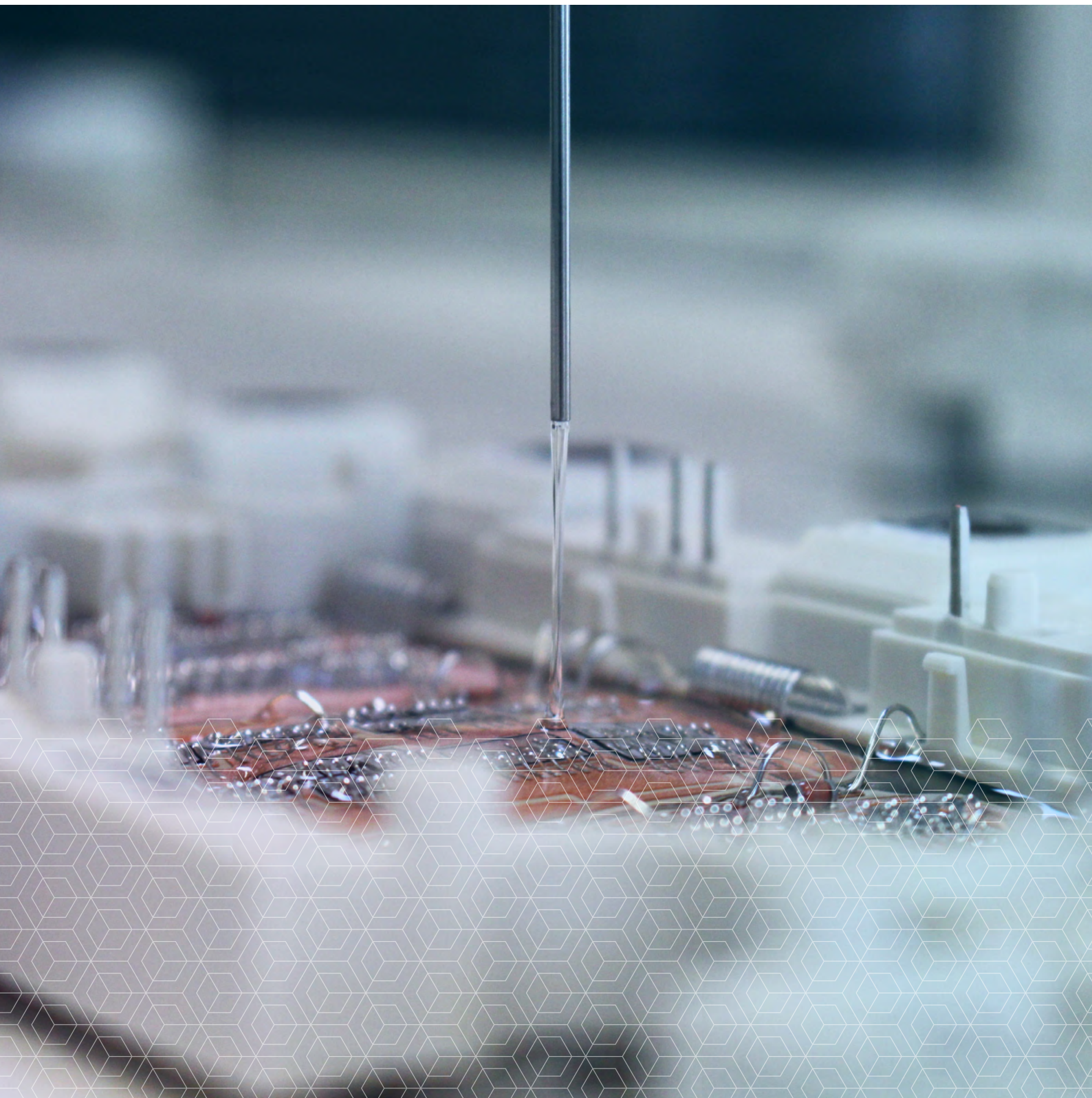


DELIVERING  
YOUR POTENTIAL



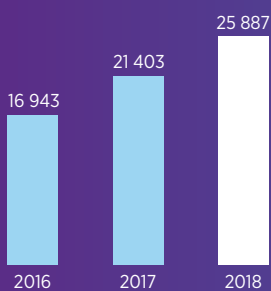
# Annual report **2018**



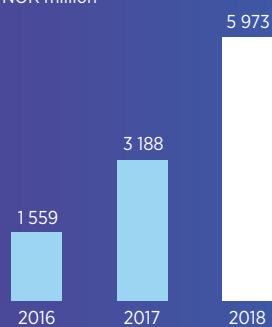
# Elkem at a glance



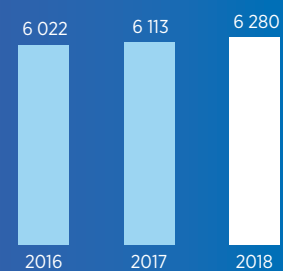
**Total operating income**  
NOK million



**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 in the environmentally responsible manufacture 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 more than 6,200 employees and consists of four business areas: Silicones, Silicon Materials, Foundry Products and Carbon.

Headquartered in Oslo, the company's 27 production sites and extensive network of sales offices and agents around the world ensure proximity to customers and access to attractive end markets.

On 22 March 2018 Elkem was re-listed on Oslo Børs.

Elkem's total operating income in 2018 amounted to NOK 25,887 million, with an EBITDA of NOK 5,793 million.

## Contents

About Elkem.....	2
Highlights .....	4
CEO's letter .....	6
Chair's letter .....	8
The business.....	10
Silicones .....	13
Silicon Materials .....	15
Foundry Products .....	17
Carbon .....	19
Case: The fast-growing battery market .....	20
Market opportunities: China .....	24
Board of directors' report .....	26
Board and management.....	38
Corporate governance .....	40
Statement of corporate governance .....	40
Risk management .....	51
Sustainability report .....	54
Annual accounts.....	86
Consolidated financial statements .....	88
Notes to the consolidated financial statements .....	94
Financial statements – Elkem ASA .....	162
Notes to the financial statements – Elkem ASA.....	165
Independent auditor's report .....	193
Alternative Performance Measures (APMs) .....	197
Contact .....	200

# Elkem – key figures and highlights

## Key figures

	<i>Metric</i>	2018	2017	2016
Total operating income	<i>NOK million</i>	25 887	21 403	16 943
Operating income growth	%	20.9	26.3	16.3
EBITDA	<i>NOK million</i>	5 793	3 188	1 559
EBITDA margin	%	22.4	14.9	9.2
EBIT	<i>NOK million</i>	4 522	1 927	264
Profit (loss) for the year	<i>NOK million</i>	3 367	1 249	(268)
Cash flow from operations	<i>NOK million</i>	4 030	2 336	1 051
Reinvestments of D&A	%	84.3	71.5	56.8
Total assets	<i>NOK million</i>	31 129	25 507	23 092
Net interest-bearing debt	<i>NOK million</i>	3 264	8 111	9 502
Debt leverage		0.6	2.5	6.1
Equity	<i>NOK million</i>	13 722	8 565	5 830
Equity	%	44.1	33.6	25.2
ROCE	%	28.3	12.8	1.8
Earnings per share	<i>NOK</i>	5.74	2.08	(0.52)
Number of employees	<i>Full time equivalent</i>	6 280	6 113	6 022
Total recordable injury rate H1+H2	<i>Injuries per million working hours</i>	2.20	3.10	5.30
CO <sub>2</sub> emissions	<i>Million tonnes</i>	2.54	1.78	1.50
Energy consumption	<i>TWh</i>	6.26	5.30	4.40



All-time high revenues

Strong financial position



Good EHS performance

## Highlights 2018

- Elkem ASA re-listed on Oslo Børs in March
- Acquisition of Xinghuo Silicones and Yongdeng Silicon Materials, substantially strengthening the company's integrated silicones value chain
- All time high financial results
- New long-term financing agreements, significantly improving the group's maturity profile and diversity of funding sources
- The new plant in Paraguay commenced production
- More than 80 new products launched by the Silicones division
- New business established for silicones to EV batteries
- Decision to build new R&D centre for Silicones in Lyon, France
- Decision to build Elkem's largest energy recovery plant so far in Salten, Norway

# An extraordinary year

2018 was an extraordinary year for Elkem. Not only did we deliver the strongest financial results in the company's 114-year history. We also completed a successful Initial Public Offering and re-introduced Elkem on Oslo Børs.

The listing of Elkem's shares on 22 March marked the completion of a three-year process to restructure and reposition the company to become a vertically integrated supplier of silicones and advanced silicon and carbon based materials.

**It was a proud moment**, "ringing the bell" that morning when Elkem was re-introduced to the stock market. Elkem has played an important part in Norway's industrial history since 1904 and has grown to become a global player with more than 6,200 employees around the world.

**The plan to create an integrated value chain for silicones** was conceived when Bluestar acquired Elkem in 2011. Seven years on we have come a long way in accomplishing our mission. We are one of the world's top three producers of silicones and number one in China, the fastest growing market. Our production platform in China puts us in a perfect position to continue growth and capture market share, delivering customised silicone solutions for products ranging from electrical vehicles, personal care and consumer electronics to medical equipment and construction materials.

**Safety is a cornerstone of our operations.** The recordable injury rate of 2.2 in 2018 is the second lowest to date, but there is further room for improvement. With continuous daily focus at all levels of the organisation we will strive towards our goal of zero injuries.

**2018 was exceptionally good for Elkem.** All divisions have delivered strong results thanks to excellent operational performance, record high volumes and high prices, particularly in the first half of the year. Concentrating on elements within our control, I remain confident in our strategy to grow sales and margins by developing increasingly specialised products meeting the demands from the global megatrends.

**Specialisation is the future.** Elkem is ready to capture the expected growth in electrical vehicles (EV). The group is working intensely to industrialise its proprietary technology of combining graphite and silicon in anodes to improve battery performance. Demand for graphite is expected to increase seven-fold in the

next ten years, partly driven by China, where electrification of the transport sector is happening at a pace no one thought possible.

**Reducing carbon footprint has high priority.** We opened our first foundry plant in Latin America, in Limpio, Paraguay in 2018. Production is mainly based on local raw materials and hydroelectric power, and this plant will have the lowest carbon footprint in the Elkem group.

Another exciting event in 2018 has been the investment decision to start building our largest energy recovery plant so far, in Salten, Norway with an investment frame of up to NOK 1 billion, which will improve our ability to ensure environmentally friendly silicon production with the lowest possible emissions at the lowest possible use of resources.

**Elkem will continue to grow.** Our products are everywhere, improving the performance of thousands of products used in every-day life. Global megatrends drive the demand for lighter and stronger materials and as income levels rise, an increasing amount of people will be able to afford higher quality products. Global demand for silicones is expected to increase by 5% per year until 2021. Global demand for silicones is expected to increase at a rate of twice global GDP growth in the next five years. Elkem aims to grow faster than the market, through specialisation, organic growth and M&A.

**2018 has been extraordinary in many ways** and I would like to thank all my Elkem colleagues for their dedication, hard work and continuous efforts to create value for our customers and shareholders. Elkem will focus on its growth and specialisation strategy and we expect the strong production performance to continue. The outlook for 2019 is promising.



Helge Aasen  
CEO, Elkem ASA



2018 was exceptionally good for Elkem. All divisions have delivered strong results and strong operational performance.



# A strong platform for creating shareholder value

Dear shareholders,

After seven years under the sole ownership of China National Bluestar (Bluestar), Elkem is back in the spotlight as a publicly listed company.

**Last year's successful re-listing on Oslo Børs** was a natural next step for the company, which has gone through major changes and realised strong growth in revenues and profitability. The board and management have kept strong focus on operational efficiency and specialisation, combined with a stronger presence in China and other growth markets.

**Following the listing, we enjoyed the privilege of getting many new shareholders**, while Bluestar has maintained its position as majority owner. During the last seven years Bluestar has proven its ability to contribute to Elkem's growth and value creation and has expressed a long-term ownership perspective. This should bode well for Elkem's ability to create value for all shareholders, also in the coming years.

**Last year we recorded our strongest financial results ever.** In 2019 we expect to see continued good financial performance for Elkem, albeit margins will be lower than in 2018, when silicone prices rose to record high levels in parts of the year. At the capital markets day in November we announced our financial targets; 5-10% annual revenue growth and EBITDA-margins in the range of 15-20% through the economic cycle. The board is committed to support Elkem's strategies for growth, based on specialisation, organic growth and accretive mergers and acquisitions, with an aim to deliver superior returns for our shareholders.

**Innovation is key and Elkem will strengthen its focus on R&D.** Elkem's R&D department counts nearly 400 employees, spread across a total of 13 research centres worldwide. They are an integral part of our strategy to develop increasingly specialised and unique products for our customers, which in turn will reduce our earnings volatility and allow us to maintain strong margins. To succeed in this strategy, we will strengthen our R&D-efforts going forward through exchange of expertise between France and China and through establishing a new R&D centre in France.

Elkem's products play a key role in the low carbon society of the future. We see it as a responsibility to reduce our carbon footprint, and at the same time we consider it to be an important contributor to continuously improve our competitiveness. In 2018 Elkem's board approved an updated environmental strategy. It is aligned with our zero-harm philosophy and says that we shall run resource-efficient processes where negative environmental impacts are minimised throughout the value chain.

To be able to reach the United Nations Sustainable Development Goals we need forward leaning and innovative companies. Corporates can and must contribute to create a sustainable world for all, and Elkem works every day to make sure that we contribute in a positive way, for our stakeholders globally.

**In 2011, Elkem and Bluestar drew up a strategic roadmap** to become a fully integrated producer of specialised silicones. We are well on our way to achieve this. So, where will we be in another seven years? What I feel most confident about is that Elkem will be an even larger company in 2025, driven by both organic growth and M&A. I expect our earnings to be less volatile and cyclical, due to our specialisation strategy. Advances in sensor technology and machine learning would make our production processes more effective, while e-commerce will have radically changed how we sell our products and communicate with our customers. We have become a one stop shop, where services and solutions represent natural parts of our range of offerings.

Whatever the future holds, I feel very excited about the opportunities for Elkem going forward.



Michael Koenig,  
Chair of the board





The board is committed to support Elkem's strategies for growth, based on specialisation, organic growth and accretive M&A, with an aim to deliver superior returns for our shareholders.



# Elkem's **business** strategy

Elkem is one of the world's leading companies in the environmentally responsible manufacture 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. The group consists of four business areas: Silicones, Silicon Materials, Foundry Products and Carbon. Elkem's strategy is based on low cost heritage, further growth and product specialisation and to solidify local presence and market positions.

## 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, together with operational excellence, economies of scale, an integrated value chain from raw materials to end products, and low-cost power with advanced energy recovery systems will continue to be fundamental for achieving operational improvements.

## GROWTH AND SPECIALISATION

Global megatrends drive growth for Elkem's products and requires highly specialised solutions. Elkem intends 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.

The group has an ambition to increase its production capacity to meet the expected growth, particularly by expanding its downstream silicones speciality capabilities at existing plants or through selected bolt-on acquisitions as an entrance into new product segments.

## CHINA AND NEW MARKET OPPORTUNITIES

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 silicones market and aims to develop this position through further growth and product specialisation.

### Building blocks of continued profitable growth:

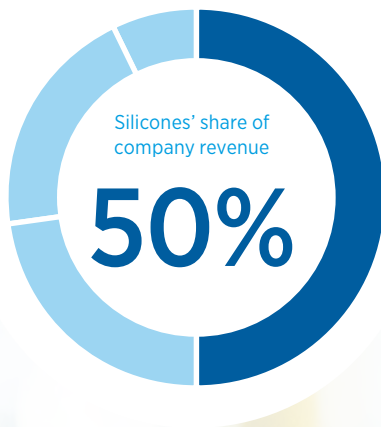




**Global megatrends** drive consumption of Elkem's products and provide attractive opportunities in markets that are growing at a rate faster than GDP.



GLOBAL MEGATRENDS DRIVE ELKEM'S SOLUTIONS



## PRODUCTS

Silicones have thousands of applications and improve the performance and reliability of a vast number of modern products. Silicones produced by Elkem are found in products such as re-release coatings, rubber, textile coating, healthcare, personal care, mould making, speciality fluids, sealing and bonding and construction.

## CAPACITY

Upstream siloxane capacity of about 330,000 tonnes per year which provides more than 500,000 tonnes capacity per year of intermediates and specialities.

## PLANTS

**China:** Xinghuo Silicones and Shanghai

**France:** Roussillon and Saint-Fons

**Germany:** Lübeck

**Italy:** Caronno

**Spain:** Santa Perpetua

**USA:** York

**Brazil:** Joinville



## Silicones:

# Trusted partner with a personal touch

The Silicones division produces siloxanes and a comprehensive range of silicones, which are found in a large variety of products used in industrial applications and consumer products.

### PRODUCTS AND APPLICATIONS

Silicones are polymers and 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 products such as fluids, elastomers, resins and gels.

### MARKET POSITION AND MARKET DRIVERS

Almost all leading silicones producers are backward integrated into siloxane due to cost benefits.

The five largest, integrated, multinational firms account for approx. 2/3 of the global production capacity. More than half of the world's production capacity is based in China. Elkem ranks as the third largest producer globally and the largest producer in China by siloxane production capacity.

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, motor vehicle, and electronic markets. Global consumption of silicones is expected to grow by approx. 5% per annum.

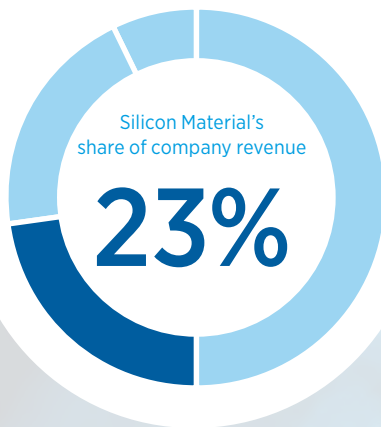
### HIGHLIGHTS 2018

- Very strong year for the Silicones division
- Xinghuo Silicones plant in China acquired in connection with the IPO
- Decision to build a new R&D center at the Saint-Fons site to support further specialisation

### KEY FIGURES

<i>Amounts in NOK million</i>	2018	2017	2016
Total operating income	13 059	10 026	7 619
EBITDA	3 535	1 515	402
EBITDA margin	27%	15%	5%
Number of employees	3 189	3 089	3 064
Sales volume (thousands mt)	314	300	262





## PRODUCTS

Silicon metal is critical for use in aluminium alloys, silicones and polysilicon, and is produced in different purities and sizes according to customer needs. Elkem Microsilica® is used in construction, refractory, oilfield and polymer industries because of its many unique properties.

## CAPACITY

Silicon Materials has a production capacity of 200,000 tonnes of silicon metal and 100,000 tonnes of Microsilica® per year. Silicon Materials also has a portfolio of traded Microsilica and related powder products totaling 200,000 mt per year. The division operates quartz mines in Norway and Spain supplying Elkem's need for silicon and ferrosilicon grade quartz.

## PLANTS

**Norway:** Salten, Thamshavn, Bremanger and Rana

**China:** Yongdeng

## QUARTZ MINES

**Norway:** Tana and Mårnes

**Spain:** Explotacion de Rocas Industriales y Minerals SA (Erimisa)



# Silicon Materials:

## Global concept, tailored local solutions

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

### PRODUCTS AND APPLICATIONS

Silicon Materials comprise a wide range of versatile products including high purity silicon and microsilica. 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 increase the castability, corrosion resistance, hardness, tensile strength, wear-resistance and weldability 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

Quartz, consisting of Si and oxygen, "SiO<sub>2</sub>", is the silicon source for silicon production. Quartz is one of the most abundant minerals on the earth, and Elkem's mines contains quartz with the chemical purity needed for metallurgical applications. The silicon production process is run by reacting quartz and carbon materials in a high temperature electric arc furnace, giving carbothermal reduction of quartz.

The industry-leading specialist CRU estimates that Elkem's silicon plants, Salten and Thamshavn, have amongst the lowest cost positions globally.

### 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 metal and the 2<sup>nd</sup> largest commercial producer.

The demand for Silicon Materials' products is primarily driven by global megatrends, including the need for lighter and stronger materials.

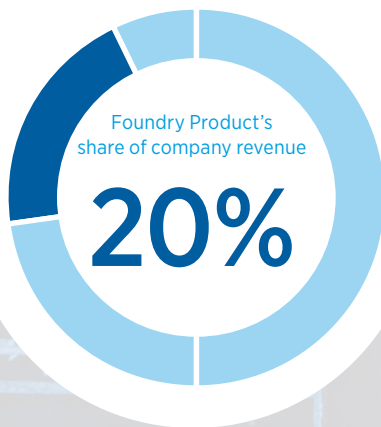
### HIGHLIGHTS 2018

- Major upgrade of the Elkem Yongdeng Silicon Materials plant in China
- Major upgrade of the Elkem Rana plant in Norway
- Initiating construction of an energy recovery plant at Elkem Salten.
- Continued strengthening of Silicon Materials portfolio of speciality products

### KEY FIGURES

<i>Amounts in NOK million</i>	2018	2017	2016
Total operating income	6 590	6 412	5 269
EBITDA	1 116	804	602
EBITDA margin	17%	13%	11%
Number of employees	1 416	1 422	1 452
Sales volume (thousands mt)	237	278	203





## PRODUCTS

High-quality speciality ferrosilicon to the steel industry and metal treatment solutions to iron foundries.

## CAPACITY

Foundry's production capacity is approximately 380,000 tonnes per year, based on current product mix of ferrosilicon-magnesium (nodularisers), inoculants and ferrosilicon. The capacity includes ferrosilicon produced at the Rana plant.

## PLANTS

**Norway:** Bremanger and Bjølvefossen.

**Iceland:** Grundartangi

**Canada:** Chicoutimi

**China:** Shizuishan

**India:** Nagpur

**Paraguay:** Limpio

**England:** Dronfield





# Foundry Products:

## Leading in metal treatment solutions

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

### PRODUCTS AND APPLICATIONS

The market for Foundry Products can be divided into two segments, ferrosilicon (FeSi) and foundry alloys.

FeSi is mainly used in the steel industry where it is generally used to remove oxygen from the steel and as an alloying element to enhance certain qualities of steel, including strength and elasticity, and lowers the electrical conductivity and magnetostriction. Specialty FeSi, such as low aluminium, low carbon, and low titanium FeSi, are generally used in the production of specialty steels, which are used in a number of high-end applications like transformers, motors, ball bearings and stainless steel.

Foundry alloys are specialty alloys based on ferrosilicon with a specific addition of other active elements. These elements are most often added in the ladle after the smelting process to achieve the desired properties. Foundry alloys are mainly used in the production of iron castings to improve their properties such as tensile strength, ductility and impact properties.

### PRODUCTION PROCESS AND RAW MATERIALS

FeSi is an alloy of iron and silicon, with silicon content ranging from 45% to 90%. It 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

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

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

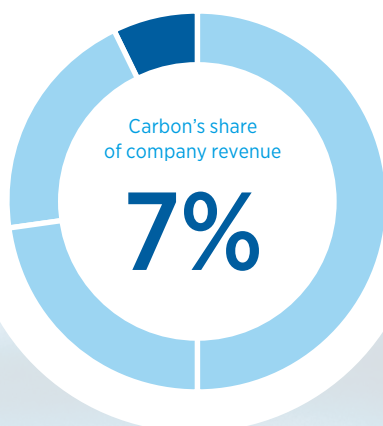
### HIGHLIGHTS 2018

- All time high financial performance
- Record high sales of specialty products
- Start-up of 3 new production plants
- Good performance developing new products and patents

### KEY FIGURES

<i>Amounts in NOK million</i>	2018	2017	2016
Total operating income	5 082	4 241	3 630
EBITDA	931	701	491
EBITDA margin	18%	17%	14%
Number of employees	894	812	736
Sales volume (thousands mt)	275	260	255





## PRODUCTS

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.

## CAPACITY

Carbon has an annual production capacity of approximately 230,000 tonnes of Söderberg electrode paste and approximately 100,000 tonnes of other carbon products, depending on the product mix.

## PLANTS

**Norway:** Kristiansand

**Brazil:** Carboindustrial and Carboderivados, Vitoria

**South Africa:** Ferroveld JV, eMalahleni

**China:** Shizuishan

**Malaysia:** Sarawak



# Carbon:

## Safe, stable and efficient solutions

Elkem Carbon is the world leading supplier of carbon paste and speciality products to the ferroalloys, silicon and aluminium industries.

### 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.

Recarburisers are carbon additives for iron foundries that are added to the furnace during smelting to allow for increased use of scrap in the raw materials mix, or to achieve certain required properties in final casting parts.

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.

### 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. Demand for such products generally follows the trends in these industries.

Elkem is the market leader in the industry with a global reach and a market share of approximately 40% (excluding China) in 2016.

### HIGHLIGHTS 2018

- Strong underlying growth
- Record high revenues and EBITDA
- Finalised project of gas cleaning and energy recovery from all calcination furnaces in China

### KEY FIGURES

<i>Amounts in NOK million</i>	2018	2017	2016
Total operating income	1 892	1 577	1 375
EBITDA	335	274	275
EBITDA margin	18%	17%	20%
Number of employees	420	427	420
Sales volume (thousands mt)	285	284	256



## Case: The fast-growing battery market



Elkem already provides products to the automotive industry and increasingly to the electric vehicles market.



