China are taxed under the regulations for "High and new technology company" which mean that the tax rate is 15% compared to the regular 25%. The companies have to confirm to the authorities every other year that they fulfill the conditions for "High and new technology company".

Tax effect of other permanent income is mainly due to additional R&D deduction and non-taxable R&D grants that are settled through the taxable profit.

Tax effects of changes in non-recognised deferred tax assets are mainly related to the changes in deferred tax assets in China and the use of debt forgiveness, see separate tables below.

Other current taxes paid relates mainly to taxes that are indirectly calculated based on profit (loss) before income tax and withholding taxes on dividends.

Deferred tax assets and deferred tax liabilities

	31.12.2019		31.12.2018	
Amounts in NOK million	**Deductible temporary difference**	**Deferred tax**	Deductible temporary difference	Deferred tax
Derivatives including cash flow hedges	**360**	**80**	528	116
Property, plant and equipment and Intangible assets	**1,488**	**232**	2,495	395
Pension liabilities	**441**	**126**	401	114
Trade receivables	**94**	**15**	100	15
Inventories	**185**	**40**	253	60
Provisions	**196**	**50**	316	82
Other differences	**54**	**14**	37	11
Debt forgiveness	**595**	**198**	644	215
Tax losses to carry-forward	**2,063**	**600**	1,925	572
Gross deferred tax assets	**5,477**	**1,355**	6,699	1,579
Non-recognised deferred tax assets to tax loss carry-forward	**(1,673)**	**(478)**	(1,477)	(431)
Non-recognised debt forgiveness	**(595)**	**(198)**	(644)	(215)
Non-recognised deferred tax assets other items	**(1,573)**	**(236)**	(2,521)	(391)
Recognised deferred tax assets	**1,636**	**444**	2,057	542
Netting		**(378)**		(482)
Net deferred tax assets		**66**		60
Derivatives including cash flow hedges	**210**	**46**	433	95
Property, plant and equipment and intangible assets	**1,724**	**460**	1,853	495
Inventories	**209**	**47**	232	54
Other differences	**308**	**69**	212	46
Gross deferred tax liabilities	**2,452**	**621**	2,730	689
Netting		**(378)**		(482)
Net deferred tax liabilities		**243**		207
Net deferred tax liabilities/assets (-) recognised		**(178)**		(147)

Non-recognised deferred tax assets other items are mainly related to Property, plant and equipment.

Movements in net deferred tax assets and deferred tax liabilities

Amounts in NOK million	**2019**	2018
Opening balance	**(147)**	(15)
Recognised in profit or loss for the year	**(59)**	25
Effect of business combination	**(12)**	(0)
Recognised in other comprehensive income	**42**	(158)
Foreign currency exchange differences	**(2)**	1
Closing balance	**(178)**	(147)

Tax losses to carry-forward 31 December 2019

Amounts in NOK million	Gross tax losses to carry-forward	Net tax losses to carry-forward	Not recognised tax losses	Recognised deferred tax losses to carry-forward
France	1,273	410	(296)	115
China	325	81	(81)	-
Brazil	226	77	(77)	-
USA	6	1	-	1
United Kingdom	18	3	-	3
Malaysia	36	9	(7)	2
Paraguay	176	18	(18)	-
Mexico	2	1	-	-
Iceland	2	0	-	0
Total tax losses to carry-forward	2,063	600	(478)	122

Tax losses to carry-forward 31 December 2018

Amounts in NOK million	Gross tax losses to carry-forward	Net tax losses to carry-forward	Not recognised tax losses	Recognised deferred tax losses to carry-forward
France	1,207	389	(255)	133
China	338	84	(84)	-
Brazil	226	77	(76)	0
USA	3	1	-	1
United Kingdom	5	1	-	1
Malaysia	47	11	(5)	6
Paraguay	100	10	(10)	-
Total tax losses to carry-forward	1,925	572	(431)	141

Tax losses to carry-forward by expiry date

	31.12.2019		31.12.2018	
Amounts in NOK million	**Total not recognised losses**	**Total recognised losses**	Total not recognised losses	Total recognised losses
2019	**-**	**-**	(19)	-
2020	**(22)**	**-**	(22)	-
2021	**(39)**	**-**	(39)	-
2022	**-**	**-**	-	-
2023	**-**	**-**	(4)	-
2024	**(20)**	**-**	-	-
> 2024	**-**	**-**	-	-
Without maturity	**(397)**	**122**	(347)	141
Total tax losses carried forward	**(478)**	**122**	(431)	141

Deferred tax assets not recognised current year
When an entity has a history of losses, the deferred tax assets arising from unused tax losses is recognised only to the extent that there is convincing evidence that sufficient future taxable profit will be generated before any expiration of the losses.

Pending tax issues with tax authorities, see note 25 Provision and other liabilities

Debt forgiveness
Elkem Silicones France SAS has four Elkem internal debt-forgiveness agreements where internal loans were converted to equity and the converted amounts were treated as taxable income. Elkem Silicones France SAS can only utilise the agreements to the extent that the company has an accounting profit according to IFRS. All debt that is repaid under the agreements can be deducted against taxable income. Nominal value of the agreements as of 31 December 2019 are EUR 64 million (EUR 69 million). Elkem Silicones France SAS has repaid NOK 49 million (NOK 577 million) that gives a tax credit of NOK 16 million (NOK 192 million). The amount is included in tax effect of changes in non-recognised deferred tax assets in the reconciliation of income tax (expense) benefit above.

Debt forgiveness 31 December 2019

Amounts in NOK million	2010	2012	2013	2014	**Total**
Gross value of debt forgiveness	103	186	149	207	**644**
Usage 2019	(49)				**(49)**
Total debt that can be reversed	54	186	149	207	**595**
Deferred tax asset not recognised [1)]	18	62	49	69	**198**
The respective agreements expire in	7 years	9 years	10 years	11 years	

Debt forgiveness 31 December 2018

Amounts in NOK million	2010	2012	2013	2014	**Total**
Gross value of debt forgiveness	680	186	149	207	**1,221**
Usage 2018	(577)				**(577)**
Total debt that can be reversed	103	186	149	207	**644**
Deferred tax asset not recognised [1)]	34	62	49	69	**215**
The respective agreements expire in	7 years	9 years	10 years	11 years	

1) Based on tax rate 33.33%, which is applicable in France.

Note 17 Property, plant and equipment

PRINCIPLE

Property, plant and equipment

Property, plant and equipment (PPE) are stated in the consolidated statement of financial position at cost less accumulated depreciation and accumulated impairment losses. PPE acquired in business combinations are recognised at fair value at the acquisition date. PPE acquired in a business combination under common control are reflected at their carrying amounts. Assets in the course of construction are carried at cost less any recognised impairment loss. Such assets are classified to the appropriate categories of PPE when completed and ready for the intended use. When significant parts of an item of PPE have different useful lives, they are accounted for as separate items.

Initial cost includes expenditures that are directly attributable to the acquisition of the asset, cost of materials, direct labour, any other costs directly attributable to bringing the assets to working condition for their intended use and estimated dismantling or removal charges.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, when future benefits are probable and the cost can be measured reliably. The carrying amount of the replaced part is derecognised. Major periodic maintenance that is carried out less frequently than every year, is capitalised and depreciated over the period until the next periodic maintenance is performed. All other repairs and maintenance are charged to the statement of income when incurred.

Depreciations are calculated based on estimated useful life and expected residual value for each item of PPE and are recognised in the statement of income using the straight-line method. The estimated useful lives, residual values (if any) and depreciation method are reviewed, and if necessary adjusted, at least annually. Depreciation commences when the assets are ready for their intended use.

An item of PPE is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on disposal or retirement of PPE, determined as the difference between the sales proceeds and the carrying amount of the asset, is recognised under other operating income or other operating expenses in the statement of income. Accounting principle for impairment of assets, see Note 20 Impairment assessment.

JUDGEMENTS AND ESTIMATES

Estimated useful lives, residual values (if any) included in calculation of depreciation of PPE are reviewed and, if necessary, adjusted at least annually.

Details of property, plant and equipment

2019 *Amounts in NOK million*	Land	Plant, buildings and other property	Machinery, equipment and motor vehicles	Office and other equipment	Construc-tion in progress	**Total**
Cost						
Opening balance	148	6,529	19,103	485	1,619	**27,883**
Additions	2	19	7	5	1,997	**2,031**
Transferred from CiP	0	349	1,564	61	(1,974)	**-**
Reclassification	-	0	19	(16)	(48)	**(45)**
Business combinations (note 4)	30	32	8	1	-	**70**
Disposals	(2)	(10)	(430)	(12)	(7)	**(461)**
Exchange differences	(0)	(10)	(26)	(1)	(4)	**(41)**
Closing balance	178	6,908	20,245	523	1,583	**29,437**
Accumulated depreciation						
Opening balance		(2,310)	(10,213)	(334)		**(12,856)**
Additions		(193)	(1,013)	(35)		**(1,241)**
Reclassification		(0)	(19)	19		**0**
Disposals		7	396	12		**415**
Exchange differences		2	12	0		**14**
Closing balance		(2,494)	(10,837)	(338)		**(13,668)**
Impairment losses						
Opening balance	(11)	(380)	(2,116)	(0)	(75)	**(2,582)**
Additions	(0)	(0)	(9)	(0)	(1)	**(10)**
Disposals	0	1	14	0	1	**16**
Exchange differences	0	1	8	0	0	**10**
Closing balance	(11)	(378)	(2,103)	(0)	(75)	**(2,567)**
Net book value	167	4,036	7,305	186	1,508	**13,202**
Original cost of assets fully depreciated but still in use	-	478	2,873	57	-	**3,407**
Estimated useful life	Indefinite	5–50 years	3–50 years	3–20 years		
Depreciation plan		Straight-line	Straight-line	Straight-line		

2018 *Amounts in NOK million*	Land	Plant, buildings and other property	Machinery, equipment and motor vehicles	Office and other equipment	Construc-tion in progress	**Total**
Cost						
Opening balance	144	6,177	18,241	454	1,517	**26,532**
Additions	0	3	37	3	1,661	**1,705**
Transferred from CiP	0	389	1,111	34	(1,535)	**-**
Reclassification	-	4	(5)	1	(11)	**(10)**
Business combinations (note 4)	-	-	7	-	-	**7**
Disposals	-	(67)	(317)	(7)	(47)	**(438)**
Exchange differences	3	22	30	(0)	33	**87**
Closing balance	148	6,529	19,103	485	1,619	**27,883**
Accumulated depreciation						
Opening balance		(2,162)	(9,467)	(306)		**(11,934)**
Additions		(178)	(947)	(31)		**(1,156)**
Reclassification		(3)	4	(1)		**(0)**
Disposals		34	233	5		**273**
Exchange differences		(0)	(36)	(2)		**(38)**
Closing balance		(2,310)	(10,213)	(334)		**(12,856)**
Impairment losses						
Opening balance	(11)	(395)	(2,134)	(0)	(108)	**(2,647)**
Additions	-	(0)	(5)	(0)	(3)	**(8)**
Disposals	-	17	35	0	35	**86**
Exchange differences	(0)	(1)	(12)	(0)	1	**(13)**
Closing balance	(11)	(380)	(2,116)	(0)	(75)	**(2,582)**
Net book value	137	3,839	6,774	152	1,544	**12,445**
Historical cost, assets under financial leasing	-	-	212	1	-	**213**
Accumulated depreciation, assets under finan-cial leasing	-	-	(211)	(1)	-	**(212)**
Net book value, assets under financial leasing	-	-	1	0	-	**1**
Original cost of assets fully depreciated but still in use	-	693	3,057	53	-	**3,803**
Estimated useful life	Indefinite	5–50 years	3–50 years	3–20 years		
Depreciation plan		Straight-line	Straight-line	Straight-line		

The weighted average cost of capital for capitalisation of loan interest in 2018 was 4.35% per annum.

Note 18 Right-of-use assets

PRINCIPLE

Leases

The principles described below are applied to contracts entered into, or changed, on or after 1 January 2019. For transition to the new IFRS 16 leases see note 35 Changes in accounting policies.

Elkem assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Elkem applies single recognition and measurement approach for all leases, except for:

- Lease contracts for which the lease term ends within 12 months as of the date of initial application are not capitalised (short-term leases). Elkem's short-term lease commitments are mainly related to rental of equipment in connection with maintenance and installation of new equipment.
- Lease contracts for which the underlying asset is of low value, meaning mainly office equipment are not capitalised.
- Lease of intangible assets are not capitalised.
- Right-of-use assets are presented separately in the statement of financial position, while lease liabilities are recognised in interest-bearing liabilities.
- Lease payments on contracts that are not capitalised are recognised as other operating expenses on a straight-line basis over the lease term.

Elkem recognises right-of-use assets at the commencement date of the lease (i.e., the date the underlying assets is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis from the commencement date to the earlier of the lease term and the remaining useful life of the right-of-use asset for assets where Elkem does not obtain ownership of the leased asset at the end of the lease term. Depreciation expense on the right-of-use asset is presented as depreciation in the statement of income. Right-of-use assets are subject to impairment assessments as described in note 20 Impairment assessment.

See note 24 Interest-bearing assets and liabilities for accounting policies for lease liabilities

JUDGMENTS AND ESTIMATES

Elkem determines the lease term as the non-cancellable period of a lease, together with any periods covered by an option to extend the lease if the lessee is reasonably certain to exercise that option and any periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option. Elkem's main renewal options relate to lease of office and production buildings including lease of land and it is reasonably certain that the renewal option will be used. Elkem reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise, or not to exercise, the option to renew.

Details of right-of-use assets

2019 *Amounts in NOK million*	Land	Plant, buildings and other property	Machinery, equipment and motor vehicles	Office and other equipment	**Total**
Cost					
Opening balance	-	-	-	-	**-**
Opening balance IFRS 16	14	322	68	8	**412**
Additions	1	40	33	-	**74**
Reclassification [1)]	223	-	0	-	**223**
Disposals	-	(3)	(3)	-	**(6)**
Exchange differences	0	(2)	(0)	0	**(2)**
Closing balance	239	357	99	8	**702**
Accumulated depreciation					
Opening balance	-	-	-	-	**-**
Additions	(6)	(56)	(30)	(1)	**(93)**
Reclassification [1)]	(37)	-	(0)	-	**(37)**
Disposals	-	3	3	-	**6**
Exchange differences	0	1	0	0	**1**
Closing balance	(42)	(52)	(27)	(1)	**(123)**
Impairment losses					
Opening balance	-	-	-	-	**-**
Additions	-	-	-	-	**-**
Disposals	-	-	-	-	**-**
Exchange differences	-	-	-	-	**-**
Closing balance	-	-	-	-	**-**
Net book value	197	305	72	6	**580**
Estimated useful life	1–50 years	1–20 years	1–10 years	1-5 years	
Depreciation plan	Straight-line	Straight-line	Straight-line	Straight-line	

1) Leasehold land is reclassified from intangible assets (note 19) to right-of-use assets from 2019 due to implementation of IFRS 16 Leases

Carrying amounts of lease liabilities and the movements during the period

	2019
Opening balance	**-**
Opening balance IFRS 16	**412**
Additions of leases	**74**
Payments	**(95)**
Interest expenses on lease liabilities	**17**
Exchange differences	**(1)**
Closing balance (note 24)	**407**

Elkem has a limited number of lease contracts that include extension and termination options, where the options are not expected to be exercised and hence where no liability is recognised.

Amounts recognised in consolidated statement of income

	2019
Depreciations of right-of-use assets	(93)
Interest expenses on lease liabilities (note 15)	(17)
Leasing expenses, short-term leases	(26)
Leasing expenses, low value assets	(20)
Leasing expenses, variable lease payments	(3)
Total amount recognised in consolidated statement of income	**(159)**

Note 19 Intangible assets and goodwill

PRINCIPLE

Goodwill

Goodwill is initially measured as the excess of the cost of an acquisition over the group's share of the fair values of the acquired entity's net identifiable assets at the acquisition date. If the fair value of the group's interest in the net assets of the acquired subsidiary exceeds the cost of the acquisition (negative goodwill), the differences are recognised directly in the statement of income. Goodwill is carried at cost less accumulated impairment losses. Goodwill is tested for impairment annually, or more frequently when there is an indication of impairment. An impairment loss recognised for goodwill is not reversed in subsequent periods.

Other intangible assets

Intangible assets are stated in the consolidated financial statements at cost less accumulated amortisation and accumulated impairment losses. Intangible assets acquired in business combinations are recognised at fair value at the acquisition date. Intangible assets with a finite useful life are amortised, using the straight-line method. The estimated useful lives and amortisation method are reviewed at the end of each reporting period.

An intangible asset is derecognised on disposal, or when the group expects no future economic benefits to be derived from its use. Gain or loss arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, is recognised in other operating income or other operating expenses in the statement of income.

Expenditure on research activities is recognised as an expense in the period in which it is incurred. An intangible asset arising from an internal development project is recognised in the statement of financial position if the group can demonstrate technically feasibility of completing the intangible asset, has the intention to complete it, ability to use it, can demonstrate that it will generate probable future economic benefits and the cost can be reliably measured.

Accounting principle for impairment of assets, see Note 20 Impairment assessment.

JUDGEMENTS AND ESTIMATES

Estimated useful lives are used in calculation of amortisation of intangible assets, these are reviewed, and if necessary adjusted, at least annually.

Details of goodwill and intangible assets

2019 *Amounts in NOK million*	Goodwill	Land use rights	Technology and licences	Software	Develop-ment	Other intangible	Intangible assets under con-struction	**Total**
Cost								
Opening balance	342	328	540	392	591	57	154	**2,062**
Additions	-	0	0	10	-	-	84	**94**
Transferred from CiP	-	-	20	19	50	5	(95)	**0**
Reclassification [1)]	-	(223)	2	1	34	(1)	10	**(179)**
Business combinations (note 4)	122	-	-	-	-	31	-	**31**
Disposals	-	(1)	-	(1)	(7)	-	-	**(8)**
Exchange differences	3	(2)	(5)	(1)	(6)	0	(1)	**(14)**
Closing balance	466	101	557	421	663	92	152	**1,987**
Accumulated amortisation								
Opening balance		(87)	(392)	(272)	(364)	(24)		**(1,139)**
Additions		(1)	(29)	(35)	(53)	(4)		**(122)**
Reclassification [1)]		37	(1)	2	0	(1)		**37**
Disposals		0	-	1	7	-		**7**
Exchange differences		1	3	1	3	(0)		**8**
Closing balance		(50)	(419)	(304)	(407)	(29)		**(1,209)**
Impairment losses								
Opening balance	-	(1)	-	-	-	-	-	**(1)**
Additions	-	(1)	-	-	-	-	-	**(1)**
Disposals	-	1	-	-	-	-	-	**1**
Exchange differences	-	0	-	-	-	-	-	**0**
Closing balance	-	(1)	-	-	-	-	-	**(1)**
Net book value	466	51	138	117	256	63	152	**777**
Estimated useful life	Indefinite	3–10 years	3–15 years	3–10 years	3–16 years	3–10 years		
Amortisation plan		Straight-line	Straight-line	Straight-line	Straight-line	Straight-line		

1) Leasehold land is reclassified to right-of-use assets (note 18) from 2019 due to implementation of IFRS 16 Leases

Additions in 2019 mainly consist of capitalisation of development projects of NOK 74 million.

2018 *Amounts in NOK million*	Goodwill	Leasehold land and land use rights	Technology and licences	Software	Develop-ment	Other intangible	Intangible assets under con-struction	**Total**
Cost								
Opening balance	326	326	526	409	548	53	117	**1,980**
Additions	-	9	0	15	2	0	76	**102**
Transferred from CiP	-	-	10	2	31	-	(43)	**-**
Reclassification	-	(2)	-	9	2	1	-	**10**
Business combinations (note 4)	15	-	-	-	-	3	-	**3**
Disposals	-	(7)	(2)	(45)	-	-	-	**(54)**
Exchange differences	1	2	5	2	8	0	3	**20**
Closing balance	342	328	540	392	591	57	154	**2,062**
Accumulated amortisation								
Opening balance		(82)	(365)	(289)	(314)	(19)		**(1,068)**
Additions		(5)	(26)	(28)	(44)	(4)		**(107)**
Reclassification		-	-	1	-	(1)		**0**
Disposals		1	2	45	-	-		**48**
Exchange differences		(1)	(4)	(2)	(5)	(0)		**(12)**
Closing balance		(87)	(392)	(272)	(364)	(24)		**(1,139)**
Impairment losses								
Opening balance	-	(1)	-	-	-	-	-	**(1)**
Exchange differences	-	(0)	-	-	-	-	-	**(0)**
Closing balance	-	(1)	-	-	-	-	-	**(1)**
Net book value	342	240	147	120	227	33	154	**922**
Estimated useful life	Indefinite	3–10 years	3–15 years	3–10 years	3–16 years	3–10 years		
Amortisation plan		Straight-line	Straight-line	Straight-line	Straight-line	Straight-line		

Additions in 2018 mainly consist of capitalisation of development projects of NOK 68 million.

Note 20 Impairment assessments

PRINCIPLE

Impairment of tangible and other intangible assets

The group's management reviews, at least at each reporting date, the carrying amounts of its property, plant, equipment and other intangible assets whenever there is any indication that the carrying amount may not be recoverable. Other intangible assets that have an indefinite useful life are tested at least annually for impairment. If any such indication exists, the recoverable amount of the asset or the Cash Generating Unit (CGU) including goodwill, is estimated in order to determine the extent of the impairment loss. The recoverable amount is the higher of fair value less costs to sell, or its value in use. Value in use is the present value of the future cash flow expected to be derived from the asset or the cash generating unit to which it belongs, after taking into account all other relevant information.

A CGU is the lowest level at which independent cash inflows can be measured. Elkem's cash generating units are reflecting the company's business areas, which are the basis for the management review and monthly reports. The carrying amount of tangible and intangible assets within the cash generating units is measured against the value in use of tangible assets, intangible assets and working capital within these units.

Impairment expenses are presented as impairment losses in the statement of income.

JUDGEMENTS AND ESTIMATES

The recoverable amounts of assets of CGUs subject to impairment testing are often determined based on value-in-use calculations, which are to a large extent based on estimated future cash flows.

These calculations require the use of estimates for cash flows, the choice of discount rate before tax for discounting the cash flows and to determine the CGU. Tangible and intangible assets including goodwill, are tested for impairment if there are indicators that an asset may be impaired. Indicators of impairment will typically be changes in technological development, changes in market conditions and changes in the competitive situation. Intangible assets that are not amortised and goodwill are, as a minimum, tested annually for impairment.

Goodwill per entity/CGU – 31 December 2019

Amounts in NOK million	Silicones	Silicon Materials	Foundry Products	Carbon	**Total**
Basel Chemie Co. Ltd.	122	-	-	-	**122**
Silicones	75	-	-	-	**75**
Elkem Rana AS	-	40	-	-	**40**
Elkem Oilfield Chemical FZCO	-	20	-	-	**20**
Elkem Materials Process Services BV	-	0	-	-	**0**
Elkem Foundry Hingna Nagpur	-	-	39	-	**39**
Elkem UK Holdings Ltd.	-	-	15	-	**15**
Ferroveld JV	-	-	-	46	**46**
Elkem Participacòes Indústria e Comércio Limitada	-	-	-	9	**9**
Elkem Carbon China Comp Ltd.	-	-	-	1	**1**
NEH Inc.	-	23	60	15	**98**
Total goodwill	197	84	114	72	**466**

Goodwill per entity/CGU – 31 December 2018

Amounts in NOK million	Silicones	Silicon Materials	Foundry Products	Carbon	**Total**
Silicones	76	-	-	-	**76**
Elkem Rana AS	-	40	-	-	**40**
Elkem Oilfield Chemical FZCO	-	20	-	-	**20**
Elkem Materials Process Services BV	-	0	-	-	**0**
Elkem Foundry Hingna Nagpur	-	-	39	-	**39**
Elkem UK Holdings Ltd.	-	-	15	-	**15**
Ferroveld JV	-	-	-	45	**45**
Elkem Participacòes Indústria e Comércio Limitada	-	-	-	9	**9**
Elkem Carbon China Comp Ltd.	-	-	-	1	**1**
NEH Inc.	-	23	59	15	**97**
Total goodwill	76	83	113	70	**342**

Discounted cash flow models are applied to determine the value in use for the cash-generating units. Management in each CGU has projected cash flows based on forecast and strategy plans covering a four-year period. Currency rates and power prices are based on external official sources such as Reuters and Nasdaq. Beyond the explicit forecast period of four years, the cash flows are extrapolated using constant nominal growth rates.

Key assumptions

Key assumptions used in the calculation of value in use are growth rate, EBITDA levels, capital expenditure and discount rates.

Growth rates: The expected growth rates for a cash-generating unit converge from its current level experienced over the last few years, to the long-term growth level in the market in which the entity operates. The growth rates used to extrapolate cash flow projections beyond the explicit forecast period are based on management's past experience, assumptions in terms of market share and expectations for the market development in which the entity operates.