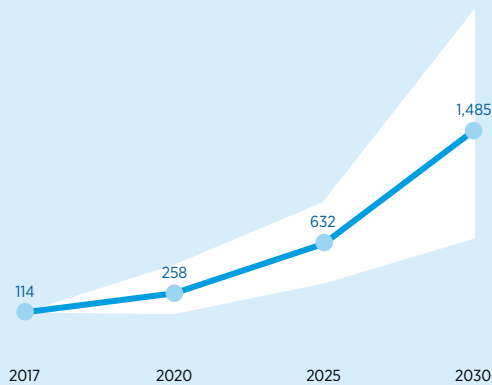


## An integrated business opportunity for Elkem

With the rapid development in electrification of the transport sector and the increasing need for energy storage systems, the demand of batteries is surging. A key component of these batteries is the anode, where graphite plays the most important role today, but silicon has a bright future.

The forecast for 2030, it is assumed that anything between 22% to 30% of the new sale of light vehicles will be electric. However, we know that the pace of fast growing markets tends to be underestimated, like we have seen in solar power. The electricity system around the world is changing significantly through installation of wind and solar. In Europe, US and China, wind and solar constitute the majority of new electricity generation capacity. Storage and batteries is essential to balance supply and demand.

**Li-ion battery, average demand forecast**  
(GWh)



An example of the growing and somewhat unforeseen demand of electrical vehicles (EVs) is the penetration of electrical buses in China. Every five weeks more than 9000 buses enter the market in China, which is more than the whole London bus fleet. Some cities in China have decided that all new taxis and buses must be electric from 2020.

### ELKEM'S SOLUTION

The group believe that Elkem is uniquely positioned to supply solutions to the battery industry and the EV market. The total lithium-ion battery market is estimated to grow from around 120 GWh in 2017 to more than 800 GWh in 2025.

Elkem already provides products to the automotive industry and increasingly into the EV market. With a robust cost structure, Elkem is combing opportunities in our division's competences, meeting today's challenges and the opportunities of tomorrow. The current focus for Elkem is within the areas of graphite for anodes, silicon for tomorrow's anodes and silicone solutions for battery packs and modules and various other applications in electric vehicles.

### INCREASE ENERGY STORAGE IN BATTERIES

Elkem produces both graphite and silicon, two key products in battery storage. The main advantage of graphite

is that it is stable and has a proven performance in lithium-ion batteries. However, with current materials we are close to the theoretical storage capacity of graphite and there is thus not room for major improvements in the energy density on the anode side. In this respect, silicon can provide a solution. Silicon has around ten times higher theoretical storage capacity than graphite. However, the challenge with a silicon based anode is to handle the expansion during charging, which is around 300%, and the disintegration during discharge, that cause a poor cycle performance and limited battery life.

Combining graphite and silicon provides a great opportunity, as we already produce both materials. The aim is to produce composites of graphite and silicon, and increase the amount of silicon gradually. A higher silicon content increases the energy density. This allows a battery producer to either store more energy in the same volume, or store the same amount of energy, but in a smaller space.

More research is needed to overcome the challenges related to silicon containing anodes. Elkem has a dedicated team working on this.

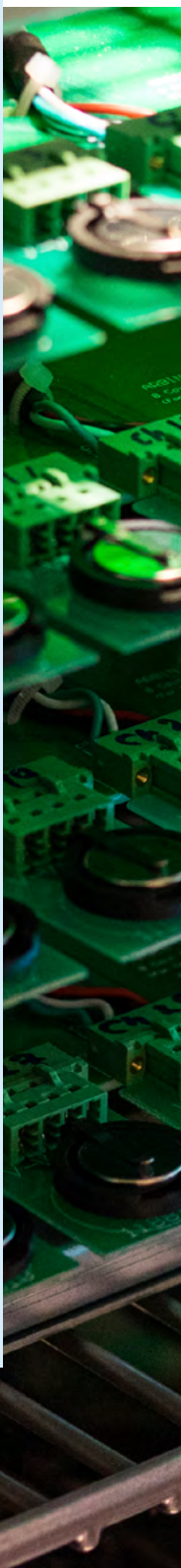
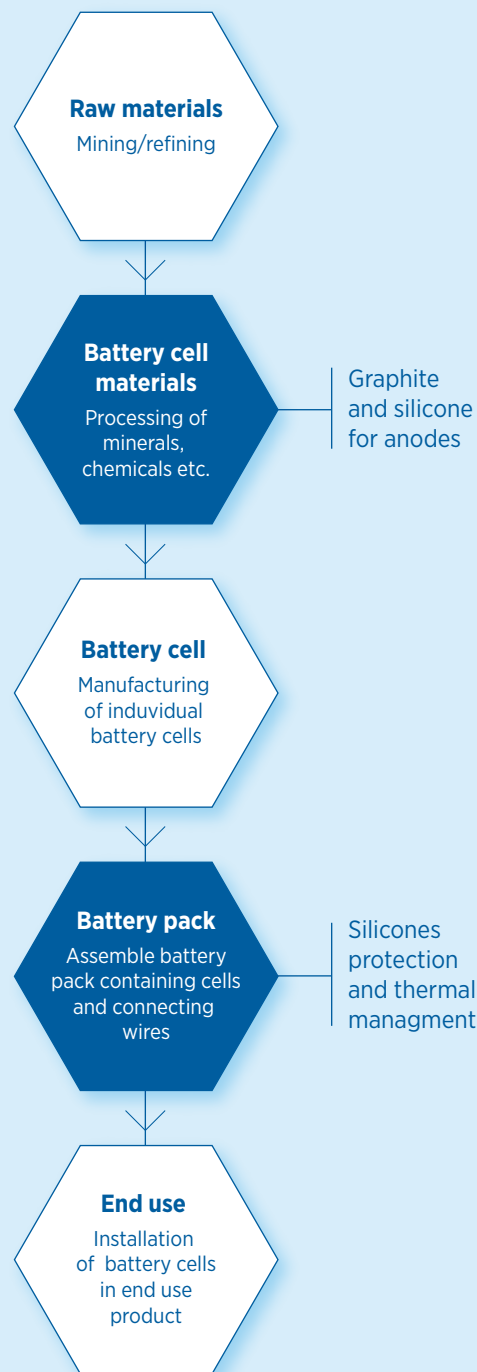
**PROTECTING THE BATTERY WITH SILICONES**

In addition to this project, our silicones division provides protection and thermal management materials for battery packs and for cables to the battery. The management of the heat in battery modules, which is the heart of the electric vehicle, is key for the performance, reliability, safety, life and cost of these modules. To address this challenge, Elkem develops customised solutions according to the design of the battery pack and cells used (cylindrical, pouch or prismatic) based on two technologies:

- Our foam range to create thermal insulation of each cell and avoid the overheating propagation to other cells with a light weight advantage.
- Our thermally conductive materials to dissipate the heat from the cell with additional performance like self-adhesion.

In 2018 these products generated revenue of more than EUR 30 million.

**Elkem in battery value chain:**





Combining graphite and silicon provides a great opportunity, as we already produce both materials.



# Market opportunities: **China**







## Vast opportunities in a fast-growing Chinese silicones market

Within the silicones segment Elkem is well positioned for the vast opportunities of the fast-growing Chinese market. Growth projections show that Chinese demand for silicones is expected to outperform GDP growth .

China is continuing its economic growth, driving increased need for Elkem's products. Digitalisation, rapid urbanisation, ageing and growing population, and sustainable developments such as electric vehicles and the growing use of solar and wind energy are all driving growth in key Elkem segments in China. Elkem aims to capture market growth in existing and new segments by leveraging its global position, and through utilising technology and product innovation to strengthen the specialisation platform and thereby extend the silicones value chain.

In China, Elkem has more than 3,500 employees located at six industrial sites, three R&D centres and two labs. With the acquisitions of Yongdeng Silicon Materials and Xinghuo Silicones, Elkem strengthened its position within the silicones segment as a fully integrated player from silicon metal to upstream siloxane and downstream silicones. Elkem Xinghuo Silicones is the largest integrated silicones manufacturer in the Asia Pacific region equipped with state-of-the-art production equipment.

China is the biggest producer of upstream siloxane and Elkem has the leading position with an approximate 18% market share.

Chinese silicones demand is supported by a wide range of end-user segments with higher added value markets. Construction, electronics, electric vehicles, health and personal care and chemical are all segments which have had strong growth, with projected continued growth moving forward, and where Elkem holds leading market positions. In the coming years Chinese GDP is expected to double from current approximate levels of US 10,000 dollars per capita, bringing an increase to silicones consumption. Growth estimates for the demand of silicones is at approximately 7.4% per year. It is expected that this demand growth will continue moving forward, and in the long term towards levels of advanced economies such as Germany, USA and South Korea.

“

Global megatrends drive consumption of silicon and provide attractive opportunities for our products in end markets that are growing at rates faster than GDP.



# Report from the board of directors: Strong results and growth

## ABOUT ELKEM

Established in 1904, Elkem is one of the world's leading companies in the environmentally responsible manufacture of metals and materials. Elkem is a fully-integrated producer with operations throughout the silicon value chain from quartz to silicon and downstream silicone specialties as well as speciality ferro-silicon alloys and carbon materials. Elkem has more than 6,200 employees and consists of four business areas: Silicones, Silicon Materials, Foundry Products and Carbon.

Headquartered in Oslo, the company's 27 production sites and extensive network of sales offices and agents around the world ensure proximity to customers and access to attractive end markets.

Elkem ASA is listed on Oslo Børs.

## ELKEM'S PERFORMANCE IN 2018

With more than 110 years of history, 2018 has been a milestone for Elkem with the re-listing of the company on Oslo Børs on 22 March and large acquisitions in China.

During the year, Elkem continued to deliver on its strategy to realise operational efficiencies and synergies, growth and specialisation and increasing presence in China, capturing new market opportunities.

Safety performance showed further improvement in 2018 compared to 2017 and 2016, and the organisation, including more than 2,100 new colleagues in China, is seeking lasting improvements to create a safe working place with zero accident ambition. Full understanding of health and safety risks and challenges have high priority at all plants. Elkem's statistics show that it is possible to run difficult and potentially dangerous 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 with safety as a number one priority.

Financial results were all time high supported by improved operations, improved sales volumes and favourable market conditions. During the year Elkem has secured improved financing structure and has a solid asset base and financial capability to support further growth creating value to all of Elkem's stakeholders.

Operating income improved by 21% year-on-year, reaching NOK 25,887 million. EBITDA<sup>1</sup> margin ended at 22%, which is 7 percentage points higher than 2017. Leverage<sup>2</sup> ratio ended at 0.6 times, which enables Elkem for flexibility and ability for step-change growth and acquisitions.

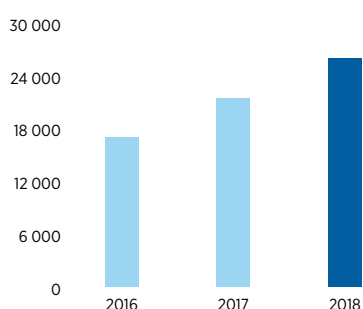
The company carried out several initiatives in 2018 to support Elkem's strategic roadmap for growth:

- Elkem ASA was re-listed on Oslo Børs on 22 March. Under China National Bluestar's ownership, Elkem has been transformed into a more specialised and global company, and into a predominantly specialty chemicals company with the majority of its revenues from the silicones value chain. Capital increase from the IPO was NOK 5,200 million (gross).
- Jiangxi Bluestar Xinghuo Organic Silicone Co. Ltd. (Xinghuo Silicones) and Bluestar Silicon Material Co. Ltd. (Yongdeng Silicon Materials) were acquired on 22 March in parallel with the IPO. These acquisitions position Elkem as a true global player with a more diversified revenue base and significant

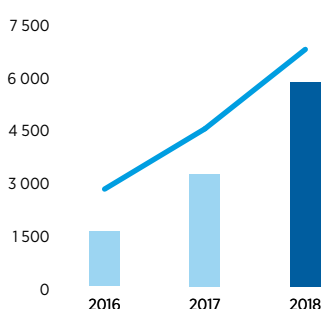
1) EBITDA commented under APM section.

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

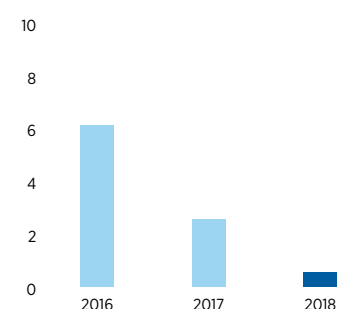
**Operating income**  
NOK million



**Gross operating profit**  
NOK million



**Leverage ratio**  
(x)



growth platform in the fast-growing Chinese market. Xinghuo Silicones and Yongdeng Silicon Materials were acquired for a net purchase price of NOK 3,995 million. The financial performance of these two acquisitions have been satisfactory in 2018.

- On 13 February, Elkem signed a new loan facilities agreement securing new long-term financing agreements significantly improving the group's maturity profile and diversity of funding sources. Furthermore, Elkem successfully placed bonds in the financial market during November and December.
- In March, Foundry Products ramped-up production at a new ferrosilicon plant in Paraguay. The plant has 1 furnace with a capacity of 11,000 mt ferrosilicon, and production will later be further developed to foundry alloys.
- On 25 April, Salten Energigjenvinning AS, a partnership between Elkem ASA and Kvitebjørn Energi decided to build an energy recovery plant at Elkem Salten in Nordland, Norway. 28% of the energy consumption of the Elkem plant is expected to be recovered. This investment confirms Elkem's dedication to ensure environmentally friendly silicon production with the lowest possible emissions and with the lowest possible use of resources.
- In addition to the above, Elkem Silicones launched more than 80 new products, decided to invest NOK 200 million in a new R&D center for Silicones in Lyon, France, and has established a new business for Silicones to EV batteries.

With a highly competent organisation, well-invested assets and attractive market positions, Elkem is committed to create value to all stakeholders.

## Financial results

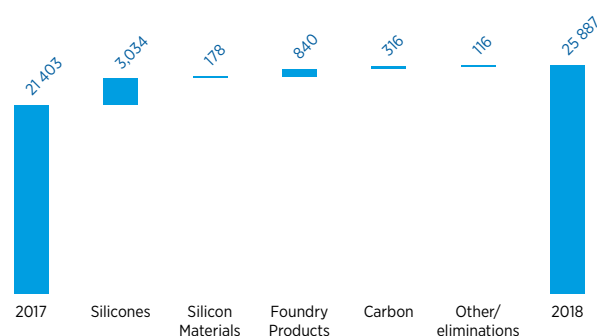
Operating income for the Elkem group amounted to NOK 25,887 million compared to NOK 21,403 million in 2017. The operating income increased by 21%, due to higher income from all divisions. Silicones operating income increased by 30% due to increased sales volumes and higher prices. Silicon Materials operating income increased by 3% supported by favourable prices, however lower sales volumes. Foundry Products operating income increased by 20% due to higher prices and improved sales volume and mix. Carbon managed to increase operating income by 20% largely due to improved sales mix.

Elkem's EBITDA ended at strong NOK 5,793 million compared to NOK 3,188 million in 2017. The corresponding margin improved from 15% in 2017 to 22% in 2018. The improvement in EBITDA was supported by positive development in earnings from all segments, and in particular Silicones explaining 78% of the improved EBITDA for the year. Silicones experienced improved production and sales mix, in addition to favourable prices in China for most part of the year. Silicon Materials and Foundry Products also contributed to improved earnings, which were largely driven by improved sales prices countered only partly by higher raw

material prices. Carbon managed to improve earnings helped by price increase more than offsetting increased raw material prices in the same period.

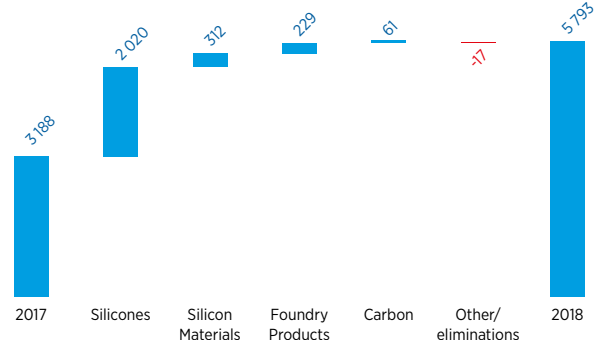
## Operating income

NOK million



## Gross operating profit

NOK million



Silicones EBITDA was NOK 3,535 million in 2018 compared to NOK 1,515 million in 2017. Sales volume increased from 300 kmt in 2017 to more than 314 kmt in 2018, an increase of 4% year-on-year. Specialised sales volumes improved in Europe and North America in particular supported by sales towards the EV industry. In addition sales volume mix improved in Asia in particular during the first half of 2018, followed by maintenance stop at Xinghuo Silicones in the third quarter and slow down in demand in the fourth quarter. Average prices<sup>3</sup> increased by 25% year-on-year, supported by improved prices for high premium products in Europe and North America, in addition to steep price increases in China for the most part of 2018. The earnings conditions in China improved during the first three quarters of 2018 on tight siloxane capacity. The tight capacity led to an imbalance of supply versus demand, pushing prices to record levels. During the second half of 2018, the US imposed tariffs on silicones being imported from China, leading to an over-supply situation in China pushing prices down rapidly.

<sup>3</sup> Average prices: Calculated as segment operating income divided by reported sales volume from the same segment.



Silicon Materials EBITDA was NOK 1,116 million in 2018 compared to NOK 804 million in 2017. Sales volume decreased from 278 kmt in 2017 to 237 kmt in 2018 largely due to technical upgrade and maintenance stop at Yongdeng Silicon Materials, the newly acquired silicon smelter in China and a relining of furnace at Salten in Norway. Silicon 99 CRU reference price EU was on average 3% higher in 2018 compared to 2017. Due to time-lag of contracts however, Silicon Materials realised on average 21% higher prices in 2018 more than offsetting increase in raw material prices.

Foundry Products EBITDA was NOK 931 million in 2018 compared to NOK 701 million in 2017. Sales volume increased from 260 kmt in 2017 to 275 kmt in 2018 with most of the increase coming from high premium products of FSM and Inoculants. CRU reference ferrosilicon price EU was on average 13% higher in 2018 compared to 2017, more than compensating for negative raw materials price effects.

Carbon EBITDA was NOK 335 million in 2018 compared to NOK 274 million in 2017. Sales volume increased from 284 kmt in 2017 to 289 kmt in 2018 contributing positively to earnings. In addition, positive effect from sales price increase more than offset raw material price increase.

Operating profit was NOK 4,142 million in 2018 compared to NOK 1,971 million in 2017. Amortisations and depreciations was NOK 1,263 million in 2018 compared to NOK 1,244 million in 2017. Impairment losses was NOK 8 million in 2018 compared to NOK 17 million in 2017. Other items was NOK 380 million negative in

2018 compared to NOK 44 million positive in 2017. Other items are largely related to change in fair value of power contracts and IPO expenses.

Profit before income tax ended at NOK 3,792 million for the year compared to NOK 1,519 million in 2017. Share of profit from equity accounted financial investments was NOK 23 million negative in 2018 related to Elkem ASA's share of the Energy Recovery project at Salten Energigjenvinning AS, compared to NOK 1 million negative in 2017. Finance income was NOK 42 million and foreign exchange gains was NOK 19 million in 2018 compared to NOK 30 million and NOK 8 million negative in 2017 respectively. Finance expenses were NOK 388 million negative compared to NOK 474 million negative last year. The reduced net interest bearing debt throughout 2018 resulted in lower finance expenses.

The consolidated profit for the year was NOK 3,367 million, including NOK 425 million tax expense for the year, giving an effective tax rate of 11%. The low effective tax rate was attributed to utilisation of tax loss carry forward in China and France.

The earnings per share was NOK 5.74 per share in 2018 compared to NOK 2.08 per share in 2017.

The main items recognised in the consolidated statement of other comprehensive income relates to cash flow hedges (foreign currency hedges and power price hedges). These items had a net positive income of NOK 634 million for 2018, compared to a net positive income of NOK 111 million in 2017. The positive income in 2018 was largely related to positive cash flow hedges



effects of NOK 538 million and currency translation differences of NOK 112 million. In 2017 hedging of net investment in foreign operations amounted to NOK 209 million negative, countered by tax effects hedging of net investment in foreign operations of NOK 48 million and currency translation differences of NOK 279 million positive.

### Cash flow and statement of financial position

Cash flow from operating activities was NOK 4,460 million positive for the year supported by the strong earnings from all segments. Operating profit was NOK 4,142 million. Amortisation, depreciation and impairment amounted to NOK 1,270 million. Changes in net working capital was NOK 712 million negative. The build-up in working capital was related to inventory build-up amounting to NOK 1,368 million due to slow-down in demand and partly due to strategic inventory build-up to prepare for planned reduced production during Chinese New Year impacting Xinghuo Silicones in the first quarter 2019 and for planned maintenance stop of siloxane production in Roussillon in France in April 2019. The inventory build-up was countered partly by increased payables in the same period largely related to high activity towards year-end. Changes in fair value commodity contracts was NOK 321 million positive, countered by NOK 390 million in interest payments made and NOK 272 million income taxes paid.

Cash flow from investing activities amounted to outflow of NOK 4,671 million for the year. Investments in property, plant and equipment and intangible assets amounted to NOK 1,916 million. Elkem invested NOK 1,064 million into maintenance, EHS, and productivity improvement initiatives during the year. In addition, Elkem invested NOK 726 million into growth and step-change investments. The strategic investments in 2018 were primarily related to Silicones' specialisation volume increase of high consistency rubber (HCR), release and textile coating silicone, and electric vehicle related silicones. Silicon Materials and Foundry Products secured strategic technical and environmental upgrades at Elkem Rana, Elkem Yongdeng Silicon Materials and Elkem Paraguay plants. Acquisition of subsidiaries, net of cash acquired amounted to NOK 4,049 million and relates to the acquisition of Xinghuo Silicones and Yongdeng Silicon Materials plants in China. Payment received on loan to related parties was NOK 1,303 million.

Cash flow from financing activities was NOK 5,509 million positive. Several financing activities occurred during 2018 as a result of the re-listing of the company. Capital increase amounted to NOK 5,171 million related to the IPO, whereas new interest-bearing loans and borrowings was NOK 6,643 million. The new capital was partly utilised to pay down short and long-term debt arrangements. Net changes in bills payables was NOK 445 million, net changes in short term loans from related parties was NOK 241 million, and repayment of interest-bearing loans and borrowings was NOK 5,586 million. The board is satisfied with the financing activities carried out in 2018 and is of the opinion that the company has a good basis to support going concern and grow the company based on cash flow generated from op-

erating activities, proceeds from investment activities and access to financing.

Elkem's financial position continued to improve during the year with significant positive impact related to the IPO, refinancing of the group and strong earnings during the year. Elkem's equity was NOK 13,722 million at the end of the year, including non-controlling interests. The equity ratio improved from 33% in 2017 to 44% in 2018. Leverage ratio was 2.5x in 2017 and improved to 0.6x in 2018. The strong equity ratio constitutes a healthy basis for further expansion and growth.

Net interest-bearing debt<sup>4</sup> amounted to NOK 3,264 million per 31.12.2018. Cash and cash equivalents amounted to NOK 7,082 million, in addition to NOK 2,854 million in undrawn credit facilities. The board views the company's cash and financial position to be strong.

The Board of Directors believes that there is no reasonable cause to question the ability of Elkem Group and the parent company 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.

### GOVERNANCE

The board of directors considers good corporate governance to be a prerequisite for value creation and trustworthiness. In order to secure good corporate governance, the board of directors will ensure that Elkem complies with relevant recommendations, practices and regulations.

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](http://www.lovdata.no). The Norwegian Code of Practice for Corporate Governance may be found at [www.nues.no](http://www.nues.no).

The annual statement on corporate governance can be found on page 41 in this report, and is an integral part of the Report of the Board of Directors.

Elkem had 16 board meetings in 2018, five prior to the IPO, two with an interim board and nine meetings with the current board of directors, which was appointed subsequent to the listing at Oslo Børs. The meeting attendance by the current board has been 95% after the IPO. A detailed overview attendance may be found in Note 12 of the financial statement.

### 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

<sup>4</sup>) See APM section.

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.

#### *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.

#### *Financial related risks*

Elkem operates in an international industry which expose the business to a variety of financial risks. Through its operations outside of Norway, Elkem is exposed to fluctuations in exchange rates of other currencies. Elkem has a currency hedge program and loans in foreign currencies that seeks to reduce the impact of fluctuations in exchange rates. Counterparty credit risk is considered low as a big portion of the receivables are insured and that Elkem monitors its receivable portfolio closely. Liquidity risk related to difficulty in meeting financial obligations is con-

sidered low in light of a satisfactory long-term financing of the group, low leverage ratio and adequate equity and solid credit facilities. See note 28 in the financial statements for more details on financial risk.

#### *Elkem's model for risk management*

Elkem's model, according to 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

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 audits. During 2018, the board of directors and management have decided to strengthen the compliance and internal audit reach by establishing a separate function for these activities for its operations in Asia.

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.

Elkem's total risk exposure and business performance is analysed, evaluated and summarized regularly at corporate, segment and business unit level. Risk management is supported by the central finance function's mapping of risks during the yearly budget process. Top risks are identified and discussed with management including risk mitigating activities. A summary of risk management is presented to the Audit Committee and to the Board of Directors on a yearly basis.

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.

The above routine and practise allows Elkem to oversee the total risk exposure, monitor business performance, allow for corrective and improvement activities and mitigate unforeseen and known risk adverse impacts. An overview of major risks and mitigating activities can be found on page 51 in this report.

### 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 is 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 and annual financial statement with special focus on accounting



topics such as provisions and liabilities, estimates and judgments, 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.

### SUSTAINABILITY AND CORPORATE RESPONSIBILITY

Elkem is committed to contribute to a sustainable future. 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.