EBITDA levels: EBITDA level represents the operating profit (loss) before depreciation and amortisation. The key assumptions used in reaching the forecast figures are sales prices, operating costs and productivity targets. These are estimated based on the current level and expected future market development, which also takes into consideration committed operational efficiency programs. Changes to the outcome of these initiatives may affect future estimated EBITDA levels.

Capital expenditure ("Capex"): A normalised capex is assumed in the long run. Estimated capital expenditures do not include capital expenditures that significantly enhance the current performance, as such effects generally are not included in the cash flow projections.

Discount rates: The required rate of return is calculated by the WACC method. The cost of a company's equity and liabilities, weighted to reflect its capital structure of 50:50, respectively, derive from its weighted average cost of capital. The WACC rates used in discounting the future cash flows are based on Norwegian 10-year risk-free interest rate. The rates are adjusted for inflation differential and country risk premium. The discount rates also take into account the debt premium, market risk premium, corporate tax rate and asset beta.

The following pre-tax discount rates (WACC) and sustained growth rate for year five and beyond have been used for the impairment tests on CGUs containing goodwill :

	WACC	Growth
Silicones	9.0%	2.0%
Silicon Materials	9.8%	2.0%
Foundry Products	9.0%	2.0%
Carbon	12.1%	2.0%

Impairment – test results and conclusion
In 2019 Elkem has identified impairment indicators for two plants within Foundry Products and Silicon Materials, outside of Norway, with a total carrying value of PPE of NOK 1,071 million, largely due to weak markets in second half of 2019 with decreased prices particularly in China. Foundry Products' operating income decreased due to weaker prices and lower sales volume in particular towards the automotive industry. The recoverable amount was determined estimating the value in use of the assets. The assumptions used in the calculation are based on contract prices and estimated market prices for consumption and sales not yet contracted. Except for energy there are limited long-term observable market prices. Environmental / emission expenses are based on current regulations. Currency exchange rates are based on observable rates for the next 5 years. Discount rates specific to each CGU have been used, updated for country specific risks and borrowing rates. None of the plants were assessed to be impaired, as the recoverable amount exceed the carrying amount for all CGUs. The tests were sensitive to changes in sales prices and product mix, productivity and cost estimates particularly related to committed cost improvement initiatives, and discount rates, but were still assessed to have sufficient coverage, and no impairment has been recognised for these plants.

Sensitivity of estimated cash flows
An increase of 2 percentage points in WACC will not result in an impairment for Elkem.

0% growth, 10% reduction in sales prices and 10% reduction to EBITDA level will not result in an impairment for Elkem.

Note 21 Inventories

PRINCIPLE
Inventories
Inventories are measured at the lower of cost and net realisable value. Inventory consists of raw materials, semi-finished goods and finished goods, in addition to operating materials and spare parts that do not meet the definition of property, plant and equipment. Raw materials, and operating materials and spare parts, are recognised at cost of purchase including transport and handling to their present location. The cost of finished and semi-finished goods is measured at the cost of raw materials, energy for production, direct labour, other direct costs and production overhead cost based on the higher of actual and normal capacity. Net realisable value represents the estimated selling price for inventories less estimated costs of completion and variable selling expenses.
Cost of goods sold is recognised in different lines in the statement of income based on nature; raw materials and energy for production, employee benefits, other operating cost and amortisation and depreciation.

Entities within the group sell goods to other group entities, consequently finished goods from one entity become raw materials or semi-finished goods for another group entity. The classification of goods in the group's statement of financial position is based on the separate entity's classification.

JUDGEMENTS AND ESTIMATES
The assessment of net realisable value for the inventory is based on estimated market prices in the period the inventory is expected to be sold. The actual market price will differ from the estimates used.

Details of inventory

Amounts in NOK million	31.12.2019 Cost price	31.12.2019 Provision	31.12.2018 Cost price	31.12.2018 Provision
Raw materials	**1,216**	**(10)**	1,278	(10)
Semi-finished goods	**359**	**(13)**	527	(17)
Finished goods	**3,260**	**(73)**	3,284	(48)
Operating materials and spare parts	**508**	**(23)**	476	(23)
Total inventories	**5,343**	**(119)**	5,564	(98)

This year's change in provision for impairment of inventory, a loss of NOK 20 million (loss of NOK 23 million), is recognised as a part of Raw materials and energy for production.

Note 22 Trade receivables

PRINCIPLE

Trade and bills receivables are initially recognised at transaction price, which in most cases corresponds to their nominal amount. The carrying amount is subsequently measured at amortised cost using the effective interest rate method, less any provision for expected credit losses. Current receivables with no stated interest rate are recognised at their nominal amount.

A bill receivable is a document where the customer formally agrees to pay for delivered goods or services at maturity date and are normally guaranteed by a financial institution. A bill receivable is transferable and can be used to pay trade payables (endorsed) or settled in cash with a finance institution (discounted). The bills receivable-document effectively replaces, for the specified amount, the open debt exchanged for the bill. Bills receivable are used by Elkem's Chinese entities, towards financial institutions, and the duration is normally below six months.

Trade receivable are derecognised when settled or when transferred to a third party and the group has no further risk related to the receivables. Bills receivable are derecognised when they are settled on due date or when the risk and reward are transferred to a third party. Transferral to a third party can be done by discounting a bill receivable before due date or by endorsing the bill receivable, meaning that it's accepted by the supplier as payment for goods or services received.

Provisions for expected credit losses is done by taking all expected cash flows, including cash flows from credit insurance contracts where such contracts are deemed to be an integral part of the transactions, into consideration. The assessment is based on historical experienced losses adjusted for forward-looking estimates on changes in risk / probability that credit losses will occur.

JUDGEMENTS AND ESTIMATES

Judgement is applied when determining the provision for impairment on trade receivables. The judgement is based on experienced losses in the past and expectations about future economic conditions for the different customer groups / business areas.

Details of trade receivables

Amounts in NOK million	31.12.2019	31.12.2018
Trade receivables	**1,624**	2,071
Trade receivables, related parties (note 33)	**46**	44
Allowance for expected credit losses	**(76)**	(78)
Bills receivable	**675**	354
Total trade receivables	**2,269**	2,391

Elkem has entered into a factoring agreement of a total of EUR 85 million, NOK 838 million, whereof EUR 35 million is extended in 2019 compared to 2018. The agreement includes a recourse clause for maximum 5% of the face value of the individual receivables sold under the agreement. 95% of the receivables under the agreement are derecognised and the recourse amount is recognised as a current liability. As at 31 December 2019 NOK 694 million (NOK 497 million) is derecognised and NOK 35 million is recognised as current liability (see note 25 Provisions and other liabilities) under the agreement.

Bills receivable consist of NOK 671 million (NOK 354 million) bank acceptance bills and NOK 3.4 million (NOK 0.3 million) commercial acceptance bills.

A total of NOK 2,795 million (NOK 1,414 million) in unmatured bills receivables are discounted or endorsed. These bills are derecognised as there are no remaining credit risk related to discounted bills, and the credit risk for endorsed bills are assessed to be insignificant.

Analysis of gross trade receivables by age, presented based on the due date

Amounts in NOK million	**31.12.2019**	31.12.2018
Not due	**1,249**	1,664
Overdue by:		
1–30 days	**258**	268
31–60 days	**42**	57
61–90 days	**19**	32
More than 90 days	**101**	94
Total trade receivables [1)]	**1,670**	2,115

1) Bills receivable is not included in the ageing table

Elkem applies for credit insurance for all customers. In cases where credit insurance coverage is refused, other methods such as prepayment, letter of credit, documentary credit and guarantees for securing the payment, are used.

Movements in allowance for expected credit losses

Amounts in NOK million	**31.12.2019**	31.12.2018
Opening balance	**(78)**	(75)
Written off during the year	**(4)**	8
New provisions	**(9)**	(22)
Reversed provisions	**15**	11
Foreign currency exchange differences	**(0)**	(0)
Closing balance	**(76)**	(78)

Analysis of allowance for expected credit losses, presented based on related trade receivable

Amounts in NOK million	**31.12.2019**	31.12.2018
Not due	**(4)**	(3)
Overdue by:		
1–30 days	**(0)**	(3)
31–60 days	**(0)**	(2)
61–90 days	**(0)**	(1)
More than 90 days	**(71)**	(70)
Total allowance for expected credit losses	**(76)**	(78)

Note 23 Other assets

PRINCIPLE

Other shares

Investments in equity instruments with an ownership below 20% are normally classified as other shares and recongised in other non-current assets in the statement of financial position. Other shares consist of equity investments in both listed and unlisted companies.

Shares in listed companies are measured at fair value through profit or loss. Investments in equity instruments that do not have a quoted market price in an active market are classified as financial assets measured at fair value through other comprehensive income (OCI).

Changes in fair values recognised in OCI cannot be subsequently recycled to statement of income. Dividends from such investments are recognised as other items in the statement of income.

Financial assets
A financial asset or a financial liability is recognised in the statement of financial position when the entity becomes party to a contract. Assets to be acquired and liabilities to be incurred as a result of a firm commitment to purchase or sell goods or services are recognised at the time one of the parties has performed under the agreement.

At initial recognition, the financial assets are carried in the statement of financial position at fair value plus any transaction costs directly attributable to the acquisition or issue of the asset. Financial assets are derecognised once the right to future cash flows have expired or been transferred to a third party, and once the group has transferred substantially all the risk and rewards of control of these assets. Any rights or obligations retained in transferred assets are booked separately as assets or liabilities.

Financial assets with a maturity exceeding one year are classified as non-current financial assets. Short-term investments that do not meet the definitions of a cash equivalent, and financial assets with a maturity of less than one year, are classified as current financial assets.

Loans and receivables
Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in a regulated market. After initial recognition, they are recognised at amortised cost using the effective interest method. Gains and losses are recognised in the statement of income when the loans and receivables are derecognised or impaired, as well as through the amortisation process.

If there is objective evidence of impairment, or if there is a risk that the group may not recover the contractual amounts at the contractual maturity dates, an impairment loss is recognised in the statement of income. The provision is equal to the difference between the carrying amount and the estimated future recoverable cash flows.

Current assets
Current receivables are initially recognised at fair value, which in most cases corresponds to their nominal amount. The carrying amount is subsequently measured at amortised cost using the effective interest rate method, less any provision for expected credit losses. Current receivables with no stated interest rate are recognised at their nominal amount.

JUDGEMENTS AND ESTIMATES
Judgement is applied when assessing the value of shares in unlisted companies. For estimates related to valuation of financial assets, see note 26 Financial assets and liabilities.

Details of other assets

	Non-current		Current	
Amounts in NOK million	**31.12.2019**	31.12.2018	**31.12.2019**	31.12.2018
Other shares	**61**	52	**-**	-
Restricted deposits	**42**	97	**-**	-
Other deposits	**16**	11	**-**	-
Pension assets, defined benefits and contribution plans (note 9)	**3**	7	**2**	2
Prepayments for construction of fixed assets	**66**	56	**-**	0
Prepayments for goods and equipment	**-**	-	**71**	98
Prepayments for other expenses	**32**	31	**69**	50
Prepayments to related parties (note 33)	**-**	-	**16**	4
Receivables from related parties, interest-bearing (note 33)	**1**	2	**-**	-
Receivables from related parties, interest free (note 33)	**-**	-	**2**	4
Grants receivable (note 8)	**152**	172	**361**	148
Value added tax	**-**	-	**280**	452
Corporate income tax	**-**	-	**137**	38
Interest receivables	**-**	-	**2**	0
Other receivables	**8**	8	**68**	21
Other assets	**26**	5	**3**	17
Total other assets	**407**	441	**1,013**	836
Provision for impairment other receivables	**-**	-	**(54)**	(66)

Restricted deposits mainly consist of restricted deposits related to the ongoing tax litigation in Elkem's business in Brazil of NOK 19 million (NOK 75 million), see note 25 Provisions and other liabilities, and deposit for pension guarantee, related to unfunded pension liabilities for salaries above 12G, of NOK 22 million (NOK 22 million).

Note 24 Interest-bearing assets and liabilities

PRINCIPLE

Interest-bearing liabilities

The liabilities are initially recognised at fair value of the amount required to settle the associated obligation, net of prepaid costs directly attributable to the liability. Subsequently and insofar, as they are not designated as liabilities at fair value through profit or loss, such liabilities are recognised at amortised cost using the effective interest rate method. The difference between the cost and the amount of repayment being recognised in the statement of income over the term of the interest-bearing liabilities.

Financial assets are derecognised when the rights to receive cash flows from the assets have expired or have been transferred to a third party. Financial liabilities are derecognised when they are extinguished.

Lease liabilities

The principles described below are applied to contracts entered into, or changed, on or after 1 January 2019. For transition to the new IFRS 16 leases see note 35 Changes in accounting policies.

At the commencement date of a lease, Elkem recognise lease liabilities measured at the present value of the lease payments to be made over the lease term. The lease payments include fixed payments (less any lease incentives receivable), variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by Elkem and payments of penalties for terminating the lease, if the lease term reflects exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses in the period in which the event or condition that triggers the payment occurs, see note 18 Right-of-use assets. Elkem uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease cannot be readily determined. The incremental borrowing rate is based on the respective country's risk-free rate for the term corresponding to the lease term, adjusted for own credit risk. Right-of-use assets are presented separately in the statement of financial position, whereas lease liabilities are recognised in interest-bearing liabilities.

Lessees are also required to remeasure the lease liability upon the occurrence of certain events (e.g., a change in the lease term, a change in future lease payments resulting from a change in an index or rate used to determine those payments). The lessee will generally recognise the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset.

See note 18 Right-of-use assets for accounting policies for right-of-use assets.

Bills payable

A bill payable is a document where the buyer formally agrees to pay for purchased goods or services at maturity date and are normally guaranteed by a financial institution. Bills payable are used by Elkem's Chinese entities, and the duration is normally below six months. When the bill payable is guaranteed by a financial institution it is normally required to deposit a certain per centage of the nominal value of the bill payable into a restricted bank account. All bills payable in Elkem are bank acceptance bills.

Cash and cash equivalents

Cash and cash equivalents are held for the purpose of meeting short- term fluctuations in liquidity. Deposits with a term of 3 months or less on acquisition are included. Bank overdrafts are presented within interest-bearing current liabilities in the statement of financial position. Restricted deposits are presented separately in the statement of financial position and excluded from cash and cash equivalents presented in the statement of cash flows.

Details of interest-bearing assets / liabilities

	Non-current		Current	
Amounts in NOK million	**31.12.2019**	31.12.2018	**31.12.2019**	31.12.2018
Interest-bearing liabilities				
Financial leases	**-**	-	**-**	0
Lease liabilities	**323**	-	**85**	-
Loans from external part, other than bank	**3,928**	2,731	**266**	195
Bank financing	**4,089**	4,400	**887**	1,834
Accrued interest	**-**	-	**25**	23
Total interest-bearing liabilities	**8,340**	7,131	**1,262**	2,052
Total bills payable	**-**	-	**887**	1,740
Total interest-bearing liabilities including bills payable	**8,340**	7,131	**2,149**	3,792
Interest-bearing assets				
Cash and cash equivalents	**-**	-	**4,496**	7,082
Restricted deposits bills payable	**-**	-	**267**	569
Other restricted deposits	**42**	97	**4**	8
Receivables from related parties	**1**	2	**-**	-
Loans to external parties	**8**	8	**-**	-
Accrued interest income	**-**	-	**2**	0
Total interest-bearing assets	**51**	106	**4,769**	7,659
Net interest-bearing assets / (liabilities)	**(8,289)**	(7,025)	**2,620**	3,867

Interest-bearing liabilities by currency

Amounts in million	Currency amount	**NOK 31.12.2019**	Currency amount	NOK 31.12.2018
EUR	675	**6,660**	538	5,352
USD	11	**96**	15	132
NOK	1,856	**1,856**	1,708	1,708
CNY	1,429	**1,803**	2,946	3,731
Other currencies	-	**73**	-	1
Total interest-bearing liabilities		**10,489**		10,923

Maturity of interest-bearing liabilities 31 December 2019

Amounts in NOK million	2020	2021	2022	2023	2024	2025 and later	**Total**
Lease liabilities	85	54	40	38	28	162	**407**
Loans from external part, other than bank	266	2,047	1,253	14	368	247	**4,194**
Bank financing	887	54	56	4,001	3	11	**5,012**
Bills payable	887	-	-	-	-	-	**887**
Accrued interest	25	-	-	-	-	-	**25**
Total interest-bearing liabilities excluding pre-paid loan fees	2,149	2,155	1,349	4,053	400	420	**10,526**
Prepaid loan fees							**(37)**
Total interest-bearing liabilities							**10,489**

Maturity of interest-bearing liabilities as at 31 December 2018

Amounts in NOK million	2019	2020	2021	2022	2023	2024 and later	**Total**
Financial leases	0	-	-	-	-	-	**0**
Loans from external part, other than bank	195	11	1,864	527	15	314	**2,926**
Bank financing	1,834	308	53	53	4,033	-	**6,281**
Bills payable	1,740	-	-	-	-	-	**1,740**
Accrued interest	23	-	-	-	-	-	**23**
Total interest-bearing liabilities excluding prepaid loan fees	3,792	319	1,917	580	4,048	314	**10,970**
Prepaid loan fees							**(47)**
Total interest-bearing liabilities							**10,923**

Loan agreements
Elkem signed a new loan facilities agreement 13 February 2018, consisting of a revolving credit facility (RCF) of EUR 250 million, a term loan facility of EUR 400 million, and a bridge financing term loan facility of EUR 500 million. In December 2018 the term loan facility, bridge financing, of EUR 500 million was terminated and replaced with other facilities. At 31 December 2019 only the term loan facility is drawn. The loan facilities are unsecured, but the agreement contains two financial covenants described below.

27 November 2018 Elkem issued a senior unsecured bond loan of NOK 1,750 million. The bond loan is listed on Oslo Børs. There are no covenants related to the bond loan. There are no material differences between fair value of the bond loan and book value.

10 December 2018 Elkem issued a serie of floating and fixed rate loans in the Schuldshein market. Total size of the transaction was EUR 215 million whereof EUR 91.5 million was issued at 31 December 2018 and the remainder EUR 123.5 million in January 2019. The loans are unsecured. Of the total transaction amount EUR 15 million is a fixed rate loan, there are no material differences between fair value of the fixed rate loan and book value.

Net investment hedge
Elkem entered in 2017 into a bank loan amounting to EUR 275 million that is included in the line item bank financing above. In 2018 the bank loan of EUR 275 million was re-financed and increased to EUR 400 million. The spot rate of the initial loan amount, EUR 275 million, has been designated as a hedge of the net investment in the group's subsidiaries with EUR as functional currency. The fair value and carrying amount of the borrowing at 31 December 2019 was NOK 2,712 million (NOK 2,736 million). The foreign exchange gain of NOK 24 million (a loss of NOK 29 million) on translation of the borrowing from EUR to NOK at the end of the reporting period is recognised in other comprehensive income and accumulated in the foreign currency translation reserve, in statement of changes in equity. There was no ineffectiveness to be recorded from net investments hedges.

Cash flow hedge
Elkem has a bank loan amounting to EUR 21 million (EUR 27 million) that is included in the line item bank financing above. The spot rate of the loan amount has been designated as a hedge for currency fluctuations in highly probable future sales. See note 27 Hedging.

Credit facilities
As of 31 December 2019 the group is granted credit facilities of NOK 3,105 million. The credit facilities are undrawn at 31 December 2019. As of 31 December 2018 the group is granted credit facilities of NOK 2,854 million. The credit facilities are undrawn at 31 December 2018.

The main revolving credit facilities are granted to Elkem ASA, but the facilities can be utilised by Elkem ASA and its subsidiaries. The main facilities amount to EUR 250 million (NOK 2,465 million) and NOK 250 million respectively. See note 28 Financial risk, section (c) liquidity risk for more information.

Loan covenant
Elkem has financial covenants related to its main bank financing and parts of loans from external part, other than bank (Schuldshein), in Norway. The interest-bearing loans in China have no connected financial covenants. In addition to the covenants on these loan facilities in Norway there are loan covenants related to the credit facilities in Elkem Metal Canada Inc of CAD 2 million. Elkem and Elkem Metal Canada Inc. are compliant with their covenants at the end of 2019 and 2018.

The covenants for the interest-bearing loan facilities in Norway relate to the financial performance of Elkem and are as specified in the table below.

Covenant Elkem related to drawn loan of NOK 6,275 million (NOK 5,156 million) in Elkem ASA

		31.12.2019	31.12.2018	Loan covenant
Total Equity	*NOK*	**12,952**	13,722	
Total Assets	*NOK*	**29,004**	31,129	
Equity ratio		**45%**	44%	> 30%
EBITDA	*NOK*	**2,656**	5,793	
Net finance charges	*NOK*	**224**	336	
Interest cover ratio		**11.85**	17.22	> 4.00

Movements in interest-bearing liabilities

		Cash flows	Non-cash changes					
Amounts in NOK million	31.12.2018	Receipts/ Payments	IFRS 16 leasing OB	IFRS 16 additions	Reclassi-fication	Business combi-nation	Foreign exchange changes	**31.12.2019**
Lease liabilities	-	-	328	74	(79)	-	0	**323**
Loans from external part, other than bank	2,731	1,190	-	-	-		7	**3,928**
Bank financing	4,400	-	-	-	(313)	23	(21)	**4,089**
Total movements non-current	7,131	1,190	328	74	(393)	23	(14)	**8,340**
Lease liabilities	-	(78)	85	-	79	-	(1)	**85**
Financial leases	0	(0)	-	-	-	-	-	**-**
Loans from external part, other than bank	195	70	-	-	-	-	1	**266**
Bank financing	1,834	(1,253)	-	-	313	1	(8)	**887**
Total movements current	2,029	(1,261)	85	-	393	1	(9)	**1,237**
Total movements	9,160	(71)	412	74	-	24	(22)	**9,577**

Movements in interest-bearing liabilities

		Cash flows	Non-cash changes				
Amounts in NOK million	31.12.2017	Receipts/ Payments	Debt conversion	Reclassi-fication	Business combination	Foreign exchange changes	**31.12.2018**
Loans from related parties	7	(7)	-	-	-	(0)	**-**
Financial leases	0		-	(0)	-	-	**-**
Loans from external part, other than bank	80	2,655	-	(16)	-	13	**2,731**
Bank financing	4,498	1,591	-	(1,700)	-	11	**4,400**
Total movements non-current	4,585	4,239	-	(1,716)	-	23	**7,131**
Financial leases	1	(2)	-	0	-	(0)	**0**
Loans from external part, other than bank	61	109	-	16	-	9	**195**
Bank financing	3,418	(3,290)	-	1,700	-	6	**1,834**
Total movements current	3,480	(3,182)	-	1,716	-	15	**2,029**
Total movements	8,065	1,057	-	-	-	38	**9,160**

Note 25 Provisions and other liabilities

PRINCIPLE

Provisions

A provision is recognised when the group has a present obligation (legal and constructive) and it is probable that an outflow of resources is required to settle the obligation. The amount recognised is the best estimate of the consideration required to settle the obligation, taking into account the risks and uncertainties surrounding the obligation, known at the end of the reporting period. Provisions are measured at present value, unless the time value is assessed to be immaterial.

Contract obligations

Contract obligations are liabilities assumed in business combinations, liabilities related to cancellation of contracts and contracts that include guarantees for losses.

Other liabilities

The liabilities are initially recognised at fair value of the amount required to settle the associated obligation, net of prepaid costs directly attributable to the liability.

Contingent liabilities

Contingent liabilities are liabilities which are not recognised because they are possible obligations that have not yet been confirmed, or they are present obligations where an outflow of resources is not probable. Any significant contingent liabilities are disclosed in the notes.

Contingent assets

Contingent assets are not recognised but disclosed in the notes if probable.

JUDGEMENTS AND ESTIMATES

Elkem has several types of provisions due to its operations. Such liabilities are normally uncertain in timing and amount, and recognised amounts are estimates based on available information at the end of the reporting period. The estimated liability is based on expected cashflows necessary to settle the obligation, adjusted for any related risk and discounted by using the pre-tax interest applicable for the specific entity. The estimates are updated when new or updated information is available. The actual outcome will differ from the estimate.

Details of provision and other liabilities

	Non-current		Current	
Amounts in NOK million	**31.12.2019**	31.12.2018	**31.12.2019**	31.12.2018
Employee withholding taxes and other public taxes	**-**	-	**87**	108
Value added tax	**-**	-	**74**	265
Prepayments	**-**	-	**249**	160
Prepayments from related parties (note 33)	**-**	-	**4**	16
Liabilities to related parties (note 33)	**-**	-	**81**	328
Provisions	**141**	164	**76**	77
Contract obligations power	**2**	62	**68**	64
Contract obligations equity accounted investment (note 5)	**-**	-	**17**	-
Accrued expenses	**-**	-	**154**	194
Grants, deferred income (note 8)	**-**	-	**5**	8
Grants payable (note 8)	**15**	-	**-**	-
Recourse liability factoring agreement (note 22)	**-**	-	**35**	-
Other liabilities	**-**	6	**22**	1
Total provisions and other liabilities	**158**	232	**871**	1,221

The contract obligation power relates mainly to a fair value adjustment of a power contract due to the purchase of Fesil Rana. The adjustment is calculated based on the differences between contract price and market price at date of purchase, 1 December 2016.

Movements in provision 2019

Amounts in NOK million	Site restoration	Environmental measures	Litigations	Customers	Other provisions	Total provisions
Opening balance	28	88	101	15	10	241
Additional provisions recognised	1	10	31	9	8	60
Used during the year	-	(1)	(62)	(9)	(6)	(78)
Reversal of provisions recognised	-	(1)	(0)	(5)	-	(6)
Foreign currency exchange differences	(0)	2	(1)	(0)	0	0
Closing balance	29	97	69	11	12	217
Hereof non-current	29	53	51	-	8	141
Hereof current	-	44	18	10	4	76
Closing balance	29	97	69	10	12	217

Movements in provision 2018

Amounts in NOK million	Site restoration	Environmental measures	Litigations	Customers	Other provisions	Total provisions
Opening balance	26	63	106	14	2	211
Additional provisions recognised	2	25	12	2	10	50
Used during the year	0	0	(8)	(1)	(0)	(9)
Reversal of provisions recognised	-	-	(0)	-	(2)	(2)
Foreign currency exchange differences	0	(1)	(10)	0	0	(10)
Closing balance	28	88	101	15	10	241
Hereof non-current	28	47	86	3	-	164
Hereof current	-	41	15	12	10	77
Closing balance	28	88	101	15	10	241

Site restoration

The site restoration provisions are related to the necessary site remediation work that Elkem will have to undertake in respect of its quartz mines.

Environmental measures

Elkem has worldwide operations representing potential exposure towards environmental consequences. Elkem has established clear procedures to minimise environmental emissions, well within public emission limits. The provisions relate to clean up costs for a closed down production site and landfills, mainly in Canada and Norway, and also estimated cost for clean-up cost of polluted soil and fjord in relation to production sites in Norway and France.

Litigations

The provisions due to litigations are mainly related to tax cases in the Carbon division in Brazil.

Tax cases in Brazil can take a substantial amount of time before resolution by the tax authorities, hence the time of settlement is uncertain. Provisions are made for each case based on the estimated amount expected to be paid, including interest and penalties. In accordance with Brazilian regulations, agreed amounts have been transferred to restricted bank accounts and are adjusted for interest. The restricted cash is recognised in other non-current assets, see note 23 Other assets.

Customers

The provisions are related to customer complaints, mainly in the Silicones division.

Contingent liabilities

Due to its operations Elkem could be included in criminal or civil proceedings related to, among others, product liability, environment, health and safety, anti-competitive, anti-corruption, trade sanctions or other similar laws or regulations or other forms of commercial disputes which could have a material adverse effect on Elkem. See section litigation above for ongoing cases.

Note 26 Financial assets and liabilities

PRINCIPLE

Financial assets

A financial asset or a financial liability is recognised in the statement of financial position when the entity becomes party to a contract. Assets to be acquired and liabilities to be incurred as a result of a firm commitment to purchase or sell goods or services are recognised at the time one of the parties has performed under the agreement.

At initial recognition, the financial assets are carried in the statement of financial position at fair value plus any transaction costs directly attributable to the acquisition or issue of the asset. Financial assets are derecognised when the right to future cash flows have expired or been transferred to a third party, once the group has transferred substantially all the risk and rewards of control of these assets. Any rights or obligations retained in any transferred assets are booked separately as assets or liabilities.

Financial assets with a maturity exceeding one year are classified as non-current financial assets. Short-term investments that do not meet the definitions of a cash equivalent, and financial assets with a maturity of less than one year, are classified as current financial assets.

Financial liabilities

Non-derivative financial liabilities include interest-bearing liabilities, bills payable and trade payables. The liabilities are initially recognised at fair value of the amount required to settle the associated obligation, net of prepaid costs directly attributable to the liability. Subsequently and insofar, as they are not designated as liabilities at fair value through profit or loss, such liabilities are recognised at amortised cost using the effective interest rate method. The difference between the cost and the amount of repayment being recognised in the statement of income over the term of the interest-bearing liabilities.

Financial liabilities are derecognised when they are extinguished.

Derivatives

Derivative financial assets and liabilities include financial instruments or contracts where the value changes in response to the change of a specified rate, price or index and commodity contracts within the scope of IFRS 9.

Derivatives are initially recognised at fair value at the date when the derivative contracts are entered into. Transaction costs that are directly attributable to the acquisition of financial assets or liabilities at fair value through profit or loss, are recognised immediately in the statement of income. Subsequently the derivatives are remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognised in the statement of income immediately, unless the derivative is designated and is effective as a hedging instrument, in which case the change in fair value is recognised in statement of income in the same period(s) as the hedged objects affects the profit or loss.

Derivatives are presented as current assets or liabilities, unless they are expected to be realised more than 12 months after the reporting period. In that case, they are classified as non-current assets or liabilities.

Embedded derivatives

An embedded derivative is a component of a hybrid instrument that also includes a non-derivative host contract with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. Derivatives embedded in financial liability of a non-financial host are separated from the host and accounted for as separate derivatives; if the economic characteristics and risks are not closely related to the host, a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative and the hybrid contract is not measured a fair value through profit and loss. Elkem has long-term power contracts settled in other currencies than the entity's functional currency. The currency portion of these contracts is an embedded derivative and is recognised and presented as an independent derivative, see section Derivatives above.

Commodity contract within the scope of IFRS 9

Non-financial commodity contracts where the relevant commodity is readily convertible to cash and where the contracts are not for own use, fall within the scope of IFRS 9 Financial instruments - recognition and measurement. The group currently has energy contracts in Norway that do not meet the own use criteria according to IFRS 9, since the power under the contracts is delivered in another grid area to where the plants are located. Transfer between different grid areas is assessed to be net settlement according to IFRS and considered to be two different transactions. Such contracts are therefore measured at fair value through profit or loss and classified as derivatives, unless they are designated as hedging instruments.

JUDGEMENTS AND ESTIMATES

Estimates are used mainly for financial assets and liabilities where there are no listed prices or direct observable prices. Calculation of fair value is in such cases based on observable prices for similar contracts, as far as possible. For contracts with a duration beyond the period of observable prices, the assumptions are derived based on the latest observable data.

See assumptions used at the balance sheet date in chapter (a) Fair value measurement below, and sensitivity of the main power contracts in note 28 Financial risk.

Assets by category 31 December 2019

Amounts in NOK million	*Note*	Assets at fair value through profit or loss	Assets at fair value - hedging instruments	Assets at fair value through other comprehensive income	Loans and receivables at amortised cost	Non-financial assets	**Total**
Derivatives, non-current		-	66	-	-	-	**66**
Other assets, non-current	*23*	4	-	58	67	279	**407**
Trade receivables	*22*	-	-	-	2,269	-	**2,269**
Derivatives, current		92	(54)	-	-	-	**38**
Other assets, current	*23*	-	-	-	70	942	**1,013**
Restricted deposits	*24*	-	-	-	271	-	**271**
Cash and cash equivalents	*24*	-	-	-	4,496	-	**4,496**
Total		96	11	58	7,174	1,222	

Liabilities by category 31 December 2019

Amounts in NOK million	*Note*	Liabilities at fair value through profit or loss	Liabilities at fair value - hedging instruments	Liabilities at amortised cost	Non-financial liabilities	**Total**
Interest-bearing liabilities, non-current [1)]	*24*	-	13	8,327	-	**8,340**
Derivatives, non-current		142	69	-	-	**210**
Provisions and other liabilities, non-current	*25*	-	-	2	156	**158**
Trade payables		-	-	2,767	-	**2,767**
Interest-bearing liabilities, current [1)]	*24*	-	5	1,257	-	**1,262**
Bills payable	*24*	-	-	887	-	**887**
Derivatives, current [2)]		19	18	-	-	**37**
Provisions and other liabilities, current	*25*	-	-	338	533	**871**
Total		161	105	13,579	689	

Assets by category 31 December 2018

Amounts in NOK million	*Note*	Assets at fair value through profit or loss	Assets at fair value - hedging instruments	Assets at fair value through other comprehensive income	Loans and receivables at amortised cost	Non-financial assets	**Total**
Derivatives, non-current		71	60	-	-	-	**131**
Other assets, non-current	*23*	2	-	50	118	271	**441**
Trade receivables	*22*	-	-	-	2,391	-	**2,391**
Derivatives, current		74	229	-	-	-	**303**
Other assets, current	*23*	-	-	-	26	811	**836**
Restricted deposits	*24*	-	-	-	577	-	**577**
Cash and cash equivalents	*24*	-	-	-	7,082	-	**7,082**
Total		147	289	50	10,193	1,082	

Liabilities by category 31 December 2018

Amounts in NOK million	*Note*	Liabilities at fair value through profit or loss	Liabilities at fair value - hedging instruments	Liabilities at amortised cost	Non-financial liabilities	**Total**
Interest-bearing liabilities, non-current [1]	*24*	-	20	7,111	-	**7,131**
Derivatives, non-current		369	81	-	-	**450**
Provisions and other liabilities, non-current	*25*	-	-	62	170	**232**
Trade payables		-	-	2,731	-	**2,731**
Interest-bearing liabilities, current [1]	*24*	-	5	2,048	-	**2,052**
Bills payable	*24*	-	-	1,740	-	**1,740**
Derivatives, current [2]		18	60	-	-	**79**
Provisions and other liabilities, current	*25*	-	-	586	635	**1,221**
Total		387	166	14,278	805	

1) In addition to the hedging instruments specified below, currency effect of EUR loan is designated as a hedging instrument in a cash flow hedge of highly probable future sales. See note 24 Interest-bearing assets and liabilities.
2) The group applies hedge accounting for certain contracts and certain parts of power contracts. The negative value reported as liabilities at fair value through profit and loss is representing the value of parts of power contracts where hedge accounting is not applied.

There are no material differences between fair value and the carrying amount for financial liabilities and financial assets at amortised cost.

(a) Fair value measurement
Fair value of financial assets and financial liabilities are measured using different levels of input.

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.
- Level 2 inputs are inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3 inputs are unobservable inputs for the asset or liability.

Assets and liabilities measured at fair value 31.12

Amounts in NOK million	Level 1	Level 2	Level 3	**Total 2019**	Level 1	Level 2	Level 3	Total 2018
Financial assets at fair value through profit or loss	4	20	72	**96**	2	(1)	145	147
Derivatives designated in a hedging relationship	-	38	(27)	**11**	-	34	255	289
Assets at fair value through other comprehensive income	-	-	58	**58**	-	-	50	50
Total assets	4	58	103	**165**	2	33	450	486
Financial liabilities at fair value through profit or loss	-	120	41	**161**	-	84	303	387
Derivatives designated in a hedging relationship	-	133	(28)	**105**	-	241	(75)	166
Total liabilities	-	253	12	**265**	-	325	228	553

Level 1:
Financial assets measured at level 1 apply to external quoted shares, which are measured based on the quoted prices.
Dividends from the external shares are classified as other items.

Level 2:
Financial assets and liabilities measured at level 2 applies to forward currency contracts, commodity contracts and embedded currency derivatives.

The contracts are measured at fair value by estimating the future cash flows.

Level 3:
The financial assets and liabilities at fair value through profit or loss measured at level 3, consist of power contracts and equity investments in unlisted companies. The power contracts are assessed to be settled net in cash and are therefore within the scope of IFRS 9 and recognised as financial instruments.

When valuing the power contracts observable data is used, such as power price, currency rates, CPI and CfD, when available. The power prices for long-term electricity contracts in Norway are not directly observable in the market for the whole contract length. Power prices are observable until 2029, CfD prices are only observable for a short time period and currency rates are observable until 2024. Valuation of the contracts for the remaining periods are based on the latest observable data adjusted for CPI, if relevant.

Overview of contracts and the assumptions used for assessment of fair value for the level 3 contracts.

Contracts with Statkraft

Power contracts with Statkraft consist of one contract bought from Norske Skog in 2010 and swap contracts. The usage of power from the contract bought from Norske Skog is restricted to industrial purposes. Elkem pays fixed power prices to Statkraft, specified for each contract/year.

As of 1 January 2013, the Statkraft contract bought from Norske Skog has been designated as a hedging instrument in a cash flow hedge of highly probable future purchases, hence changes in fair value for the power contract are from the same date booked against OCI. Changes in fair value up to 31 December 2012 were booked in the statement of income, classified as other items. Reversal of unrealised effects from the contract will be offset by realised effects, only the interest element will affect the statement of income. Swap contracts with Statkraft are booked according to hedge accounting principles from 1 January 2016.

Power contract "30-øringen"

30-øringen power contract lasts until 31 December 2030 and the power from the contract is restricted to be used at Elkem ASA plants. For the years 2019 - 2020 the price under the contract is fixed except if the spot price at the relevant grid points exceeds a certain threshold, in which case the price equals the spot price. For the last 10 years of the contract the price is fixed based on the average spot price the preceding four years, adjusted for inflation. The fixed price and the threshold price are based on a start date and thereafter adjusted with inflation annually. Changes in fair value for the "30-øringen" contract are classified as other items.

Power contract with Salten Energigjenvinning AS

Elkem ASA has agreed to purchase all power produced from Salten Energigjenvinning AS at a fixed price per year, for 15 years from start-up date, estimated to fourth quarter of 2020. Elkem owns 50% of Salten Energigjenvinning AS, hence the information below relates to the 50% of the contract that is against the external part. The contract has been designated as a hedging instrument in a cash flow hedge of highly probable future need for power. Changes in fair value of the power contract are from the same date booked against OCI.

Assumptions for valuation of the contracts

- Discount rate: 3.6% (3.6%) p.a. for contract with Salten Energigjenvinning AS and for the 30-øringen contract, and 1.68% (1.68%) for contracts with Statkraft. The assumptions are based on the estimated risk of the contract, including credit risk.
- Inflation: 2.0% (2.0%) p.a.
- Power prices: Market prices per 31 December 2019 until 2029, thereafter prices are based on 2029, adjusted with inflation rate.
- CfDs: Four year average historic CfD prices based on Nord Pool Spot prices.
- Exchange rate EUR: Observable rates for the next 5 years, thereafter calculated rates based on long-term interest rates.
- Volume for the contract with Salten Energigjenvinning AS: estimated production volume based on concept study and similar production facilities.

For the external shares measured at level 3, historical cost minus any write down for identified impairment is used as an approximation of fair value.

Movements in fair value measurement level 3

Amounts in NOK million	**2019**	2018
Opening balance	**222**	(162)
Transfer to / from other levels	**-**	7
Change in fair value recognised in OCI, cash flow hedges	**(219)**	892
Settlement / realised effects	**(159)**	(222)
Other changes in fair value through profit or loss, unrealised	**247**	(293)
Translation effects	**(1)**	0
Closing balance	**90**	222

(b) Details of financial instruments

Details of currency exchange contracts 31 December 2019

Purchase currency	Purchase ccy million	Sale currency	Sale ccy million	Type of instrument	Currency deal rate	Due	Fair value NOK	Notional amount [1) NOK
NOK	54	CAD	8	Fwd	6.6117	2020	1	55
CAD	3	EUR	2	Fwd	1.5070	2020	0	20
NOK	1,470	EUR	146	Fwd	10.0930	2020	18	1,436
NOK	184	GBP	16	Fwd	11.4199	2020	(4)	187
NOK	108	JPY	1,268	Fwd	0.0850	2020	4	103
NOK	480	JPY	5,325	Fwd	0.0901	2021-2024	21	431
NOK	371	USD	42	Fwd	8.7937	2020	1	371
USD	610	JPY	66,045	Fwd	0.0092	2020	0	5
NOK	350	EUR	35	Embedded [2)	9.9167	2020	(12)	348
NOK	4,628	EUR	433	Embedded [2)	10.6877	2021-2034	(205)	4,270
Total fair value [3)							(176)	

Details of currency exchange contracts 31 December 2018

Purchase currency	Purchase ccy million	Sale currency	Sale ccy million	Type of instrument	Currency deal rate	Due	Fair value NOK	Notional amount [1) NOK
NOK	5	AUD	1	Fwd	5.8323	2019	(0)	6
CAD	34	EUR	22	Fwd	1.5622	2019	(2)	218
NOK	1,207	EUR	124	Fwd	9.7619	2019	(32)	1,230
NOK	85	GBP	8	Fwd	10.8535	2019	(2)	88
NOK	317	USD	40	Fwd	8.0094	2019	(24)	344
NOK	128	JPY	1,546	Fwd	0.0826	2019	5	122
NOK	108	JPY	1,268	Fwd	0.0850	2020	5	100
USD	1	JPY	166	Fwd	0.0089	2019	(0)	13
NOK	271	EUR	29	Embedded [2)	9.4877	2019	(17)	271
NOK	4,732	EUR	454	Embedded [2)	10.4253	2020-2034	(212)	4,529
Total fair value [3)							(281)	

1) Notional value of the contracts, based on currency rates 31 December.
2) Embedded EUR derivatives in own use power contracts.
3) The spot element of forward currency contracts with duration more than 3 months are designated as hedging instruments is a cash flow hedge of highly probable future sales, hence this part is classified as 'Derivatives used for hedging' in the table 'Assets and liabilities classified by category above. The interest element of these contracts and contracts of duration < 3 months are classified as 'Assets/liabilities at fair value through profit and loss'.

Details of power contracts and other commodity contracts within the scope of IFRS 9 31 December 2019

Amounts in NOK million	Volume GWh / Oz	Due	Fair value	Notional amount [1)]
Forward power contracts financial institutions	63	2020	(4)	26
Forward power contracts financial institutions	44	2021	(0)	14
Forward power contracts financial institutions	44	2022	0	14
Forward power contracts financial institutions, sale	(26)	2020	2	(11)
Power contract "30-øringen"	502	2020	(2)	153
Power contract "30-øringen"	5,013	2021-2030	(2)	1,823
Power contract Statkraft (bought from Norske Skog)	1,502	2020	0	469
Power contracts Statkraft, swap	202	2020	(5)	66
Power contracts Statkraft, swap	201	2021	(3)	65
Power contract with Salten Energigjenvinning AS (note 33)	1,856	2021-2035	45	563
Commodity contracts Platinum	5,852	2020	1	14
Total fair value contracts within scope of IFRS 9[2)]			32	

Details of power contracts and other commodity contracts within the scope of IFRS 9 31 December 2018

Amounts in NOK million	Volume GWh / Oz	Due	Fair value	Notional amount [1)]
Forward power contracts financial institutions	210	2019	15	95
Power contract "30-øringen"	501	2019	11	149
Power contract "30-øringen"	5,515	2020-2030	(245)	2,149
Power contract Statkraft (bought from Norske Skog)	1,498	2019	246	457
Power contract Statkraft (bought from Norske Skog)	1,502	2020	108	469
Power contracts Statkraft, swap	201	2019	27	66
Power contracts Statkraft, swap	403	2020-2021	9	132
Power contract with Salten Energigjenvinning AS (note 33)	1,856	2021-2035	16	541
Commodity contracts Platinum	6,192	2019	(1)	21
Fair value contracts within scope of IFRS 9[2)]			(186)	

*1) Notional value of underlying asset at the end of reporting period, calculated as volume * price * currency rate as 31 December (if other currencies than NOK).*
2) Certain power contracts and part of power contract Statkraft are designated as hedging instruments, the remaining contracts/parts of contracts are classified as 'Assets/liabilities at fair value through profit and loss'.

(c) Offsetting

Amounts in NOK million	Gross amount of financial assets	Gross amount of financial liabilities set off in the statement of financial position	Net amounts of financial assets recognised / presented	Financial instruments not set off in the statement of financial position	Cash collateral pledged	Net amount
Financial assets 31 December 2019						
Power contracts including embedded derivatives	45	2	43	-	-	43
Forward currency contracts	57	-	57	(0)	-	57
Total	102	2	100	(0)	-	100

Amounts in NOK million	Gross amount of recognised financial liabilities	Gross amount of recognised financial assets set off in the statement of financial position	Net amounts of financial liabilities presented	Financial instruments not set off in the statement of financial position	Cash collateral pledged	Net amount
Financial liabilities 31 December 2019						
Power contracts including embedded derivatives	232	2	234	-	-	234
Forward currency contracts	16	-	16	(0)	-	15
Total	248	2	249	(0)	-	249

Amounts in NOK million	Gross amount of financial assets	Gross amount of financial liabilities set off in the statement of financial position	Net amounts of financial assets recognised / presented	Financial instruments not set off in the statement of financial position	Cash collateral pledged	Net amount
Financial assets 31 December 2018						
Power contracts including embedded derivatives	36	(17)	19	-	-	19
Forward currency contracts	18	-	18	(1)	-	18
Total	54	(17)	37	(1)	-	36

Amounts in NOK million	Gross amount of recognised financial liabilities	Gross amount of recognised financial assets set off in the statement of financial position	Net amounts of financial liabilities presented	Financial instruments not set off in the statement of financial position	Cash collateral pledged	Net amount
Financial liabilities 31 December 2018						
Power contracts including embedded derivatives	229	(17)	211	-	-	211
Forward currency contracts	71	-	71	(1)	-	70
Total	299	(17)	282	(1)	-	281

Note 27 Hedging

PRINCIPLE

Hedge accounting

The group applies hedge accounting requirements in IAS39, based on an option in IFRS 9. According to the group's policy derivatives can be designated as hedging instruments for fair value hedges and cash flow hedges. At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions.

i) Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as hedging instruments in fair value hedges, are recognised in the statement of income immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

ii) Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges, are recognised in other comprehensive income and accumulated under the heading of cash flow hedging reserve. The gain or loss relating to the ineffective portion is recognised immediately in the statement of income. Realised effects are recognised through statement of income, in the same line item as the hedged objects.

iii) Net investment hedges

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income and included in foreign currency translation reserve in equity. The gain or loss relating to the ineffective portion is recognised immediately in the statement of income within other items. Gains and losses accumulated in equity are reclassified to the statement of income when the foreign operation is partially disposed of or sold.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in comprehensive income at that time remains in equity and is recognised in the statement of income when the forecast transaction is ultimately recognised in the statement of income. When a forecast transaction is no longer expected to occur, the cumulative gain or loss reported in equity is immediately transferred to the statement of income.

ELKEM'S HEDGING POLICY

The group's policy is to hedge currency exposure up to 90% of highly probable net cash flows short-term (0-3 months), and between 25% to 45% of highly probable cash flows in 4 - 12 months, depending on Elkem's overall risk assessment. The spot element of forward currency contracts is designated as hedging instruments and Elkem's highly probable future revenue in corresponding currencies is designated as the hedging objects in this hedging relationship, defined as a cash flow hedge. Also embedded EUR derivatives in power contracts and an EUR loan are designed as hedging instruments to hedge currency fluctuations of highly probable future sales.

Normally all plants have covered their future need for power by entering into power contracts, classified as own use contracts according to IFRS 9, hence such contracts are off-balance. For plants located in Norway, Elkem's policy is that minimum 80% of the expected power consumption shall be covered by fixed price contracts for current and next year. For the following periods, the ratio extends until 4 years ahead, declining with 10%-point per year ending at 50%. Elkem currently fulfils this minimum hedge policy, and also has a substantial amount of contracts at fixed price for the later years.

Based on this policy certain power commodity contracts, defined as financial instruments, are designated as hedging instruments in a cash flow hedge of price fluctuations for highly probable future purchases. Hence, the effective part of changes in fair value is booked against OCI, and recycled to profit or loss as an adjustment of the power cost (included in raw materials and energy for production) when realised.

Cash flow hedging instruments, by type

Amounts in NOK million	2019 Assets fair value	2019 Liabilities fair value	2018 Assets fair value	2018 Liabilities fair value
Forward currency contracts	**38**	**16**	18	83
Power contracts financial institutions	**-**	**4**	15	-
Power contract Statkraft	**0**	**72**	220	-
Power contracts Statkraft swap	**28**	**-**	19	(75)
Power contract Salten Energigjenvining AS	**45**	**-**	16	-
Power contracts embedded derivatives	**-**	**95**	-	133
Currency effect loan EUR (note 24)	**-**	**18**	-	25
Total hedging instruments	**111**	**205**	289	166
Less non-current portion:				
Forward currency contracts	**21**	**-**	4	2
Power contracts financial institutions	**-**	**-**	37	-
Power contract Statkraft	**-**	**-**	45	-
Power contracts Statkraft swap	**14**	**-**	-	-
Power contract Salten Energigjenvining AS	**45**	**-**	16	-
Power contracts embedded derivatives	**-**	**83**	-	124
Currency effect loan EUR (note 24)	**-**	**13**	-	20
Current portion of hedging instruments	**32**	**109**	187	20

As of 31 December 2019, financial power contracts designated in a hedging relationship comprise 51% of expected consumption in 2020, 28% in 2021 and about 20% in the period 2022 - 2030.