Our sustainability report details our commitment and activities within environment, emissions, equal opportunity and other social responsibilities. The sustainability report is written within the framework of the Global Reporting Initiative.

The sustainability report can be found on page 50. This report is an integral part of the Report of the Board of Directors.



### 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. 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 experienced eight injuries with high severity in 2018. All injuries were subject to investigation afterwards. There were no accidents with casualties in 2018.

Elkem's sustainability report from page 54 outlines our ambitions and achievements in 2018 within EHS.

### 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. 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. Elkem will provide equal employment opportunities and treat all our 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.

Elkem's sustainability report from page 54 outlines our ambitions and achievements in 2018 within HR.

## STRATEGIC OVERVIEW

### Foundation

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 defines sustainability work as continuous efforts to maximise the positive impact on the environment and societies around us, as well as to minimise any negative impact. Elkem is

a signatory to the UN Global Compact and apply sustainability in line with these principles.

The Elkem Business System (EBS) plays an important role in all of Elkem's operations. EBS is first and foremost about improving customer satisfaction. The aim is to secure excellence in EHS, delivery, quality and cost. EBS is designed and aligned to support the strategic direction and operational goals of Elkem and will drive the behaviour in the organisation to foster a culture of operational excellence, continuous improvement and deep learning.

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.

### Research and development

More than 400 people are dedicated to research and development (R&D) activities and devotes considerable effort and resources to R&D, in order to create and develop innovative products, develop environmentally friendly and energy efficient production technologies and to optimise the full value chains.

R&D is at the core of Elkem and the company's strategy. Elkem has a proven track record through of supplying and commissioning several hundred furnaces worldwide, and being a leader in silicones production and innovation, and silicon related processes and other metals and materials. Our R&D facilities with chemical analysis, material characterisation and melting laboratories play a crucial role for the success of our customers, providing critical analysis information needed for trouble-shooting, research, quality control and innovation. With ambitions of increasing specialisation, a strong product and customer focused R&D capability will be even more important going forward.

For meeting our goal of reduced CO<sub>2</sub>-emissions Elkem seeks to replace fossil coal with biocarbon in the production of silicon and ferrosilicon alloys. Elkem has received NOK 10 million in public funding from the Norwegian Pilot-E program for developing an innovative production process for biocarbon that can make it possible to use non-traditional raw materials to produce cost-effective and sustainable reducing agents.

The pilot facilities in Elkem's corporate R&D centre in Kristiansand 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 Li-ion battery anodes, with pilot equipment for production of fine powder and a battery test lab.

Silicones 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 this capacity worldwide.

In December 2018 Elkem announced the decision to expand capacity and capability by building a new R&D center at its St 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 2018 Elkem's R&D expenses related to processes, products and business development, including improvement projects and technical support to customers were NOK 562 million where of NOK 68 million was capitalised and NOK 495 million was expensed.

### Strategic priorities

The key priority set by the board of directors is that Elkem shall continue its transition into a specialty chemicals company. In order to achieve this, Elkem pursues a strategy based on three main building blocks; operational efficiencies and synergies, growth and specialisation, and China and new market opportunities. The board of directors has defined clear financial goals to create value for the company's shareholders.

#### *Operational efficiencies and synergies*

Elkem has significant industry experience based on the lean manufacturing principles outlined in EBS and continuous improvements. 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.

#### *Growth and specialisation*

The board of directors intends that Elkem continues to pursue its specialty strategy to reduce cyclicalities 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.

The strategy is to pursue further growth through specialisation, organic growth and acquisitions. The target is to grow faster than the market and to achieve revenue growth of 5-10% per year.

The strategy is to improve and stabilise the group's profitability through further product specialisation, especially within silicones. The target is to generate an EBITDA-margin of 15-20% through the economic cycle.

#### *China and new market opportunities*

Elkem has a broad geographical footprint. The company has leading market positions in mature markets such as Europe and North America. The strategy is to develop these positions further. However, the main growth going forward is expected to take place in China and emerging markets. Elkem has a very strong position in China and attractive markets positions also



in other parts of Asia and in South America. The strategy is to capitalise on growth opportunities in these fast-growing markets through developing existing market positions and through acquisitions.

### FUTURE PROSPECTS

The board of directors' assessment is that the fundamentals and long-term prospects are positive for Elkem. The demand for Elkem's products are driven by global megatrends such as sustainability, energy demand growth, urbanisation, digitalisation and aging and growing population. The markets for silicones and silicon, which constitutes about 75% of the group's business, are expected to grow at a rate of 5% per year.

The short-term outlook may however, be more uncertain based on risk for slower macro-economic growth, possible trade conflicts and volatile financial markets. The market conditions for Elkem's segments are softer in terms of demand and pricing than they were one year ago and 2019 is on this basis expected to be weaker than 2018. Market prices have however stabilised and are likely to increase during 2019. The board also expects that gradually higher sales volumes, lower raw material costs

and effects of accelerated improvement programmes will have positive impact during the year.

Elkem will pursue its main strategic initiatives and ensure continuous improvement to counter a weaker short-term market outlook. The specialisation strategy will continue with several initiatives and a strengthening of R&D resources.

Elkem's strategy is to grow through specialisation, organic growth and acquisitions. The target is to have reinvestments of 80-90% of amortisations and depreciations. Elkem has strong up-stream capabilities and limited investment needs related to further upstream capacity expansions. The main focus is to grow downstream through further specialisation. This growth will mainly be driven by R&D processes and acquisitions. Elkem has decided to invest in a new R&D centre in Lyon, France. The plan is also to make investments in the Paraguay-plant to move the production from standard ferrosilicon to foundry alloys. In addition, Elkem may do acquisitions of speciality companies enabling the company to capitalise on already strong upstream positions. These initiatives are well within Elkem's financial capabilities.

Elkem aims to maintain an investment grade profile and targets a leverage ratio in the range of 1.0x - 2.0x. The financial po-

sition is considered to be strong at the turn of the year and will enable Elkem to meet its growth ambitions and dividend targets.

Elkem's policy is to pay a dividend of 30-50% of net income. The board of directors has proposed to the annual general meeting a dividend payment of NOK 2.60 per share for 2018, which would represent 45% of profit for the year. The board of directors' view is that distributing 45% of profit for the year is appropriate based on an extraordinary strong year with leverage below target and given its current 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 6,944 million compared to NOK 7,177 million in 2017. The operating profit ended at NOK 263 million compared to NOK 333 million previous year.

For Elkem ASA the financial position improved during the year. Elkem ASA equity was NOK 8,861 million at the end of the year. The equity ratio improved from 38% in 2017 to 40% in 2018. Profit for the year was NOK 772 million. The net interest-bearing debt amounted to NOK 1,978 million per 31.12.2018. Cash and cash equivalents amounted to NOK 5,596 million.

Allocation of 2018 net profit: The net profit for the year was NOK 772 million. The board of directors proposes the following allocation (in NOK million):

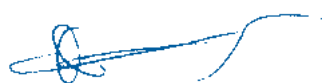
From other paid in capital	(1 511)
Proposed dividend	1 511
Transfer to retained earnings	772
<b>Allocated</b>	<b>772</b>

The Board of Directors of Elkem ASA  
Oslo, 6 March 2019

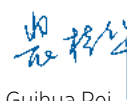


Michael Koenig

Chairman of the Board



Olivier de Clermont-Tonnerre



Guihua Pei



Anja Isabel Dotzenrath



Caroline Gregoire Sainte Marie



Dag Opedal



Marianne Færøyvik



Terje Andre Hanssen



Helge Aasen

CEO

# Management team



**Helge Aasen**  
CEO



**Morten Viga**  
CFO



**Katja Lehland**  
SVP Human Resources



**Asbjørn Søvik**  
SVP Business Development



**Frédéric Jacquin**  
SVP Silicones



**Trond Sæterstad**  
SVP Silicon Materials



**Jean Villeneuve**  
SVP Foundry Products



**Inge Grubben-Strømnes**  
SVP Carbon



**Håvard Moe**  
SVP Elkem Technology



**Louis Vovelle**  
SVP Innovation and R&D

# Board of directors



**Michael Koenig**  
Chair of the board



**Olivier de  
Clermont-Tonnerre**  
Board member



**Guihua Pei**  
Board member



**Dag J. Opedal**  
Board member



**Anja-Isabel Dotzenrath**  
Board member



**Caroline Gregoire Sainte Marie**  
Board member



**Terje Andre Hanssen**  
Board member



**Marianne Færøyvik**  
Board member





# Statement of corporate governance

Elkem considers good corporate governance to be a prerequisite for value creation and trustworthiness. The group has governance documents setting out principles for how business should be conducted. These apply to all Elkem entities.

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 Børs. 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 <http://www.nues.no/>.

This report follows the system used in the Code.

## 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.

Elkem's mission is to contribute to a sustainable future by providing advanced silicon, silicones and carbon solutions, adding value to our stakeholders globally. Further information on Elkem's corporate values is available on [www.elkem.com](http://www.elkem.com).



## 2. BUSINESS

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's business scope is clearly described in our articles of association, and is as follows:

*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 is operating in capital intensive industries and has 27 production sites and an extensive network of sales offices around the world. This gives competitive strengths, but also 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.

The board has set out a strategy based on cost efficiency, growth and specialisation. Elkem's strategy is to ensure operational excellence and cost-effective production based on the lean

manufacturing principles in Elkem Business System (EBS). The target is to grow Elkem's business both organically and through acquisitions. An important part of Elkem's strategy is also further product specialisation to improve and stabilise the group's profitability.

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's mission is to "contribute to a sustainable future by providing advanced silicon, silicones and carbon solutions, adding value to the stakeholders globally". Elkem is a signatory to the UN Global Compact and apply sustainability in line with the principles of the UN Global Compact. Elkem supports the UN Sustainable Development Goals (SDGs), and has analysed how our business activities impact the SDGs and which goals are most relevant for Elkem to contribute towards. Elkem has implemented guidelines and procedures as set out in section 3-3c of the Accounting Act, including code of conduct, policy on anti-corruption and CSR policies.

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

#### Capital structure

As of 31 December 2018, the group's equity was NOK 13,722 million, which is equivalent to 44% 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 par value of NOK 5.

In connection with the re-listing of Elkem on Oslo Børs in March 2018, the company raised NOK 5,200 million in new equity through an offering of 179,310,344 new shares, completed at a subscription price of NOK 29 per share. In connection with the listing, Elkem acquired all the shares in Bluestar Silicone Material Co., Ltd. and Jiangxi Bluestar Xinghuo Silicone for a purchase price of NOK 3,995 million. Due to common control by China National Bluestar (group) Co. Ltd, the purchase price is booked directly against equity according to the "pooling of interest method".

Elkem aims to maintain an investment grade profile and targets a leverage ratio in the level of 1.0 – 2.0x. 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 31.12.2018 the leverage ratio was 0.6x. In 2018, Elkem raised new financing in the bank and bonds markets which has improved the maturity profile and diversification of funding sources. Elkem's loan maturities in 2019 mainly consist of bank loan in

China which are expected to be rolled over. As of 31.12.2018 available cash amounted to NOK 7,092 million providing a very strong liquidity position. In addition, Elkem has undrawn credit facilities.

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

#### Dividend policy

The board of director'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 income for the year.

The proposed dividend pay-out for the 2018 financial year is NOK 1.5 billion, which corresponds to NOK 2.60 per share. The proposed dividend represents 45% of the group's net income.

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

#### Authorisations to the board of directors

At an extraordinary general meeting held on 23 February 2018, i.e. prior to the listing of the Company's shares on Oslo Børs, the board of directors was granted the following authorisations:

- i. Authorisation to acquire up to 10% of the company's shares with a total nominal value of NOK 200 million. 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 ordinary general meeting in 2019.
- ii. Authorisation to increase the share capital by a maximum of NOK 40 million to be used in connection with the issuance of new shares under the Company's share incentive scheme. The authorisation is valid until the ordinary general meeting in 2019.

For any new board authorisations, the board of directors of Elkem will propose that these are limited to a defined purpose so that the shareholders' may vote separately on each purpose.

*No deviations from the Code.*

### 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 shares issuance.

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.

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. The acquisition of Bluestar Silicone Material Co., Ltd. and Jiangxi Bluestar Xinghuo Silicone which was completed in 2018 was made according to these principles.

*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 first ordinary general meeting after the listing of Elkem will take place in the 2<sup>nd</sup> quarter 2019. 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;

- 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;
- members of the board of directors and the chairman of the nomination committee are present at the general meeting; and
- the general meeting is able to elect an independent chairperson 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.

Elkem does not intend 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.

*No deviations from the Code.*

## 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 according to decision of the general meeting. The members of the nomination committee are elected by the annual general meeting, which also have approved guidelines for the duties of the nomination committee.

The nomination committee comprise the following members, all of whom are elected for the period until the annual general meeting in 2019. The members of the nomination committee have been selected to take into account the interests of shareholders in general and are independent of the board of directors and the executive management:

- Sverre Sellæg Tysland / Chairperson / Practicing lawyer
- Anne Kjølseth Ekerholdt / Committee member / Practicing lawyer
- Hao Zhigang / Committee member / Chairman of the board of China National Bluestar



### The work of the nomination committee

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 to the members of the board of directors and the nomination committee. When nominating shareholders' 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 are in contact with the board of directors, the CEO and major shareholders. Further, the nomination committee ensures that the board of directors is composed to comply with legal requirements and the corporate governance code.

The nomination committee will justify its proposal on each candidate separately. Information for how to propose candidates are available on Elkem's webpage.

*No deviations from the Code.*

## 8. COMPOSITION AND INDEPENDENCE OF THE BOARD

The board of directors of Elkem comprise eight members, of which six of the board members, including the chairperson, are shareholder elected. The remaining two board members are elected by the company's employees. All of the shareholder elected board members are elected for the period until the annual general meeting in 2019, while the employee representatives are elected for the period until the general meeting in 2020.

As of 31 December 2018, the board of directors of Elkem comprise the following persons:

- Michael Koenig / Chairperson / Representing China National Bluestar
- Olivier de Clermont-Tonnerre / Board member / Representing China National Bluestar
- Guihua Pei / Board member / Representing China National Bluestar
- Anja-Isabel Dotzenrath / Board member / Independent
- Dag Jakob Opedal / Board member / Independent

- Caroline Gregoire Sainte Marie / Board member / Independent
- Marianne Færøyvik / Board member / Employee representative
- Terje Andre Hanssen / Board member / Employee representative

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, three out of the six shareholder elected board members are independent of the company's major shareholders.

Further information on each of the board members is presented at [www.elkem.com](http://www.elkem.com). The annual report for 2018 also includes information of the expertise of the members of the board of directors, and information on their record of attendance at board meetings.

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 2018, the following board members owned shares in the company; Michael Koenig (68,965 shares), Olivier de Clermont-Tonnerre (15,517 shares), Caroline Gregoire Sainte Marie (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

The board of directors have 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 / Board member / Independent
- Olivier de Clermont-Tonnerre / Board member / Representing China National Bluestar

The committee members have the overall competence required to fulfil their duties based on the organisation and operations of the group.

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:

- Michael Koenig / Chairperson / Representing China National Bluestar
- Anja-Isabel Dotzenrath / Member / Independent
- Caroline Gregoire Sainte Marie / 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 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.

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 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 of both operational and financial matters with the purpose of ensuring that the board of directors has sufficient information for decision-making and is able to respond quickly to changing conditions. 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 of 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 of the board of directors shall 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 March 2018 until the annual general meeting in 2019 are as follows:

### Board of directors:

- Chairperson and board members representing China National Bluestar: No compensation
- Independent shareholder elected board members: NOK 350,000
- Employee elected board members: NOK 170,000

### Audit committee:

- Chairperson: NOK 125,000
- Member: No compensation

### Remuneration committee:

- Leader: No compensation
- Members: NOK 80,000

The total compensation to members of the board of directors in 2018 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 31.12.2018 7,850,000 options are granted to members of the management and certain other key employees. 40 employees were included in the option program. Each option 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. The options will vest over a period of three years from grant with one-third vesting each year. The options will expire two years after vesting, on 18 September 2021, 2022 and 2023, respectively.

*No deviations from the Code.*

## 13. INFORMATION AND COMMUNICATIONS

Elkem is under an obligation to continuously provide its shareholders, Oslo Børs and the financial market 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 the 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 in the 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 2018. In addition, Elkem had a capital market day on 22 November 2018. 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 58.2% of the shares as of 31 December 2018. The Company has not been subject to any takeover bids in 2018.

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 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 ensures that the auditor submits the main features of the plan for the audit of the company to the audit committee annually. Fur-

ther, the board of directors invites the auditor to participate in board meeting(s) that deal 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.

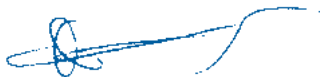
In order to ensure the auditor's independence of the company's executive management, the board of directors has established guidelines in respect of the use of the auditor by the management for services other than the audit.

*No deviations from the Code.*

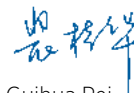
The Board of Directors of Elkem ASA  
Oslo, 6 March 2019



Michael Koenig  
*Chairman of the Board*



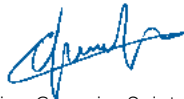
Olivier de Clermont-Tonnerre



Guihua Pei



Anja Isabel Dotzenrath



Caroline Gregoire Sainte Marie



Dag Opedal



Marianne Færøyvik



Terje Andre Hanssen



Helge Aasen

CEO







# Risk management

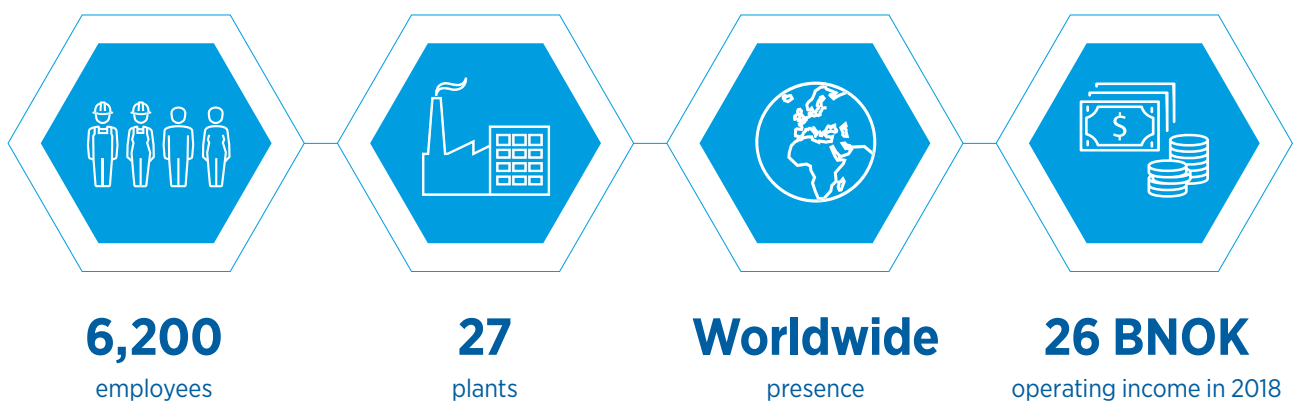
## Main risk areas

Elkem has established policies and procedures for risk management and internal control. The group's risk exposure may change over time depending on market conditions, strategic initiatives and financial position. Main risks are therefore subject to annual mapping and analysis followed by a risk review by the board of directors.

### ELKEM'S KEY RISKS FALL INTO FIVE CATEGORIES:

- Strategic risks
- Financial risks
- Raw materials risks
- Production and process risks
- Market and product risks

The risks are structured to follow Elkem's value chain. The risk assessment is based on likelihood and probable financial impact. Consideration for health, environment and security, as well as adherence to Elkem's code of conduct are incorporated into Elkem's daily operations and risk mitigating activities.



# Risk management

No	Description	Inherent risk	Mitigating actions
1	<b>Sales prices</b>	Sales prices for commodity based products are generally volatile and may fluctuate considerably depending on economic cycles and/or market balance.	Elkem has specialised products positions, which provide certain price and margin stability. Part of the group's product portfolio is, however, still exposed to commodity dynamics. The strategy is to pursue further product specialisation to reduce the share of commodity pricing exposure. Financial hedging of sales prices is not deemed to be possible or desirable.
2	<b>Raw material costs</b>	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, which provides some degree of natural hedging. In addition, price changes for raw materials tend to affect the whole industry and hence not give rise to any company specific exposure. Elkem aims to match raw material contracts with expected sales volumes to limit timing risk.
3	<b>Power price (Norway)</b>	Price changes to electricity in Norway impacts the cost base of silicon and ferrosilicon smelters in Norway.	Power prices in Norway represents an Elkem specific risk and is therefore managed and hedged centrally according to a predefined policy. Please refer to note 28 to the consolidated financial statements.
4	<b>Raw material availability</b>	Timely access to raw materials, such as methyl chloride, quartz, coal, charcoal and rare earth materials, is critical to ensure stable and predictable production. Lack of any of these raw materials may cause production stops and problems to supply customers.	Elkem is mitigating the risk by sourcing from multiple suppliers and avoid being dependent on single suppliers. Long term procurement programmes are in place to reduce availability risk. In addition, raw material stock is monitored closely. Safety stock levels are in place at all plants.
5	<b>Currency exposure</b>	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 the assets and the debt portfolio in the same currencies to reduce translation risk. It is also a target to match sales and operating costs in the same currencies. Currency risk is managed centrally according to a predefined hedging policy. Please also refer to note 28 to the consolidated financial statements.
6	<b>Major explosion / fire</b>	Elkem's operations include complex chemical processes and smelting processes in large electrical arc furnaces. 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 for plants, employees and other stakeholders. If an incident should occur, insurance policies are in place to cover property damage and business interruption and environmental claims. Management conducts follow-up to monitor and reduce risk.

No	Description	Inherent risk	Mitigating actions
7	<b>Critical equipment failure</b>	Elkem's operations depend on heavy equipment, of which some require significant time for repair and/or replacement.	Good maintenance and monitoring of chemical reactors, transformers and fans to avoid disruption. Spare parts and spare equipment are held to limit risk. If production should be affected at one plant due to equipment failure, Elkem will try to move production of critical high value products to other plants to meet contract obligations.
8	<b>Product liability</b>	Quality issues may result in claims and product recalls. In addition, products may give rise to health or environmental concerns.	Elkem is mainly selling to other companies using our products as raw material or ingredients in their finished products. To mitigate any quality problems, Elkem undertakes strict analysis and quality controls before products leave the plants. Elkem has low volumes of potentially harmful products, but substances such as D4 and D5 have been listed as substances of very high concern by The European Chemicals Agency (ECHA). Special precautions are taken regarding use of tar/pitch. Insurance for third party liability and product recall is in place.
9	<b>License to operate</b>	Elkem's production units have a license to operate subject to among others, operating within environmental regulations.	Each plant is continuously monitoring the emissions and have long term programmes to ensure regulatory compliance.
10	<b>Project execution</b>	Large cost overruns and/or failure to identify project risks may impact the group's liquidity and financing position. M&A could also pose a risk that an acquired entity does not deliver profit or synergies as anticipated, or that there are unforeseen restructuring costs or liabilities.	Projects are followed-up according to Elkem's governing documents for industrial projects. M&A risk is sought mitigated by thorough due diligence processes comprising professional support from legal, financial, audit and industry expertise.
11	<b>Compliance</b>	Elkem has global operations and is exposed to compliance risk, which include breaches (incl. allegations) of applicable laws, including competition law, trade sanctions, export control, anti-dumping and countervailing obligations, tax provisions, other regulatory requirements, pollution, anti-corruption provisions, labour law, etc	Proper guidelines for ethical conduct, training of all employees and good internal control measures are in place to prevent any compliance issues. Elkem has a CSR Steering committee which is responsible for internal awareness and internal audits and investigations.

# Elkem 2018 Sustainability report

## A message from our CEO

The process industry has an important role to play if the world is to achieve the UN Sustainable Development Goals and the Paris Climate Agreement. Elkem's mission is to contribute to a sustainable future by providing advanced silicon, silicones and carbon solutions, adding value to our stakeholders globally.

Our products provide solutions to meet the demand driven by megatrends including energy demand and storage, rapid urbanisation, increased standard of living, ageing and a growing population, and digitalisation. Therefore, sustainability is an integrated part of Elkem's business model. It is part of our business, and essential for our license to operate.

We aim to be a leading and sustainable industrial company wherever we operate. As a global company with more than 6,200 employees and presence in 28 countries, we impact the environment and communities around the world. The products we make, for consumers and industry, create a footprint in our supply chain. Elkem intends to leverage new technology and innovation to become more energy efficient, and provide good, safe and attractive jobs. We are committed to developing products and processes that contribute positively to the UN Sustainable Development Goals while minimising the negative impact of our activities, both environmental and social.

A key priority moving forward is to ensure that Elkem's corporate governance and sustainability standards are applied throughout the organisation. This means that new business divisions and employees, whether they are located in China, Paraguay, France or Norway – all meet the same high standards. We are committed to ensuring safe working conditions for our employees along with business integrity and strict compliance for all our operations. Elkem witnessed seven serious work-related accidents in 2018. We take this very seriously and continue to implement several preventive measures as we strive to reach our goal of zero injuries.

Elkem is among the world's most environmentally friendly manufacturers of silicon based materials, but our production processes still emit significant amounts of CO<sub>2</sub>, as this is an inherent part of the process that cannot be avoided with today's technology. Elkem is however working to change this and is playing a leading role in the Norwegian process industry's commitment to become carbon neutral by 2050. Elkem's goal is to use 20% biocarbon in the mix of reduction materials in the production of silicon and ferrosilicon alloys in Norway within 2021 and 40% within 2030. As of 2018 we have already reached our 2021 target. Moving forward, our ambition is to only invest in

new capacity where production is based on renewable energy.