Elkem has hedged approximately 20% of the expected revenues in EUR and approximately 7% of expected revenues in USD for 2020. For the years 2020-2034 EUR is hedged at 31 December 2019, at a range of 3 – 6%.

Financial instruments 31 December 2019

			Effects to be recycled from OCI			
Amounts in NOK million	Net fair value	Hereof recognised in OCI	Within 1 year	Within 2 years	Within 3 years	Within 4 years or more
Forward currency contracts	41	22	2	5	5	9
Embedded EUR derivatives	(217)	(95)	(13)	(12)	(12)	(58)
Power contracts	31	(3)	(62)	25	8	27
Commodity contracts Platinum	1	-	-	-	-	-
Total [1)]	(144)	(76)	(72)	19	1	(23)
EUR loan designed as cash flow hedging instrument	(211)	(18)	(4)	(4)	(4)	(4)
Total		(94)	(77)	14	(4)	(27)

1) Hedge accounting is applied for certain contracts and for parts of contracts.

Of total changes in fair value of power contracts designated as hedging instruments negative NOK 13 million (NOK 19 million) is booked through profit or loss, classified under Other items (note 14), due to ineffectiveness in the hedging relationship.

Realised effects hedge accounting, recycled from OCI

Amounts in NOK million	**31.12.2019**	31.12.2018
Realised effects from forward currency contracts, recognised in revenue	**(50)**	(34)
Realised effects from embedded derivatives EUR, recognised in revenue	**(11)**	(3)
Realised effects from EUR loans, recognised in revenue	**(5)**	(3)
Realised effects from power contracts, recognised in raw materials and energy for production	**87**	216
Total realised effects hedge accounting	**21**	176

In addition,the group applies hedge accounting principles related to currency risk from a net investment in foreign operation, see note 24 Interest-bearing assets and liabilities.

Movements in OCI related to hedging instruments 2019

Amounts in NOK million	Opening balance	Net change in fair value	Reclassified to P&L	Closing balance
Hedging of future sales, forward currency contracts	(65)	37	50	22
Hedging of future need for power, contracts with financial institutions	15	(19)	(1)	(4)
Hedging of future need for power, contract with Statkraft [1)]	207	(220)	(59)	(72)
Hedging of future need for power, contracts with Statkraft (swap) [2)]	93	(38)	(27)	28
Hedging of future need for power, contract with Salten Energigjenvinning	16	29	-	45
Hedging of future sales, embedded EUR derivatives in own use power contracts [2)]	(133)	26	11	(95)
Hedging of future sales, currency effects EUR loan	(25)	2	5	(18)
Total (before tax)	110	(182)	(21)	(94)

1) Hedge accounting from 2013.
2) Hedge accounting from 2016.

Movements in OCI related to hedging instruments 2018

Amounts in NOK million	Opening balance	Net change in fair value	Reclassified to P&L	Closing balance
Hedging of future sales, forward currency contracts	(74)	(25)	34	(65)
Hedging of future need for power, contracts with financial institutions	6	64	(54)	15
Hedging of future need for power, contract with Statkraft [1)]	(429)	757	(120)	207
Hedging of future need for power, contracts with Statkraft (swap) [2)]	18	117	(42)	93
Hedging of future need for power, contract with Salten Energigjenvinning	-	16	-	16
Hedging of future sales, embedded EUR derivatives in own use power contracts [2)]	(82)	(54)	3	(133)
Hedging of future sales, currency effects EUR loan	(26)	(2)	3	(25)
Total (before tax)	(588)	873	(176)	110

1) Hedge accounting from 2013.
2) Hedge accounting from 2016.

Note 28 Financial risk

Elkem operates in an international and cyclical industry which expose the business to a variety of financial risks. The financial risk is related to (a) market risk consisting of risk factors related to currency, price and interest rates, (b) counterparty credit risk related to the financial ability of customers and lastly (c) liquidity risk related to the risk that Elkem will encounter difficulty in meeting financial obligations. The financial risks affect the group's income and / or the value of financial instruments held. The risks related to Elkem's operations are monitored and handled centrally at group level. Elkem has financial risk policies in place, approved by its board of directors.

(a) Market risk

(i) Currency risk

Transaction risk - cash flow hedge
Elkem has revenue and operating costs in various currencies. The prices of finished goods are to a large extent determined in international markets, primarily in US Dollar, Chinese Yuan and Euro. This is partly offset by purchase of raw materials denominated in the same currencies. Elkem has net positive cash flows in most currencies, mainly Euro, US Dollar and Chinese Yuan, but has a net cost position in certain other currencies, mainly Norwegian krone, but also in Canadian dollars, Brazilian real and Icelandic krona.

Elkem presents its accounts in Norwegian krone, but it has underlying assets and liabilities in various currencies. These effects are monitored and managed centrally. Elkem's policy is to hedge foreign exchange risk against functional currency to even out fluctuations in result and cash flow. The target is to hedge expected net cash flow for 0–3 months on a 90% hedging ratio. Expected net cash flow for 4–12 months should be hedged on a rolling basis targeting a 45% hedging ratio. The hedging ratio for 4–12 months may vary based on internal approval. Elkem has hedged JPY until 2024, related to a long-term customer contract. Elkem uses hedge accounting for all cash flow hedges over 3 months. Embedded EUR derivatives in power contracts are included in the foreign exchange hedging program. To ensure an effective hedge, according to the hedge accounting principles, the spot element of the forward currency contracts is designated as hedging instruments and highly probable future revenue as hedging object in a hedging relationship, covering the exposure beyond 3 months.

In 2019, Elkem realised a loss of NOK 66 million from hedging programme (loss of NOK 40 million).

Currency effects included in financial statement, excluding effects from cash-flow hedging

Amounts in NOK million	**2019**	2018
Net foreign exchange gains (losses) - forward currency contracts - recognised in other items	**23**	29
Operating foreign exchange gains (losses) - recognised in other items	**(45)**	32
Net foreign currency exchange gain/loss on financing activities - recognised in foreign exchange gains (losses)	**16**	19
Currency translation differences - recognised in other comprehensive income	**33**	112
Hedging of net investment in foreign operations - recognised in other comprehensive income	**24**	(29)

Currency exposure
The amounts in the tables below are based on exchange-rates against NOK per 31 December.

Exchange rates against NOK per 31 December

Currency	**Exchange rate 2019**	Exchange rate 2018
USD	**8.7804**	8.6851
EUR	**9.8613**	9.9488
CNY	**1.2613**	1.2662
CAD	**6.7552**	6.3711

Currency exposure affecting statement of income
The tables show carrying amount of assets and liabilities denominated in foreign currencies different from the entities functional currency, where changes in currency rates will affect profit and loss. The tables include notional amount of currency exchange contracts (note 26). Amounts are presented in NOK based on currency rates as at 31 December.

31 December 2019

Amounts in NOK million	USD	EUR	CNY	CAD	NOK	Other	**Total**
Other non-current assets	-	-	-	-	-	-	**-**
Trade receivables	316	2	-	-	-	53	**370**
Other assets	-	-	-	-	-	-	**-**
Restricted deposits	-	-	-	-	-	-	**-**
Cash and cash equivalents	263	1,968	0	51	3	176	**2,461**
Total monetary assets	579	1,969	0	51	3	229	**2,831**
Interest-bearing liabilities	-	3,948	-	-	-	-	**3,948**
Other liabilities	-	-	-	-	-	-	**-**
Trade payables	459	319	1	-	0	60	**839**
Bills payable	-	-	-	-	-	-	**-**
Total monetary liabilities	459	4,268	1	-	0	60	**4,787**
Derivatives, notional value	371	6,054	-	55	-	720	**7,199**
Net currency exposure financial position	(250)	(8,352)	(1)	(4)	3	(551)	**(9,155)**

31 December 2018

Amounts in NOK million	USD	EUR	CNY	CAD	NOK	Other	**Total**
Other non-current assets	-	-	-	-	-	-	**-**
Trade receivables	333	18	-	-	-	75	**427**
Other assets	-	-	-	-	-	-	**-**
Restricted deposits	-	-	-	-	-	-	**-**
Cash and cash equivalents	587	1,589	0	49	-	147	**2,372**
Total monetary assets	920	1,607	0	49	-	223	**2,798**
Interest-bearing liabilities	-	2,616	-	-	-	-	**2,616**
Other liabilities	-	-	-	-	-	-	**-**
Trade payables	316	219	-	2	0	66	**604**
Bills payable	-	-	-	-	-	-	**-**
Total monetary liabilities	316	2,835	-	2	0	66	**3,220**
Derivatives, notional value	344	6,030	-	-	-	315	**6,689**
Net currency exposure financial position	260	(7,258)	0	46	(0)	(159)	**(7,111)**

Sensitivity on profit and loss from financial assets and liabilities
The sensitivity related to financial instruments on Elkem's profit or loss, is based on a strengthening / weakening of all currencies by 10% against the Norwegian krone, which is the presentation currency for Elkem. If the Norwegian krone is strengthened by 10% against all other currencies, the isolated effect on financial assets and liabilities would have been an effect on profit before tax of approximately NOK 915 million (NOK 711 million), whereof NOK 470 million (NOK 463 million) will be booked against OCI. Effects booked against OCI are recycled through profit before tax, offsetting an opposite effect from the hedged objects, when the hedged items are realised.

Currency exposure affecting currency translation differences / equity
The table shows Elkem's total assets and liabilities denominated in the group's main currencies translated to NOK at the currency rates at 31 December and gives an overview of the group's currency exposure that will affect currency translation differences in the consolidated statement of comprehensive income.

31 December 2019

Amounts in NOK million	USD	EUR	CNY	CAD	NOK	Other	**Total**
Other non-current assets	0	238	69	-	60	40	**407**
Trade receivables	640	218	966	16	54	376	**2,269**
Other assets	45	214	121	10	510	113	**1,013**
Restricted deposits	2	-	269	-	-	-	**271**
Cash and cash equivalents	437	2,491	278	62	734	494	**4,496**
Total monetary assets	1,124	3,161	1,703	88	1,358	1,023	**8,456**
Asset non-monetary items	1,478	4,044	6,746	694	6,227	1,358	**20,547**
Total assets	2,602	7,205	8,449	782	7,585	2,382	**29,004**
Interest-bearing liabilities	96	6,660	916	-	1,856	73	**9,602**
Other liabilities	7	88	299	23	324	130	**871**
Trade payables	453	892	801	55	399	166	**2,767**
Bills payable	-	-	887	-	-	-	**887**
Total monetary liabilities	556	7,641	2,904	78	2,579	370	**14,127**
Liabilities non-monetary items	78	575	123	108	880	160	**1,924**
Total liabilities	634	8,216	3,026	187	3,459	530	**16,052**

31 December 2018

Amounts in NOK million	USD	EUR	CNY	CAD	NOK	Other	**Total**
Other non-current assets	-	232	65	6	45	92	**441**
Trade receivables	715	512	616	15	96	437	**2,391**
Other assets	42	209	98	11	370	106	**836**
Restricted deposits	2	-	575	-	0	-	**577**
Cash and cash equivalents	771	1,769	657	58	3,443	385	**7,082**
Total monetary assets	1,529	2,722	2,010	90	3,955	1,020	**11,327**
Asset non-monetary items	1,309	3,755	6,916	654	6,323	844	**19,802**
Total assets	2,838	6,477	8,927	744	10,279	1,865	**31,129**
Interest-bearing liabilities	132	5,352	1,991	-	1,708	1	**9,184**
Other liabilities	11	102	497	28	444	139	**1,221**
Trade payables	417	998	724	57	394	140	**2,731**
Bills payable	-	-	1,740	-	-	-	**1,740**
Total monetary liabilities	560	6,452	4,952	85	2,546	279	**14,875**
Liabilities non-monetary items	90	602	191	174	1,300	175	**2,532**
Total liabilities	650	7,054	5,144	259	3,847	453	**17,407**

Sensitivity on statement of financial position from financial assets and liabilities
The sensitivity related to financial instruments on Elkem's statement of financial position, is based on a weakening / strengthening of all currencies by 10% against the Norwegian krone, which is the presentation currency for Elkem. If the Norwegian krone is strengthened by 10% against all other currencies, the isolated effect on financial assets and liabilities would have given a reduced equity of NOK 445 million (NOK 355 million). This effect comes in addition to the effects from the sensitivity on profit or loss as calculated above.

(ii) Price risk
Elkem is exposed to fluctuations in market prices in the operating business related to individual contracts.
The main part of short-term price risk is hedged.

Commodity prices
The business is exposed to changes in market prices for raw materials and finished goods. The group seeks to minimise the exposure by entering into sales and purchase contracts with similar duration and volume. A significant part of Elkem's production volumes con-

sist of specialised products. These products require special types of raw materials and have fixed customer specifications.
Elkem has acquired several raw material sources and / or enters into medium to long-term contracts with raw material suppliers.

Power
Elkem purchases power contracts to minimise the future exposure to changes in power prices. These contracts are either financial instruments or physical commodity contracts that both meet and do not meet the criteria for own use according to IFRS.

Changes in fair value of commodity contracts, defined as financial instruments, reflect unrealised gains or losses and are calculated as the difference between market price and contract price, discounted to present value. Valuation techniques are based on available market information where this is possible. Other valuation techniques to estimate the market price are used for non-observable market parameters.

Elkem's portfolio of commodity contracts mainly consists of physical energy contracts. Electric power is a key input factor for Elkem. Elkem's estimated future power exposure is partly hedged by long-term power contracts in addition to several medium-term contracts. Optimisation of 24-hour-, seasonal- and capacity utilisation variations are solved through utilising financial and physical contracts that are traded bilaterally, or at Nasdaq OMX. The purpose of the hedging activities is to reduce volatility in the power cost and to increase the predictability of the cost base. Fair value of commodity contracts is especially sensitive for future changes in energy prices.

Valuation of the power contracts
The valuation technique used for valuing the power contracts is described in note 26 Financial instruments.

Sensitivity analysis - power contracts
Sensitivity on the Statkraft and the "30-øringen" contracts is as follows (figures in NOK million)

"30-øringen" contract

Amounts in NOK million		Fair value 31.12.2019	Adjusted NPV
Discount rate (used 3.6%)	change to 0%	(4)	(5)
Discount rate (used 3.6%)	change to 5%	(4)	(4)
CPI (used 2%)	change to 1%	(4)	71
CPI (used 2%)	change to 3%	(4)	(84)
Power price	decrease -10%	(4)	(131)
Power price	increase + 10%	(4)	120

Power contract Statkraft (bought from Norske Skog)

Amounts in NOK million		Fair value 31.12.2018	Adjusted NPV
Power price	decrease -10%	0	(46)
Power price	increase + 10%	0	47

(iii) Interest rate risks
Elkem's interest rate risk arises from interest-bearing liabilities granted by external financial institutions. Elkem's liabilities are mainly drawn in EUR and CNY.

Elkem has a floating interest rate policy and is hence exposed to fluctuating interest rates. Prices and sales volumes for Elkem's core products tend to correlate with general economic conditions. During an economic downturn sales prices and volumes are expected to go down, while prices and volumes tend to go up during an economic upturn. A floating interest rate policy is seen as appropriate from a financial risk perspective. Interest rates have stayed low for a number of years due to a low-rate economic environment. However, many central banks have inflation targets and intend to adjust interest rates to control the general rise in the price level. With floating interest rates the group will normally be in a position to benefit from lower interest rates in an economic downturn, but a floating rate policy will also leave the group exposed to higher future interest rates.

Elkem has the following interest-bearing assets and liabilities 31 December 2019

Amounts in NOK million	Floating	Fixed	**Total**
Interest-bearing liabilities	10,341	148	**10,489**
Interest-bearing assets	4,820	-	**4,820**
Net exposure	5,521	148	**5,669**

Sensitivity
The interest rate sensitivity is based on a parallel shift in the interest rates that Elkem is exposed to. If interest rates had been 50 basis points higher for a full year, based on net debt as at 31 December 2019, with all other variables held constant, the profit (loss) for the year would have been NOK 22 million (NOK 12 million) lower. An overview of Elkem's debt portfolio is presented in note 24 Interest-bearing assets and liabilities.

(b) Counterparty credit risk
Credit risk is the risk of financial losses to the group if a customer or counterparty fails to meet contractual obligations. For Elkem this arises mainly to accounts receivable and financial trading counterparties.

Trade receivables are generally secured by credit insurance from a reputable credit insurance company. Credit limits for each customer and overdue receivables are monitored at group level. For customers where credit insurance cannot be obtained, other methods are generally used to secure the sales proceeds, such as prepayment, letter of credit, documentary credit or guarantees. In particular, when sales are made in countries with a high political risk, or to remote customers, trade finance products are used to reduce the credit risk. Of Elkem's revenue outside China 85% - 95% is covered by credit insurance.

Elkem realised credit losses of NOK 6 million (NOK 11 million) related to trade receivables.

The maximum exposure to credit risk for the group is NOK 2,278 million per 31 December 2019 (NOK 2,400 million). Please also refer to note 22 Trade receivables.

Evaluation of financial counterparties is based on external credit ratings from Moody's and / or Standard and Poor's. The general policy is that financial counterparties should have a rating equal to, or higher than, A- (or the equivalent) from the rating agencies, but exceptions may be made on a case-by-case basis, mainly for local banks in emerging markets. Elkem has not had any losses in 2019 or 2018 related to financial counterparties.

(c) Liquidity risk
Liquidity risk is the risk that the group will encounter difficulty in meeting the obligations associated with its financial liabilities. Elkem is exposed to liquidity risk related to its operations and financing.

Elkem's cash flow will fluctuate due to economic conditions and financial performance. In order to assess its future operational liquidity risk, short-term and long-term cash flow forecasts are provided. The short-term forecast is updated each week, and the long-term cash flow projection is updated each quarter.

In order to mitigate the operational liquidity risk, Elkem has cash and revolving credit facilities with banks. As at 31 December 2019 Elkem has unrestricted cash of NOK 4,496 million (NOK 7,082 million). In addition, revolving credit facilities amount to NOK 3,105 million (NOK 2,854 million), of which NOK 3,105 million is undrawn (NOK 2,854 million).

The external loan agreements contain two financial covenants. The ratio of gross operating profit (loss) to consolidated Net interest payable, as defined herein, for each measurement period, where the period is calculated as the 12 months ending on the last day of a financial quarter, must exceed 4. Additionally, the ratio of total equity to total assets must be more than 30% at all times. Elkem complies with these covenants as of 31 December 2019 and also complied with the covenants as of 31 December 2018.

The policy is to have cash and available credit facilities to cover known capital needs and generally not less than 10% of annual revenue. In addition, the policy is to ensure that the main credit facilities have a remaining maturity of at least 12 months. The maturity profile of the credit facilities per 31 December 2019 for Elkem is shown in the table below.

Year / maturity

Amounts in NOK million	2020	2023	**Total**
Total amount of credit facilities	618	2,487	**3,105**

The table below analyses the group's financial liabilities and assets into relevant maturity groupings based on the remaining period at the date of the statement of financial position to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows, and the amounts are including interest payments.

31 December 2019 *Amounts in NOK million*	2020	2021	2022	2023	2024	2025 and later	**Total**	Carrying amount
Trade receivables	2,269	-	-	-	-	-	**2,269**	2,269
Derivative assets	38	18	14	10	9	25	**113**	104
Trade payables	2,767	-	-	-	-	-	**2,767**	2,767
Derivative liabilities	37	24	26	34	28	127	**276**	248
Lease liabilities	85	69	52	49	37	187	**479**	407
Loans from external part, other than bank	339	2,117	1,275	22	376	250	**4,378**	4,194
Bank financing	986	115	117	4,061	4	12	**5,295**	5,012
Bills payable	887	-	-	-	-	-	**887**	887

At 31 December 2018 *Amounts in NOK million*	2019	2020	2021	2022	2023	2024 and later	**Total**	Carrying amount
Trade receivables	2,391	-	-	-	-	-	**2,391**	2,391
Derivative assets	305	117	12	7	1	(2)	**440**	433
Trade payables	2,731	-	-	-	-	-	**2,731**	2,731
Derivative liabilities	78	4	36	50	71	398	**637**	528
Financial leases	0	-	-	-	-	-	**0**	0
Loans from external part, other than bank	208	66	1,919	537	19	318	**3,067**	2,926
Bank financing	1,989	382	115	114	4,093	-	**6,692**	6,281
Bills payable	1,740	-	-	-	-	-	**1,740**	1,740

Note 29 Capital management

Elkem focuses on having a balanced capital structure, which seeks to reflect the return requirements for the shareholders and the need for a strong financial position to facilitate the group’s strategy for growth and specialisation. The target is to have a leverage between 1.0x and 2.0x over a cycle. The leverage ratio is defined as net interest-bearing assets, less non-current interest-bearing assets (see note 24 Interest-bearing assets and liabilities), divided by EBITDA.

Elkem is managing its financing and liquidity position to reduce liquidity risk and to ensure that the company can meet its financial obligations at all times. Elkem has centralised the responsibility for group financing and liquidity handling. The policy is to raise financing at parent company level however, country specific exceptions may be made due to local legislation or currency restrictions. Loan maturities are subject to liquidity and refinancing risk and the company aims to have a long-term and smooth maturity profile on its loan portfolio.

Cash pooling is used to secure availability and access to cash across the group. Due to local legislation, not all subsidiaries are able to participate in international cash pooling arrangements. In these cases, repatriation of excess cash is mainly executed through dividend payments and inter-company deposits, while liquidity needs are covered through capital injections and inter-company loans. Liquidity forecasts are prepared and updated on a regular basis. The short-term forecasts are updated weekly. The group’s cash position is reported on a daily basis and tracked against respective forecasts. The policy is that available liquidity reserves, defined as cash and cash equivalents and available long-term credit facilities, should exceed 10% of total operating income.

Financial covenants are applicable in some of Elkem’s loan agreements. Financial covenants, if required, are standardised across all loan agreements. Financial covenants and other financial policy targets are monitored monthly and included in the company's management reports.

The company intends to pay dividends reflecting the underlying earnings and cash flow. Elkem envisages a dividend pay-out ratio of 30 - 50% based on profit for the year. When deciding the annual dividend level, the group's leverage, capital expenditure plans and financing requirements will be taken into consideration. Focus will also be on maintaining appropriate strategic flexibility.

As at 31 December 2019, Elkem's equity was NOK 12,952 million, including minority interests of NOK 96 million. The equity ratio was 45%.

Note 30 Number of shares

The development in share capital and other paid-in equity is set out in the consolidated statement of changes in equity.

2019	Shares outstanding
As at 1 January 2019	581,310,344
As at 31 December 2019	581,310,344

2018	Shares outstanding
As at 1 January 2018	1
Share split	401,999,999
Capital increase	179,310,344
As at 31 December 2018	581,310,344

In the annual general meeting held on 30 April 2019, the board of directors was granted an authorisation to repurchase the company's own shares within a total nominal value of up to NOK 290,655,172. The maximum amount that can be paid for each share is NOK 150 and the minimum is NOK 1. The authorisation is valid until the annual general meeting in 2020, but not later than 30 June 2020.

The authorisation can be used to acquire shares as the board of directors deems appropriate, provided however, that acquisition of shares shall not be by subscription.

In the annual general meeting held on 30 April 2019, the board of directors was granted an authorisation to increase the company's share capital with an amount up to NOK 290,655,172. The authorisation is valid until the annual general meeting in 2020, but not later than 30 June 2020. The authorisation can be used to cover share capital increases against contribution in kind and in connection with mergers.

In the annual general meeting held on 30 April 2019, the board of directors was granted an authorisation to increase the share capital by up to NOK 40,000,000 to be used in connection with the issuance of new shares under share incentive scheme. The authorisation is valid until the annual general meeting in 2020, but not later than 30 June 2020. The authorisation does not cover capital increases against contribution in kind or capital increases in connection with mergers. As at 31 December 2019 14,767,000 options are granted to members of the management and certain other key employees, see note 11 Share -based payment.

Note 31 Earnings per share

PRINCIPLE

The calculation of basic EPS has been based on the following profit attributable to ordinary shareholders and weighted-average number of ordinary shares outstanding. The calculation of diluted EPS has been based on the following profit attributable to ordinary shareholders and weighted-average number of ordinary shares outstanding after adjustment for the effects of all dilutive potential ordinary shares.

	2019	2018
Weighted average number of shares outstanding	**581,310,344**	581,310,344
Effects of dilution	**-**	-
Weighted average number of shares outstanding - diluted	**581,310,344**	581,310,344
Owners of the parent's share of profit (loss) (NOK million)	**855**	3,337
Earnings per share (NOK)	**1.47**	5.74
Diluted earnings per share (NOK)	**1.47**	5.74

Note 32 Supplemental information to the consolidated statement of cash flows

Liquidity effects of acquisitions

Amounts in NOK million	**2019**	2018
Purchase price for business combinations under common control	**-**	3,995
Purchase price for business combinations	**222**	59
Adjustments in purchase price prior periods	**-**	-
Cash and cash equivalents of the acquiree	**(16)**	(5)
Total acquisition of subsidiaries net of cash acquired	**206**	4,049

Note 33 Transactions with related parties

Elkem ASA is owned 58.2% by Bluestar Elkem International Co. Ltd S.A., Luxembourg, which is under control of China National Chemical Group Co. Ltd (ChemChina) a company registered and domiciled in China. The structure of Elkem group is disclosed in note 4 Composition of the group and note 5 Investments in equity accounted companies. Balances and transactions between Elkem ASA and subsidiaries have been eliminated in the consolidated financial statements and are not disclosed in this note.

On 22 March 2018 Elkem acquired all the shares in Yongdeng Silicon Materials and Xinghuo Silicones from Bluestar Elkem Investment Co. Ltd. a company controlled by Bluestar, see note 4 Composition of the group. Details of transactions between Elkem and the parent company, joint ventures and associates, related parties within ChemChina and transactions with other related parties, such as transactions with companies held by minority shareholders, are disclosed below.

Transations with related parties

2019

Amounts in NOK million	Sale of goods	Purchase of goods	Sale of services	Purchase of services	Interest income	Financial expenses
Bluestar Elkem International Co. Ltd S.A.	-	-	-	-	-	-
Joint arrangements and associates	-	-	18	(169)	0	-
Related parties within ChemChina	387	(412)	51	(95)	-	(3)
Other related parties	0	(5)	-	(15)	-	-
Total	387	(417)	69	(279)	0	(3)

2018

Amounts in NOK million	Sale of goods	Purchase of goods	Sale of services	Purchase of services	Interest income	Financial expenses
Bluestar Elkem International Co. Ltd S.A.	-	-	0	-	-	-
Joint arrangements and associates	-	-	17	(130)	0	-
Related parties within ChemChina	663	(535)	59	(145)	-	-
Other related parties	1	(19)	-	(13)	-	-
Total	664	(554)	77	(287)	0	-

Balances with related parties

	Non-current		Current	
Amounts in NOK million	**31.12.2019**	31.12.2018	**31.12.2019**	31.12.2018
Receivables from related parties within ChemChina, interest-bearing	**-**	-	**-**	-
Receivables from joint ventures and associates, interest-bearing	**1**	2	**-**	-
Receivables from related parties within ChemChina, interest free	**-**	-	**2**	4
Loans to related parties within ChemChina	**-**	-	**-**	-
Liabilities to related parties within ChemChina, interest free	**-**	-	**(81)**	(328)
Trade receivables, Bluestar Elkem Investment Co. Ltd. S.A	**-**	-	**-**	-
Trade receivables, related parties within ChemChina	**-**	-	**38**	35
Trade receivables, joint ventures and associates	**-**	-	**9**	9
Trade payables, Bluestar Elkem Investment Co. Ltd. S.A	**-**	-	**(5)**	(5)
Trade payables, related parties within ChemChina	**-**	-	**(84)**	(75)
Trade payables, joint ventures and associates	**-**	-	**(13)**	(11)
Trade payables, other related parties	**-**	-	**(1)**	(2)
Prepayments to related parties within ChemChina	**-**	-	**16**	4
Prepayments from related parties within ChemChina	**-**	-	**-**	(0)
Prepayments from joint ventures and associates	**-**	-	**(4)**	(16)
Financial power contract	**45**	16	**-**	-

Information about transactions between related parties outside Elkem

The main transactions between Elkem and parties outside Elkem are:

- Sale of management and technology services to REC Solar Norway AS
- Sale of raw materials to REC Solar Norway AS
- Purchase of short and deep sea transport from North Sea Containerline AS and EPB Chartering AS
- Purchase of warehousing for Combined Cargo Warehousing BV
- Sale of silicone to China Blue Chemical Ltd and other companies within ChemChina
- Purchase of raw materials from companies within ChemChina
- Sale of management and technology services to Salten Energigjenvinning AS,
- Financial power contract against Salten Energigjenvinning AS (note 26)

The sale and purchase to / from related parties outside Elkem are made on terms equivalent to those that prevail in arm's length transactions. Prices are set upon negotiations between the parties. Outstanding balances at year-end are unsecured, and the current receivables and payables are interest-free, with an exception of the non-current receivables. The interest rate for the non-current receivables to the joint ventures and associates are currently 2.5%.

Elkem ASA has entered into a cash settled financial agreement to purchase all the power produced from Salten Energigjenvinning AS to a fixed price for the first 15 years of operations. See note 26 Financial assets and liabilities.

Commitments to related parties

Elkem has guaranteed to deliver a minimum of 990 GWh heat energy free of charge within each calendar year for 15 years from the start-up date, estimated to fourth quarter 2020, of Salten Energigjenvinning AS. Estimated value of the guarantee is NOK 1,126 million on 100% basis, Elkem owns 50% of the company. Elkem will be compensated if the actual volume of heat energy exceeds the guaranteed volume. Elkem has committed to cover its proportion of total estimated capital injections in Salten Energigjenvinning AS of NOK 100 million, whereof NOK 40 million is paid as of 31 December 2019. As at 31 December 2019 Elkem has made a provision of NOK 17 million to cover incurred losses.

There are no other contingent liabilities or commitments related to the joint ventures and associates.

Transactions with key management personnel

Information on transactions with key management personnel is included in note 10 Management remuneration

Information about eliminated transactions between related parties within Elkem

Elkem follows internationally accepted principles for transactions between related parties within the group. In general, Elkem seeks to use transaction-based methods (comparable uncontrolled price, transactional net margin method, cost plus and resale price method) in order to set the price for the transaction. Elkem's set-up for sales is based both on an agent structure and as a distribution network.

The related party transactions in Elkem can be divided as follows:

1. **Buy-sell of products**
   a. Supply of raw materials to manufacturers (sales from sourcing companies)
   b. Sale / supply of finished goods from one Elkem manufacturer to another Elkem manufacturer (as in-bound to further production)
   c. Distribution of manufactured goods (directly from the plant or indirectly for resale by distributors)

2. **Services**
   a. Sales agent/commissionaire services
   b. Order handling services performed for a large part of the companies by one service company (Elkem Distribution Center)
   c. General services (cost plus)
      i. Sourcing services
      ii. Technical support services (assistance from one company to another)
      iii. Management services / divisional management services / cash management services
   d. Milling services

3. **Financial services**
   a. Cash pool
   b. Group loans

Note 34 Pledge of assets and guarantees

Pledges
The main part of Elkem's interest-bearing liabilities are not pledged. A small part of the group's net interest-bearing liabilities are guaranteed by China National Bluestar (group) Co. Ltd (Bluestar). Details of liabilities that have pledged assets or guarantees related to them are stated below.

Guaranteed liabilities

Amounts in NOK million	**31.12.2019**	31.12.2018
Guaranteed liabilities	**492**	1,988

Pledged liabilities

Amounts in NOK million	**31.12.2019**	31.12.2018
Pledged liabilities	**35**	0
Pledged provisions	**-**	-

Book value pledged assets

Amounts in NOK million	**31.12.2019**	31.12.2018
Building	**178**	179
Machinery and plant	**-**	-
Other assets	**35**	-

Elkem makes limited use of guarantees, see specification below.

The main parts of the pledged building are in connection with provisions that are settled. The pledge was released on 7 February 2020.

Guarantee commitments

Amounts in NOK million	**31.12.2019**	31.12.2018
Guarantee commitment KLIF (Climate and Pollution Agency)	**27**	26
Guarantee commitment tax cases Brazil	**18**	19

Note 35 Changes in accounting policies

In 2019 Elkem has implemented the following changes in accounting policies:

- Transition to IFRS 16 Leases
- Presentation of sale of power

Transition to IFRS 16 Leases
IFRS 16 Leases supersedes IAS 17 Leases, IFRIC 4 Determining whether an Arrangement contains a Lease, SIC-15 Operating Leases-Incentives and SIC-27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease. The new standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to recognise most leases on the balance sheet.
Lessor accounting under IFRS 16 is substantially unchanged from IAS 17. Lessors will continue to classify leases as either operating or finance leases using similar principles as in IAS 17. Therefore, IFRS 16 did not have an impact for leases where Elkem is the lessor.

Elkem adopted IFRS 16 using the modified retrospective method of adoption with the date of initial application of 1 January 2019. Under this method, the standard is applied retrospectively with the cumulative effect of initially applying the standard recognised at the date of initial application. The Group elected to use the transition practical expedient to not reassess whether a contract is, or contains a lease at 1 January 2019. Instead, the Group applied the standard only to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 at the date of initial application. The lease liabilities have been measured on transition date to the present value of the remaining lease payments, discounted using the incremental borrowing rate as at 1 January 2019. The right-of-use assets have been measured on transition date to an amount equal to the lease liability on adoption (adjusted for any prepaid or accrued lease expenses).

Consolidated statement of financial position (increase / (decrease))

Amounts in NOK million	31.12.2018	Impact IFRS 16	Reclassification leasehold land	01.01.2019
Right-of-use assets	-	412	187	599
Other intangible assets	922	-	(187)	735
Interest-bearing non-current liabilities	7,131	328	-	7,459
Interest-bearing current liabilities	2,052	85	-	2,137

Consolidated statement of income

Amounts in NOK million	2019 IFRS 16	Impact IFRS 16	2019 IAS 17
Other operating expenses	(4,804)	(95)	(4,899)
Amortisation and depreciation	(1,456)	93	(1,363)
Finance expenses	(295)	17	(278)

Cash flow from operating activities has increased and cash flow from financing activities has decreased correspondingly by NOK 78 million year to date 2019 as repayment of the principal portion of the lease liabilities is classified as cash flow from financing activities compared with IAS 17. Cash flow from operations, that is used to measure segment performance, has increased with additional NOK 17 million due to cash flow related to finance expenses.

Elkem's activities, as lessor are mainly related to sublease of office buildings. The effects are not material and Elkem has not identified any impact on the financial statements due to transition to IFRS 16.

Amounts in NOK million	
Total minimum lease payments 31.12.2018 (note 13)	**340**
Discounting element	(58)
Recognition exemption for leases of low-value assets	0
Extension options reasonably certain to be exercised	89
Residual value guarantees	-
Additional leases identified compared to as reported 31.12.2018, excluded discounting element	42
Lease liability opening balance	412

Presentation of sale of power

Elkem has some power contracts where the power is delivered in other grid areas than Elkem's consumption. Elkem therefore needs to sell the power in the grid area where the power is delivered and purchase power in the areas where the plants are located. Previously Elkem presented sale of power in the same grid area that it's bought due to transfer of the power from one grid area to another grid area gross, as revenue and a corresponding raw material and energy for production. The new accounting policy is to present these transactions net, as the risks related to the transactions are immaterial and the power is considered as used at Elkem plants. There are no gains or losses from these transactions. Comparable figures are restated. The impact on comparable figures in the statement of income are shown in the tables below. The change in accounting policy has only effect on the segment other (note 6).

Consolidated statement of income

Amounts in NOK million	2019 before change	Impact	2019 after change
Revenue	22,852	605	22,246
Raw materials and energy for production	(12,118)	(605)	(11,512)
Operating profit (loss) before other items	1,189	-	1,189

Consolidated statement of income

Amounts in NOK million	2018 Financial statements	Impact of change	2018 restated
Revenue	25,625	656	24,968
Raw materials and energy for production	(12,023)	(656)	(11,366)
Operating profit (loss) before other items	4,522	-	4,522

Note 36 Events after the reporting period

PRINCIPLE

Events after the reporting period

Events after the reporting period related to the group's financial position at the end of the reporting period, are considered in the financial statements. Events after the reporting period that have no effect on the group's financial position at the end of the reporting period, but will have effect on future financial position, are disclosed if the future effect is material.

Acquisition of Polysil

Elkem has in December 2019 entered into an agreement to acquire all of the shares in Guangdong Polysil Technology Co. Ltd. (hereafter Polysil), a leading Chinese silicone elastomer & resins material manufacturer with strong positions in baby care and food grade silicones, as well as silicone products for the electronics and medical markets. The parties have agreed an enterprise value for Polysil of up to CNY 941 million, including potential bonus and earn-out depending on pre-agreed criteria. In 2019, Polysil is estimated to generate a total operating revenue of CNY 630 million and profit of CNY 100 million. Completion of the acquisition is subject to final regulatory approvals. Closing is expected during first half of 2020.

Productivity improvement programme

On 3 March 2020, Elkem board of directors decided to implement a new global productivity improvement programme to improve the group's cost position and streamline the organisation as a basis for future growth and specialisation. Elkem has identified a potential of more than NOK 350 million in annual improvements from the programme. The group expects positive EBITDA contributions from early 2021 and the full potential to be realised from the end of 2021. Restructuring costs are expected to be around NOK 200 million, which will be recognised as a provision through other items in Q1 2020.


Elkem
A Bluestar Company

Income statement – Elkem ASA

Amounts in NOK million	*Note*	**2019**	2018 Restated
1 January - 31 December			
Revenue	*4, 28*	**6,036**	6,189
Other operating income	*4, 5*	**232**	98
Total operating income		**6,268**	6,288
Raw materials and energy for production	*28*	**(2,828)**	(2,803)
Employee benefit expenses	*6, 7*	**(1,185)**	(1,031)
Amortisation and depreciation	*13, 14*	**(412)**	(333)
Impairment losses	*13, 14*	**(9)**	(2)
Other gains (losses) related to operating activities	*10*	**283**	(246)
Other operating expenses	*8, 9*	**(1,747)**	(1,610)
Total operating expenses		**(5,898)**	(6,025)
Operating profit (loss)		**371**	263
Income from subsidiaries	*15*	**290**	647
Income (loss) from joint ventures	*16*	**(12)**	(23)
Finance income	*11*	**154**	75
Foreign exchange gains (losses)	*11*	**37**	34
Finance expenses	*11*	**(219)**	(161)
Profit (loss) before income tax		**621**	834
Income tax (expenses) / benefit	*12*	**(109)**	(62)
Profit (loss) for the year		**512**	772

Balance sheet – Elkem ASA

Amounts in NOK million	*Note*	**31.12.2019**	31.12.2018
ASSETS			
Property, plant and equipment	*13*	**2,800**	2,026
Goodwill		**28**	-
Intangible assets	*14*	**193**	263
Investments in subsidiaries	*15*	**9,434**	9,543
Investments in joint ventures	*16*	**-**	9
Derivatives	*24*	**66**	23
Other non-current assets	*19*	**3,031**	1,984
Total non-current assets		**15,552**	13,848
Inventories	*17*	**1,611**	1,581
Trade receivables	*18*	**519**	553
Derivatives	*24*	**36**	56
Other current assets	*19*	**931**	426
Cash and cash equivalents	*22*	**3,512**	5,596
Total current assets		**6,609**	8,213
Total assets		**22,161**	22,061
EQUITY AND LIABILITIES			
Paid-in capital	*20, 21*	**6,267**	6,591
Retained earnings	*20*	**2,883**	2,270
Total equity		**9,150**	8,861
Non-current interest-bearing liabilities	*22*	**8,425**	6,867
Deferred tax liabilities	*12*	**123**	29
Pension liabilities	*7*	**70**	69
Derivatives	*24*	**210**	450
Provisions and other non-current liabilities	*23*	**62**	63
Total non-current liabilities		**8,890**	7,478
Trade payables		**831**	769
Income tax payables	*12*	**8**	79
Current interest-bearing liabilities	*22*	**2,344**	2,749
Derivatives	*24*	**37**	77
Dividend	*20*	**349**	1,511
Other current liabilities	*23*	**552**	536
Total current liabilities		**4,122**	5,722
Total equity and liabilities		**22,161**	22,061

The Board of Directors of Elkem ASA – Oslo, 3 March 2020

Zhigang Hao
Chair of the Board

Dag Jakob Opedal
Deputy chair

Caroline Catherine Juliette Mazza
Board member

Yougen Ge
Board member

Anja Isabel Dotzenrath
Board member

Olivier de Clermont Tonnerre
Board member

Marianne Elisabeth Johnsen
Board member

Helge Aasen
Board member

Terje Andre Hanssen
Board member

Marianne Færøyvik
Board member

Per Tronvoll
Board member

Michael Koenig
Chief Executive Officer

Cash flow statement – Elkem ASA

Amounts in NOK million	*Note*	**2019**	2018
Operating profit (loss)		**371**	263
Changes fair value financial instruments		**(213)**	238
Amortisation, depreciation and impairment losses	*13, 14*	**420**	335
Changes in working capital [1)]		**241**	13
Changes in provisions, pension obligations and other		**(302)**	12
Interest payments received		**97**	33
Interest payments made		**(182)**	(172)
Income taxes paid		**(119)**	(95)
Cash flow from operating activities		**314**	628
Investments in property, plant and equipment and intangible assets	*13, 14*	**(708)**	(353)
Received investment grants	*5*	**19**	26
Proceeds from sale of property, plant and equipment	*13*	**2**	1
Cash effect from merged companies	*27*	**17**	-
Acquisition and capital increase in subsidiaries	*15*	**(229)**	(4,928)
Acquisition of joint ventures	*16*	**-**	(21)
Increase / decrease in loans to subsidiaries	*22*	**(898)**	87
Dividends and group contributions		**161**	237
Other investments /sales		**0**	0
Cash flow from investing activities		**(1,636)**	(4,952)
Dividend	*20*	**(1,511)**	-
Capital increase	*20*	**0**	5,171
New interest-bearing loans and borrowings		**1,451**	6,643
Repayment of interest-bearing loans and borrowings		**(700)**	(2,739)
Cash flow from financing activities		**(761)**	9,074
Change in cash and cash equivalents		**(2,084)**	4,750
Currency exchange differences		**(0)**	0
Net change in cash and cash equivalents		**(2,084)**	4,750
Cash and cash equivalents opening balance	*22*	**5,596**	847
Cash and cash equivalents closing balance	*22*	**3,512**	5,596

1) Working capital is defined as trade receivables, inventory, other current assets, trade payables and other current liabilities. Other current assets is defined as other current assets less current receivables to related parties, current interest-bearing receivables, tax receivables, grants receivable and accrued interest income. Accounts payable is defined as trade payables less accounts payable related to purchase of non-current assets. Other current liabilities is defined as other current liabilities less provisions.

Notes to the financial statements – Elkem ASA

Note 01 General information

Elkem ASA is a limited liability company located in Norway, whose shares are publicly traded on Oslo Børs. The main activities are related to production and sale of silicon materials, ferrosilicon, specialty alloys for the foundry industry and microsilica. Elkem ASA is owned 58.2 per cent by Bluestar Elkem International Co. Ltd S.A., Luxembourg, which is under the control of China National Chemical Group Co. Ltd (ChemChina), a company registered and domiciled in China.

The presentation currency of Elkem ASA is Norwegian Krone (NOK). All financial information is presented in NOK million, unless otherwise stated. As a result of rounding adjustments, the amounts shown in one or more columns included in the financial statements, may not add up to the total.

In text, the comparative figures are presented in parantheses following the current year's figures outside parantheses.

Note 02 Significant accounting policies

The financial statements have been prepared in accordance with the Norwegian Accounting Act and generally accepted accounting principles in Norway. The accounts are prepared based on a going concern assumption.

Changes in accounting policies
Changes in accounting policies are recognised directly in equity and the opening balance is adjusted as if the new accounting policy had always been applied. Last year's figures are changed correspondingly, for comparative purposes.

Change in presentation
Presentation of sale of power is changed, see note 28 Changes in accounting policies.

Accounting estimates
In the event of uncertainty, the best estimate is applied, based on the information available when the financial statements are prepared. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected. See note 3 Accounting estimates.

Foreign currency translation
Elkem ASA's functional currency is Norwegian Krone (NOK). Transactions in currencies other than the entity's functional currency are translated using the transaction date's currency rate. Monetary items in foreign currencies are presented at the exchange rate applicable on the balance sheet date. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rate at the date fair value is measured. If the currency exposure of a transaction is designated as a part of a hedging relationship, realised effects from the associated hedging instrument is classified in the same line in the financial statements as the hedged transaction. Currency gains (losses) related to operating activities, i.e. receivables, payables, bank accounts for operating purposes, are classified as a part of other gains (losses) related to operating activities. As a result of this, currency effects included in finance income and expenses are only related to loans and dividends.

Revenue recognition
Sale of goods:
Revenue is recognised when it is probable that transactions will generate future economic benefits for the company and the revenue can be measured reliably. Revenue is measured at the fair value of the consideration received or receivable, net of any taxes, rebates and discounts. Revenue and expenses that relate to the same transaction are recognised simultaneously. When products are sold with warranties, the expected warranty amounts are recognised as expenses at the time of the sale, and are subsequently adjusted for any changes in estimates or actual outcome.

Revenue from sale of goods is recognised when the significant risk and reward of the ownership of the goods has passed to the buyer, according to the agreed delivery term for each sale. Delivery terms are based on Incoterms 2010 issued by International Chamber of Commerce, and the main terms are

- "F" terms, where the buyer arranges and pays for the main carriage. The risk and reward is passed to the buyer when the goods are handed over to the carrier engaged by the buyer.
- "C" terms, where the group arranges and pays for the main carriage but without assuming the risk of the main carriage. The risk and reward is passed to the buyer when the goods are handed over to the carrier engaged by the seller.
- "D" terms, where the group arranges and pays for the carriage and retain the risk and reward of the goods until delivery at agreed destination. The risk is transferred to the buyer upon arrival at agreed destination, usually the purchaser's warehouse.

Sale of power and revenue connected to energy recovery
Sale of electric power and revenue connected to energy recovery,

mainly heat supply in form of steam and hot water, el-certificates and el-tax, are recognised in income based on the price agreed with the customer. Revenue connected to energy recovery is mainly based on long-term contracts where the prices are regulated yearly based on changes in CPI or government regulated prices, except for the el-certificates where the price is based on the observable market price at date of delivery.

Revenue from sale of services
Revenue from sale of services is recognised when the services have been provided. Sale of services are mainly related to management agreements with related parties based on cost plus a margin.

Other
Income from insurance settlement is recognised when it is virtually certain that the company will receive the compensation, and presented as other operating income. Interest income is recognised on accrual basis. Dividends are recognised when shareholders' right to receive dividends is determined by the shareholders' meeting.

Grants
Grants are recognised when it is reasonably assured that the company will comply with the conditions attached to them and the grants will be received. Grants are recognised in the income statement over the periods necessary to match them with the cost they are intended to compensate. Grants relating to cost of production of goods are recognised in profit or loss when the produced goods are sold. Grants relating to property, plant and equipment and intangible assets are deducted from the carrying amount of the asset. The grant is recognised in the income statement over the lifetime of a depreciable asset by reducing the depreciation charge. Grants related to expenses are classified as other operating income.

Investment in subsidiaries, associates and jointly controlled entities
Subsidiaries are companies in which Elkem ASA has controlling interests, normally obtained when Elkem ASA owns more than 50% of the shares.

Associates are those entities in which Elkem ASA has significant influence, but no control, over the financial and operating policies. Significant influence is presumed to exist when Elkem ASA holds between 20% and 50% of the voting power of another entity. Jointly controlled entities are those entities over whose activities Elkem ASA has joint control, established by contractual agreement and requiring unanimous consent for strategic financial and operating decisions.

Subsidiaries
Interests in subsidiaries are recognised at cost less any write-down for impairment.

Associates
Investments in associates are valued at cost less any write-down for impairment. Dividends received from associated companies are included in the income statement.

Joint ventures
Elkem ASA's interests in jointly controlled entities, which operates within Elkem ASA's main business areas (silicon materials and foundry products), are accounted for using the gross method, meaning that the company's share of the income, expense, assets and liabilities are recognised. Elkem ASA combines its share of the joint ventures' individual income and expenses, assets and liabilities and cash flows on a line-by-line basis with similar items in the financial statements.

Elkem ASA's interests in joint controlled entities, which do not operate within Elkem ASA's main business areas, are accounted for using the equity method. Under the equity method, the investment is initially recognised at cost, and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss and other comprehensive income of the investee after the date of acquisition. In cases where a joint ventures' loss increases the initially recognised cost the carrying amount is presented to reflect Elkem's liability to finance the joint venture. Any liability to finance a joint venture is presented either as part of provisions and other liabilities, current, or netted against Elkem's receivables towards the joint venture.

Impairment of investment in subsidiaries, associates and jointly controlled entities
Impairment loss is recognised if the carrying amount exceeds the recoverable amount and the impairment is not considered to be temporary. The recoverable amount is the higher of fair value less costs to sell, or its value in use. Value in use is the present value of the future cash flow expected to be derived from the asset or the cash generating unit to which it belongs, after taking into account all other relevant information. The impairment is reversed if the basis for the write-down is no longer present.