I would like to highlight two events to underline how sustainability is part of our business model and strategy. In 2018 we opened our first foundry plant in Latin America, in Limpio, Paraguay. The production is based on charcoal and hydroelectric power. The plant has the lowest carbon footprint for smelters in Elkem, and serves as an inspiration to the rest of the organisation for what we can achieve when it comes to reducing fossil emissions.

In 2018 we also made a final decision to build our largest energy recovery plant so far, in Salten, Norway with an investment frame of up to NOK 1 billion. The new facility will be commissioned in 2020 and will substantially improve our ability to ensure environmentally friendly silicon production. It will secure lowest possible emissions and lowest possible use of energy resources.

Elkem's successful re-listing on Oslo Børs in 2018 is a great opportunity for us to engage with stakeholders on sustainability issues. This year we asked employees, shareholders, industry peers, research institutions and other stakeholders to help us identify the most material sustainability issues for Elkem. Energy, water waste and safe working conditions are high on the agenda, both for us and our stakeholders. We are committed to set ambitious, but achievable, targets for these sustainability issues. This will allow stakeholders, from employees to investors, to monitor our progress in the years to come.

Our ambition is to not only meet regulatory requirements, but to be one step ahead. Being at the forefront on sustainability issues gives Elkem a comparative business advantage and secures our license to operate. I firmly believe that our products can contribute to a more sustainable world, be it batteries for energy storage, green mobility, renewable energy production and construction or maybe products based on our materials that we do not even know of today.



Helge Aasen  
CEO, Elkem ASA



“

Our ambition is to not only meet regulatory requirements, but to be one step ahead.

## Introduction:

# Elkem's sustainability work

Elkem's mission is "to contribute to a sustainable future by providing advanced silicon, silicones and carbon solutions, adding value to our stakeholders globally". For Elkem, sustainable growth means being part of the response to the great challenges facing the world.

Our products provide solutions to meet the demand driven by megatrends including increased energy needs, a growing population, rapid urbanisation and digitalisation. We believe sustainability is both a responsibility and a prerequisite to be at the forefront of our industry and to remain competitive in the future.

Elkem sees sustainability as a commitment, and our 6,200 employees in 28 countries are the ones who make it happen. The group is committed to harnessing technology and advancing the production of silicon, silicones and carbon materials to create new, innovative solutions and business models that promote a sustainable future. This has been the Elkem way of thinking since Sam Eyde established Elkem in 1904 and Carl Wilhelm Söderberg developed the Söderberg electrode in 1918. Their work came to define the future for Elkem and industry worldwide.

As corporate social responsibility includes a wide range of topics, we embarked last year on a process to identify which of these are most material to Elkem. This comes after a three-year

process of restructuring and repositioning the company from a traditional silicon and ferrosilicon producer to a vertically integrated supplier of silicones covering the whole value chain from quartz mining to a wide range of advanced silicon and silicone based speciality products. Elkem's successful re-listing on Oslo Børs in March 2018 presented a good opportunity to engage more comprehensively with stakeholders on sustainability.

### STAKEHOLDER ENGAGEMENT

Cooperation and dialogue with stakeholders are essential for Elkem as we seek to be good neighbours and valuable community members wherever we operate around the world, be it small towns in Norway or major cities in China. Many of Elkem's plants are cornerstone employers and of great importance to the local community with tax income, jobs, infrastructure and community development. As a long-term partner, Elkem values open dialogue with neighbours, local governments and other partners including research institutions, customers and suppliers.

### Elkem's stakeholders:



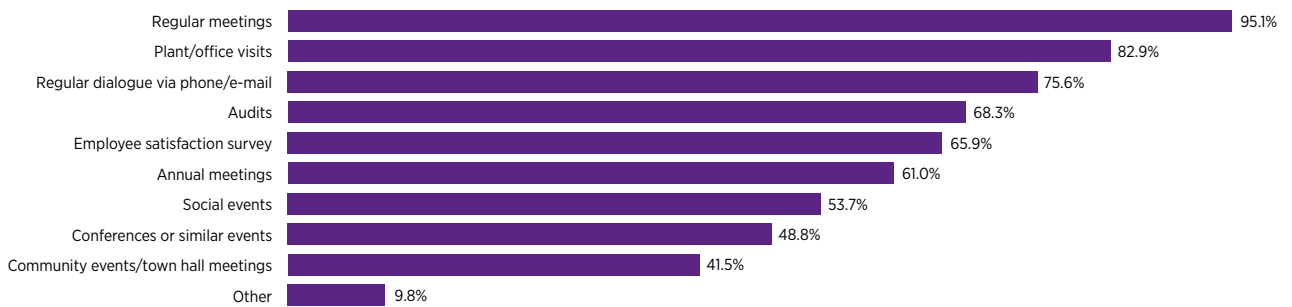


In 2018, Elkem has developed a stakeholder engagement tool to help us structure stakeholder engagement in the organisation and to enable a more thorough impact assessment. The tool pilot is now being tested and we plan to develop it further and implement it in key parts of the organisation in 2019. The aim is

to get a better global overview of our stakeholder engagement. Elkem’s annual internal stakeholder engagement survey shows how and where we interact with stakeholders. The participants in the survey were asked about typical stakeholder engagement types.

**Stakeholder engagement types**

Per cent

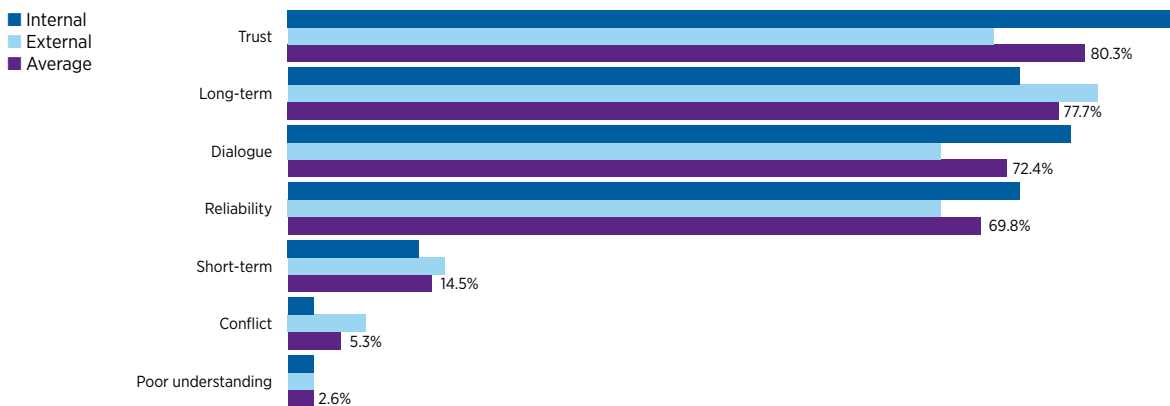


As cooperation and dialogue with stakeholders are essential to Elkem, the participants in our internal survey was asked to describe the overall relationship with their stakeholders. 80% answered that they had a trust-based relationship with their

stakeholders and 78% answered that it was a long-term relationship. Very few participants answered that the relationship to stakeholders is based on conflict (5%) and a poor understanding (3%).

**Stakeholder relationship is built on:**

Per cent



**MATERIALITY ASSESSMENT**

To ensure compliance with Global Reporting Initiative (GRI) and the new stakeholder landscape arising from Elkem’s re-listing on the stock exchange, the group carried out a more extensive engagement process with stakeholders last year. The materiality

assessment table on the next page highlights Elkem’s priority issues on sustainability based on comprehensive dialogue with both internal and external stakeholders.

**Priority issues on sustainability in Elkem:**

<b>Importance: External stakeholders</b>	<b>1. priority</b>	Supply chain: Environmental management	GHG Emissions Stakeholder dialogue/relations Climate change and risk adaption	<b>Compliance</b> <b>Occupational health and safety</b> <b>Energy efficiency</b> <b>Anti-corruption</b> <b>Diversity and equality</b> <b>Water management</b> <b>Waste management</b>
	<b>2. priority</b>	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
	<b>3. priority</b>	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 conditions	Customer health and safety
		<b>3. priority</b>	<b>2. priority</b>	<b>1. priority</b>
<b>Importance: Internal</b>				

The material topics with highest priority in our materiality assessment can be found at the top right of the table. These topics are covered in our report.

**POLICIES AND REPORTING**

Elkem’s management of Corporate Social Responsibility is defined in the following procedures:

- General policy of Elkem ASA
- Elkem policy for corporate social responsibility
- Mandate for the CSR steering committee
- Code of conduct
- Whistle blowing
- Anti-corruption policy
- Competition law compliance policy

The general policy for Elkem ASA is approved by the board and provides the overall strategic approach while the other procedures are approved by corporate management and give necessary details.

Elkem’s reporting of Corporate Social Responsibility is covered by the annual sustainability report that is prepared in accordance with the GRI Standards and in line with Oslo Børs’ guidance on the reporting of corporate responsibility.

**COMMITMENTS**

Elkem is committed to develop its business in support of the ambitions of the Paris climate agreement and the United Nations Sustainable Development Goals (SDGs). As a member of the United Nations Global Compact we ensure that our business is in line with the ten principles of the Global Compact. We are committed to following the United Nations Guiding Principles on Human Rights and Business, and have made available an updated statement for the UK Modern Slavery Act.

Elkem adheres to the principles of “the Norwegian Code of Practice for Corporate Governance” issued by the Norwegian Corporate Governance Policy Board (NCGB). The objective of the Code of Practice is that companies listed on regulated markets in Norway will practice corporate governance that provides 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 which is the chemical industry’s global initiative to drive continuous improvement in environment, health, safety and security. This includes a commitment to managing chemicals safely throughout their life cycle.

Elkem is committed to complying with international regulatory requirements and provides safety data sheets (SDS) for all



applicable products in accordance with the UN Globally Harmonised System of Classification and Labelling of Chemicals (GHS) or its national implementations.

**TARGETS**

We are committed to setting ambitious, but achievable targets for our material sustainability issues. This will allow stakehold-

ers, from employees to investors, to monitor our progress in the years to come. The below targets reflect how we will overall manage engagement and reporting on sustainability. Each chapter in this report includes specific targets, which are aligned to our material sustainability topics and where introduced in the 2017 sustainability report.

Targets	Timeline	Comments
<ul style="list-style-type: none"> <li>Continue to refine materiality analysis with more comprehensive surveys of external stakeholders</li> </ul>	2017-2018	Finalised in 2018
<ul style="list-style-type: none"> <li>Integrate the Sustainable Development Goals more into the report and consider reporting on selected targets</li> </ul>	2019-2020	To be revised in 2019



**United Nations**  
Global Compact



# Governance and compliance: Going further than the law

Governance and compliance is a prerequisite for value creation and trustworthiness. Elkem's strict ethical standards apply to all employees globally and we conduct training to enable our employees to make the right decisions and comply with our standards.

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.

In Elkem, we all are required to promote our values and business standards towards colleagues, business associates and society at large. Our governance documents set out principles for how business should be conducted. These apply to all Elkem entities. The board of directors approves the Elkem governance structure.

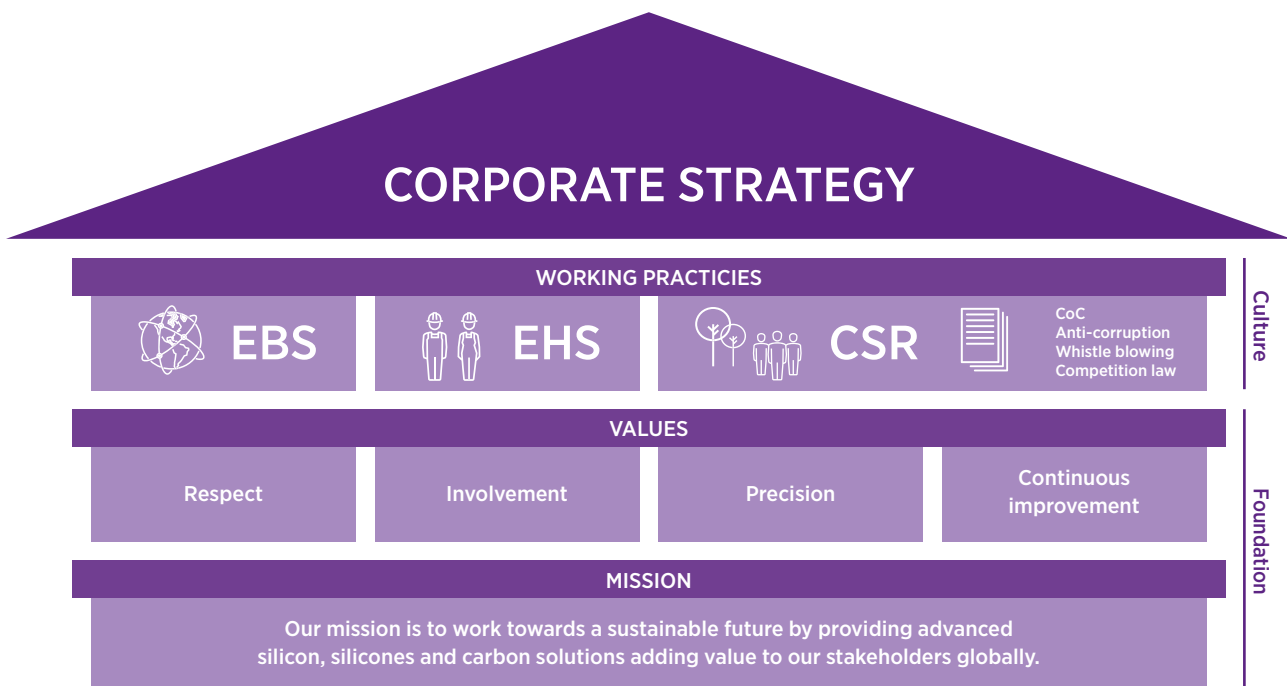
Our code of conduct is based on the principles of honesty and respect, and must be complied with regardless of where our operations are carried out. Corporate social responsibility forms an important part of Elkem's business culture. Elkem is a signatory to UN Global Compact, and Elkem's definition of cor-

porate responsibility is based on the ten UN Global Compact principles concerning human rights, labour rights, environment and anti-corruption.

## COMPLIANCE

Elkem is committed to full compliance with applicable rules and regulations wherever we operate around the world. Compliance is the responsibility of each business unit, but is also followed closely through the corporate system for internal boards and monthly business reviews as defined in the Elkem board of directors' instructions.

Elkem's board of directors endorses "The Norwegian Code of Practice for Corporate Governance" (the "Code") most recently revised 17 October 2018 and issued by the Norwegian Corporate Governance Policy Board (NCGB). The Code of Practice is available on <http://www.nues.no/>



All employees are given documented training on Elkem's code of conduct and must sign the document to confirm their understanding and commitment to follow it. This includes training on Elkem policies related to business ethics, social responsibility and understanding how local culture and customs can influence the perception of what is acceptable in different situations. Training on Elkem's anti-corruption and competition law compliance policies is also required for targeted groups. Sales, marketing and procurement resources also receive anti-corruption training. Elkem employees responsible for supplier audits receive additional training using recognised international audit standards and tools.

Elkem's CEO is the formal owner of Elkem's policy and programme for corporate social responsibility while governing documents are subject to board approval. The board of directors approves the sustainability report together with the annual report. The CSR steering committee is responsible for the sustainability report.

Each location and function are responsible for establishing a shared understanding of how Elkem's CSR policy affects their specific working environment. They are also responsible for developing necessary procedures and routines to ensure full compliance.

### Incidents in 2018

There were no identified material incidents of non-compliance with laws and regulations in 2018.

### ANTI-COMPETITIVE BEHAVIOUR

It is Elkem's general policy to compete vigorously and fairly in full compliance with relevant laws and regulations applicable to its business. To ensure group-wide compliance, Elkem has adopted a competition law policy and manual that describes conduct that will or may infringe on competition law.

Absolute compliance with competition law is expected of all Elkem business units, its employees and representatives. Any failure to comply with competition law will be considered as a serious breach of the employee's obligations towards Elkem. Elkem personnel considered as exposed to competition law issues are required to sign the competition law policy and manual and participate in competition law training facilitated by Elkem. Business unit leaders have the responsibility to take steps to implement Elkem's policy in their respective organisations.

### Incidents in 2018

No identified incidents of anti-competitive behaviour in 2018.

### ENVIRONMENTAL COMPLIANCE

Environmental impact is one of Elkem's key focus areas. Our EHS philosophy is to run operations with resource-efficient processes where negative environmental impacts are minimised throughout the value chain. Elkem is therefore committed to always stay within the rules and regulations governing environmental laws and regulations. Compliance is followed up by each plant as well



as by the corporate EHS department and management through business reviews. All environmental deviations are documented, investigated and managed, even if they are within permit levels and legal restrictions, to learn from them and initiate actions to avoid them from happening again.

In 2018, there were no reported material deviations causing risk of environmental effects. There were however minor short-term deviations from operating permits at some plants. These were quickly resolved and did not exceed annual limits or trigger administrative sanctions or fines.

In 2018 our Chinese plants have been subject to close scrutiny from the Chinese environmental authorities as part of the general tightening of environmental regulations in China. Based on new regulations that were implemented abruptly some of our activities were temporarily closed down and ordered to invest in new abatement systems. This is being done in full compliance with requirements and all applicable activities have returned to operational status.

### Incidents in 2018

No material deviation causing risk of environmental effect in 2018.

## ANTI-CORRUPTION

Elkem does not permit or tolerate any form of corruption. Elkem's policy on anti-corruption applies group-wide and worldwide. Along with our EHS focus, anti-corruption is a top priority. The policy explains and elaborates on the content and implications of the anti-corruption policy for Elkem's employees, representatives and partners. All Elkem personnel exposed to corruption risks must sign the anti-corruption policy and manual.

Elkem is present in several countries with high corruption-risk. Elkem also sells products to companies located in countries ranked in the bottom tier (i.e. very high levels of corruption) of the Transparency International's Corruption Perception Index. Elkem conducts risk assessments on all operations group-wide and globally while the aforementioned high-risk countries receive particular scrutiny. All new suppliers of raw materials, goods and services are subject to pre-qualification based on corporate requirements within environment, health and safety, social responsibility, anti-corruption and compliance with laws and regulations. You can read more about our supplier requirements in the societal impact chapter, page 78. Examples of corruption risk includes the use of consultants regarding receiving public approvals, use of agents and joint ventures including local partners.

Risk assessments are typically conducted when entering into business arrangements in a new country where corruption is viewed as a major concern. Elkem will perform an integrity due diligence to assess the different risks related to corporate social responsibility, including corruption. The assessments may be done by relying on external specialists and will be regularly revisited. Elkem did not enter any new countries in 2018.

Elkem also undertakes a group-wide mapping of sales to companies located in countries with high corruption risk. The mapping ensures that the marketing departments have high-awareness to potential risks of unethical behaviour in these countries. This includes questions relate specifically to customer evaluation, CSR policy communication, documentation of sales, transaction transparency, and the application of Elkem's standards when using agents and distributors.

All Elkem personnel exposed to corruption risks must sign the anti-corruption policy and document e-learning. This relates to the following personnel:

- Corporate management
- Division management teams
- Divisional finance managers
- Plant finance managers & controllers
- Treasury and credit management personnel
- Corporate business support personnel
- Technology management team / department leaders
- All project managers
- All managers in research and product development
- All sales and marketing personnel
- All procurement personnel
- Production managers
- General managers of subsidiaries
- Key managers in logistics/supply chain/raw materials

Each Elkem business unit is responsible for understanding the specific challenges regarding anti-corruption, the anti-corruption regulations applicable to its operations and for adopting adequate anti-corruption guidance and measures.

The target is that 100% of personnel in the target group should be trained within the first year of employment. For 2018 the target was met except for a few individuals that recently joined Elkem and have since been trained.

Elkem's anti-corruption policy, as part of our CSR principles, is communicated and to a large extent forms part of the contracts with agents, distributors, partners, vendors and customers. They are also available on our website. All new suppliers must sign that they have understood and accept Elkem's CSR principles.

### Incidents in 2018:

There were no identified incidents of corruption in 2018.

Targets	Timeline	Comments
• Code of conduct communication and signatures for all employees at 100%	Continuous	On track, but not complete due to integration of Yongdeng Silicon Materials and Xinghuo Silicones
• Anti-corruption training of target group at 100%	Continuous	
• Competition policy training of target group at 100%	Continuous	
• Compliance with laws and regulations (zero deviations)	Continuous	Zero deviations
• CSR audits carried out by CSR committee - 8 audits per year	Continuous	Target not reached in 2018
• Update corporate governance policies to comply with rules for listed companies at Oslo Børs - Implement in Elkem ASA	2018	Goal reached in 2018
• Revise policies available online	2019	To be started in 2019



## Attractive employer:

# Striving to be an even better workplace

Elkem's skilled and dedicated employees are the basis of our success and Elkem must strive to remain an attractive employer, both to retain and to attract new employees. Important areas of action are health and safety, training and competence building as well as promoting equality and diversity.

Elkem's skilled and dedicated employees are the basis of our success and Elkem must strive to remain an attractive employer, both to retain current employees and to attract new employees. Important focus areas for this are health and safety, training, competence building and the promotion of equality and diversity.

Environment, health and safety (EHS) are part of the foundation of the company and are always our first priority. Our EHS efforts are based on a zero-harm philosophy. The safety of our employees is paramount. We strongly believe and have shown at many plants that our production can be done without any harm to our people.

Supported by a strong company culture, we work continuously to be a safe and attractive employer, for current and future employees. Organisational development, continuous talent management and systematic competence development are key to the successful growth of the company, especially now that we are growing as a company.

Elkem has more than 6,200 colleagues after the acquisition of two plants in China, Yongdeng Silicon Materials in Lanzhou and Xinghuo Silicones in Jiangxi, this equals 35% more employees in the company.

The number of contract employees in Elkem was 833 in 2018. Contractors deliver 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. Contractors receive training and follow-up to ensure that they have a safe and healthy working environment. Total number of contractors by region in 2018 was 633 in Asia, 146 in Europe, 0 in Africa and 54 in the Americas.

### COMMON CULTURE: ELKEM BUSINESS SYSTEM

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. Together with the Elkem Business System (EBS) they are at the core of Elkem's company culture. EBS is our business philosophy and a toolbox that gives a common language and working methods for all employees to achieve both personal and busi-

ness success. EBS covers all areas of work, including productivity, quality and cost efficiency. The EBS method and philosophy applies throughout the organisation, and training of our staff is highly prioritised.

### OCCUPATIONAL HEALTH AND SAFETY

Elkem does not accept that injuries or illnesses are unavoidable facts in our industry. Full understanding of health and safety risks and challenges have high priority at all plants. Elkem's statistics clearly show that it is possible to run difficult and potentially dangerous operations with a large work force without injuries. Several of our plants have achieved this for a number of years in succession. The status of Elkem's safety work is discussed every week at division and group management level.

However, Elkem's production processes also have a number of health challenges that are managed daily in Elkem's organisation. The main exposures that may lead to occupational diseases are:

- Exposure to quartz dust in mining, transportation and storage of quartz, and exposure to SiO<sub>2</sub> dust in smelting halls that may cause lung diseases.
- Exposure to PAH components in carbon paste production that may cause cancer.
- Exposure to toxic chemicals in chemical processes to produce siloxane and silicone products.
- Exposure to noise.
- Exposure to ergonomic challenges that may give long-term musculoskeletal damage.

All of these exposures are carefully managed at each applicable site with containment, work and work station adjustment, and, when necessary, personal protection equipment that is provided free of charge to all employees. Many initiatives have also been implemented through the years to reduce exposure by reducing/eliminating sources of dust and noise, and substitution of hazardous substances in the production process.

Employees who are exposed for hazardous dust, chemicals and noise are also subject to extended medical follow-up. A med-





ical examination sets a baseline for their health condition when hired, and routine medical examinations follow-up that this does not change over time.

### INJURY SEVERITY

Elkem measures injury severity based on the short and long-term effect the injury has on the injured person's health and capabilities. We use OSHA's definition of recordable injuries for reporting and define Lost Workday injuries as H1, and Medical Treatment / Restricted Work injuries as H2.

In 2018 we reached the second best total recordable injury rate (H1+H2) in Elkem's history with 2.2 injuries per million working hours, down from 3.1 in 2017. Our best result was in 2015 with 1.8.

Part of this positive development is due to our growth with a high increase in the number of working hours, but we also see a very good improvement in the number of recordable injuries for own employees. Sadly, we saw an increase from 13 injuries (2017) to 20 injuries for our contractors. This again shows that we can never lose focus on our zero-harm philosophy and goal.

In Elkem, injury severity is tracked as low, medium and high severity. Low severity injuries give no permanent damage and have a short recovery time, medium severity injuries may have a longer recovery period, but no substantial permanent damage,

while high severity injuries give substantial permanent damage or worst case, causes death.

Although Elkem's total recordable injury rate numbers were record low in 2018, Elkem did have an increase in severity. In 2017 we had three injuries with high severity, while the number increased to eight in 2018. 83.4% of all recordable injuries (both own employees and contractors) were registered as low and medium severity in 2018. This is down from 95.3% in 2017, because of the increase in severe injuries.

Elkem had no fatalities in 2018.