Intangible assets
Intangible assets are stated in the balance sheet at cost less subsequent accumulated amortisation and subsequent accumulated impairment losses. Intangible assets with a finite useful life are amortised, using the straight-line method. The estimated useful life and amortisation method is reviewed at the end of each reporting period.

An intangible asset is derecognised on disposal, or when no future economic benefits from its use are expected to be derived. Gain or loss arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, is recognised in the income statement.

Expenditure on research activities is recognised as an expense in the period in which it is incurred. An intangible asset arising from an internal development project is recognised if the company can demonstrate technical feasibility in completing the intangible asset, has intention to complete it, ability to use it, can demonstrate that it will generate probable future economic benefits and the cost can be reliably measured.

Property, plant and equipment
Property, plant and equipment is presented at cost, less accumulated depreciations and any accumulated impairment losses. Construction in progress is carried at cost, less any recognised impairment loss. Such assets are classified to the appropriate class of property, plant and equipment when completed and ready for its intended use. Significant parts of an item of property, plant and equipment which have different useful life, are accounted for as separate items. Depreciation commences when the assets are ready for their intended use.

Initial cost includes expenditures that are directly attributable to the acquisition of the asset, cost of materials, direct labour, any other costs directly attributable to bringing the assets to working condition for their intended use and estimated dismantling or removal charges, and capitalised borrowing costs.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, when future benefits are probable and the cost can be measured reliably. The carrying amount of the replaced part is derecognised. Major periodic maintenance that is carried out less frequently than every year, is capitalised and depreciated over the period until the next periodic maintenance is performed. All other repairs and maintenance are charged to the income statement when incurred.

Depreciation is recognised using the straight-line method. The estimated useful life, residual values and depreciation method are reviewed at the end of each reporting period.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss from disposal or retirement is determined as the difference between the sales proceeds and the carrying amount of the asset, and is recognised in the income statement.

Impairment of tangible and intangible assets
At the end of each reporting period, the carrying amounts of tangible and intangible assets are reviewed to determine whether there is any indication of impairment. If any such indication exists, the recoverable amount of the individual asset is estimated in order to determine the extent of the impairment loss / write-down. If it is not possible to estimate the recoverable amount of the individual asset, the recoverable amount of the lowest possible cash generating unit, to which the asset belongs, is estimated. The recoverable amount is the higher of fair value less costs to sell, or its value in use. Value in use is the present value of the future cash flows expected to be derived from use of the cash generating unit, after taking into account all other relevant information. If an impairment loss for assets other than goodwill is recognised in a previous period, the entity assesses whether there are indications that the impairment may have decreased or no longer exists. If so, the impairment loss/write-down is reversed, based on an updated estimate of the recoverable amount, but not exceeding the carrying amount that would have been determined had no impairment loss been recognised for the asset. Any impairment on goodwill is not reversed.

Leasing
Leases are classified as financial leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases and expenses are recognised as incurred.

Assets held under finance leases are initially recognised as assets at the present value of the minimum lease payment. The corresponding liability to the lessor is included in the financial statements as a finance lease obligation. Each lease payment is allocated between the liability and finance charges so as to achieve a constant rate on the obligation.

Non-derivative financial assets and liabilities
A financial asset or a financial liability is recognised in the balance sheet when the entity becomes party to a contract. Assets to be acquired and liabilities to be incurred as a result of a firm commitment to purchase or sell goods or services are recognised at the time one of the parties has performed under the agreement.

Financial assets are initially recognised in the balance sheet at fair value plus any transaction costs directly attributable to the acquisition or issue of the asset. Financial assets are derecognised once the right to future cash flows has expired or when substantial all risks and rewards related to control of the assets are transferred to a third party.

Financial assets with a maturity exceeding one year are classified as non-current financial assets. Short-term investments that do not meet the definitions of a cash equivalent and financial assets with a maturity of less than one year are classified as current financial assets. Non-current financial assets are recognised and subsequently measured at cost less any impairment loss, if the impairment is assessed not to be temporary.

Loans and Receivables
Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in a regulated market. They are recognised at amortised cost using the effective interest method. Gains and losses are recognised in the income statement when the loans and receivables are derecognised or impaired, as well as through the amortisation process. An impairment loss is recognised when the carrying amount exceeds the estimated recoverable amount.

The category includes trade receivables, deposits, guarantees and loans. These assets are classified in the balance sheet as either other non-current assets or other current assets. Other current assets are receivables with maturity less than one year.

Trade and other receivables are recognised at nominal value less provisions for doubtful accounts.

Cash and cash equivalents
Cash and cash equivalents are held for the purpose of meeting short-term fluctuations in liquidity, rather than for investment purposes. Cash and cash equivalents comprise cash funds and short-term deposits with a term of 3 months or less on acquisition. Bank overdrafts are shown within current interest-bearing liabilities in the balance sheet. Elkem ASA's deposits and drawings within the group cash pool are netted by offsetting deposits against withdrawals. The subsidiaries' deposits and drawings are classified as current assets / liabilities.

Derivative financial instruments
Derivatives are initially recognised at fair value on the date the derivative contracts are entered into, and are subsequently remeasured to their fair value at the end of the reporting period. The resulting gain or loss is recognised in the income statement immediately, unless when the derivative is designated and is effective as a hedging instrument. If the derivative is designated as a hedging instrument, timing of recognition in the income statement depends on the nature of the hedging relationship.

Commodity contracts that do not qualify as hedging instruments are booked at the lower of cost and fair value.

Embedded derivatives are separated from the host contract and booked at fair value, as an independent derivative.

Contracts for the entity's own use are contracts which are entered into and continue to be held for the purpose of the receipt of a non-financial item according to the company's usage requirements. This applies to power purchase contracts intended for use in the plant's production processes. Such contracts are booked in the balance sheet at cost and in the income statement on realisation.

Hedge accounting
Elkem ASA may designate certain derivatives as hedging instruments for fair value hedges and cash flow hedges. At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions.

Fair value hedges
Changes in the fair value of derivatives that are designated and qualify as hedging instruments in fair value hedges, are recognised in the income statement immediately together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

Cash flow hedges
The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges, are recognised in equity and accumulated under the heading of cash flow hedging reserve. The gain or loss relating to the ineffective portion is recognised immediately in the income statement. Gains / losses recognised in equity are reclassified into the income statement in the same period(s) as the hedged assets / liabilities.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in the equity at that time remains in equity until the forecast transaction is ultimately recognised in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to the income statement.

Inventories
Inventories are recognised at the lowest of cost and net realisable value. The cost of inventory comprises of the costs incurred in bringing the goods to their current condition and location, such as raw materials, energy for production, direct labour, other direct costs and production overhead costs based on normal capacity. Net realisable value represents the estimated selling price for inventories less estimated costs of completion and variable selling expenses.

Cost of goods sold is included in different lines in the income statement based on nature; raw materials and energy for production, employee benefits and other operating expenses, for the remaining part.

Taxation
Income taxes
Current tax assets and liabilities are measured at the amount expected to be recovered or paid to the tax authorities. Current tax payable includes any adjustment to tax payable in respect of previous years. Income tax is recognised in the income statement except to the extent that it relates to items recognised directly in equity. Income tax relating to items recognised directly in equity is recognised in equity, not in the income statement.

Uncertain tax positions are included when it is probable that the tax position will be sustained in a tax review, and provisions are made relating to uncertain or disputed tax positions at the amount expected to be paid. The provision is reversed when the disputed tax position is settled in favour of the entity and can no longer be appealed.

Deferred tax
Deferred tax assets and liabilities are calculated using the liability method with full allocation for all temporary differences between the tax base and the carrying amount of assets and liabilities in the financial statements, including tax losses carried forward. Deferred tax items are recognised in correlation to the underlying transaction either in the income statement or directly in equity.

Deferred tax assets are recognised in the balance sheet to the extent it is more likely than not that the tax assets will be utilised. The enacted tax rate at the end of the reporting period and undiscounted amounts are used. Deferred tax assets arising from tax losses are recognised when there is convincing evidence of recoverability. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets.

Employee benefits
Employee benefits consist of wages and salaries, bonuses, holiday payments, share-based payments and other considerations paid in exchange for services rendered from employees, expensed as incurred together with any social security tax applicable.

Employee retirement benefits
Defined contribution plans
Defined contribution plans comprise arrangements whereby the company makes monthly contributions to the employees' pension plans, and where the future pensions are determined by the amount of the contributions and the return on the individual pension plan asset. Payments related to the contribution plans are expensed as incurred, as a part of employee benefit expenses.

Defined benefit plans
Defined benefit plans are recognised at present value of future liabilities considered retained at the end of the reporting period, calculated separately for each plan. Social security tax related to pension payments is included in estimated pension liability. Plan assets are measured at fair value and deducted in calculating the net pension obligation. Actuarial assumptions are used to measure both the obligation and the expense and effects of changes in estimates due to financial and actuarial assumptions that are recognised in equity. Service costs are classified as part of employee benefit expenses and net interest on pension liabilities / assets are presented as a part of finance expenses. Past service cost arising due to amendments in benefit plans are expensed as incurred.

Multi-employer defined benefit plans where available information is insufficient to be able to calculate each participant's obligation, are accounted for as contribution plans.

Share-based payment
The fair value of options granted under the share-based payment program is recognised as an employee benefit expense with a corresponding increase in equity. The total amount to be expensed is determined by reference to the fair value of the options granted. The total expense is recognised over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. At the end of each period, the entity revises its estimates of the number of options that are expected to vest based on the non-market vesting and service conditions. It recognises the impact of the revision to original estimates, if any, in the income statement, with a corresponding adjustment to equity.

Social security contributions payable in connection with an option grant are considered an integral part of the grant itself and the charges are treated as cash-settled transactions.

Provisions
A provision is recognised when a present obligation exists and it is probable that an outflow of resources is required to settle the obligation. The amount recognised is the best estimate of the consideration required to settle the obligation, taking into account the risks and uncertainties surrounding the obligation, known at the end of the reporting period. Provisions are measured at present value, unless the time value is assessed to be immaterial.

Contingent assets and liabilities
Contingent liabilities are liabilities which are not recognised because they are possible obligations that have not yet been confirmed, or they are present obligations where an outflow of resources is not probable. Contingent assets are not recognised. Any significant contingent assets and liabilities are disclosed in the notes.

Events after the reporting period
Events after the reporting period related to Elkem ASA's financial position at the end of the reporting period, are considered in the financial statement. Events after the reporting period that have no effect on the company's financial position at the end of the reporting period, but will have effect on future financial position, are disclosed if the future effect is material.

Note 03 Accounting estimates

In the event of uncertainty, the best estimate is applied, based on the information available when the annual accounts are prepared.

Property, plant and equipment
The estimated useful lives, residual values (if any) and depreciation method are reviewed, and if necessary adjusted, at least annually.

Financial instruments
Elkem ASA holds financial instruments such as forward currency contracts and commodity contracts which are booked at fair value. For commodity contracts denominated in EUR, the embedded EUR derivative is separated from the host contract and booked at fair value. Hedge accounting is applied for these contracts. Commodity contracts that do not qualify as hedging instruments are booked at the lower of cost and fair value. Fair value for the contracts is based on observable prices and assumptions derived from observable prices for comparable instruments. For assumptions used in fair value measurement of the contracts see details in note 26 Financial instruments for Elkem group.

Net book value of contracts booked at fair value as at 31 December 2019 is in total negative NOK 146 million (negative NOK 448 million), see note 24 Financial instruments.

Note 04 Operating income

Operating income by type

Amounts in NOK million	2019	2018 Restated
Revenue from sale of goods	**4,446**	4,564
Revenue from sale of goods to related parties	**1,277**	1,273
Other operating revenue	**90**	102
Other operating revenue to related parties	**223**	250
Total revenue	**6,036**	6,190
Sale of fixed assets	**2**	1
Insurance settlement	**17**	2
Grants (note 5)	**214**	96
Total other operating income	**232**	98
Total operating income	**6,268**	6,288

Operating income by geographic market

Amounts in NOK million	2019	2018 Restated
Nordic countries	**632**	868
United Kingdom	**381**	324
Germany	**1,051**	1,040
France	**616**	586
Italy	**297**	224
Poland	**314**	171
Spain	**204**	196
Netherlands	**84**	77
Other European countries	**848**	691
Europe	**4,427**	4,178
Africa	**21**	28
North America	**480**	534
South America	**23**	45
America	**503**	579
China	**147**	204
Japan	**470**	294
South Korea	**75**	447
Other Asian countries	**608**	543
Asia	**1,300**	1,488
The rest of the world	**16**	15
Total operating income	**6,268**	6,288

Note 05 Grants

	2019		2018	
Amounts in NOK million	**Other operating income**	**Deduction of carrying amount FA**	Other operating income	Deduction of carrying amount FA
R&D grants from the Norwegian government	**28**	**-**	28	-
CO_2 Compensation from the Norwegian Environment Agency	**162**	**-**	67	-
Energy recovery related grants	**22**	**17**	-	12
Other government grants	**-**	**1**	1	-
Total government grants	**212**	**17**	96	12
Norwegian NOx fund for reduced emission of NOx	**-**	**68**	-	15
Other grants	**1**	**-**	-	-
Total other grants	**1**	**68**	-	15
Total grants	**214**	**85**	96	27
Grants receivables related to fixed and intangible assets (note 19)		**68**		1
Grants receivables related to income (note 19)		**235**		74
Grants, deferred income (note 23)		**(2)**		(5)

CO_2 allowances
CO_2 allowances allocated from the government are classified as grants, measured at nominal value (zero). If actual emissions exceed the allocated emission allowances, additional allowances are purchased. Purchased CO_2 allowances are recognised at cost and classified as other operating expenses.

As at 31 December 2019 Elkem ASA owns approximately 215,000 allowances measured at nominal value zero. Estimated fair value of the allowances is NOK 52 million.

CO_2 compensation
The Norwegian government has, from 2013, established a CO_2 compensation scheme to compensate for CO_2 costs included in the power price. The amount being compensated is based on the market price of CO_2 allowances, and as such varies with the price development. The percentage of the costs compensated is approximately 75% in 2019 (80% in 2018) and 75% for 2020. The current CO_2 compensation scheme will end in 2020 but is likely to be extended, however, the details of the scheme post 2020 are yet to be decided. The CO_2 compensation is recognised when there is reasonable assurance that the company will comply with the conditions attached and the grants will be received. The compensation is recognised in the income statement when the goods produced, using power, are sold.

NOx Fund
The industry in Norway pays a fee for their emission of NOx to the Norwegian NOx fund. The fund is self-financed by the fee and the purpose of the fund is to support projects that reduce NOx emissions from the industry in Norway.

Other
The remaining grants are related to projects within R&D and energy recovery.

Note 06 Employee benefit expenses

Amounts in NOK million	**2019**	2018
Salaries, holiday pay and variable compensation	**(962)**	(847)
Employer's national insurance contributions / social security tax	**(118)**	(108)
Pension expenses (note 7)	**(68)**	(61)
Share-based payments	**(15)**	(4)
Other payments / benefits	**(22)**	(11)
Total employee benefit expenses	**(1,185)**	(1,031)
Average number of full time equivalents	**1,195**	1,183

For further information concerning remuneration to management and share-based payments, see note 10 Management remuneration and note 11 Share-based payments in the consolidated financial statement.

Note 07 Employee retirement benefits

Defined contribution plans
Pension for employees in Elkem ASA are mainly covered by pension plans that are classified as contribution plans.

Elkem ASA' contributions to the employees individual pension plan assets constitutes 5% of base salary up to 7.1G and 15% between 7.1 and 12G. G refers to the national insurance scheme's basic amount in Norway, amounting to NOK 99,858 as at 1 May 2019. Pension on salary above 12G is not supported by external service providers and is therefore handled as a separate plan and included under defined benefit plans.

Elkem ASA participates in the early retirement scheme AFP. This is as a multi-employer plan accounted for as a defined contribution plan, in accordance with the Ministry of Finance's conclusion. The participants in the pension plan are jointly responsible for 2/3 of the plan's pension obligation, the government is responsible for the remaining part. The yearly pension premium in 2019 is 2.5% of the employee's salary between 1 and 7.1G, covering this year's pension payments and contribution to a security fund for future pension obligations. The premium in per-cent of salary for 2020 is equal to 2019.

Defined benefit plans
The defined benefit pension plans are unfunded and comprise pension on salaries above 12G, where the expense is 15% of annual base salary that exceeds 12G plus interest on the individual calculated pension obligation, and some individual retirement schemes. The individual retirement schemes are closed.

Net interest is calculated based on pension liability at the start of the period multiplied by the discount rate and is presented as a part of finance expenses.

Remeasurements of the defined benefit plans are recognised directly in equity.

The company's retirement schemes meet the minimum requirement of the Norwegian Act of Mandatory Occupational Pension.

Breakdown of net pension expenses

Amounts in NOK million	2019	2018
Current service expenses	(2)	(2)
Accrued employer's national insurance contributions	(1)	(1)
Net pension expenses, defined benefit plans	**(3)**	(3)
Defined contribution plans	(49)	(46)
Early retirement scheme (AFP)	(16)	(12)
Total pension expenses	**(68)**	(61)

Amounts in NOK million	31.12.2019	31.12.2018
Present value of pension obligations	(70)	(69)
Fair value of plan assets	-	-
Net value pension liabilities	**(70)**	(69)
Active participants in pension scheme for salary above 12G	62	66
Retired participants	74	50
Changes in actuarial gains / (losses) recognised in equity / deferred tax	2	(2)

Principal assumptions used for the actuarial valuation

	2019	2018
Discount rate [1]	2.0%	2.5%
Change in public pension rate (G)	2.0%	2.5%
Annual regulation of pensions paid	1.5%	1.5%

1) The discount rate is based on high quality corporate bonds reflecting the timing of the benefit payments.

Note 08 Other operating expenses

Amounts in NOK million	2019	2018
External distribution expenses	(482)	(427)
Commission expenses sales	(61)	(49)
Machinery, tools, fixtures and fittings	(333)	(282)
Repair, maintenance and other operating expenses	(156)	(149)
Other external expenses (fees, transport, IT services, etc.)	(298)	(353)
Energy and fuel expenses	(87)	(81)
Leasing expenses (note 9)	(42)	(34)
Travel expenses	(42)	(48)
Loss on trade receivables	(2)	(1)
Miscellaneous manufacturing, administration and selling expenses	(244)	(186)
Total other operating expenses	**(1,747)**	(1,610)
Miscellaneous manufacturing, administration and selling expenses include:		
Capitalisation of salary on fixed assets. Employee benefit expenses are presented gross in note 6.	17	11
Changes in inventories of finished and semi-finished goods	(22)	85

During 2019, Elkem ASA expensed NOK 118 million (NOK 119 million) as research and development related to processes, products and business development, including technical customer support and improvement projects.

Grants received relating to research and development amount to NOK 28 million (NOK 28 million) are included in other operating income.

Audit and other services

Amounts in NOK million	**2019**	2018
Audit fee	**(5)**	(5)
Other assurance services	**(1)**	(2)
Tax services	**-**	(0)
Other services	**(1)**	(1)
Total fees to auditor	**(8)**	(8)

Fees to auditors are reported exclusive of VAT.

Note 09 Operating lease

2019

Amounts in NOK million	**Total**
Leasing expenses, current year (note 8)	**(42)**
Minimum future lease payments due in accordance with non-cancellable operating lease contracts:	
Within one year	**(16)**
Within two years	**(15)**
Within three years	**(13)**
Over three years	**(22)**

Future leasing obligations are mainly related to rental of office buildings. The rental agreement contains an extension option for 5+5 years. The future obligation for the extension option is approximately NOK 100 million.

2018

Amounts in NOK million	**Total**
Leasing expenses, current year (note 8)	**(34)**
Minimum future lease payments due in accordance with non-cancellable operating lease contracts:	
Within one year	**(17)**
Within two years	**(12)**
Within three years	**(12)**
Over three years	**(32)**

Note 10 Other gains (losses) related to operating activities

Amounts in NOK million	**2019**	2018
Realised currency gains (losses) from forward currency contracts	**(33)**	(3)
Unrealised currency gains (losses) from forward currency contracts	**93**	8
Other currency gains (losses) operational	**(19)**	(37)
Realised effects other financial instruments (note 24)	**33**	20
Unrealised effects other financial instruments	**208**	(234)
Total other gains (losses) related to operating activities	**283**	(246)

Note 11 Finance income and expenses

Amounts in NOK million	**2019**	2018
Interest income	**17**	11
Interest income from related parties (note 25)	**136**	64
Dividend	**0**	0
Other financial income	**0**	0
Total finance income	**154**	75
Net foreign exchange gains (losses)	**37**	34
Interest expenses	**(172)**	(125)
Interest expenses to related parties (note 25)	**(44)**	(31)
Interest on net pension liabilities	**(2)**	(2)
Other financial expenses	**(0)**	(3)
Total finance expenses	**(219)**	(161)
Net finance income (expenses)	**(28)**	(52)

Foreign exchange gains (losses) in 2019 and 2018 are mainly related to the bank loans in EUR and group loans in EUR and CNY.

Note 12 Taxes

Income tax recognised in income statement

Amounts in NOK million	**2019**	2018
Current tax expenses	**(14)**	(87)
Previous year tax adjustment	**2**	(1)
Deferred tax	**(89)**	30
Other taxes	**(8)**	(4)
Total income tax (expense) benefit	**(109)**	(62)

Reconciliation of income tax (expense) benefit

Amounts in NOK million	**2019**	2018
Profit before tax	**621**	834
Applicable tax rate Norway	**22%**	23%
Tax expense at applicable tax rate	**(137)**	(192)
Permanent differences		
Tax effect of income from Norwegian controlled foreign companies (NOKUS)	**(11)**	(9)
Dividend within the Tax exemption method	**35**	19
Debt forgiveness [1)]	**11**	133
Tax effects other permanent differences	**(1)**	(7)
Other effects		
Previous year tax adjustment	**2**	(1)
Tax effect change in tax rate	**-**	(2)
Other current tax paid	**(8)**	(4)
Total income tax (expenses) benefit	**(109)**	(62)
Effective tax rate	**18%**	7%

1) Elkem ASA has four debt forgiveness agreements with Elkem Silicones France SAS. Nominal value of the agreements as of 31 December 2019 is NOK 595 million (EUR 64 million), book value NOK 0. Elkem Silicones France SAS has repaid NOK 49 million under this agreement in 2019, the gain is classified as income from subsidiaries. The effect of repayment is tax exempted.

Deferred tax assets and deferred tax liabilities

Amounts in NOK million	**31.12.2019**	31.12.2018
Cash flow hedges charged to equity	**6**	2
Property, plant, equipment and intangible assets	**(106)**	(109)
Pension liabilities	**15**	15
Accounts receivable	**3**	2
Inventory	**(38)**	(38)
Provisions	**(29)**	0
Other differences	**28**	98
Net deferred tax assets (liabilities)	**(123)**	(29)

Net deferred tax assets (liabilities)

Amounts in NOK million	**31.12.2019**	31.12.2018
Opening balance	**(29)**	(48)
Charged to profit (loss)	**(89)**	30
Changes in deferred tax hedges charged to equity	**4**	(12)
Change in actuarial gains/losses charged to equity	**(0)**	-
Other items charged to equity	**-**	0
Effect of merger (note 27)	**(8)**	-
Foreign currency exchange differences	**0**	(0)
Closing balance	**(123)**	(29)

Note 13 Property, plant and equipment

2019 *Amounts in NOK million*	Land	Plant, buildings and other property	Machinery, equipment and motor vehicles	Office and other equipment	Construction in progress	**Total**
Opening balance net book value	7	445	1,262	22	290	**2,026**
Additions	-	0	-	2	692	**694**
Disposals	-	-	-	-	-	**-**
Merger (note 27)	-	92	185	4	112	**393**
Transferred to/from CiP	0	127	547	10	(685)	**-**
Reclassifications	-	-	-	(0)	-	**(0)**
Impairment losses	(0)	(0)	(7)	-	(1)	**(8)**
Depreciation	-	(55)	(242)	(8)	-	**(305)**
Foreign currency exchange differences	-	-	-	-	-	**-**
Closing balance net book value	7	609	1,746	29	409	**2,800**
Historical cost	7	1,545	4,536	89	409	**6,587**
Accumulated depreciation	-	(925)	(2,725)	(60)	-	**(3,710)**
Accumulated impairment losses	(0)	(11)	(65)	(0)	-	**(76)**
Closing balance net book value	7	609	1,746	29	409	**2,800**
Estimated useful life	Indefinite	5-40 years	3-30 years	3-20 years		
Depreciation plan		Straight-line	Straight-line	Straight-line		

2018 *Amounts in NOK million*	Land	Plant, buildings and other property	Machinery, equipment and motor vehicles	Office and other equipment	Construction in progress	**Total**
Opening balance net book value	7	462	1,211	26	228	**1,934**
Additions	-	-	-	1	328	**329**
Disposals	-	-	-	-	-	**-**
Transferred to/from CiP	0	32	232	1	(265)	**-**
Reclassifications	-	-	-	0	(1)	**(1)**
Impairment losses	-	(0)	(2)	(0)	-	**(2)**
Depreciation	(0)	(49)	(180)	(6)	-	**(235)**
Foreign currency exchange differences	-	-	-	-	-	**0**
Closing balance net book value	7	445	1,262	22	290	**2,026**
Fixed assets under financial leasing included in Net book value	-	-	-	0	-	**0**
Historical cost	8	1,318	3,840	73	290	**5,529**
Accumulated depreciation	(0)	(862)	(2,515)	(51)	-	**(3,428)**
Accumulated impairment losses	(0)	(12)	(63)	(0)	-	**(75)**
Closing balance net book value	7	445	1,262	22	290	**2,026**
Estimated useful life	Indefinite	5-40 years	3-30 years	3-20 years		
Depreciation plan		Straight-line	Straight-line	Straight-line		

Note 14 Intangible assets

2019 *Amounts in NOK million*	Goodwill	Software	Other intangible assets	Intangible assets under construction	**Total intangible assets**
Opening balance net book value	-	82	164	17	**263**
Additions	-	3	-	7	**10**
Merger (note 27)	32	5	18	-	**23**
Transferred from CiP	-	3	-	(3)	**-**
Reclassifications	-	2	(2)	-	**0**
Impairment losses	-	-	(1)	-	**(1)**
Amortisation	(4)	(22)	(81)	-	**(103)**
Closing balance net book value	28	73	99	21	**193**
Historical cost	40	193	829	21	**1,043**
Accumulated amortisation	(12)	(120)	(730)	-	**(850)**
Closing balance net book value	28	73	99	21	**193**
Estimated useful life		3-10 years	3-10 years		
Amortisation plan		Straight-line	Straight-line		

The book value of a power contract with Statkraft of 1.5 TWh. as of 31 December 2019 is NOK 80 million (NOK 160 million) and included in other intangible assets. The notional amount of the underlying asset at the end of reporting period, volume * price, is NOK 469 million (NOK 926 million).

2018 *Amounts in NOK million*	Software	Other intangible assets	Intangible assets under construction	**Total intangible assets**
Opening balance net book value	87	241	10	**338**
Additions	12	3	7	**22**
Transferred from CiP	1	0	(1)	**-**
Reclassifications	0	0	-	**1**
Amortisation	(17)	(80)	-	**(98)**
Closing balance net book value	82	164	17	**263**
Historical cost	183	806	17	**1,006**
Accumulated amortisation	(101)	(642)	-	**(743)**
Closing balance net book value	82	164	17	**263**
Estimated useful life	3-10 years	3-10 years		
Amortisation plan	Straight-line	Straight-line		

Note 15 Investments in subsidiaries

Investment in subsidiaries of Elkem ASA

Amounts in NOK million	Country	Owner share vote rights (%)	Book value 31.12.2019	Book value 31.12.2018
Basel Chemie Co., Ltd.	Republic of Korea	100%	223	-
Bluestar Silicon Material Co., Ltd. (Yongdeng Silicon Materials)	China	100%	1,033	1,033
Elkem GmbH	Germany	100%	1	1
Elkem Ltd. [2)]	United Kingdom	100%	-	19
Elkem S.a.r.l.	France	100%	-	-
Elkem S.r.l.	Italy	100%	6	6
Elkem Carbon AS	Norway	100%	116	113
Elkem Chartering Holding AS	Norway	80%	1	1
Elkem Distribution Center B.V.	Netherlands	100%	0	0
Elkem Foundry (China) Co., Ltd.	China	100%	66	66
Elkem Iberia SLU	Spain	100%	0	0
Elkem Ísland ehf.	Iceland	100%	784	784
Elkem International AS	Norway	100%	5	5
Elkem International Trade (Shanghai) Co. Ltd. [1)]	China	11%	1	1
Elkem Japan K.K	Japan	100%	0	0
Elkem Korea Co. Ltd. [4)]	Republic of Korea	100%	1	-
Elkem Madencilik Metalurji Sanayi Ve Ticaret Ltd. STI [1)]	Turkey	1%	0	0
Elkem Materials Processing (Tianjin) Co., Ltd.	China	100%	1	1
Elkem Materials Processing Services BV	Netherlands	100%	1	1
Elkem Metal Canada Inc.	Canada	100%	6	6
Elkem Milling Services GmbH	Germany	100%	12	12
Elkem Nordic A.S.	Denmark	100%	5	5
Elkem Oilfield Chemicals FZCO	UAE	51%	13	13
Elkem Rana AS [3)]	Norway	100%	-	351
Elkem Siliconas España S.A.U	Spain	100%	125	125
Elkem Silicones (UK) Ltd. [2)]	United Kingdom	100%	-	22
Elkem Silicones Brasil Ltda.	Brazil	100%	145	145
Elkem Silicones Canada Corp.	Canada	100%	6	6
Elkem Silicones Czech Republic, s.r.o.	Czech Republic	100%	2	2
Elkem Silicones Finland OY	Finland	100%	5	5
Elkem Silicones France SAS	France	100%	2,152	2,148
Elkem Silicones Germany GmbH	Germany	100%	130	130
Elkem Silicones Hong Kong Co., Ltd.	Hong Kong	100%	102	102
Elkem Silicones México S. De R.L. De C.V. [4)]	Mexico	100%	5	-
Elkem Silicones Poland sp. z o.o.	Poland	100%	4	4
Elkem Silicones Scandinavia AS	Norway	100%	15	15
Elkem Silicones Services S.à.r.l	France	100%	1	-
Elkem Silicones Shanghaï Co., Ltd.	China	100%	108	107
Elkem Silicones USA Corp.	USA	100%	261	260
Elkem Siliconi Italia S.r.l.	Italy	100%	24	24
Elkem Singapore Materials Pte. Ltd.	Singapore	100%	0	0
Elkem (Thailand) Co., Ltd. [4)]	Thailand	100%	0	-
Elkem South Asia Private Limited	India	100%	34	34
Elkem UK Holdings Ltd. [2)]	United Kingdom	100%	78	37
Elkem Uruguay S.A.	Uruguay	100%	33	33
Explotación de Rocas Industriales y Minerales S.A.	Spain	100%	80	80
Jiangxi Bluestar Xinghuo Silicones Co., Ltd. (Xinghuo Silicones)	China	100%	3,749	3,747
NEH LLC	USA	100%	98	98
Total			9,434	9,543

1) Elkem ASA and a subsidiary own 100% of Elkem Madencilik Metalurji Sanayi Ve Ticaret Ltd and Elkem International Trade (Shanghai) Co. Ltd.
2) The shares in these companies are given as a contribution in kind in Elkem UK Holdings Ltd in December 2019.
3) On 15 October 2019 Elkem Rana AS merged with Elkem ASA. For accounting purposes the merger is effective from 1 January 2019, see note 27 Merger
4) The companies are incorporated during second half of 2019. The companies have limited activity in 2019.

On 30 September 2019 Elkem acquired 100% of the shares in Basel Chemie Co. Ltd., a Korean producer of specialty silicone gels for cosmetics and water repellents for the construction industry. The acquisition gives Elkem access to leading technology in attractive end-user silicone segments and provides a solid platform for further development and growth. The purchase price was NOK 222 million.

On 22 March 2018 Elkem acquired all the shares in Yongdeng Silicon Materials and Xinghuo Silicones for a purchase price of CNY 3,274 million, (NOK 3,995 million) from Bluestar Elkem Investment Co. Ltd a subsidiary of China National Chemical Group Co. Ltd. (Chem-China). In addition Elkem ASA has increased the share capital of the companies with CNY 630 million (NOK 785 million).

Income from investments in subsidiaries

Amounts in NOK million	**2019**	2018
Dividends and group contributions from subsidiaries	**241**	69
Repayment of debt forgiveness (note 12)	**49**	577
Total income from subsidiaries	**290**	647

Note 16 Investments in joint ventures

	Company address	Country	Owner share voting rights 2019	Owner share voting rights 2018	Accounting method
Elkania DA	Hauge i Dalane	Norway	50%	50%	Gross method
Salten Energigjenvinning AS	Oslo	Norway	50%	50%	Equity

Main figures for the investments accounted for by equity method. The figures show Elkem ASA's portion.

Total interest in joint ventures

Amounts in NOK million	**2019**	2018
Opening balance	**9**	19
Acquired shares in joint ventures/change of ownership	**-**	21
Share of profit / (loss)	**(12)**	(23)
Share of other comprehensive income	**(14)**	(7)
Closing balance [1]	**(17)**	9

1) Negative amount recognised in Other liabilities, current (note 23).

Main figures for investments accounted for using the gross method, showing Elkem ASA's portion

Amounts in NOK million	Elkania DA	**Total 2019**
Current assets	14	**14**
Non-current assets	3	**3**
Current liabilities	14	**14**
Non-current liabilities	8	**8**
Net assets	(5)	**(5)**
Total revenue	6	**6**
Total expenses	(5)	**(5)**
Financial items	(0)	**(0)**
Tax	0	**0**
Total profit / (loss) for the year	1	**1**

Amounts in NOK million	Elkania DA	**Total 2018**
Current assets	14	**14**
Non-current assets	4	**4**
Current liabilities	17	**17**
Non-current liabilities	8	**8**
Net assets	(6)	**(6)**
Total revenue	1	**1**
Total expenses	(3)	**(3)**
Financial items	(0)	**(0)**
Tax	0	**0**
Total profit (loss) for the year	(1)	**(1)**

Note 17 Inventories

Amounts in NOK million	**31.12.2019**	31.12.2018
Finished goods	**814**	766
Semi-finished goods	**185**	285
Raw materials	**385**	346
Operating materials and spare parts	**227**	185
Total inventories	**1,611**	1,581
Provisions for write down of inventories	**17**	7

Note 18 Trade receivables

Amounts in NOK million	**31.12.2019**	31.12.2018
Trade receivables	**183**	148
Trade receivables, related parties	**347**	415
Provision for doubtful accounts	**(11)**	(10)
Total trade receivables	**519**	553

Elkem ASA and its subsidiary Elkem Carbon AS have entered into a factoring agreement of EUR 55 million, NOK 542 million, whereof EUR 5 million is extended in 2019 compared to 2018. The agreement includes a recourse clause for maximum 5% of the face value of the individual receivables sold under the agreement. 95% of the receivables under the agreement are derecognised and the recourse amount is booked as a current liability. As at 31 December 2019 NOK 398 million (NOK 497 million) is derecognised and NOK 20 million is recognised as current liability (see note 23 Provisions and other liabilities) under the agreement.

Analysis of gross trade receivables by age, presented based on the due date

Amounts in NOK million	**31.12.2019**	31.12.2018
Not due	**95**	72
1 - 30 days	**60**	50
31 - 60 days	**8**	16
61 - 90 days	**2**	4
More than 90 days	**17**	6
Total trade receivables	**183**	148

Elkem applies for credit insurance for all customers when this can be obtained. In cases where credit insurance coverage is refused, other methods of securing the sales income are used. Other methods used for securing the sales are, among others, prepayment, letter of credit, documentary credit, guarantee etc.

Movements in provisions for doubtful accounts

Amounts in NOK million	**31.12.2019**	31.12.2018
Opening balance	**(10)**	(8)
Losses during the year	**1**	0
New provisions	**(6)**	(5)
Reversed provisions	**4**	4
Closing balance	**(11)**	(10)

Analysis of ageing of trade receivables where allowance for expected credit losses are made

Amounts in NOK million	**31.12.2019**	31.12.2018
Not due	**(0)**	(1)
Overdue by:		
1 - 30 days	**(0)**	(2)
31 - 60 days	**-**	(1)
61 - 90 days	**(0)**	(1)
More than 90 days	**(11)**	(6)
Total provisions for doubtful accounts	**(11)**	(10)

Note 19 Other assets

	Non-current		Current	
Amounts in NOK million	**31.12.2019**	31.12.2018	**31.12.2019**	31.12.2018
Other shares	**5**	4	**-**	-
Shares in associated companies	**9**	9	**-**	-
Restricted deposits	**22**	22	**-**	-
Other deposits	**1**	1	**-**	-
Pension assets, defined benefits and contribution plans (note 7)	**0**	1	**1**	2
Prepayments	**-**	-	**24**	14
Receivables from related parties, interest-bearing (note 25)	**2,981**	1,941	**354**	61
Receivables from related parties, interest free (note 25)	**-**	-	**122**	21
Grants receivable (note 5)	**-**	-	**303**	75
Value added tax	**-**	-	**67**	214
Interest receivables	**-**	-	**2**	-
Interest receivables from related parties (note 25)	**-**	-	**21**	11
Other receivables	**8**	7	**38**	28
Other assets	**6**	1	**0**	0
Total other assets	**3,031**	1,984	**931**	426

Note 20 Equity

2019

Amounts in NOK million	Share capital	Other paid in capital	Total paid in capital	Retained earnings	**Total equity**
Opening balance	2,907	3,684	6,591	2,270	**8,861**
Cash flow hedge	-	-	-	(14)	**(14)**
Share of items booked against equity from joint ventures	-	-	-	(14)	**(14)**
Share-based payments	-	25	25	0	**25**
Remeasurement pension obligations gains (losses)	-	-	-	1	**1**
Currency translations	-	-	-	0	**0**
Merger (note 27)	-	-	-	127	**127**
Dividends	-	(349)	(349)	-	**(349)**
Profit for the year	-	-	-	512	**512**
Closing balance	2,907	3,360	6,267	2,883	**9,150**

The share capital of Elkem ASA is NOK 2,906,551,720 divided on 581,310,344 shares of NOK 5 par value. For more information, see note 30 Number of shares in the consolidated financial statements.

For the year 2019 NOK 0.60 per share has been allocated for the distribution of dividends to the shareholders.

2018

Amounts in NOK million	Share capital	Other paid in capital	Total paid in capital	Retained earnings	**Total equity**
Opening balance	2,010	908	2,918	1,503	**4,421**
Capital increase	897	4,281	5,177	-	**5,177**
Cash flow hedge	-	-	-	38	**38**
Share of items booked against equity from joint ventures	-	-	-	(7)	**(7)**
Share-based payments	-	6	6	-	**6**
Remeasurement pension obligations gains (losses)	-	-	-	(2)	**(2)**
Currency translations	-	-	-	0	**0**
Merger (note 27)	-	-	-	(34)	**(34)**
Dividends	-	(1,511)	(1,511)	-	**(1,511)**
Profit for the year	-	-	-	772	**772**
Closing balance	2,907	3,684	6,591	2,270	**8,861**

Note 21 Shareholders

The 20 largest shareholders as at 31 December 2019, according to information in the Norwegian securities' registry system (VPS)

	Number of Shares	Ownership
Bluestar Elkem International Co. Ltd. S.A.	338,338,536	58.2%
Folketrygdfondet	19,291,034	3.3%
State Street Bank and Trust Company [1)]	12,156,284	2.1%
Verdipapirfondet DNB Norge (IV)	11,589,509	2.0%
The Northern Trust Company Ltd. [1)]	8,209,439	1.4%
BNP Paribas Securities Services	7,685,222	1.3%
JPMorgan Chase Bank [1)]	5,868,545	1.0%
Storebrand Norge I Verdipapirfond	5,805,461	1.0%
Arctic Funds PLC	4,514,970	0.8%
JPMorgan Chase Bank [1)]	4,167,515	0.7%
Pareto aksje Norge Verdipapirfond	3,884,000	0.7%
Must Invest AS	3,551,888	0.6%
JPMorgan Chase Bank [1)]	3,500,000	0.6%
Verdipapirfondet Eika Spar	3,266,035	0.6%
Verdipapirfondet Alfred Berg Gambak	3,133,745	0.5%
State Street Bank and Trust Company [1)]	3,028,914	0.5%
State Street Bank and Trust Company [1)]	2,977,898	0.5%
JPMorgan Chase Bank [1)]	2,930,363	0.5%
Verdipapirfondet Alfred Berg Gambak	2,827,342	0.5%
JPMorgan Chase Bank [1)]	2,783,222	0.5%
Total 20 largest shareholders	449,509,922	77.3%

1) Nominee accounts

Note 22 Interest-bearing assets and liabilities

	Non-current		Current	
Amounts in NOK million	**31.12.2019**	31.12.2018	**31.12.2019**	31.12.2018
Interest-bearing liabilities				
Loans from related parties (note 25)	**489**	61	**2,019**	2,498
Financial leases	**-**	-	**-**	0
Loans from external part, other than bank	**3,870**	2,660	**249**	179
Bank financing	**4,066**	4,145	**53**	53
Accrued interest	**-**	-	**23**	19
Total interest-bearing liabilities	**8,425**	6,867	**2,344**	2,749
Interest-bearing assets				
Cash and cash equivalents	**-**	-	**3,512**	5,596
Restricted deposits	**22**	22	**-**	-
Loans to related parties (note 25)	**2,981**	1,941	**354**	61
Loans to external parties	**8**	7	**-**	-
Interest receivables from related parties (note 25)	**-**	-	**21**	11
Interest receivables from external parties	**-**	-	**2**	-
Total interest-bearing assets	**3,010**	1,970	**3,889**	5,668
Net interest-bearing assets / (liabilities)	**(5,415)**	(4,897)	**1,545**	2,919

Interest-bearing liabilities by currency

Amounts in NOK million	Currency amount	**NOK 31.12.2019**	Currency amount	NOK 31.12.2018
EUR	714	**7,045**	573	5,704
USD	92	**807**	88	768
NOK	2,756	**2,756**	2,929	2,929
Other currencies	-	**161**	-	215
Total interest-bearing liabilities		**10,769**		9,616

The table below analyses the financial liabilities into relevant maturity groupings based on the remaining period at the date of the statement of financial position to the contractual maturity date. The amounts disclosed in the table are discounted.

Maturity of interest-bearing liabilities 31 December 2019

Amounts in NOK million	2020	2021	2022	2023	2024	2025 and later	**Total**
Loans from related parties	2,019	-	-	-	-	489	**2,508**
Loans from external part, other than bank	249	2,031	1,237	-	355	247	**4,119**
Bank financing	53	53	53	3,997	-	-	**4,155**
Accrued interest	23	-	-	-	-	-	**23**
Total	2,344	2,084	1,290	3,997	355	735	**10,806**
Prepaid loan fees							**(37)**
Total interest-bearing liabilities							**10,769**

Maturity of interest-bearing liabilities 31 December 2018

Amounts in NOK million	2019	2020	2021	2022	2023	2024 and later	**Total**
Loans from related parties	2,498	-	-	-	-	61	**2,559**
Financial leases	0	-	-	-	-	-	**0**
Loans from external part, other than bank	179	-	1,849	512	-	298	**2,839**
Bank financing	53	53	53	53	4,033	-	**4,245**
Accrued interest	19	-	-	-	-	-	**19**
Total	2,749	53	1,903	566	4,033	360	**9,663**
Prepaid loan fees							**(47)**
Total interest-bearing liabilities							**9,616**

Loan agreements
Elkem ASA signed a new loan facilities agreement 13 February 2018, consisting of a revolving credit facility (RCF) of EUR 250 million, a term loan facility of EUR 400 million and a bridge financing term loan facility of EUR 500 million. In December 2018 the term loan facility, bridge financing, of EUR 500 million was terminated and replaced with other facilities. At the end of December 2019 only the term loan facility is drawn. The loan facilities are unsecured, but the agreement contains two financial covenants described below.

27 November 2018 Elkem ASA issued a senior unsecured bond loan of NOK 1,750 million. The bond loan is listed on Oslo Børs. There are no covenants related to the bond loan. There are no material difference between fair value of the bond loan and book value.

10 December 2018 Elkem ASA issued a series of floating and fixed rate loans in the Schuldshein market. Total size of the transaction was EUR 215 million whereof EUR 91.5 million was issued on 31 December and the remainder EUR 123.5 million in January 2019.

The loans are unsecured. Of the total transaction amount, EUR 15 million is a fixed rate loan, there is no material difference between fair value of the fixed rate loan and book value.

Credit facilities
Elkem ASA is granted credit facilities of EUR 250 million (NOK 2,465 million) and NOK 250 million, a total of NOK 2,715 million in granted credit facilities. Both facilities remained undrawn at 31 December 2019 and 31 December 2018.

The credit facilities and the bank financing in Elkem ASA contain financial covenants based on the consolidated financial statements of Elkem group. In addition parts of the loans from external part, other than bank, contain financial covenants. The financial covenants are identical towards the different parties and remain equal to previous years covenants. In total drawn loans of NOK 6,275 million (NOK 5,156 million) have covenants as described below. Elkem ASA is not in breach with its covenants at the end of 2019 and 2018.

Covenant Elkem group

Amounts in NOK million		**31.12.2019**	31.12.2018	Loan covenant
Total Equity	NOK	**12,952**	13,722	
Total Assets	NOK	**29,004**	31,129	
Equity ratio		**45%**	44%	> 30%
EBITDA	NOK	**2,656**	5,793	
Net finance charges	NOK	**224**	336	
Interest cover ratio		**11.85**	17.22	> 4.00

Note 23 Provisions and other liabilities

	Non-current		Current	
Amounts in NOK million	**31.12.2019**	31.12.2018	**31.12.2019**	31.12.2018
Employee withholding taxes, soc. sec.tax and other public taxes	**-**	-	**49**	63
Value added tax	**-**	-	**15**	154
Prepayments from customers	**-**	-	**20**	11
Prepayments from related parties (note 25)	**-**	-	**4**	16
Payables to related parties (note 25)	**-**	-	**45**	13
Provisions	**35**	36	**3**	3
Contract obligations power	**-**	-	**63**	-
Contract obligations equity accounted investment (note 16)	**-**	-	**17**	-
Obligation to finance subsidiary	**28**	27	**-**	-
Accrued expenses	**-**	-	**93**	96
Employee benefits	**-**	-	**220**	174
Deferred income, government grants	**-**	-	**2**	5
Recourse liability factoring agreement (note 18)	**-**	-	**20**	-
Other liabilities	**-**	0	**-**	-
Total provisions and other liabilities	**62**	63	**552**	536

Amounts in NOK million	Site restoration	Environmental measures	Customers	Total provisions
Opening balance	27	10	3	39
Additional provisions recognised	1	0	-	2
Used during the year	-	-	-	-
Reversal of provisions recognised	-	-	(3)	(3)
Foreign currency exchange differences	-	-	-	-
Closing balance	28	10	-	38
Hereof non-current	28	7	-	35
Hereof current	-	3	-	3
Closing balance	28	10	-	38

Site restoration
The site restoration provisions are related to the necessary site remediation work that Elkem ASA will have to undertake in respect of its quartz mines.

Environmental measures
Elkem ASA has nationwide operations representing potential exposure towards environmental consequences. Elkem ASA has established clear procedures to minimise environmental emissions, well within public emission limits. The estimated provisions relate to estimated clean-up costs in connection with closed landfills.

Customers
The provisions are related to customer complaints.

Note 24 Financial instruments

Derivatives are initially recognised at fair value at the date on which the contract is entered into and are subsequently remeasured at their fair value. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the hedging.

Currency exchange contracts
Elkem ASA's Treasury department enters into forward currency contracts to mitigate Elkem group's foreign currency exposure. Hedge accounting is not applied, the contracts are classified as held for trading and booked at fair value through profit and loss. Elkem

ASA's Treasury department also offers internal currency hedging for major purchase/sale-contracts entered into by the subsidiaries. Such contracts cannot be designated in a hedging relationship, hence the changes in fair value are recognised through profit and loss. There are no currency contracts against subsidiaries as at 31 December 2019.

Embedded EUR derivatives in power contracts are designated as hedging instruments in a cash flow hedge to hedge currency fluctuations in highly probable future sales, from 1 January 2016. Unrealised effects are from that date booked against equity and later reclassified to revenue when realised.

Realised effects from such derivatives in 2019 are a loss of NOK 11 million (loss of NOK 3 million). See note 10 Other gains (losses) related to operating activities for information on contracts classified as held for trading.