### ABSENTEE RATE

Absenteeism is the key performance indicator for health in Elkem. The average rate of absenteeism measured in percent of available working days for 2018 was 2.5%, down from 3.5% in 2017. The absentee rate has been on a downwards trend since 2011, and this year's number is the best in nine years. This is partially an effect of growth in areas where the threshold for taking sick leave is higher than in Europe, but also indicates a strong work environment in the organisation. A small percentage of the total sick leave is work related. Ongoing activities to increase health and wellbeing at Elkem locations include working environment assessments and improvement efforts in the areas of ergonomics, chemical control and noise and dust reduction.



**OCCUPATIONAL DISEASE RATE**

For the past three years there has been very few reports of possible occupational illnesses. Most of these are low-key ergonomic issues concerning strain and pain. There have also been several reports of possible lung disease in connection with dust exposure, but none have been fully documented as work related. All of these have been in Europe.

**DIVERSITY AND EQUALITY**

Elkem is committed to 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. 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.

Elkem is an international company with a presence on four continents. Having employees to match this global presence, with diverse cultural and individual backgrounds, is necessary for the company to succeed. Elkem is a local employer and aims to employ local management and staff wherever we are present.

Following up the principle of non-discrimination is the responsibility of each unit manager. Elkem has an internal notification service (whistle-blowing) that employees can use to note their concerns about possible breaches of Elkem’s ethical guidelines or other possible unethical or illegal actions. This can be used to alert management of instances of discrimination.

The #metoo campaign on sexual discrimination raised awareness and discussion on several Elkem locations through 2017 and 2018. A pilot project about diversity and inclusion has been developed in 2018, and the first workshops will be held early 2019. The focus of the workshop will be different kinds of discrimination and possible ethical dilemmas in our work day. The pilot will be evaluated and considered for the organisation as a whole.

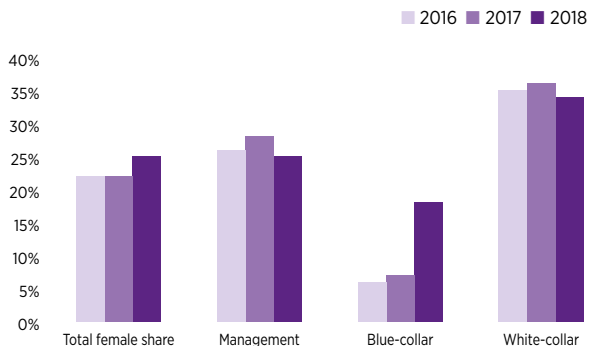
**Incidents in 2018**

There was one case of verbal sexual harassment reported to corporate level in 2017. The case was handled according to Elkem’s corporate procedures. The same case continued in 2018 and resulted in termination of employment.

**FEMALE SHARE**

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 and a high focus on environment, health and safety gives a better working environment and more sustainable operations. Elkem values gender diversity and aims to achieve a better gender balance year on year.

Female share in Elkem



The percentage of female employees in Elkem has remained stable and low at 22% the last years. We experienced an increase in female share of the company to 25% in 2018, due to the integration of the Chinese plants of Elkem Xinghuo Silicones and Elkem

Yongdeng Silicon Materials. Asia is the region with the highest number of female employees, with 29%.

Since the two new plants Xinghuo Silicones and Yongdeng Silicon Materials account for a 35% increase of employees in the organisation, any change is naturally affected. A positive change with this integration is the substantial increase in female blue-collar employment from 7% to 18% in 2018.

However, Elkem saw a drop in the share of female leaders. One concrete action to improve our share of female leaders is to actively encourage women to apply for management positions internally. At least 50% of participants invited to Elkem's leadership training programmes are women. The female participation rate in the programme in 2018 was only at 25%.

Elkem does not have the share in age groups at group level available for 2018.

### BOARD OF DIRECTORS AND MANAGEMENT

Elkem's board of directors has eight members from Germany, France, China and Norway.

The female share of the board is 50%. One of the eight board members is in the age group 30–50 years old. The rest of the members are 51 years or older. None of the board members are from minority groups.

The corporate management team of Elkem consists of 10 people. Only one of the 10 is a woman. Two of the members are in the age group of 30 to 50 years old, the rest are 51 years or older.

In 2018 Elkem started mapping the female share of leaders and boards in our divisions to get a better overview and start tracking. The mapping shows great differences within the organisation. Some places in the organisation women account for 50% of internal boards and plant management, other locations there are no women in the boards or management at all.

### DEVELOPMENT AND TRAINING

Elkem is active in a large number of demanding markets and the need for continuous developments 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 based on the EBS principles. We also consider taking on new responsibilities as a very important way of learning and developing. To strengthen our learning-by-doing approach we also offer a number of in-house training programmes. Training within various skills is part of the individual development plans for employees.

Elkem's global target is that 100% of employees of all positions and locations shall have an annual development discussion with their leader. In 2018, 59% of employees had such discussions. On that note, 83% of all Elkem units achieved 90% or higher implementation rate. Without Yongdeng Silicon Materials and Xinghuo Silicones, the number of employees that received development discussions was 91%, one of the best numbers we have seen in the company. 74% of our location met our 100% target in 2018. In 2019, we will increase the efforts especially at our two new plants, 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. The turnover rate is the so called unwanted leavers, the number of people that left Elkem that does not include retirement and similar. Total turnover rate in the Elkem group was 5.4%, down from 6% in 2017.

### Turn over rate

Region	2018 – total	Female share 2018	2017
Americas	8%	1%	6.9%
Europe, Middle-East and Africa	8%	2%	6.2%
Asia	3%	1%	3%

### New hires

Region	2018 – total	Female share 2018	2017
Americas	149	13%	72
Europe, Middle-East and Africa	241	27%	253
Asia	188	27%	72

The female share of new hires was over all 22.5% and the female share of leavers was 22.8%. The numbers are not available by age at group level.

## COLLECTIVE BARGAINING AGREEMENTS

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 two 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 has good cooperation with the unions. This also includes our suppliers' employees, where information about this is found in contractual agreements.

Information about the number of employees covered collectively by bargaining agreements is currently not available.

## CHILD AND FORCED LABOUR

Elkem has operations in several countries where there is a risk of child labour and forced labour, notably India, Malaysia and Paraguay.

Working at some supplier production sites or 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 of age, with the exception of some vacation substitutes and vocational students who can be 16. They are only allowed to do light and simple work that is deemed safe and does not conflict with school participation.

Elkem's suppliers have contractual obligations to ensure that no children under the age of 15 (14 in some selected countries) work at our supplier's plants and that they limit hazardous work and night work to persons over 18 years of age. Elkem adheres to the UN Guiding Principles on Human Rights and Business.

### Incidents in 2018:

There were no reports of child or forced labour in Elkem or with our suppliers in 2018.

Targets	Timeline	Comments
• Zero recordable injuries	Continuous	Positive development the last years, but not complete in 2018
• Zero cases of serious occupational illness	Continuous	Positive development the last years, but not complete in 2018
• EHS training of all new employees at 100%	Continuous	Goal reached for 2018
• Increased female share year on year	Continuous	Goal reached for 2018
• Development discussions at 100%	Continuous	Overall good implementation, but not complete because of the integration of Xinghuo and Yongdeng
• Map female share in internal governing bodies and start tracking	2018-2019	Goal reached in 2018



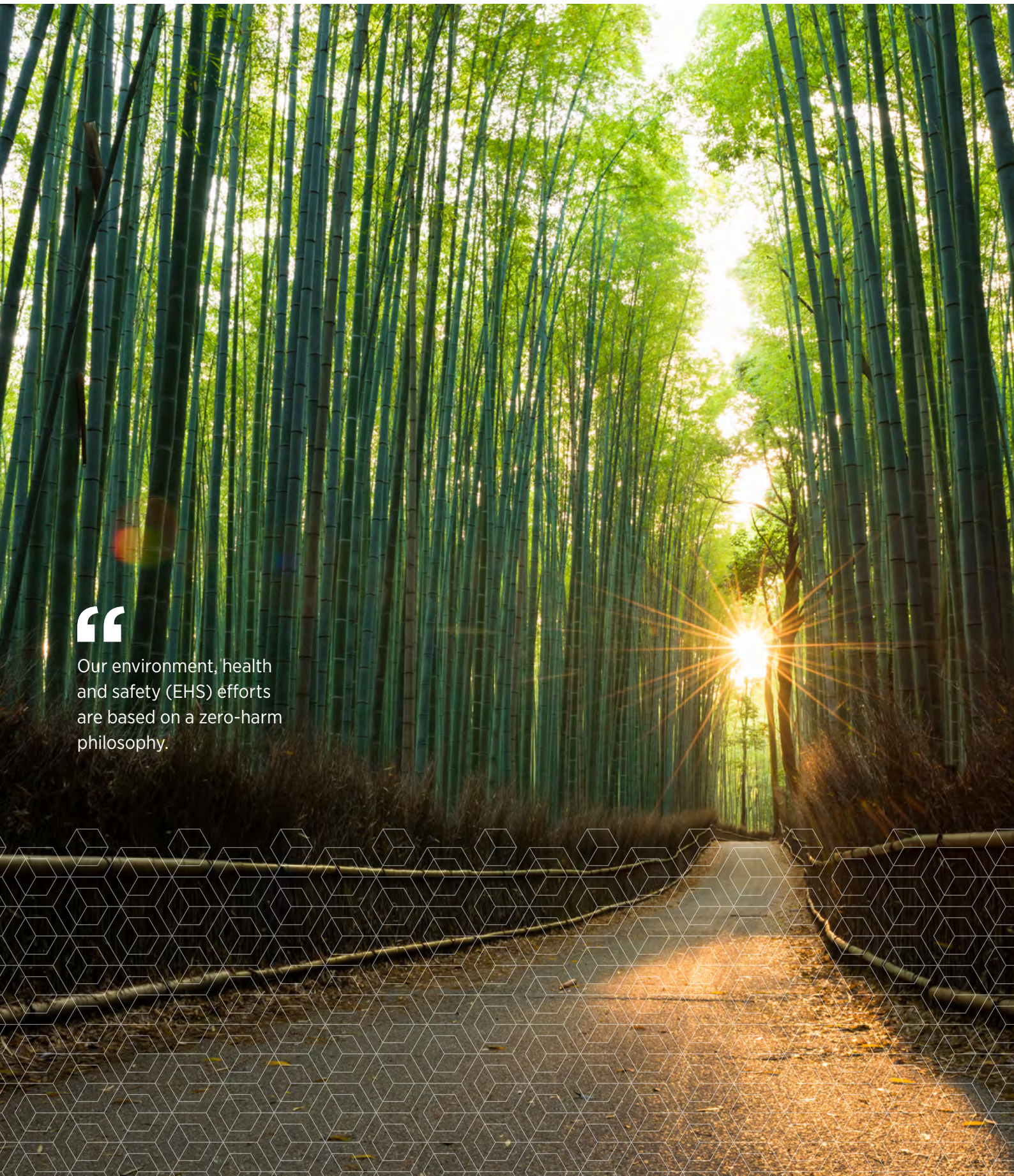
## Employment initiatives at Elkem Rana

In close cooperation with the local public employment office, Elkem Rana employs people without formal competence in a 10 week training programme. After the training, Elkem Rana evaluates the employees for permanent positions at the plant.

People standing outside of the work force are resources that are not being used and are a challenge for both the local community where they live, and for themselves as they are not using their potential to participate in the workforce. People can experience hurdles when trying to return to the work force after a pause with possible gaps in their CVs or if they have had problems in the past. Getting especially young people into the workforce is a focus for local and national authorities in Norway. Even though more and more young adults are finishing high school in Norway, certain regions like Nordland, where Elkem Rana is based, still have lower rates. Nordland has the second lowest rate in Norway. Elkem's challenge in a region like this is to get the right people with the right background

for employment at the plant. This programme is one way to attract and hire the right employees.

Elkem Rana has implemented KPIs on this, as part of their social responsibility in the local community. Several of their permanent employees started in this programme and were able to show their potential. Together with the local employment office, Elkem helps these people normalise their work day, through predictable work hours and routines. Meeting at the agreed time and doing the work set out for them can be a challenge for people that have been outside the work force for some time and is seen as one of the most important success factors for the people in training.



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Our environment, health and safety (EHS) efforts are based on a zero-harm philosophy.

# Energy and environment: Zero-harm guides our work

Elkem strives to be an environmentally conscious company, with a safe and healthy working environment. Our environmental, health and safety (EHS) efforts are based on a zero-harm philosophy.

A zero-harm philosophy implies protecting the health and safety of all people working at all Elkem locations. It also means running operations with resource-efficient processes where negative environmental impacts are minimised throughout the value chain.

Using highly developed production technology, Elkem converts natural resources into products that today's society is fully dependent on. With recent growth, Elkem is an integrated value chain covering all aspects of production from quartz to silicon and silicones. Each step of the process has its environmental challenges that we believe are managed in a sustainable manner. Our sustainability approach is based on the general principle of producing as efficiently as possible and with the maximum use of all input streams to avoid waste.

The process of converting quartz to silicon is a high temperature smelting process that consumes vast amounts of energy. As the main energy base for this production is hydropower at almost all of our smelters, the electrical energy supply does not have a climate effect. The process itself, however, uses carbon sources like fossil coal, charcoal and wood chips as a reductant in the chemical conversion. This gives emissions of CO<sub>2</sub>, NO<sub>x</sub> and SO<sub>2</sub>. These emissions are inherent to the process and cannot be fully removed with today's technology. Our main strategy has therefor been to reduce our environmental footprint as much as feasible with today's technology at the same time as we de-

velop tomorrows technology that will be carbon neutral. Efforts include replacing fossil carbon with biocarbon by increasing the amount of charcoal and wood-chips in the process, rebuilding furnaces to reduce NO<sub>x</sub> generated in the smelting process and using more low-Sulphur raw materials to reduce SO<sub>2</sub> emissions. All of these have had a substantial positive effect on our environmental footprint.

In 2018, Elkem presented a renewed environmental strategy for the board of directors confirming its commitment to:

- Full compliance with all applicable environmental regulations wherever Elkem operates worldwide.
- Create and sustain a strong environmental reputation wherever we operate worldwide.
- Ensure 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.
- Strengthen our position in the development of technology and materials that enable reduction in greenhouse gas emissions throughout the world.

The strategy also provides KPIs, reported quarterly, for energy consumption, emission to air and water and waste/by-products.

KPI	Targets
CO <sub>2</sub>	<ul style="list-style-type: none"> <li>• 20% reduction in direct fossil CO<sub>2</sub> emissions for Norwegian smelters by 2021, 40% by 2030</li> <li>• Full understanding of indirect CO<sub>2</sub> emissions</li> </ul>
SO <sub>2</sub>	<ul style="list-style-type: none"> <li>• Per cent reduction (to be defined) in direct SO<sub>2</sub> from process gas by 2030</li> </ul>
NO <sub>x</sub>	<ul style="list-style-type: none"> <li>• 1000 tonnes reduction at Norwegian smelters by 2025</li> </ul>
Dust	<ul style="list-style-type: none"> <li>• 30% reduction by 2025 (2015 base)</li> </ul>
Waste	<ul style="list-style-type: none"> <li>• Per cent reduction (to be defined) of process waste to landfill or destruction by 2025</li> </ul>
Energy	<ul style="list-style-type: none"> <li>• Energy recovery increase year on year</li> </ul>
Water (COD / PAH / fresh water consumption)	<ul style="list-style-type: none"> <li>• Meet new water directive requirements in Europe, and new water requirement in China (national and local)</li> <li>• Compliance with mandated remediation of Fiskaa water body to lowest cost</li> </ul>
D4/D5	<ul style="list-style-type: none"> <li>• Zero spills of D4/D5</li> </ul>



### ENERGY: CONSUMPTION, RECOVERY AND EFFICIENCY

Energy is a critical input factor for Elkem's production and represents a significant cost. Energy efficiency and sustainable use of energy is of utmost importance to secure necessary supply while at the same time reducing our global greenhouse gas footprint. New regulatory framework, such as concessions, directives, taxes and positive stimuli in the form of public support underscore the importance of focusing more strongly 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. The other processes in Elkem are considerably less energy intensive with the total of 1,4 TWh.

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.

Global records of total energy consumption have not been prioritised earlier as a very high percentage of the total is related to furnace production and has been well documented at a

corporate level. With our renewed strategy and more detailed reporting systems this will be in place from 2019.

Total gross electricity consumption in Elkem globally in 2018 was 6,228 GWh, up from 5,279 GWh in 2017. This is because of the integration of the silicon plant Yongdeng, the silicones plant Xinghuo and the start of production at the ferrosilicon plant in Limpio, Paraguay.

Of the total gross power consumption of 6,228 GWh in 2018, more than 85% took place in countries or regions with close to 100% renewable power production.

The increase in energy consumption is mostly related to new plants that now is a part of the Elkem organisation.

Globally, a total of 645 GWh heat and electricity was recovered from our plants, down from 689 GWh. This is due to lower capacity at our Chicoutimi plant.

New electricity is generated at the Thamshavn and Bjølvfossen plants with a total of 209 GWh in 2018. Between 2016 and 2017 refurbishment and ramp-up of the energy recovery system at Bjølvfossen gave a substantial increase, while 2018 has been stable. By 2020, an additional 275 GWh of new electricity will come on line at the Salten plant as an approved strategic investment project started in 2018 is completed.

Elkem has not kept global records of energy consumption outside our industrial processes as this energy consumption com-



prises a small percentage of the total and is very time-consuming to collect. We will aim to improve our records of auxiliary power and fuels consumption over time.

For hot water to district heating there are numerous usages including heating of raw materials internally, supply to public building and sports arenas in local communities and sales to other companies with activities like land-based fish farming that need heat.

As a percentage of total electricity consumption, the amount of recovered electricity and heat went down from 13% in 2017 to about 10% in 2018 due to the integration of new plants that does not have energy recovery facilities. See graphs that compare previous years on page 75.

### CONSUMPTION OF REDUCTION MATERIAL

Elkem's electric arc furnaces use both fossil and biogenic carbon as chemical reduction materials in the metallurgical process. Total use of fossil reduction materials in Elkem globally was 726,267 in 2018, up from 695,004 in 2017.

Consumption will vary from year to year based on market conditions and capacity utilisation. The increase is mainly due to the integration of Yongdeng Silicon Materials in 2018.

Total renewable reduction material consumption in Elkem globally was 364,424 tonnes in 2018, a 4% increase from 2017.

### 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. 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. As Elkem has developed into a global company and increased its presence in chemical processing, water management is becoming more important, both when it comes to water economisation, recovery and reuse at the plant and controlling and monitoring emissions from our plants to water.

Water monitoring has been done actively 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.

Water consumption and discharge is limited in silicon and ferrosilicon production. Emissions to air from the smelting process will however have an effect on water bodies close to the production sites as rain washes residue into the sea. Many old plants were also built on landfills and/or have landfills where there is a potential for run-off to water bodies. Water monitoring focuses on sediments and biota in water bodies that may be affected by emissions from our production or by run-off from landfills. Key parameters include levels of heavy metals and organic compounds in blue mussels and sediments.

Carbon production has historically used more water directly in the production process to cool products. For water manage-

## New energy recovery plant at Elkem Salten

In April 2018, Elkem initiated a partnership with Kvitebjørn Energi to build an energy recovery plant at Elkem Salten in the northern part of Norway.

The installation is calculated to be able to recover 28% of the electrical energy feed into the plant's three smelting furnaces. This equals the power consumption of about 15,000 Norwegian households.

At the announcement of the project in April, Elkem's CEO Helge Aasen said: - *This is an attractive and important project for Elkem. Together with our partner, Kvitebjørn Energi, we will continue to develop Elkem's leading position within energy recovery. The project will increasingly strengthen our competitiveness.*

The investment frame of the project is estimated to NOK 1 billion and has been supported by Enova which is the Norwegian government's funding agency for energy efficiency improvements. It is the second largest investment Enova has ever funded.

The energy recovery plant will position Elkem Salten to become one of the most energy effective silicon plants in the world. Together with other energy recovery installations that have been implemented at Elkem plants over many years this will bring the total energy recovery of the group to approximately 900 GWh per year. The project will therefore strengthen Elkem's efforts to ensure environmentally friendly silicon and ferrosilicon production with the lowest possible emissions and lowest possible use of resources.

The project is expected to be finished in 2020.

ment the main focus has been on avoiding discharge of PAH as it contains hazardous components that can affect marine life. Substantial efforts have been made to reduce water consumption and to capture and clean PAH polluted air and water before it reached water bodies where it can do harm.

With growth in silicones, water consumption and management is becoming increasingly important for Elkem. Water is an important raw material in the production of base and intermediate silicones and is also used extensively in the different processing steps. 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. All applicable plants have comprehensive systems for water monitoring and water treatment in compliance with local regulations.

The total fresh water consumption in Elkem was 36,208,744 m<sup>3</sup>. The total process waste water discharge was 14,859,936 m<sup>3</sup>. Water storage has no significant water-related impact.

## WASTE MANAGEMENT

With the expansion of Elkem to include the chemical production of silicones from silicon, the characteristics of our waste streams have changed. From our traditional smelting activities waste 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.

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

Several plants have a zero waste to deposit target and have accomplished significant reductions over the last years.

Waste to landfill in 2018 was 195,000 tonnes. About 1,300 tonnes of this was hazardous waste and has been managed in accordance with local public regulations.

There were no significant spills, defined as spills that have a lasting environmental impact, in 2018.

However, there have been incidents related to loss of containment in tank facilities, but without substantial environmental impact.

## EMISSIONS

With today's technology, the production of metals and materials on an industrial scale is not possible without the emission of various substances that can be harmful if not controlled. These include CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>2</sub>, PAH and dust. As some of these are inherent to our production process, emission levels vary with production volume from year to year. Elkem works continuously to

reduce these emissions and has dedicated R&D activities working with all major emissions.

## CO<sub>2</sub> EMISSIONS AND TRADING SCHEMES

More than 75% of the total CO<sub>2</sub>-emissions from our production come from the smelting process. As this cannot be measured directly, emissions are calculated based on third party certificates of carbon content (TC) in raw materials (coke and coal). Numbers for CO<sub>2</sub> from other sources, including heating and fuel, are based on standard conversion factors in accordance with EU/ETS Guidelines.

Most of our smelters are subjects to the EU/ETS system and its external revision schemes. 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 appealed. At the end of 2018 a decision was announced increasing the number of free quotas at two of Elkem's Norwegian smelters.

The total emission of CO<sub>2</sub> from our processes was 2.54 million tonnes in 2018. This will vary year on year based on market conditions and capacity utilisation. The last years we have seen an increase in our total CO<sub>2</sub> emissions. All of this can be related directly to production expansion. In 2017 Elkem acquired an existing production facility with 2 furnaces in Mo I Rana Norway and in 2018 another with 4 furnaces in China. All of these were existing production facilities and do not increase Norway's or China's total CO<sub>2</sub> emissions. In addition, Elkem started 1 smelting furnace in Paraguay giving a national increase in CO<sub>2</sub> emissions in Paraguay. This furnace is however run on hydroelectric power and uses only bio-carbon as a reductant making its operation close to carbon neutral.

As far as net CO<sub>2</sub> emissions are concerned, this is dependent on improved production yield and increasing the amount of reduction materials from non-fossil sources that can be used. Our goal is to reduce our fossil carbon footprint in our Norwegian smelters with 20% by 2021, and with 40% by 2030. We are working with partners to develop efficient and more environmentally friendly production of charcoal to silicon and ferrosilicon production.

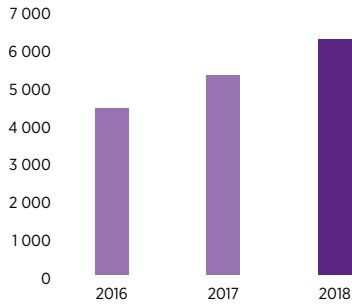
## CO<sub>2</sub>

In 2018, Elkem emitted 2.54 million tonnes of fossil CO<sub>2</sub>, a 30% increase from 2017. This increase is mainly due to the expansion of plants in our organisation.

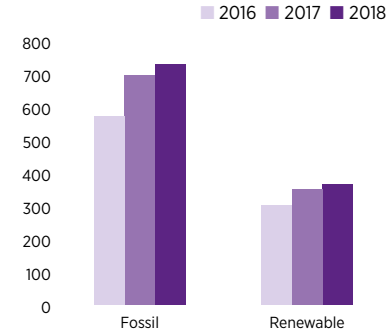
About 75% of the total CO<sub>2</sub> emissions were generated in the reduction processes in the smelters where carbon (C) reacts with oxygen in quartz to obtain silicon/ferrosilicon.