Details of currency exchange contracts 31 December 2019

Amounts in NOK million

Purchase currency	Purchase ccy million	Sale currency	Sale ccy million	Type of instrument	Currency rate	Due	Fair value [1)]	Notional value [2)]
NOK	54	CAD	8	Fwd	6.6117	2020	1	55
CAD	3	EUR	2	Fwd	1.5070	2020	0	20
NOK	1,470	EUR	146	Fwd	10.0930	2020	18	1,436
NOK	184	GBP	16	Fwd	11.4199	2020	(4)	187
NOK	108	JPY	1,268	Fwd	0.0850	2020	4	103
NOK	480	JPY	5,325	Fwd	0.0901	2021-2024	21	431
NOK	371	USD	42	Fwd	8.7937	2020	1	371
NOK	4,978	EUR	468	Embedded [3)]	10.6296	2020-2034	(217)	4,618
Total fair value							(176)	

Details of currency exchange contracts 31 December 2018

Amounts in NOK million

Purchase currency	Purchase ccy million	Sale currency	Sale ccy million	Type of instrument	Currency rate	Due	Fair value [1)]	Notional value [2)]
NOK	5	AUD	1	Fwd	5.8323	2019	0	6
CAD	34	EUR	22	Fwd	1.5622	2019	(2)	218
NOK	1,207	EUR	124	Fwd	9.7619	2019	(32)	1,230
NOK	85	GBP	8	Fwd	10.8535	2019	(2)	88
NOK	317	USD	40	Fwd	8.0094	2019	(24)	344
NOK	128	JPY	1,546	Fwd	0.0826	2019	5	122
NOK	108	JPY	1,268	Fwd	0.0850	2020	5	100
NOK	4,800	EUR	482	Embedded [3)]	10.2419	2018-2034	(229)	4,800
Total fair value							(281)	

1) The currency exchange contracts are measured at fair value based on the observed forward exchange rate for contracts with a corresponding maturity term, on the balance sheet date.
2) Notional value of underlying asset, based on currency rates at 31 December.
3) Embedded EUR derivatives in own use power contracts.

Power contracts booked at fair value
Elkem ASA enters into power contracts to meet its need for power at the plants. Certain contracts are designated as hedging instruments in a cash flow hedge to mitigate price fluctuations in highly probable future need for power. The fair value of these contracts is based on observable nominal values for similar contracts, adjusted for interest effects. In addition, Elkem ASA holds energy contracts booked at the lower of cost and fair value.

The effective part of change in fair value of contracts designated in hedging relationships is booked temporarily in equity, and recycled to profit or loss when the hedged items are realised. Realised effects from the hedging of future need for power of NOK 28 million (NOK 96 million) is included in raw materials and energy for production.

Any ineffective part of the hedging relationship is recognised as a part of other gains (losses) related to operating activities. See note 10 Other gains (losses) related to operating activities.

Details of power contracts booked at fair value 31 December 2019

Amounts in NOK million	Volume GWh	Due	Fair value	Notional amount [1]
Forward contracts financial institutions	63	2020	(4)	26
Forward contracts financial institutions	44	2021	(0)	14
Forward contracts financial institutions	44	2022	0	14
Forward contracts financial institutions, sale	(26)	2020	2	(11)
Commodity contract "30-øringen" [2]	502	2020	(2)	153
Commodity contract "30-øringen" [2]	5,013	2021-2030	(2)	1,823
Commodity contracts swap Statkraft	202	2020	(5)	66
Commodity contracts swap Statkraft	201	2021	(3)	65
Power contract with Salten Energigjennvinning AS	1,856	2021-2035	45	563
Total fair value			31	

Details of power contracts booked at fair value 31 December 2018

Amounts in NOK million	Volume GWh	Due	Fair value	Notional amount [1]
Forward power contracts financial institutions	210	2019	15	95
Power contract "30-øringen" [2]	501	2019	11	149
Power contract "30-øringen"	5,515	2020-2030	(245)	2,149
Power contracts Statkraft, swap	201	2019	27	66
Power contracts Statkraft, swap	403	2020-2021	9	132
Power contract with Salten Energigjennvinning AS	1,856	2021-2035	16	541
Total fair value			(167)	

1) Notional value based on currency rates at 31 December.
2) The contract is booked at the lower of cost and fair value.

Note 25 Transactions with related parties

Elkem ASA is owned 58.2% by Bluestar Elkem International Co. Ltd S.A., Luxembourg, which is under control of China National Chemical Group Co. Ltd (ChemChina), a company registered and domiciled in China. The structure of the Elkem group is disclosed in notes to the consolidated financial statement; note 4 Composition of the group and in note 5 Investments in equity accounted companies. Details of transactions between Elkem ASA and the parent company, joint ventures and associates and related parties within ChemChina are disclosed below.

2019

Amounts in NOK million	Sale of goods	Purchase of goods	Sale of services	Purchase of services	Interest income	Interest expenses
Bluestar Elkem International Co., Ltd. S.A.	-	-	-	-	-	-
Related parties within ChemChina	2	(52)	36	-	-	-
Subsidiaries	1,275	(543)	172	(242)	136	(44)
Joint ventures and associates	-	-	15	(127)	-	-
Total	1,277	(595)	223	(370)	136	(44)

2018

Amounts in NOK million	Sale of goods	Purchase of goods	Sale of services	Purchase of services	Interest income	Interest expenses
Bluestar Elkem International Co., Ltd. S.A.	-	-	0	-	-	-
Related parties within ChemChina	171	-	50	-	-	-
Subsidiaries	1,103	(629)	195	(230)	64	(31)
Joint ventures and associates	-	-	5	(117)	-	-
Total	1,273	(629)	250	(348)	64	(31)

Balances with related parties

	Non-current		Current	
Amounts in NOK million	**31.12.2019**	31.12.2018	**31.12.2019**	31.12.2018
Trade receivables, Bluestar Elkem Investment Co. Ltd. S.A	**-**	-	**-**	-
Trade receivables, related parties within ChemChina	**-**	-	**18**	20
Trade receivables, subsidiaries	**-**	-	**327**	392
Trade receivables, joint ventures and associates	**-**	-	**2**	3
Receivables from subsidiaries, interest-bearing	**2 981**	1 941	**354**	61
Receivables from joint ventures and associates, interest-bearing	**-**	-	**-**	-
Interest receivable from subsidiaries	**-**	-	**21**	11
Receivables from subsidiaries, interest-free	**-**	-	**122**	21
Loans from subsidiaries, interest-bearing	**(489)**	(61)	**(2 019)**	(2 498)
Other payables to related parties within ChemChina, interest free	**-**	-	**(0)**	(0)
Other payables to subsidiaries, interest free	**-**	-	**(45)**	(13)
Trade payables, Bluestar Elkem Investment Co. Ltd. S.A	**-**	-	**(5)**	(5)
Trade payables, related parties within ChemChina	**-**	-	**(23)**	(5)
Trade payables, subsidiaries	**-**	-	**(143)**	(229)
Trade payables, joint ventures and associates	**-**	-	**(11)**	(10)
Prepayments from related parties within ChemChina	**-**	-	**-**	-
Prepayments from subsidiaries	**-**	-	**(0)**	(0)
Prepayments from joint ventures and associates	**-**	-	**(4)**	(16)
Financial power contract	**45**	16	**-**	-

Information about transactions between related parties
Elkem follows internationally accepted principles for transactions between related parties. In general, Elkem seeks to use transaction based methods (comparable uncontrolled price, cost plus and resale price method) in order to set the price for the transaction.

The majority of the transactions between related parties relate to products involving:

- Raw materials (quartz) from quarries to plants
- Electrode paste from Carbon plants to FeSi and Silicon plants
- Surplus raw materials between plants
- Ad-hoc supplies of finished goods to Elkem's internal distributors
- Purchase of short and deep-sea transport
- Sale of management and technology services
- Rent of plant facilities and related services
- Financial power contract against Salten Energigjenvinning AS

Elkem's set-up for sales is based on an agent structure, rather than a distribution network. Elkem also owns companies sourcing key raw materials and other supplies from selected suppliers world-wide. In both activities above, the transaction between the related parties is a delivered service, either sales-service or sourcing-service. Additionally, Elkem has internal help chains that are established to serve several operating units more efficiently.

Elkem ASA has both non-current receivables and non-current payables to related parties. The group loans are normally interest-bearing and interest is calculated based on interbank rates (for example NIBOR) and a margin.

Elkem ASA has entered into a cash settled financial agreement to purchase all the power produced from Salten Energigjenvinning AS at a fixed price for the first 15 years of operations. See note 24 Financial instruments.

Commitments with related parties
Elkem has guaranteed to deliver a minimum of 990 GWh heat energy free of charge within each calendar year for 15 years from the startup date, estimated to fourth quarter 2020, to Salten Energigjenvinning AS. Estimated value of the guarantee is NOK 1,126 million on 100% basis, Elkem owns 50% of the company. Elkem will be compensated if the actual volume of heat energy exceeds the guaranteed volume. Elkem has committed to cover its proportion of total estimated capital injections in Salten Energigjenvinning AS of NOK 100 million, whereof NOK 40 million is paid as of 31 December 2019. As at 31 December 2019 Elkem has made a provision of NOK 17 million to cover incurred losses.

Transactions with key management personnel
Information on transactions with key management personnel is included in note 10 Management remuneration to the consolidated financial statements.

Note 26 Pledge of assets and guarantees

Guarantee commitments

Amounts in NOK million	**31.12.2019**	31.12.2018
Guarantees given on behalf of the operating plants regarding environmental obligations	**27**	26
Guarantees given on behalf of subsidiaries regarding financing	**387**	131

Note 27 Merger

2019
In 2019, Elkem ASA merged with its subsidiary Elkem Rana AS. Elkem Rana AS operates a Foundry products plant in Norway.

The merged subsidiary was 100% owned by Elkem ASA and the merger was effective from 15 October 2019 with Elkem ASA as transferee entity. The merged entity`s total carrying amounts is based on group book value and the continuity accounting method is applied. For accounting and tax purposes the merged entity was included in Elkem ASA retrospectively as of 1 January 2019.

Amounts in NOK million	*Note*	**Total**
Property, plant and equipment	*13*	**393**
Goodwill	*14*	**32**
Other intangible assets	*14*	**23**
Other non-current assets		**(68)**
Shares in subsidiaries	*15*	**(352)**
Total non-current assets		**28**
Inventories		**210**
Trade receivable		**152**
Other currents assets		**38**
Restricted deposits		**0**
Cash and cash equivalents		**17**
Total currents assets		**417**
Deferred tax liabilities	*12*	**(8)**
Pension liabilities		**(2)**
Provisions and other non-current liabilities		**(62)**
Total non-current liabilities		**(73)**
Accounts payable		**(116)**
Income tax payable		**(28)**
Other current liabilities		**(102)**
Total current liabilities		**(245)**
Net assets / equity contributed in the merger		**127**

2018

In 2018, Elkem ASA merged with its subsidiary Elkem Foundry Invest AS. Elkem Foundry Invest AS owns 100% of the shares in Elkem Uruguay S.A group, a group which operates a Foundry Products plant in Paraguay.

The merged subsidiary was 100% owned by Elkem ASA and the merger was effective from 21 November 2018. The merged entity is included in Elkem ASA based on group carrying amounts and the continuity accounting method is applied. For accounting and tax purposes the merged entity was included in Elkem ASA retrospectively as of 1 January 2018.

Details on the merged balance is outlined below.

Net assets

Amounts in NOK million	*Note*	**Total**
Investments in subsidiaries	*15*	**(37)**
Other non-current assets		**98**
Total assets		**61**
Non-current interest-bearing liabilities, Elkem ASA		**76**
Current interest-bearing liabilities, Elkem ASA		**10**
Accounts payable, Elkem ASA		**1**
Current interest-bearing liabilities		**8**
Total liabilities		**95**
Net assets / equity contributed in the merger		**(34)**

Note 28 Changes in accounting policies

Presentation of sale of power

Elkem ASA has some power contracts where the power is delivered in other grid areas than Elkem's consumption. Elkem therefore needs to sell the power in the grid area where the power is delivered and purchase power in the areas where the plants are located. Previously Elkem presented sale of power in the same grid area that it's bought due to transfer of the power from one grid area to another grid area gross, as revenue and a corresponding raw material and energy for production. The new accounting policy is to present these transactions net, as the risks related to these transactions are immaterial and the power is considered as used at Elkem plants. There are no gains or losses from these transactions. Comparable figures are restated. The impact on comparable figures in the statement of income are shown in the tables below.

Income statement

Amounts in NOK million	2019 before change	Impact	2019 after change
Revenue	6,641	605	6,036
Raw materials and energy for production	(3,433)	(605)	(2,828)
Operating profit (loss)	371	-	371

Amounts in NOK million	2018 Financial statements	Impact of change	2018 restated
Revenue	6,846	656	6,189
Raw materials and energy for production	(3,459)	(656)	(2,803)
Operating profit (loss)	263	-	263

Note 29 Events after the reporting period

Elkem has in December 2019 entered into an agreement to acquire all of the shares in Guangdong Polysil Technology Co. Ltd. (hereafter Polysil), a leading Chinese silicone elastomer & resins material manufacturer with strong positions in baby care and food grade silicones, as well as silicone products for the electronics and medical markets. The parties have agreed an enterprise value for Polysil of up to CNY 941 million, including potential bonus and earn-out depending on pre-agreed criteria. Closing is expected during first half of 2020.

Declaration by the board of directors

We confirm that, to the best of our knowledge, the financial statements for the period from 1 January to 31 December 2019 have been prepared in accordance with applicable standards and give a true and fair view of the group and the company's assets, liabilities, financial position and results of operations.

We confirm that the Board of Directors' report provides a true and fair view of the development and performance of the business and the position of the group and the company, together with a description of the key risks and uncertainty factors that they are facing.

The Board of Directors of Elkem ASA – Oslo, 3 March 2020

Zhigang Hao
Chair of the Board

Dag Jakob Opedal
Deputy chair

Caroline Catherine Juliette Mazza
Board member

Yougen Ge
Board member

Anja Isabel Dotzenrath
Board member

Olivier de Clermont Tonnerre
Board member

Marianne Elisabeth Johnsen
Board member

Helge Aasen
Board member

Terje Andre Hanssen
Board member

Marianne Færøyvik
Board member

Per Tronvoll
Board member

Michael Koenig
Chief Executive Officer

KPMG

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To the Annual Shareholders' Meeting of Elkem ASA

Independent auditor's report

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Elkem ASA, which comprise:

- The financial statements of the parent company Elkem ASA (the Company), which comprise the balance sheet as at 31 December 2019, the income statement and cash flow statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and
- The consolidated financial statements of Elkem ASA and its subsidiaries (the Group), which comprise the statement of financial position as at 31 December 2019, the statement of income, statement of other comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion:

- The financial statements are prepared in accordance with the law and regulations.
- The accompanying financial statements give a true and fair view of the financial position of the Company as at 31 December 2019, and its financial performance and its cash flows for the year then ended in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway.
- The accompanying consolidated financial statements give a true and fair view of the financial position of the Group as at 31 December 2019, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the EU.

Basis for Opinion

We conducted our audit in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Company and the Group as required by laws and regulations, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

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Independent Auditor's Report - 2019
Elkem ASA

Assessment of the carrying value of property, plant and equipment

Refer to Note 3 *Accounting estimates*, Note 20 *Impairment assessments*, and the Board of Directors report

The key audit matter	*How the matter was addressed in our audit*
In 2019 the Group's financial performance was impacted by weak markets in the second half of 2019, and decreased sales prices particularly in China. Management identified impairment indicators and as a result conducted an impairment review of certain cash-generating units (CGUs). Two specific plants in the Foundry Products and Silicon Materials segments, with a total carrying value of property, plant and equipment of NOK 1 071 million, were identified as being particularly sensitive to key assumptions applied in management's impairment assessment. The Group considers that each plant constitutes its own CGU. The Group has estimated the recoverable amount of these two plants based on value in use calculations. The model relies on certain assumptions and estimates of sales prices and product mix, productivity and cost estimates particularly related to committed cost improvement initiatives, and discount rates, all of which involve a high degree of estimation uncertainty, particularly in light of current market conditions. None of the plants were assessed to be impaired, as the recoverable amount exceed the carrying amounts for each individual CGU.	Our audit procedures in this area included, among others: • Assessing management's process and results for identification and classification of CGUs to ensure they were appropriate and in accordance with relevant accounting standards; • Evaluating management's assessment of impairment triggers and sought to identify additional potential indicators of impairment through our review of operational performance and financial results; • Evaluating and challenging the forecasted cash flows including timing of future cash flows applied in the models with reference to historical accuracy and approved business plans; • Evaluating key assumptions such as forecasted sales prices (particularly ferrosilicon prices), inflation rates, energy prices and relevant foreign exchange rates compared against external sources; • Assessing, with the assistance of KPMG valuation specialists, the mathematical and methodological integrity of management's impairment models and the reasonableness of discount rates applied with reference to market data; and • Evaluating the adequacy and appropriateness of the disclosures in the financial statements related to the carrying value of intangible assets and property, plant and equipment.

Other information

Management is responsible for the other information. The other information comprises information in the annual report, except the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon, with the exception of our report on Other Legal and Regulatory Requirements below.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

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Elkem ASA

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors and the Managing Director for the Financial Statements

The Board of Directors and the Managing Director (Management) are responsible for the preparation in accordance with law and regulations, including fair presentation of the financial statements of the Company in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway, and for the preparation and fair presentation of the consolidated financial statements of the Group in accordance with International Financial Reporting Standards as adopted by the EU, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's and the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern. The financial statements of the Company use the going concern basis of accounting insofar as it is not likely that the enterprise will cease operations. The consolidated financial statements of the Group use the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error. We design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- obtain an understanding of internal control relevant to the audit in order 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 or the Group's internal control.

- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company and the 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 financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company and the Group to cease to continue as a going concern.

Independent Auditor's Report - 2019
Elkem ASA

- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with 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.

We also provide 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 Board of Directors, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

Opinion on the Board of Directors' report

Based on our audit of the financial statements as described above, it is our opinion that the information presented in the Board of Directors' report and in the statements on Corporate Governance and Corporate Social Responsibility concerning the financial statements, the going concern assumption and the proposed allocation of the result is consistent with the financial statements and complies with the law and regulations.

Opinion on Registration and Documentation

Based on our audit of the financial statements as described above, and control procedures we have considered necessary in accordance with the International Standard on Assurance Engagements *(ISAE) 3000, Assurance Engagements Other than Audits or Reviews of Historical Financial Information*, it is our opinion that management has fulfilled its duty to produce a proper and clearly set out registration and documentation of the Company's accounting information in accordance with the law and bookkeeping standards and practices generally accepted in Norway.

Oslo, 3 March 2020
KPMG AS

Øyvind Skorgevik

Øyvind Skorgevik
State Authorised Public Accountant

Appendix – Alternative Performance Measures (APMs)

An APM is defined as a financial measure of historical or future financial performance, financial position, or cash flows, other than a financial measure defined or specified in the applicable financial reporting framework (IFRS). Elkem uses EBITDA and EBITDA margin to measure operating performance at the group and segment level. In particular, Management regards EBIT and EBITDA as useful performance measures at segment level because income tax, finance expenses, foreign exchange gains (losses), finance income and other items are managed on a group basis and are not allocated to each segment. Elkem uses cash flow from operations to measure the segments cash flow performance, this measure is excluding items that are managed on a group level. Elkem uses ROCE, or return on capital employed as measures of the development of the group's return on capital. Elkem relies on these measures as part of its capital allocation strategy. Elkem uses net interest-bearing debt less non-current interest-bearing assets / EBITDA as leverage ratio for measuring the group's financial flexibility and ability for step-change growth and acquisitions.

The APMs presented herein are not measurements of performance under IFRS or other generally accepted accounting principles and should not be considered as a substitute for measures of performance in accordance with IFRS. Because companies calculate the APMs presented herein differently, Elkem's presentation of these APMs may not be comparable to similarly titled measures used by other companies.

Elkem's financial APMs, EBITDA and EBIT

- **EBIT**, also referred to as operating profit (loss) before other items is defined as Elkem's profit (loss) for the period, less income tax (expenses), finance expenses, foreign exchange gains (losses), finance income, share of profit from equity accounted financial investments and other items.
- **EBITDA** is defined as Elkem's profit (loss) for the period, less income tax (expenses), finance expenses, foreign exchange gains (losses), finance income, share of profit from equity accounted financial investments, other items, impairment loss and amortisation and depreciation.
- **EBITDA margin** is defined as EBITDA divided by total operating income.

Below is a reconciliation of EBIT and EBITDA:

2019 *Amounts in NOK million*	Silicones	Silicon Materials	Foundry Products	Carbon	Other	Elimi-nations	Elkem
Profit (loss) for the year							897
Income tax (expense) benefit							237
Finance expenses							295
Foreign exchange gains (losses)							(16)
Finance income							(41)
Share of profit from equity accounted financial investments							12
Other items							(195)
EBIT	742	270	100	232	(170)	15	1,189
Impairment losses							11
Amortisation and depreciation							1,456
EBITDA	1,523	601	342	308	(133)	15	2,656

2018 *Amounts in NOK million*	Silicones	Silicon Materials	Foundry Products	Carbon	Other	Elimi-nations	Elkem
Profit (loss) for the year							3,367
Income tax (expense) benefit							425
Finance expenses							388
Foreign exchange gains (losses)							(19)
Finance income							(42)
Share of profit from equity accounted financial investments							23
Other items							380
EBIT	2,864	833	710	267	(164)	12	4,522
Impairment losses							8
Amortisation and depreciation							1,263
EBITDA	3,535	1,116	931	335	(136)	12	5,793

Elkem's financial APMs, Cash flow from operations

- Cash flow from operations is defined as Cash flow from operating activities, less income taxes paid, interest payments made, interest payments received, changes in provision, pension obligations and other changes in fair value commodity contracts, other items (from the statement of income) and including reinvestments.
- Reinvestments generally consist of maintenance capital expenditure to maintain existing activities or that involve investments designed to improve health, safety or the environment.
- Strategic investments generally consist of investments which result in capacity increases at Elkem's existing plants or that involve an investment made to meet demand in a new geographic or product area.

Below is a split of the items included in investment in property, plant and equipment and intangible assets

Amounts in NOK million	**2019**	2018
Reinvestments	**(1,162)**	(1,064)
Strategic investments	**(963)**	(726)
Periodisations [1)]	**18**	(125)
Investments in property, plant and equipment and intangible assets	**(2,107)**	(1,916)

1) Periodisations reflects the difference between payment date and accounting date of the investment.

Amounts in NOK million	**2019**	2018
Cash flow from operating activities	**1,839**	4,460
Income taxes paid	**559**	272
Interest payments made	**248**	390
Interest payments received	**(38)**	(41)
Changes in provisions, bills receivables and other	**671**	(46)
Changes in fair value commodity contracts	**218**	(321)
Other items	**(195)**	380
Reinvestments	**(1,162)**	(1,064)
Cash flow from operations	**2,140**	4,030

Elkem's financial APMs, ROCE

- ROCE, Return on capital employed, is defined as EBIT divided by the average capital employed, where capital employed comprises working capital, property, plant and equipment, right-of-use assets, investments equity accounted companies and trade payables and prepayments related to purchase of non-current assets.
- Working capital is defined as accounts receivable, inventory, other current assets, accounts payable, employee benefit obligations and other current liabilities. Accounts receivable are defined as trade receivables less bills receivable. Other current assets are defined as other current assets less current receivables to related parties, current interest-bearing receivables, tax receivables, grants receivable and accrued interest income. Accounts payable are defined as trade payables less CAPEX payables. Other current liabilities are defined as provisions and other current liabilities less current provisions and liabilities to related parties.
- Capital employed consists of working capital as defined above, property, plant and equipment, right of use assets, investments equity accounted companies, trade payable and prepayments related to purchase of non-current assets.
- Average capital employed is defined as the average of the opening and closing balance of capital employed for the relevant reporting period.

Below is a reconciliation of working capital and capital employed, which are used to calculate ROCE:

Amounts in NOK million	**31.12.2019**	31.12.2018
Inventories	**5,224**	5,467
Trade receivables	**2,269**	2,391
Bills receivable	**(675)**	(354)
Accounts receivable	**1,594**	2,037
Other current assets	**1,013**	836
Current interest-bearing receivables	**0**	0
Other current receivables to related parties interest free	**(2)**	(4)
Grants receivables	**(361)**	(148)
Tax receivable	**(137)**	(38)
Accrued interest	**-2**	0
Other current assets included in working capital	**510**	645
Trade payables	**2,767**	2,731
Trade payables related to purchase of non-current assets	**(389)**	(307)
Accounts payables included in working capital	**2,378**	2,423
Employee benefit obligations	**640**	671
Provisions and other current liabilities	**871**	1,221
Current provisions	**(161)**	(141)
Liabilities to related parties	**(81)**	(328)
Other current liabilities included in working capital	**629**	752
Working capital	**3,681**	4,303
Property, plant and equipment	**13,202**	12,445
Right-of-use assets	**580**	0
Investments equity accounted companies	**129**	134
Trade payable and prepayments related to purchase of non-current assets	**(323)**	(251)
Capital employed	**17,269**	16,631

Elkem's financial APMs, Leverage ratio

- Net interest-bearing debt that is used to measure leverage ratio is excluding non-current interest-bearing financial assets. These assets are not easily available to be used to finance the group's operations. Below a calculation of Elkem's leverage ratio.

Amounts in NOK million	**31.12.2019**	31.12.2018
Net interest-bearing assets / (liabilities)	**(5,669)**	(3,158)
Non-current interest-bearing assets	**(51)**	(106)
Accrued interest income	**(2)**	
Net interest-bearing assets / (liabilities) less non-current interest-bearing assets	**(5,722)**	(3,264)
EBITDA	**2,656**	5,793
Leverage ratio	**2.2**	0.6

Elkem ASA

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