Our goal is to replace fossil emissions with biocarbon by 20% in our Norwegian smelters by 2021. The biogenic emissions in 2018 was 313,500 tonnes, equal to 20,7% of our CO<sub>2</sub> emissions. The emission of biogenic CO<sub>2</sub> originates from woodchips and

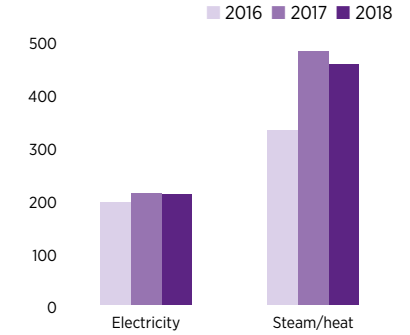
**Gross electricity consumption<sup>1</sup>**  
GWh



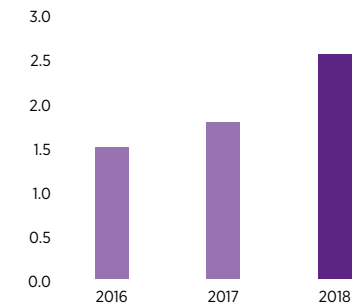
**Consumption of reduction materials**  
Metric tonnes



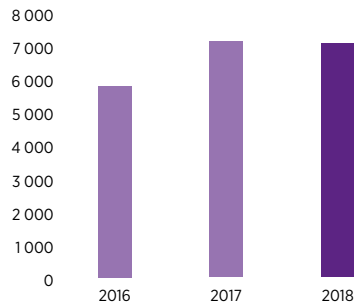
**Energy recovery by electricity & heat**  
GWh



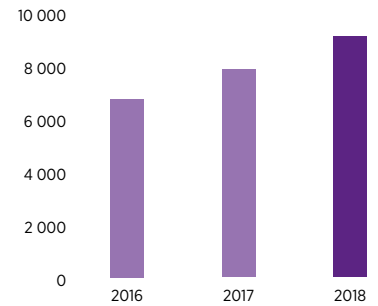
**CO<sub>2</sub> emissions**  
Million tonnes



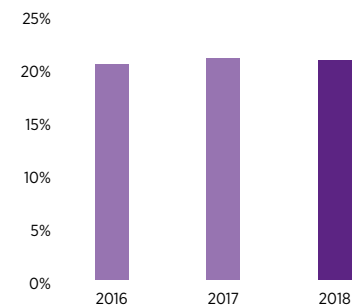
**NO<sub>x</sub> emissions**  
Tonnes



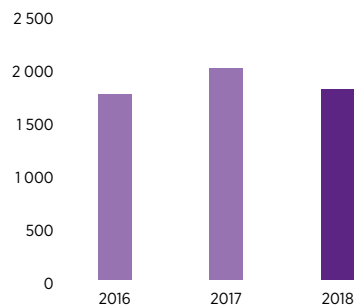
**SO<sub>2</sub> emissions**  
Tonnes



**Biocarbon in Norwegian smelters**  
Percentage of total carbon



**Dust emissions**  
Tonnes



20.7% of the CO<sub>2</sub> emissions in Norwegian smelters are from biocarbon sources.

<sup>1)</sup> 2016 numbers do not include Elkem Rana, Xinghuo and Yongdeng. 2017 numbers do not include Elkem Yongdeng.

<sup>2)</sup> To reach our goal of 20% use of biocarbon, the Norwegian smelters would have to reduce the fossil CO<sub>2</sub> with more than 303,100 tonnes that equals 20% of the total emission.

charcoal used as alternative raw material in the silicon and ferrosilicon smelters.

## OTHER EMISSIONS

Elkem has significant emissions of NO<sub>x</sub>, SO<sub>2</sub>, and dust. Emissions vary mainly due to production volume.

### NO<sub>x</sub>

Elkem's NO<sub>x</sub> emissions saw a small decline from 7,110 tonnes in 2017 to 7,070 tonnes in 2018, including new plants in the calculation. This reduction comes as a result of several initiatives and projects at our plants, mainly supported by the Norwegian NO<sub>x</sub> fund. For our Norwegian smelters, Elkem has seen a 5% decrease in our NO<sub>x</sub> emission, from 5774 tonnes in 2017 to 5462 tonnes in 2018.

### SO<sub>2</sub>

In 2018, Elkem emitted 9,000 tonnes, up from 7,900 tonnes.

For SO<sub>2</sub> 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<sub>2</sub> filter with support from the Norwegian SO<sub>2</sub> fund. Unfortunately, the installation has not operated as expected due to technical issues and has therefore been out of operation for most of 2018. These technical issues will be resolved early in 2019. 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.

For 2018, Elkem emitted 1.8 million tonnes of dust (PM/particulate matter). This was a decrease from 2 million tonnes in 2017. The 10% decrease is highly welcome and comes as a result of continuous improvements. Our overall goal is a 30% reduction by 2025, based on 2015 numbers. We are pleased to see that we are on the way to reach that target.

Targets	Timeline	Comments
• Energy goal: Energy recovery increase year on year	Continuous	On track on projects, but went down because of new plants
• CO <sub>2</sub> goal: 20% reduction of fossil emissions	2021	On track: 20.7% in 2018
• CO <sub>2</sub> goal: on track to reach 40% reduction of fossil emissions	2030	On track
• CO <sub>2</sub> goal: Full understanding of indirect CO <sub>2</sub>	2020	On track
• NO <sub>x</sub> goal: Reduce emissions from Norwegian smelters by 1000 tonnes	2025	On track: Reduction in 2018 was 312 tonnes
• SO <sub>2</sub> goal: Per cent reduction (to be defined) in direct SO <sub>2</sub> from process gas by 2030	2025	Not on track, set-back due to technical issues of facilities
• Dust goal: 30% reduction (2015 base)	2025	Improvements made: Down 10% in 2018
• Waste goal: Per cent reduction (to be defined) of process waste to landfill or destruction	2025	Not completely on track
• Water goal: Meet new water directive requirements in Europe, and new water requirement in China (national and local)	Continuous	No deviation in 2018
• Water goal: Compliance with mandated remediation of Fiskaa water body with cost efficient measures	Continuous	No deviation in 2018
• D4/D5 goal: Zero spills	Continuous	No deviation in 2018
• Elkem Fiskaa Carbon SO <sub>2</sub> scrubber and energy recovery unit fully operational	2018	Some delay, expected to be resolved by Q3 2019
• Energy recovery project in Salten on track for completion	2020	On track
• Analyse and develop a climate risk overview	2019–2020	Startup in 2019



## Elkem Foundry plant based on biocarbon opens in Paraguay

In August, Elkem celebrated the opening of a new ferrosilicon plant in Limpio, Paraguay, with a production based on local and sustainable biocarbon together with hydropower from the Itaipu power plant.

Focusing on sustainability and the future of ferrosilicon production with neutral emissions of CO<sub>2</sub>, the plant is working towards using 100% biocarbon as reductant for the furnace.

Biocarbon in the form of charcoal and woodchips are sustainable carbon sources replacing fossil coal. All the biocarbon is harvested and produced locally, from sustainable eucalyptus plantations, so no native woods are deforested.

The quartz, another raw material, is also being extracted and processed locally giving a low CO<sub>2</sub> footprint.

At the celebration ceremony in August, the President of Paraguay, Mr. Mario Abdo Benitez, made the official opening of the plant, celebrating with employees of the plant, local business and politicians and top management of Elkem.

*"This is a big day for all of Elkem. To open a brand-*

*new plant in Latin America is an important milestone for us. Also, Elkem's long term goal is to achieve carbon neutral metal production. The Limpio plant challenges and inspires the rest of the company to meet our climate and sustainability strategies",* says Helge Aasen, CEO of Elkem.

Limpio is 25 km from Asunción, the capital of Paraguay, and is strategically situated to serve the iron and steel industry in the region. The plant is the first foundry plant for Elkem in Latin-America. The plant has about 100 employees and 1 arc-furnace with 11.5MW-15MVA, which generates an annual capacity of 11,000 metric tonnes.

*"Limpio is a pioneer plant within Elkem and in Paraguay. It is the first foundry Elkem plant in Latin America, the first 100% biocarbon fed plant in Elkem globally and it is the first ferroalloy industry in the country",* says Osvaldo Almeida, General Manager of Elkem Paraguay.

# Societal impact: Sustainable footprint with great reach

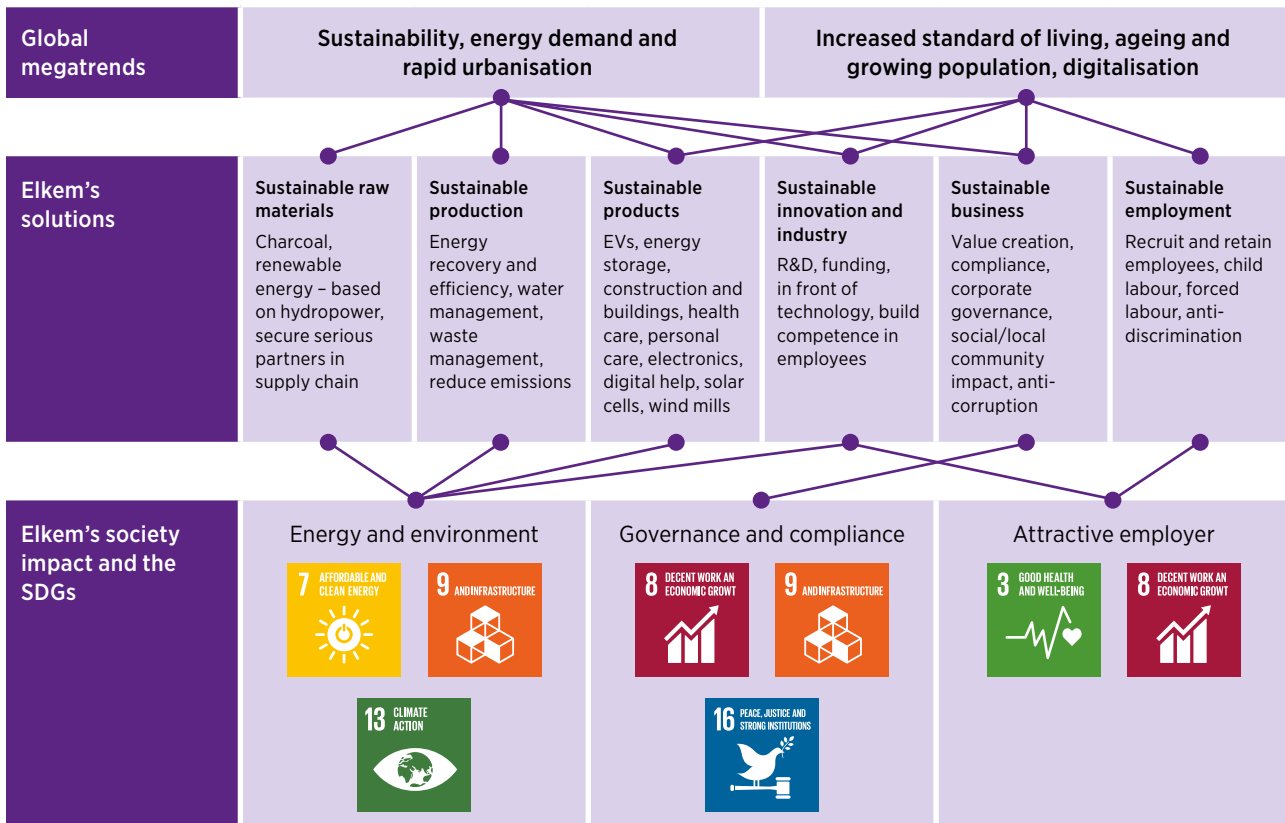
Elkem’s operations have significant impact on society throughout the value chain. In addition to own operations, Elkem also has a significant footprint through its procurement of raw materials, capital goods and services. We set high standards for ethical conduct and social responsibility in our supply chain and monitor it closely.

This impact has both positive and negative sides. On the positive side, our operations create stable employment and tax revenue in addition to developing and producing products and materials that are essential to our way of life and to the changes that are necessary as we see the effects of climate change. On the negative side there is high energy usage and harmful emissions that must be closely monitored and effectively mitigated.

The process industry plays a major role in the transition to a low carbon society. In addition to reducing own emissions and in-

creasing energy efficiency, Elkem contributes to the green transformation by delivering materials, technology and solutions that are necessary for the transformation in other businesses and sectors around the world. Solar panels, wind mills, electric vehicles, low emission transportation and infrastructure, smart phones, batteries and cables are all dependant on products and materials produced by companies like Elkem.

Global megatrends affects our business stratgy and drive growth for Elkem’s products and solutions. This requires that



we specialise. Elkem's products serve demand driven by six megatrends that are strategically important to Elkem: Sustainability, energy demand, rapid urbanisation, increased standard of living, ageing and growing population, and digitalisation. In the illustration on the page to the left you can see how the different global trends are linked to our process, products and solutions, and how we contribute to the UN Sustainable Development Goals. Elkem believes sustainability is both a responsibility and a prerequisite to be at the forefront of our industry and to remain competitive in the future.

### SUPPLY CHAIN AND RAW MATERIALS

Elkem sources raw materials, capital goods and services for our operations around the world. Elkem sets high ethical, environmental and social standards that companies must meet to become our suppliers.

Elkem's corporate supply chain function holds the overall global responsibility for outlining and maintaining Elkem's procurement and logistics strategies and policies. Elkem's main purchasing categories are raw materials, equipment and construction and maintenance services on site. The function is working internationally across all divisions in the company, and the focus is to improve Elkem's total procurement and logistics cost in a sustainable way.

Elkem's total procurement spend in 2018 was approximately NOK 15 billion, covering supplies of raw materials, materials, energy, goods, services and logistics. The active supply base consists of about 15,000 suppliers globally – of which almost 70% in Europe.

### SUPPLIER REQUIREMENTS

All new suppliers of raw materials, goods and services are subject to pre-qualification based on corporate requirements within environment, health and safety, social responsibility, anti-corruption and compliance with laws and regulations. Risk assessments are done before suppliers are approved. Risk-exposed suppliers are subject to detailed requirements from Elkem. Elkem also requires that suppliers and their sub-contractors follow Elkem's principles. Elkem is implementing improved database and contract management systems to ensure compliance and governance in these areas.

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.

### Supplier screening

New suppliers of raw materials and hardware and services to plants and investment projects are screened using social and environmental criteria. The goal for 2019 is to continue improving documentation of screening and follow-up and to implement a global supply chain risk management system.

### Supplier audits

For raw materials the number of suppliers is relatively low, and a structured auditing programme is in place to ensure that all existing suppliers receive regular audits. For suppliers of goods and services such as hardware, plant equipment and services the number of suppliers is high. New suppliers are assessed for social and environmental criteria, and regular audits are performed by plant personnel or corporate personnel. In 2018, Elkem entered into a partnership with a global supply chain risk management solution that will support contractual relationships with existing and new suppliers in keeping their information up-to-date in a web portal, ensuring widespread visibility to their current qualification status and competencies. The system will also be used to keep a central record of supplier audits.

### LOCAL COMMUNITIES

Input from local communities is valuable information that helps us improve. Important topics for dialogue with local communities are 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.

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. A number of Elkem plants have local initiatives and support programmes for better education, sports activities, better local infrastructure, local community poverty reduction/food support or other social impact initiatives. There are clear guidelines for what is permitted to avoid corruption.

**Question: Which activities does your unit have a plan for today?**



Being part of local and regional formal networks are also an important way of understanding the needs of local and regional communities. Several of Elkem's plants are members of business

organisations, research and development clusters or other networks. In our stakeholder survey 65% of the participants said their unit were part of some sort of local/regional network

Stakeholder	Key issues for the stakeholders
Employees	Safe jobs, high EHS standard, sustainable work situation, development/career opportunities, contribute to EHS and business improvements, salaries, benefits and compensation (employee welfare), equal opportunities, sustainability (CSR).
Authorities	Environmental regulations, industrial practice and trust, good environmental performance, open communication, compliant with laws – labour and environment, community development, pay taxes, active participator in dialogue, coordination with fire and police force.
Management	EHS results, financial results, strategic direction, ethical business, CSR issues, compliance, all to follow Code of Conduct, sustainable business, leadership development, full compliance with laws.
Customers	High quality of product, highly trustworthy partner, good coordination in supply chain, technical improvements, fair/reasonable pricing, ethical and responsible behaviour, timely delivery of product, product innovation.
Suppliers	Ethical and responsible behaviour, value addition, anti-corruption work, anti-bribery work, highly trustworthy partner, transportation.
Local communities	Community support/development, EHS, sustainable business, employment prospects, reliable employer, visible in the community, open and trustworthy dialogue, environmental performance and perception.
Unions	Respect of agreements, good work climate, good dialogue, constructive partnership.
Shareholders	Profit, strategic direction, EHS results.

More information on our stakeholder dialogue see page 56 (under introduction).



## HUMAN RIGHTS

Elkem is committed to conducting its business with respect for all internationally recognised human rights, and is dedicated to doing so consistently with the United Nations Guiding Principles on Business and Human Rights and the United Nations Global Compact. Elkem also adheres to the UK Modern Slavery Act.

We will work to ensure the individual's right to privacy and personal dignity, promoting equality for all people and do not accept discrimination based on skin colour, race, nationality, social background, disability, sexual orientation, political or religious conviction, gender or age. Elkem does not tolerate any form of harassment or physical/mental abuse in the form of words or action. This commitment is stipulated in all our governing documents and all Elkem employees are required to sign a copy of the code of conduct stating that they will adhere to these principles.

Elkem follows up human rights issues through risk assessments and audit programmes. In addition, due diligence is done before entering new countries or regions.

Elkem personnel responsible for contracts with significant suppliers of raw materials, goods and services, or who are required to follow-up Elkem's CSR policy at supplier sites receive training on how to conduct supplier audits including criteria for human rights assessments.

All significant investment contracts are screened using human rights criteria as well as other social and environmental impact criteria. The definition of 'significant investment agreements' concern contracts above NOK 15 mill. or investments of a size that must be approved by plant management or higher. Elkem's Principles for corporate social responsibility are attached to all significant contracts.



Targets	Timeline	Comments
• 100% screening of new suppliers for social and environmental criteria	2018–2020	No deviation in 2018
• Training of target group on human rights at 100%	Continuous	Some delay
• Zero incidents involving violation of human rights in supply chain	Continuous	No deviation in 2018
• Implement updated human rights clauses through training of target employees	Continuous	Some delay
• Implement templates and reporting procedures for more systematic stakeholder engagement	2018–2019	On track
• Map community programmes at all plants and units	2018	Goal reached in 2018
• Implementation of supply chain risk management system	2018–2020	IT application on track

# Focus on **construction**





## Innovation providing solutions for sustainable construction

Elkem Silicon Materials is building on its long history of creating value through sustainable innovation. We currently have a portfolio of products and active product development efforts that focus on providing solutions for solving the world's need for sustainable buildings.

### INCREASED CONCRETE DURABILITY

With global cement production generating 2.2 billion tonnes of CO<sub>2</sub> and accounting for 8% of worldwide CO<sub>2</sub> emissions, Elkem Microsilica® is at the forefront of new technologies that can use concrete more efficiently. Our family of Elkem Microsilica® products significantly improves the environmental profile of concrete by increasing durability, giving buildings a longer service life and lowering maintenance costs. Elkem Microsilica® also enables the manufacture of higher strength concrete, thereby enabling more efficient building techniques with slender slabs and columns, reducing concrete consumption.

### REDUCING CARBON FOOTPRINT

Elkem Microsilica® is widely used in the construction of the Elizabeth Line in London. Starting in 2009, it was the first major infrastructure project to develop a sustainability strategy. Built by Crossrail Ltd, the rail line will stretch more than 60 miles from Reading to Shenfield through central tunnels beneath London. When opening in 2019, the new railway will stop at 40 accessible stations, 10 newly built and 30 newly upgraded, and is expected to serve around 200 million people each year.

As a major energy user during construction and operation, Crossrail Ltd were committed to reducing their carbon footprint. Elkem Microsilica® helped reduce construction-related carbon emissions by 18.6%, 10% better than the intended target. All civil structures where Elkem Microsilica® was used, such as tunnels, portals and surface sections, were assessed using the Civil Engineering Environmental Quality (CEEQUAL) scheme to evaluate sustainability performance, and have either achieved an excellent rating or are on target to do so. In addition, Elkem had to ensure all trucks delivering to the site were fitted with diesel particulate filters or cleaner Euro Stage IIIB engines to reduce air pollution.

### ASBESTOS SUBSTITUTION

In addition, we have developed solutions for substituting asbestos, a known carcinogen that has commonly been used in the production of building products. Elkem Microsilica® is now an important additive in the fibre cement industry, enabling the production of asbestos free products. In the gypsum industry, Elkem has been developing products that will improve the fire retardancy of wallboard products.

# Process21:

## Roadmap to zero emissions

The initiative of Process21 was launched in the white paper about Norwegian industry in March 2017 (Meld. St. 27 (2016-2017)). In 2018, the forum was formally established by the Norwegian government. Process21 shall give strategic advice and recommendations to the government and other actors on how to combine sustainable growth and reduced emissions from the process industry.

The Process21 has a steering committee lead by Elkem's SVP Technology, Håvard Moe. The steering committee has representatives from the industry, academia and representatives from the tripartite constituents. Here, Håvard Moe tells us about Process21 and his thoughts on how the process industry will have to develop to adapt to the low carbon society of the future.

### *What is Process21 and why do we need it?*

– Process21 is a national forum set up by the Norwegian Ministry of Trade, Industry and Fisheries. The strategy process will end up with advice and recommendations to the Government and other stakeholders on how the process industry can take a leading role in the transition into a low emission society. Part of the recommendations will be to advise how the government's funding agencies better can support the transition. The final report will be handed over to the ministry in December 2020.

– The Paris climate agreement of 2015, our participation in the EU Emission Trading System (ETS) and the Norwegian Parliament's decision that Norway shall be a low carbon society in 2050 are all important frameworks for the process industries development in the coming years. The process industry is an integral part of this future and we have a clear vision: Increased value creation from the industry with zero emissions in 2050

### *What are these "21 strategies" about?*

– The 21 strategies are based on the well established three party collaboration between government, workers unions and business organisations. We are used to work together to find the best solutions on central and great societal challenges. Involvement from the relevant parts has been a key to the success of the tripartite agreement, and that is what the "21 strategies" are based on too.

– There has been several "21 strategy"-groups previously, covering different industries, sectors and technology areas. The main reason to organise this kind of strategic work, is to ensure that R&D and innovation policy, design and structure of the government and the strategic ambitions and needs that businesses have

correlate. That is why the 21 strategies that have been organised have a high involvement from the business sector.

### *What is the goal of Process21?*

– Process21 has two goals. The first is to reduce the emissions from the industry. The second is to make sure that the industry continues to contribute to value creation in Norway, within the framework of the Paris climate agreement. The forum is set to take into account how the process industry in Norway and our technological development in Norway can have indirect effect on cuts in emissions in other sectors and businesses, both in Norway and globally. I believe that the process industry in Norway has the opportunity to be at the forefront of technology to achieve this, and hopefully it will spread and create a positive impact in the world as we move towards a low carbon society.

### *How does the Process21 work?*

– The steering committee collaborates closely with the secretariat to set up our goals and activities. We will organise expert groups to assess key topics related to reduced emissions and increased value creation. The first expert groups are currently being established for entrepreneurship in the process industry sector, product and service development, bio economy, carbon capture and storage (CCS) and digitalisation. During the next 18 months, the expert groups will have a deep dive into their strategic task and give their advice. Our aim is that the first expert group will give their recommendation in August 2019.

### *You started the work in 2018, what have you done so far?*

– Mobilisation of the industry and other stakeholders has been the main focus in 2018. We have visited the industrial areas in Norway to meet people in the industry, academia and local government. The aim is to engage over 100 companies in the strategy process. So far, the response and feedback have been very positive. If the broad engagement continues, I am quite confident that work done by the Process21 forum will contribute to sustainable development of the Norwegian process industry over the next decade.

*Elkem's SVP Technology Håvard Moe, head of the steering committee Prosess21, with Norwegian minister of Trade Torbjørn Røe Isaksen.*

*Håvard Moe tells us about Prosess21 and his thoughts on how the process industry will have to develop to adapt to the low carbon society of the future.*



# Annual accounts **2018**



## Elkem group

<b>Consolidated statement of income</b> .....	<b>88</b>
<b>Consolidated statement of other comprehensive income</b> .....	<b>89</b>
<b>Consolidated statement of financial position</b> .....	<b>90</b>
<b>Consolidated statement of cash flows</b> .....	<b>91</b>
<b>Consolidated statement of changes in equity</b> .....	<b>92</b>
<b>Notes to the consolidated financial statements</b> .....	<b>94</b>
<b>Note 01</b> General information and basis of presentation.....	94
<b>Note 02</b> Significant accounting policies.....	94
<b>Note 03</b> Accounting estimates.....	102
<b>Note 04</b> Composition of the group.....	103
<b>Note 05</b> Investments in equity accounted companies.....	109
<b>Note 06</b> Operating segments.....	111
<b>Note 07</b> Operating income.....	114
<b>Note 08</b> Grants.....	115
<b>Note 09</b> Employee benefit expenses.....	116
<b>Note 10</b> Employee benefit obligations.....	116
<b>Note 11</b> Share-based payment.....	120
<b>Note 12</b> Management remuneration.....	120
<b>Note 13</b> Other operating expenses.....	125
<b>Note 14</b> Operating lease.....	126
<b>Note 15</b> Other items.....	128
<b>Note 16</b> Finance income and expenses.....	128
<b>Note 17</b> Taxes.....	129
<b>Note 18</b> Property, plant and equipment.....	133
<b>Note 19</b> Intangible assets and goodwill.....	135
<b>Note 20</b> Impairment assessments.....	136
<b>Note 21</b> Other assets.....	138
<b>Note 22</b> Inventories.....	138
<b>Note 23</b> Trade receivables.....	139
<b>Note 24</b> Interest-bearing assets and liabilities.....	140
<b>Note 25</b> Provisions and other liabilities.....	144
<b>Note 26</b> Financial assets and liabilities.....	145
<b>Note 27</b> Hedging.....	151
<b>Note 28</b> Financial risk.....	153
<b>Note 29</b> Capital management.....	158
<b>Note 30</b> Number of shares.....	158
<b>Note 31</b> Earnings per share.....	158
<b>Note 32</b> Supplemental information to the consolidated statement of cash flows.....	159
<b>Note 33</b> Transactions with related parties.....	159
<b>Note 34</b> Pledge of assets and guarantees.....	161
<b>Note 35</b> Events after the reporting period.....	161

## Elkem ASA

<b>Income statement – Elkem ASA</b> .....	<b>162</b>
<b>Balance sheet – Elkem ASA</b> .....	<b>163</b>
<b>Cash flow statement – Elkem ASA</b> .....	<b>164</b>
<b>Notes to the financial statements – Elkem ASA</b> .....	<b>165</b>
<b>Note 01</b> General information.....	165
<b>Note 02</b> Significant accounting policies.....	165
<b>Note 03</b> Accounting estimates.....	169
<b>Note 04</b> Operating income.....	169
<b>Note 05</b> Grants.....	170
<b>Note 06</b> Employee benefit expenses.....	171
<b>Note 07</b> Retirement benefits.....	172
<b>Note 08</b> Other operating expenses.....	173
<b>Note 09</b> Operating lease.....	174
<b>Note 10</b> Other gains (losses) related to operating activities.....	174
<b>Note 11</b> Finance income and expenses.....	175
<b>Note 12</b> Taxes.....	175
<b>Note 13</b> Property, plant and equipment.....	177
<b>Note 14</b> Intangible assets.....	178
<b>Note 15</b> Investments in subsidiaries.....	179
<b>Note 16</b> Investments in joint ventures.....	180
<b>Note 17</b> Other non-current assets.....	181
<b>Note 18</b> Inventories.....	181
<b>Note 19</b> Trade receivables.....	181
<b>Note 20</b> Other current assets.....	182
<b>Note 21</b> Equity.....	183
<b>Note 22</b> Shareholders.....	184
<b>Note 23</b> Interest-bearing assets and liabilities.....	185
<b>Note 24</b> Provisions and other non-current liabilities.....	187
<b>Note 25</b> Other current liabilities.....	187
<b>Note 26</b> Financial instruments.....	187
<b>Note 27</b> Transactions with related parties.....	189
<b>Note 28</b> Guarantees.....	191
<b>Note 29</b> Merger Elkem ASA and subsidiaries.....	191
<b>Note 30</b> Events after the reporting period.....	192
<b>Declaration by the Board of Directors</b> .....	<b>192</b>
<b>Independent auditor's report</b> .....	<b>193</b>
<b>Appendix - Alternative Performance Measures (APMs)</b> .....	<b>197</b>

## Consolidated statement of income

<i>Amounts in NOK million</i>	<i>Note</i>	<b>2018</b>	2017
<b>1 January - 31 December</b>			
Revenue	7	<b>25 625</b>	21 133
Other operating income	7	<b>244</b>	236
Share of profit (loss) from equity accounted companies	5	<b>18</b>	35
<b>Total operating income</b>	6	<b>25 887</b>	21 403
Raw materials and energy for smelting		<b>(12 023)</b>	(10 825)
Employee benefit expenses	9	<b>(3 449)</b>	(3 145)
Other operating expenses	8, 14	<b>(4 622)</b>	(4 245)
Amortisations and depreciations	18, 19	<b>(1 263)</b>	(1 244)
Impairment losses	18, 19	<b>(8)</b>	(17)
Operating profit (loss) before other items		<b>4 522</b>	1 927
Other items	15	<b>(380)</b>	44
<b>Operating profit (loss)</b>		<b>4 142</b>	1 971
Share of profit (loss) from equity accounted financial investments	5	<b>(23)</b>	(1)
Finance income	16	<b>42</b>	30
Foreign exchange gains (losses)	16	<b>19</b>	(8)
Finance expenses	16	<b>(388)</b>	(474)
<b>Profit (loss) before income tax</b>		<b>3 792</b>	1 519
Income tax (expense) benefit	17	<b>(425)</b>	(269)
<b>Profit (loss) for the year</b>		<b>3 367</b>	1 249
<b>Attributable to:</b>			
Non-controlling interests' share of profit (loss)		<b>29</b>	39
Owners of the parent's share of profit (loss)		<b>3 337</b>	1 211
<b>Earnings per share in NOK:</b>			
Basic	31	<b>5.74</b>	2.08
Diluted	31	<b>5.74</b>	2.08



## Consolidated statement of other comprehensive income


<i>Amounts in NOK million</i>	<i>Note</i>	<b>2018</b>	2017
<b>1 January - 31 December</b>			
<b>Profit (loss) for the year</b>		<b>3 367</b>	1 249
<b>Items that will not be reclassified to profit or loss</b>			
Remeasurement of defined benefit pension plans	10	<b>17</b>	1
Tax effects on remeasurements of defined benefit pension plans	17	<b>(6)</b>	2
Change in fair value of equity instruments		<b>2</b>	0
Share of other comprehensive income (loss) from equity accounted companies	5	<b>(0)</b>	-
		<b>14</b>	4
<b>Items that may be reclassified to profit or loss in subsequent periods</b>			
Currency translation differences		<b>112</b>	279
Hedging of net investment in foreign operations		<b>(29)</b>	(209)
Tax effects hedging of net investment in foreign operations	17	<b>7</b>	48
Cash flow hedges	27	<b>873</b>	(111)
Tax effects on cash flow hedges	17	<b>(200)</b>	21
Share of other comprehensive income (loss) from equity accounted companies	5	<b>(8)</b>	(0)
		<b>755</b>	27
<b>Reclassification adjustments for the period</b>			
Currency translation differences		<b>0</b>	-
Cash flow hedges	27	<b>(176)</b>	105
Tax effects on cash flow hedges	17	<b>40</b>	(25)
		<b>(135)</b>	80
<b>Other comprehensive income for the year, net of tax</b>		<b>634</b>	111
<b>Total comprehensive income for the year</b>		<b>4 001</b>	1 360
<b>Attributable to:</b>			
Non-controlling interests' share of comprehensive income		<b>32</b>	40
Owners of the parent's share of comprehensive income		<b>3 969</b>	1 320
Total comprehensive income for the year		<b>4 001</b>	1 360

## Consolidated statement of financial position

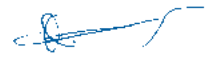
<i>Amounts in NOK million</i>	<i>Note</i>	<b>31.12.2018</b>	31.12.2017
<b>ASSETS</b>			
Property, plant and equipment	18	<b>12 445</b>	11 950
Goodwill	19	<b>342</b>	326
Other intangible assets	19	<b>922</b>	911
Deferred tax assets	17	<b>60</b>	90
Investments in equity accounted companies	5	<b>134</b>	159
Derivatives	26, 27	<b>131</b>	152
Other non-current assets	21	<b>441</b>	407
<b>Total non-current assets</b>		<b>14 474</b>	13 995
Inventories	22	<b>5 467</b>	4 099
Trade receivables	23	<b>2 391</b>	2 518
Derivatives	26, 27	<b>303</b>	33
Other current assets	21	<b>836</b>	2 091
Restricted deposits	24	<b>577</b>	1 020
Cash and cash equivalents	24	<b>7 082</b>	1 751
<b>Total current assets</b>		<b>16 656</b>	11 513
<b>Total assets</b>		<b>31 129</b>	25 507
<b>EQUITY AND LIABILITIES</b>			
Paid-in capital	30	<b>8 102</b>	2 918
Retained earnings		<b>5 520</b>	5 545
Non-controlling interests		<b>101</b>	102
<b>Total equity</b>		<b>13 722</b>	8 565
Interest-bearing non-current liabilities	24	<b>7 131</b>	4 585
Deferred tax liabilities	17	<b>207</b>	105
Employee benefit obligations	10	<b>563</b>	556
Derivatives	26, 27	<b>450</b>	379
Provisions and other non-current liabilities	25	<b>232</b>	315
<b>Total non-current liabilities</b>		<b>8 583</b>	5 940
Trade payables		<b>2 731</b>	2 650
Income tax payables		<b>330</b>	139
Interest-bearing current liabilities	24	<b>2 052</b>	3 647
Bills payable	24	<b>1 740</b>	2 650
Employee benefit obligations	10	<b>671</b>	587
Derivatives	26, 27	<b>79</b>	247
Provisions and other current liabilities	25	<b>1 221</b>	1 083
<b>Total current liabilities</b>		<b>8 824</b>	11 003
<b>Total equity and liabilities</b>		<b>31 129</b>	25 507

The Board of Directors of Elkem ASA – Oslo, 6 March 2019

  
Michael Koenig  
Chairman of the Board

  
Anja Isabel Dotzenrath

  
Marianne Færøyvik

  
Olivier de Clermont-Tonnerre

  
Caroline Gregoire Sainte Marie

  
Terje Andre Hanssen

  
Guihua Pei

  
Dag Opedal

  
Helge Aasen  
CEO

## Consolidated statement of cash flows

<i>Amounts in NOK million</i>	<i>Note</i>	<b>2018</b>	<b>2017</b>
Operating profit (loss)		<b>4 142</b>	1 971
Amortisation, depreciation and impairment	18, 19	<b>1 270</b>	1 261
Changes in working capital <sup>1)</sup>		<b>(712)</b>	47
Equity accounted companies	5	<b>14</b>	(10)
Changes in fair value commodity contracts		<b>321</b>	(79)
Changes in provisions, pension obligations and other		<b>46</b>	(313)
Interest payments received		<b>41</b>	24
Interest payments made		<b>(390)</b>	(446)
Income taxes paid		<b>(272)</b>	(198)
<b>Cash flow from operating activities</b>		<b>4 460</b>	2 256
Investments in property, plant and equipment and intangible assets	18, 19	<b>(1 916)</b>	(1 126)
Sale of property, plant and equipment	18, 19	<b>40</b>	18
Acquisition of subsidiaries, net of cash acquired	32	<b>(4 049)</b>	4
Acquisition of joint ventures	5	<b>(21)</b>	(20)
Payment received on loan to related parties		<b>1 303</b>	-
Loan to associates and joint ventures		<b>-</b>	(12)
Other investments / sales		<b>(28)</b>	8
<b>Cash flow from investing activities</b>		<b>(4 671)</b>	(1 128)
Dividends paid to non-controlling interests		<b>(33)</b>	(26)
Dividends paid to owner of the parent		<b>-</b>	(144)
Capital increase	30	<b>5 171</b>	-
New interest-bearing loans and borrowings	24	<b>6 643</b>	60
Repayment of interest-bearing loans and borrowings	24	<b>(5 586)</b>	(859)
Net changes in bills payable and restricted deposits		<b>(445)</b>	285
Repayment of short term loan from related parties		<b>(241)</b>	(30)
<b>Cash flow from financing activities</b>		<b>5 509</b>	(714)
<b>Change in cash and cash equivalents</b>		<b>5 298</b>	414
Currency exchange differences		<b>33</b>	17
<b>Cash and cash equivalents opening balance</b>		<b>1 751</b>	1 320
<b>Cash and cash equivalents closing balance</b>	24	<b>7 082</b>	1 751

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

## Consolidated statement of changes in equity

<i>Amounts in NOK million</i>	Share capital	Other paid-in capital	<b>Total paid-in capital</b>	Foreign currency translation reserve
<b>Balance 1 January 2018</b>	2 010	908	<b>2 918</b>	751
Profit (loss) for the year	-	-	-	-
Other comprehensive income for the year	-	-	-	89
<b>Total comprehensive income for the year</b>	-	-	-	89
Capital increase (note 30)	897	4 281	<b>5 177</b>	-
Business combination under common control (note 4)	-	-	-	-
Share-based payment (note 11)	-	6	<b>6</b>	-
Dividends to equity holders	-	-	-	-
<b>Balance 31 December 2018</b>	2 907	5 195	<b>8 102</b>	839

<i>Amounts in NOK million</i>	Share capital	Other paid-in capital	<b>Total paid-in capital</b>	Foreign currency translation reserve
<b>Balance 1 January 2017</b>	2 010	1 078	<b>3 088</b>	634
Profit (loss) for the year	-	-	-	-
Other comprehensive income for the year	-	-	-	116
<b>Total comprehensive income for the year</b>	-	-	-	116
Conversion of liabilities to equity <sup>1)</sup>	-	-	-	-
Dividends to equity holders <sup>2)</sup>	-	(170)	<b>(170)</b>	-
<b>Balance 31 December 2017</b>	2 010	908	<b>2 918</b>	751

1) In May 2017 a shareholder loan of CNY 543 million in Yongdeng Silicon Materials and in August 2017 a shareholder loan of CNY 761 million in Xinghuo Silicones was converted to equity.

2) Of the NOK 170 million in dividend paid, NOK 26 million was net settled against loans to shareholders.

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

Cash flow hedge reserve	Other retained earnings	Total retained earnings	Total owners share	Non-controlling interests	Total
(442)	2 462	<b>2 655</b>	<b>5 743</b>	88	<b>5 830</b>
-	1 211	<b>1 211</b>	<b>1 211</b>	39	<b>1 249</b>
(10)	3	<b>109</b>	<b>109</b>	1	<b>111</b>
(10)	1 214	<b>1 320</b>	<b>1 320</b>	40	<b>1 360</b>
-	1 571	<b>1 571</b>	<b>1 571</b>	-	<b>1 571</b>
-	-	-	<b>(170)</b>	(26)	<b>(196)</b>
(453)	5 247	<b>5 545</b>	<b>8 463</b>	102	<b>8 565</b>

## Notes to the consolidated financial statements

### Note 01 General information and basis of presentation

Elkem ASA is a limited liability company located in Norway and whose shares are publicly traded on Oslo Børs. The consolidated financial statements for Elkem ASA (hereafter Elkem/the group), including notes, for the year 2018 were approved by the Board of Directors of Elkem ASA on 6 March 2019. 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.

Elkem is one of the world's leading companies in the environmentally friendly 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. Elkem 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 melting 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 presentation currency of Elkem is NOK (Norwegian Krone). All financial information is presented in NOK million, unless otherwise stated. As a result of rounding adjustments, the figures in one or more columns included in the consolidated financial statements, may not add up to the total.

#### BASIS FOR PREPARATION

The consolidated financial statements include the financial statements of Elkem ASA and entities controlled directly and 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 control is transferred to the group. They are deconsolidated from the date that control ceases.

The consolidated financial statements are prepared and based on International Financial Reporting Standards as adopted by the EU (IFRS). 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.

#### New entities included in Elkem

In connection with the IPO, 22 March 2018, Elkem acquired 100% of the shares in Jiangxi Bluestar Xinghuo Silicones (hereafter Xinghuo Silicones) and 100% of the shares in Bluestar Silicone Material Co. Ltd. (hereafter Yongdeng Silicon Materials) 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 by China National Bluestar (group) Co. Ltd. Business combinations involving entities under common control, are accounted for according to the 'pooling of interest method' and comparative figures are restated. See note 4 Composition of the group.

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

### Note 02 Significant accounting policies

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.

#### CHANGES IN ACCOUNTING POLICIES, CHANGES IN ACCOUNTING ESTIMATES AND ERRORS

Change 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. Change in accounting estimate is recognised prospectively by including it in the statement of income in the period of the change and future periods, if the change affects both.

#### Changes in presentation:

Elkem has made one change to the presentation in the statement of income. Income from associates and joint ventures is renamed to share of profit from equity accounted companies and is included in operating income. The investments are closely related to the group's main activities. Investments in associates and joint ventures that do not operate within Elkem's main business areas are classified on the line item share of profit from equity accounted financial investments, previously included in income from associates and joint ventures. Comparative figures are restated.

Elkem has made two changes to the presentation in the statement of financial position. Current part of employee benefit obligations is presented on a separate line item. Previously this was included in provision and other current liabilities. Non-current part of employee benefit obligations is presented together with pension liabilities and the line item is renamed to employee benefit obligations. Previously this was included in provisions and other non-current liabilities. Comparative figures are restated.

Elkem has made one change to the presentation in statement of cash flows. Cash flow effects related to bills receivable are reclassified to changes in provisions, pension obligations and other, previously included in changes in working capital. Comparative figures are restated.

### Changes in accounting policies

#### *IFRS 15 Revenue from contracts with customers*

The IASB has issued a new standard for recognition of revenue. This has replaced IAS 18 which covers revenue from sale of goods and rendering of services and IAS 11 which covers revenue and costs from construction contracts. The new standard is based on the principle that revenue is recognised when control of a goods or service transfers to a customer – so the notion of control replaces the existing notion of risks and rewards.

A new five-step process must be 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.

Elkem has applied the simplified transition approach and will not restate comparative amounts for the year prior to first adoption. See separate section below for changes in current practice due to implementation of IFRS 15 Revenue from contracts with customers.

### 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 includes 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 or services. 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 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 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 of the goods until delivery at agreed destination. The ownership is transferred to buyer upon arrival at 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.

### 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. Prices for sale of electric power are mainly set based on spot prices at Nord Pool spot, and delivery is when the power is delivered to the customers through the relevant grid area. Revenue connected to energy recovery are mainly based on long term contracts where the prices are regulated yearly based on changes in CPI's 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 has 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.

Key changes to current practice that have or could have effects on Elkem's revenue recognition are:

- Any bundled goods or services that are distinct must be separately recognised.

#### *Freight services:*

Freight component included in sales of goods on incoterms "C" terms were previously considered an integral part of the sale of goods, and recognised when risk and rewards of the goods were transferred to the customers. The freight component on these sales

is considered as a separate performance obligation under IFRS 15 and from 1 January 2018 recognised over the period the service is performed. This timing effect from change in accounting policy is immaterial and the transition effect for the freight component is not recognised as of 1 January 2018. Elkem still considers shipping and handling services that occur before customers take control of the goods to be part of fulfilling the sale of the goods, sale on "D" terms.

*Consignment agreements:*

Elkem has some agreements where products are delivered to the customer's site or to an external warehouse as consignment stock. Elkem has assessed whether the finished products on consignment has an alternative use to Elkem, and whether Elkem has an enforceable right to payment. Elkem has a right to redirect goods in consignment stock to other customers and uses this right. The agreements do not give Elkem an enforceable right to payment. Elkem has concluded that Elkem has control of the goods, hence no changes in the revenue recognition. The assessment could change due to changes in contract terms.

There are also increased disclosure requirements.

## IFRS 9 FINANCIAL INSTRUMENTS

IFRS 9 Financial Instruments, effective from 1 January 2018, sets out requirements for classification and measurement, impairment and hedge accounting. The standard replaces IAS 39 Financial Instruments: Recognition and Measurement. Financial assets shall be classified and subsequently measured at amortised cost, fair value through profit or loss or fair value through other comprehensive income, based on both the use of the assets within the entity's business model and the nature of the cash flows. A financial asset is derecognised when expired or when the entity no longer has control of the cash flows related to the assets. Any rights or obligations retained in any transfer of assets are booked separately as assets or liabilities. Financial liabilities are classified and subsequently measured at amortised cost, except for financial liabilities (including derivatives) which are classified at fair value.

According to IFRS 9 investments in equity instruments should be measured at fair value through profit or loss, unless the fair value through other comprehensive income (FVOCI) option is selected. Elkem group has chosen to apply the FVOCI option for shares classified as Held for sale under IAS39. These shares have been recognised at cost minus any impairment under IAS39, but the effect from the change to recognition at fair value is immaterial and therefore not recognised as an implementation effect.

The new impairment model for financial instruments is based on expected credit losses, rather than incurred credit losses, taking both experienced losses and expected future risks into consideration. This will affect Elkem's impairment assessment for receivables, but as the group's receivables against the main customers are covered by credit insurance contracts, the effects from the impairment measurement based on IFRS 9 for remaining credit risk, is assessed to be immaterial.

The group has chosen to continue to apply the hedge accounting requirements in IAS39 based on an option in IFRS 9, hence there are no changes in accounting policy for this area.

## BUSINESS COMBINATIONS

Business combinations are generally 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, is based on a proportionate amount of the net assets of the subsidiary.

### Business combinations under common control

Business combinations involving entities under common control, are accounted for according to the "pooling of interest method", also called "the merger method". This method involves the following:

- 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.

## 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.

## JOINT ARRANGEMENT

The group applies IFRS 11 to all joint arrangements. Under IFRS 11 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 the investor's share of the profit or loss, and other comprehensive income of the investee after the date of acquisition.

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

#### SHARE OF PROFIT FROM INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

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

#### FOREIGN CURRENCIES

##### 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. 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 included in finance income and expenses are only related to financing activities like loans, 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 and currency 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 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, that 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 the 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.

#### OPERATING SEGMENTS

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.

#### INSURANCE SETTLEMENTS

Income from an insurance settlement is recognised when it is virtually certain that the group will receive the compensation, and is presented as other operating income.

#### GRANTS

Grants are recognised when it is reasonably assured that the group will comply with the conditions attached to them, and the grants will be received. Grants are recognised in the statement of income over the periods necessary to match them with the cost they are intended to compensate. Grants relating to property, plant and equipment and intangible assets are deducted from the carrying amount of the asset. The grant is recognised as income over the lifetime of a depreciable asset by reducing the depreciation charge. Grants related to expenses are classified as other operating income.

#### EMPLOYEE RETIREMENT BENEFITS

##### 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 recorded at fair value, and deducted in calculating the net pension liability. Past service cost arising due to amendments in the benefit plans are expensed as incurred. Accumulated effects of changes in estimates due to changes in 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.

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 programme is recognised as an employee benefits 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 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.

**OTHER ITEMS**

Change in fair value of financial instruments are classified as part of other items, if not designated as a part of a hedging relationship. Also any ineffective part of hedging relationships are reported as a part of 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 included 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.

**FINANCIAL INCOME AND EXPENSES**

Interest income is recognised on accrual basis and is classified as finance income.

Foreign exchange gains (losses) related to financing activities including internal placements 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 accrual basis and are classified as financial expenses. Interest is capitalised as a part of the carrying amount of a self-contracted item of property, plant and equipment, according to IAS 23 Borrowing cost, if applicable.

Financial expenses also include interest on net pension liabilities, unwinding of discounted non-current provisions, and interest on financial lease liabilities.

**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, and accrued penalties and interest are included in income tax payables in statement of financial position.

**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 dif-

ferent tax entities, but they intend to settle current tax liabilities and assets on a net basis, or their tax assets and liabilities will be realised simultaneously.

#### **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. 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 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 removing 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 statement of income using the straight-line method. The estimated useful lives, residual values (if any) and depreciation method is 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 an 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.

#### **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 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 technical 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.

#### **IMPAIRMENT OF TANGIBLE AND OTHER INTANGIBLE ASSETS**

The group's management reviews 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 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.

The group's cash generating units are reflecting the company's business areas, which are the basis for the management review and monthly reports.

The capitalised value 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.

#### **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. 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 included 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.

## 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 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.

## OTHER SHARES

Investments in equity instruments with an ownership below 20% are normally classified as other shares and included 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 classified as held for trading as the group has acquired the assets for the purpose of selling it in near term. These shares 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), based on an option in IFRS 9. Changes in fair values recognised in OCI cannot be subsequently recycled to statement of income. Dividends from these investments are booked in statement of income.

## LOANS AND RECEIVABLE

This category include trade receivables, bills receivable, loans, restricted / guarantee deposits, and cash and cash equivalents.

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.

Trade, bills and other 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. Short term receivables with no stated interest rate are recognised at their nominal amount.

Provisions for expected credit losses is done by taking all expected cash flows including cash flows from credit insurance contracts 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.

Cash and cash equivalents are held for the purpose of meeting short-term fluctuations in liquidity, rather than for investment purposes. Bank overdrafts are presented within interest-bearing current liabilities on the statement of financial position. Restricted deposits are presented separately in the statement of financial position, and are not included the cash and cash equivalents presented in the statement of cash flows.

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.

## 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 assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred to a third party. 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.

### 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 has currently energy contracts in Norway that do not meet the own use criteria according to IFRS 9 2.4, since the power under the contracts are 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, according to principles explained above. See notes 15 Other items, 26 Financial assets and liabilities, and 28 Financial risk.

### Hedge accounting

The group applies the 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 statement of income within other items. Gains and losses accumulated in equity are reclassified to 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.

### INVENTORIES

Inventories are measured at the lower of cost and net realisable value. Inventory consist 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 smelting, 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 included in different lines in the statement of income based on nature; raw materials and energy for smelting, employee benefits, other operating cost and amortisations and depreciations.

Entities within the group sell goods to other group entities, consequently finished goods from one entity become raw materials or semi finished goods for an other group entity. The classification of goods in Elkem's consolidated financial statements is based on the separate entity's classification.

### PROVISIONS

A provision is recognised when the group has a present obligation 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 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.

### 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.

#### 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 statement. 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.

### 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. Actual results may differ from these estimates.

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.

The management makes estimates and assumptions concerning the future, the resulting accounting estimates will, by definition, seldom equal the actual outcome.

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.

The management considers the following as the main items for use of estimates:

- Property, plant and equipment, intangible assets and goodwill
- Deferred tax assets
- Financial instruments
- Provisions

#### PROPERTY, PLANT AND EQUIPMENT, INTANGIBLE ASSETS AND GOODWILL

The valuation of assets in connection with business combinations and testing of property, plant and equipment, intangible assets and goodwill for impairment, is to a large extent based on estimated future cash flows. These calculations require the use of estimates for cash flows and the choice of discount rate before tax for discounting the cash flows. Tangible and intangible assets including goodwill, are tested for impairment if there are indicators that an asset may be

#### NEW INTERPRETATIONS AND CHANGES TO EXISTING STANDARDS NOT YET ADOPTED

IASB has published a number of new standards and amendments to standards and interpretations that are not effective for the annual period ending 31 December 2018. New and amended standards and interpretations expected to affect Elkem's financial position, performance or disclosure are IFRS 16 Leases. Estimated effect of implementing IFRS 16 Leases is presented in note 14 Operating lease. The standard is approved by EU and mandatory for the financial year starting 1 January 2019.

impaired. Indicators of impairment will typically be changes in technological development and changes in the competitive situation. Intangible assets that are not amortised and goodwill are, as a minimum, tested annually for impairment.

Estimated useful lives, residual values (if any) included in calculation of depreciation and amortisation are reviewed, and if necessary adjusted, at least annually.

See note 18 Property, plant and equipment, note 19 Intangible assets and goodwill and note 20 Impairment assessment.

#### DEFERRED TAX ASSETS

The group performs annual tests for impairment of deferred tax assets. 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. See note 17 Taxes.

#### FINANCIAL INSTRUMENTS

Fair value of financial instruments are mainly based on observable prices and assumptions derived from observable prices for comparable instruments. Net booked value as at 31 December 2018 is in total negative NOK 95 million. See note 26 Financial assets and liabilities and note 28 Financial risk for sensitivity.

#### PROVISIONS

Elkem has several types of provisions due to its operations. The main types of provisions are related to commitments to restore the site of operations to its original condition after use, environmental measurements and litigations. Such liabilities are normally uncertain in timing and amount, and recognised amounts are estimates based on the available information at the end of the reporting period. The estimates are updated when new or updated information are available. See note 25 Provisions and other liabilities.

## Note 04 Composition of the group

The following entities make up the composition of the group and are included in the consolidated financial statement:

Company	Functional currency	Country of incorporation	2018 Equity interests	2017 Equity interests	Owner
Aleaciones Yguazú S.A.	USD	Paraguay	100%	100%	Elkem Uruguay SA
Bluestar Silicon Material Co. Ltd. (Yongdeng Silicon Materials)	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 ASA
Elkem S.a.r.l.	EUR	France	100%	100%	Elkem ASA
Elkem S.r.l.	EUR	Italy	100%	100%	Elkem ASA
Elkem Carbon (China) Comp 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%	-	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 Foundry Invest AS <sup>1)</sup>	NOK	Norway	-	100%	Elkem ASA
Elkem Iberia SLU	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 Island ehf.	NOK	Iceland	100%	100%	Elkem ASA
Elkem Japan K.K	JPY	Japan	100%	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

1) 1 January 2018 Elkem Foundry Invest AS merged with Elkem ASA.

Company	Functional currency	Country of incorporation	2018 Equity interests	2017 Equity interests	Owner
Elkem Oilfield Chemicals FZCO	AED	Dubai	51%	51%	Elkem ASA
Elkem Participações Indústria e Comércio Limitada	BRL	Brazil	100%	100%	Elkem Carbon AS
Elkem Rana AS	NOK	Norway	100%	100%	Elkem ASA
Elkem Siliconas España S.A.U	EUR	Spain	100%	100%	Elkem ASA
Elkem Silicones (UK) Ltd	GBP	United Kingdom	100%	100%	Elkem ASA
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. Limited	HKD	Hong Kong	100%	100%	Elkem ASA
Elkem Silicones Poland p. 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. Limited	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 UK Holdings Ltd.	GBP	United Kingdom	100%	-	Elkem ASA
Elkem Uruguay SA	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
Explotacion de Rocas Industriales y Minerales S.A. (Erimisa)	EUR	Spain	100%	100%	Elkem ASA
Gimtrade Ltd. <sup>2)</sup>	GBP	United Kingdom	-	100%	Elkem LTD.
Iniconce, S.L	EUR	Spain	97%	97%	Explotacion de Rocas Industriales y Minerales S.A.
Jiangxi Bluestar Xinghuo Silicones Co. Ltd (Xinghuo Silicones)	CNY	China	100%	100%	Elkem ASA
Mill Street Ltd. <sup>2)</sup>	GBP	United Kingdom	-	100%	Elkem LTD.
NEH LLC	USD	USA	100%	100%	Elkem ASA
NorenoComercial Importada e Exportadora Limitada	BRL	Brazil	100%	100%	Elkem Participações Indústria e Comércio Limitada
Norsil, S.A.	EUR	Spain	100%	100%	Iniconce, S.L
Tifwer Trade S.A.	UYU	Uruguay	100%	100%	Elkem Uruguay SA

2) The companies are dormant and were liquidated in January 2018.



### 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 Blue-

star (group) Co. Ltd. Business combinations involving entities under common control, are accounted for according to the 'pooling of interest method' 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 are settled in connection with the transaction. Acquisition-related costs of NOK 1 million are classified as other items in the statement of income.

Below is an overview of the effects of the purchases.

<i>Amounts in NOK million</i>	Financial statement 2017	Xinghuo and Yongdeng	Eliminations	Restated financial statement 2017
<b>Statement of income 1.1. -31.12.</b>				
Revenue	16 442	5 047	(357)	21 133
Other operating income	216	20	-	236
Share of profit (loss) from equity accounted companies	35	-	-	35
<b>Total operating income</b>	<b>16 693</b>	<b>5 067</b>	<b>(357)</b>	<b>21 403</b>
Raw materials and energy for smelting	(8 126)	(3 033)	334	(10 825)
Employee benefit expenses	(2 858)	(287)	-	(3 145)
Other operating expenses	(3 576)	(687)	17	(4 245)
Amortisations and depreciations	(776)	(468)	-	(1 244)
Impairment losses	(17)	-	-	(17)
<b>Operating profit (loss) before other items</b>	<b>1 340</b>	<b>592</b>	<b>(5)</b>	<b>1 927</b>
Other items	49	(6)	-	44
<b>Operating profit (loss)</b>	<b>1 390</b>	<b>586</b>	<b>(5)</b>	<b>1 971</b>
Share of profit from equity accounted financial investments	(1)	-	-	(1)
Finance income	19	11	-	30
Foreign exchange gains (losses)	(8)	-	-	(8)
Finance expenses	(119)	(355)	-	(474)
<b>Profit (loss) before income tax</b>	<b>1 281</b>	<b>242</b>	<b>(5)</b>	<b>1 519</b>
Income tax (expense) benefit	(269)	-	-	(269)
<b>Profit (loss) for the year</b>	<b>1 012</b>	<b>242</b>	<b>(5)</b>	<b>1 249</b>
<b>Attributable to:</b>				
Non-controlling interests' share of profit (loss)	39	-	-	39
Owners of the parent's share of profit (loss)	973	242	(5)	1 211

<i>Amounts in NOK million</i>	Financial statement 2017	Xinghuo and Yongdeng	Eliminations	Restated financial statement 2017
<b>Statement of financial position 31.12</b>				
Property, plant and equipment	6 569	5 381	-	11 950
Goodwill	326	-	-	326
Other intangible assets	719	192	-	911
Deferred tax assets	90	-	-	90
Investments in equity accounted companies	159	-	-	159
Derivatives	152	-	-	152
Other non-current assets	376	31	-	407
<b>Total non-current assets</b>	<b>8 390</b>	<b>5 604</b>	<b>-</b>	<b>13 995</b>
Inventories	3 561	543	(5)	4 099
Trade receivables	2 264	322	(69)	2 518
Derivatives	33	-	-	33
Other current assets	602	1 489	-	2 091
Restricted deposits	4	1 016	-	1 020
Cash and cash equivalents	1 493	258	-	1 751
<b>Total current assets</b>	<b>7 958</b>	<b>3 629</b>	<b>(74)</b>	<b>11 513</b>
<b>Total assets</b>	<b>16 348</b>	<b>9 233</b>	<b>(74)</b>	<b>25 507</b>
Paid-in capital	2 918	-	-	2 918
Retained earnings	5 313	237	(5)	5 545
Non-controlling interests	102	-	-	102
<b>Total equity</b>	<b>8 333</b>	<b>237</b>	<b>(5)</b>	<b>8 565</b>
Interest-bearing non-current liabilities	2 682	1 903	-	4 585
Deferred tax liabilities	105	-	-	105
Employee benefit obligations	520	36	-	556
Derivatives	379	-	-	379
Provisions and other non-current liabilities	315	-	-	315
<b>Total non-current liabilities</b>	<b>4 000</b>	<b>1 939</b>	<b>-</b>	<b>5 940</b>
Trade payables	1 837	882	(69)	2 650
Income tax payables	139	0	-	139
Interest-bearing current liabilities	661	2 986	-	3 647
Bills payable	-	2 650	-	2 650
Employee benefit obligations	567	20	-	587
Derivatives	247	-	-	247
Provisions and other current liabilities	565	519	-	1 083
<b>Total current liabilities</b>	<b>4 015</b>	<b>7 056</b>	<b>(69)</b>	<b>11 003</b>
<b>Total equity and liabilities</b>	<b>16 348</b>	<b>9 233</b>	<b>(74)</b>	<b>25 507</b>

#### 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 business (business combination). 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.

The transactions are considered as business combinations according to IFRS 3. Acquisition method is applied by netting the fair value of consideration given to the transferee (the "acquisition cost"), less cost related to the acquisition, with the fair value of the acquired assets, liabilities and contingent liabilities assumed at the acquisition date. The acquisition cost of a purchase is equal to the fair value

of the assets transferred, the equity instruments issued and the liabilities incurred or assumed at the acquisition date. The fair values of assets and liabilities under contingent consideration agreements are likewise included.

Elkem's management was required to allocate values in excess/deficit of the carrying amount of equity to assets acquired and liabilities assumed.

Acquisition-related costs of NOK 2 million are classified as other items in the statement of income. The tables below summarise the consideration transferred and the amounts recognised for assets acquired and liabilities assumed after the business combination.

<i>Amounts in NOK million</i>	TM (Technology) Holdings Ltd
<b>Consideration</b>	
Cash	59
Contingent consideration	-
Non-controlling ownership interest in subsidiary	-
<b>Consideration transferred</b>	<b>59</b>
Fair value of previously held equity interest	-
<b>Total</b>	<b>59</b>

#### Amounts for assets and liabilities recognised

<i>Amounts in NOK million</i>	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)
<b>Total</b>	<b>41</b>	<b>3</b>	<b>44</b>
Non-controlling interests	-	-	-
Goodwill	-	15	15
<b>Total</b>	<b>41</b>	<b>18</b>	<b>59</b>

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.

#### CHANGES IN THE COMPOSITIONS OF THE GROUP IN 2017

In September 2017 Elkem invested NOK 84 million to increase its ownership in Iguazú Alloys S.A. (re-named Elkem Uruguay S.A) from 50% to 100% and purchase convertible shareholder loans. The amount comprises of loans from former shareholders reduced by cash and cash equivalents of the acquiree. The loan will be settled

by annual payments over a seven year period. Iguazú Alloys owns a ferrosilicon plant in Paraguay that until recently was under construction. The plant opened in March 2018.

This transaction is considered a business combination according to IFRS 3. Acquisition method is applied by netting the fair value of consideration given to the transferee (the "acquisition cost"), less costs related to the acquisition, with the fair value of the acquired assets, liabilities and contingent liabilities assumed at the acquisition date. The acquisition cost of a purchase is equal to the fair value of the assets transferred, the equity instruments issued and the liabilities incurred or assumed at the acquisition date. The fair values of assets and liabilities under contingent consideration agreements are likewise included.

Elkem's management was required to allocate values in excess/deficit of the carrying amount of equity to assets acquired and liabilities assumed.

Acquisition-related costs of NOK 2 million are classified as other items in the statement of income. The tables below summarises the consideration transferred, and the amounts recognised for assets acquired and liabilities assumed after the business combination.

*Amounts in NOK million*

Iguazú Alloys S.A.

<b>Consideration</b>	
Loans from former shareholders	85
Contingent consideration	-
<b>Consideration transferred</b>	<b>85</b>
Fair value of previously held equity interest including convertible shareholder loans <sup>1)</sup>	85
<b>Total</b>	<b>169</b>

1) The purchase price is equal to the book value of the equity interest at the acquisition-date, hence no gain or loss is recognised as a result of remeasuring of the previously held equity interest.

### Amounts for assets and liabilities recognised

*Amounts in NOK million*

Carrying amount

Property, plant and equipment	284
Other intangible assets	0
Inventories	2
Other current assets	12
Cash and cash equivalents	0
Provisions and other non-current liabilities	(122)
Trade payables	(6)
Provisions and other current liabilities	(1)
<b>Total</b>	<b>169</b>
Goodwill	-
<b>Total</b>	<b>169</b>

For the period from purchase to 31 December 2017 Iguazú Alloys has contributed NOK 0 million to total operating income and contributed negatively NOK 4 million to profit (loss) for the year. If the acquisition date of business combination was of 1 January 2017, the total operating income of Elkem group would have increased by NOK 0 million and profit would have decreased by NOK 6 million.

## Note 05 Investments in equity accounted companies

Elkem has interests in the following joint arrangements and associates

Name of entity	Business office	Country	Principal activities	Classification	% equity interests 2018	% equity interests 2017
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%
Elkem Uruguay SA	Montevideo	Uruguay	Production of foundry products	Joint venture	-	-
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%	-
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%	-

The remaining 50% of the shares in Elkem Uruguay SA were purchased in September 2017 (note 4 Composition of the group). The company's results are included as a joint venture up to the date its remaining shares were purchased. No gain or loss is recognised from remeasurement of previously held equity interests due to the transaction.

Salten Energigjenvinning AS (SEAS) was incorporated on 1 June 2017 and 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.

### Development in net carrying amount

Amounts in NOK million	2018			2017		
	Joint ventures	Associates	Total	Joint ventures	Associates	Total
<b>Carrying amount as at 1 January</b>	<b>98</b>	<b>61</b>	<b>159</b>	109	55	164
Acquired shares	21	0	21	20	-	20
Disposal of shares	-	-	-	(29)	-	(29)
Dividend received	(23)	(9)	(32)	(12)	(13)	(25)
Share of profit (loss) from equity accounted companies	7	10	18	18	16	35
Share of profit (loss) from equity accounted financial investments	(23)	-	(23)	(1)	0	(1)
Currency translation differences transferred to income on disposal	-	-	-	(5)	-	(5)
Part of other comprehensive income	(8)	(0)	(8)	-	(0)	(0)
Currency translation differences	-	0	0	(3)	3	0
<b>Carrying amount as at 31 December</b>	<b>72</b>	<b>62</b>	<b>134</b>	98	61	159

## Share of profit and carrying amount for each equity accounted companies

<i>Amounts in NOK million</i>	2018		2017	
	Share of profit	Carrying amount	Share of profit	Carrying amount
Elkem Uruguay SA	-	-	(6)	-
Klafi ehf	(0)	3	0	4
North Sea Container Line AS	7	59	24	75
North-Sea Management AS	1	1	-	-
Salten Energigjenvinning AS	(23)	9	(1)	19
Combined Cargo Warehousing BV	2	4	3	6
EPB Chartering AS	2	24	8	23
Euro Nordic Agencies Belgium NV	(0)	1	1	1
Euro Partnership BV	7	31	5	30
Future Materials AS	-	0	-	-
<b>Totals as at 31 December</b>	<b>(5)</b>	<b>134</b>	<b>34</b>	<b>159</b>

## Summary of financial information for joint ventures

<i>Amounts in NOK million</i>	2018	2017
Current assets, including cash and cash equivalents NOK 50 million (NOK 106 million)	162	211
Non-current assets	143	32
Current liabilities, including current financial liabilities NOK 1 million (NOK 0 million)	47	43
Non-current liabilities, including non-current financial liabilities NOK 114 million (NOK 5 million)	114	5
<b>Net assets/equity</b>	<b>144</b>	<b>196</b>
Elkem's carrying amount	72	98
Total operating income	552	490
Total expenses, including depreciation and amortisation NOK 7 million (NOK 3 million) and other items	(582)	(458)
Financial income, including interest income NOK 1 million (NOK 1 million)	1	1
Financial expenses, including interest expenses NOK 0 million (NOK 0 million)	(2)	3
Tax expense	(1)	(0)
<b>Total profit for the year</b>	<b>(32)</b>	<b>35</b>
Other comprehensive income	(16)	-
<b>Total comprehensive income</b>	<b>(48)</b>	<b>35</b>
Elkem's share of profit for the year	(16)	18
Elkem's share of other comprehensive income	(8)	-

## Summary of financial information for associates

<i>Amounts in NOK million</i>	2018	2017
Total operating income	233	238
Total expenses	(207)	(187)
<b>Total profit for the year</b>	<b>26</b>	<b>51</b>
Other comprehensive income	(1)	(1)
<b>Total comprehensive income</b>	<b>26</b>	<b>51</b>
Elkem's share of profit for the year	10	16
Elkem's share of other comprehensive income	(0)	(0)
<b>Net assets/equity</b>	<b>177</b>	<b>173</b>
Elkem's carrying amount	62	61

## Note 06 Operating segments

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. 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.

### Operating segment information

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.

Elkem has several smaller and larger external customers, no single customer amounts to 10% or more of total operating income.

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. 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. The following exceptions apply for intersegment transactions: Internal commodity contracts may meet the definition of a financial instrument in IFRS 9 or contain embedded derivatives that are required to be reported separately and valued 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 on the different group segments are specified in separate table below.

<i>Amounts in NOK million</i>	Silicones	Silicon Materials	Foundry Products	Carbon	Other	Elimina- tions	Total
<b>2018</b>							
Revenue from sale of goods (note 7)	12 909	5 003	4 827	1 677	903	-	<b>25 319</b>
Other revenue (note 7)	29	34	44	8	191	-	<b>306</b>
Other operating income (note 7)	108	75	31	7	23	-	<b>244</b>
Share of profit from equity accounted companies (note 5)	-	-	(0)	-	18	-	<b>18</b>
<b>Total operating income from external customers</b>	<b>13 046</b>	<b>5 113</b>	<b>4 902</b>	<b>1 692</b>	<b>1 134</b>	<b>-</b>	<b>25 887</b>
Revenue from other group segments	14	1 477	180	200	343	(2 214)	-
<b>Total operating income</b>	<b>13 059</b>	<b>6 590</b>	<b>5 082</b>	<b>1 892</b>	<b>1 477</b>	<b>(2 214)</b>	<b>25 887</b>
Operating expenses	(9 524)	(5 474)	(4 151)	(1 558)	(1 613)	2 226	<b>(20 094)</b>
<b>EBITDA</b>	<b>3 535</b>	<b>1 116</b>	<b>931</b>	<b>335</b>	<b>(136)</b>	<b>12</b>	<b>5 793</b>
<b>Operating profit (loss) before other items (EBIT)</b>	<b>2 864</b>	<b>833</b>	<b>710</b>	<b>267</b>	<b>(164)</b>	<b>12</b>	<b>4 522</b>
Cash flow from operations	2 500	458	634	215	221	3	<b>4 030</b>
Working capital	1 376	1 524	1 440	331	(321)	(47)	<b>4 303</b>
Capital employed	8 610	3 920	3 333	893	(80)	(47)	<b>16 631</b>
Reinvestments							<b>(1 064)</b>
Strategic investments							<b>(726)</b>
Movement CAPEX payables							<b>(125)</b>
Cash flow from investments in property, plant and equipment and intangible assets							<b>(1 916)</b>
<b>2017</b>							
Revenue from sale of goods (note 7)	9 893	4 955	3 987	1 310	565	-	<b>20 709</b>
Other revenue (note 7)	29	52	47	47	249	-	<b>423</b>
Other operating income (note 7)	93	71	39	5	28	-	<b>236</b>
Share of profit from equity accounted companies (note 5)	-	-	(6)	-	41	-	<b>35</b>
<b>Total operating income from external customers</b>	<b>10 015</b>	<b>5 077</b>	<b>4 066</b>	<b>1 362</b>	<b>882</b>	<b>-</b>	<b>21 403</b>
Revenue from other group segments	11	1 335	175	214	376	(2 112)	-
<b>Total operating income</b>	<b>10 026</b>	<b>6 412</b>	<b>4 241</b>	<b>1 577</b>	<b>1 258</b>	<b>(2 112)</b>	<b>21 403</b>
Operating expenses	(8 510)	(5 608)	(3 540)	(1 303)	(1 337)	2 083	<b>(18 215)</b>
<b>EBITDA</b>	<b>1 515</b>	<b>804</b>	<b>701</b>	<b>274</b>	<b>(78)</b>	<b>(28)</b>	<b>3 188</b>
<b>Operating profit (loss) before other items (EBIT)</b>	<b>840</b>	<b>527</b>	<b>486</b>	<b>209</b>	<b>(107)</b>	<b>(28)</b>	<b>1 927</b>
Cash flow from operations	1 261	607	350	171	(56)	2	<b>2 336</b>
Working capital	883	1 119	1 325	295	37	(59)	<b>3 600</b>
Capital employed	7 692	3 318	3 221	813	307	(59)	<b>15 292</b>
Reinvestments							<b>(890)</b>
Strategic investments							<b>(390)</b>
Movement CAPEX payables							<b>154</b>
Cash flow from investments in property, plant and equipment and intangible assets							<b>(1 126)</b>



**Realised effects from the group's hedging program on the different group segments**

<i>Amounts in NOK million</i>	Silicones	Silicon Materials	Foundry Products	Carbon	Other	Elimina- tions	<b>Total</b>
Revenue from sale of goods, Currency (note 27)	-	12	-	-	(52)	-	<b>(40)</b>
Operating expenses, Power (note 27)	-	183	67	0	(34)	-	<b>216</b>
<b>Total effects hedging program 2018</b>	-	195	67	0	(86)	-	<b>176</b>
Revenue from sale of goods, Currency (note 27)	-	5	(3)	-	(47)	-	<b>(45)</b>
Operating expenses, Power (note 27)	-	(27)	(8)	-	(25)	-	<b>(60)</b>
<b>Total effects hedging program 2017</b>	-	(22)	(11)	-	(72)	-	<b>(105)</b>

The reason for power hedge effects on the Other segment is that some of the group internal financial power contracts are entered into on a later date than the groups contracts with the external suppliers. The main part of Elkem's long term power contracts meet the definition of own use exception in IFRS 9 and the gains or losses on these contracts are not separately accounted for.

**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 amortisations and depreciations.

**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**

<i>Amounts in NOK million</i>	2018	2017
Norway	1 147	1 256
Other Nordic countries	781	693
United Kingdom	790	840
Germany	2 416	2 230
France	731	618
Italy	829	679
Poland	520	475
Spain	554	469
Other European countries	2 321	1 890
<b>Europe</b>	<b>10 089</b>	<b>9 150</b>
<b>Africa</b>	<b>196</b>	<b>165</b>
USA	2 519	1 947
Canada	334	295
Brazil	883	829
Other South American countries	250	133
<b>America</b>	<b>3 985</b>	<b>3 203</b>
China	7 977	5 737
Japan	752	694
South Korea	670	556
Other Asian countries	1 919	1 608
<b>Asia</b>	<b>11 320</b>	<b>8 596</b>
<b>Rest of the world</b>	<b>75</b>	<b>63</b>
<b>Total</b>	<b>25 665</b>	<b>21 177</b>
Realised hedging effects (note 27)	(40)	(45)
<b>Total revenue</b>	<b>25 625</b>	<b>21 133</b>

**Non-current assets by geographical areas based on entity location**

<i>Amounts in NOK million</i>	2018	2017
Norway	2 992	2 821
Other Nordic countries	512	537
United Kingdom	26	4
Germany	55	58
France	2 612	2 452
Italy	109	88
Poland	0	-
Spain	202	192
Other European countries	95	99
<b>Europe</b>	<b>6 604</b>	<b>6 251</b>
<b>Africa</b>	<b>69</b>	<b>75</b>
USA	465	381
Canada	394	415
Brazil	323	330
Other South American countries	317	293
<b>America</b>	<b>1 499</b>	<b>1 420</b>
China	5 921	5 817
Japan	4	4
Other Asian countries	187	188
<b>Asia</b>	<b>6 112</b>	<b>6 008</b>
<b>Total</b>	<b>14 283</b>	<b>13 753</b>

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****Details of revenue 2018**

<i>Amounts in NOK million</i>	Silicones	Silicon Materials	Foundry Products	Carbon	Other	<b>Total</b>
Sale of goods, Silicones	12 909	-	-	-	8	<b>12 917</b>
Sale of goods, Silicon Materials	-	3 916	-	-	-	<b>3 916</b>
Sale of goods, Foundry Products	-	1 075	4 827	-	289	<b>6 192</b>
Sale of goods, Carbon	-	-	-	1 677	-	<b>1 677</b>
Sale of power	-	-	-	-	657	<b>657</b>
Revenue from energy recovery and other energy related income	-	6	32	-	46	<b>84</b>
Service agreements with related parties	4	5	0	4	62	<b>76</b>
Other revenue from contracts with customers	22	23	11	3	82	<b>140</b>
<b>Total revenue from contracts with customers</b>	<b>12 935</b>	<b>5 024</b>	<b>4 870</b>	<b>1 685</b>	<b>1 145</b>	<b>25 659</b>
Rental income	3	1	1	1	1	<b>6</b>
Realised currency hedging effects (note 27)	-	12	-	-	(52)	<b>(40)</b>
<b>Total revenue</b>	<b>12 938</b>	<b>5 037</b>	<b>4 871</b>	<b>1 685</b>	<b>1 094</b>	<b>25 625</b>

**Details of revenue 2017**

<i>Amounts in NOK million</i>	Silicones	Silicon Materials	Foundry Products	Carbon	Other	Total
Sale of goods, Silicones	9 893	-	-	-	-	<b>9 893</b>
Sale of goods, Silicon Materials	-	3 992	-	-	-	<b>3 992</b>
Sale of goods, Foundry Products	-	957	3 989	-	193	<b>5 140</b>
Sale of goods, Carbon	-	-	-	1 310	-	<b>1 310</b>
Sale of power	-	-	-	-	418	<b>418</b>
Revenue from energy recovery and other energy related income	-	5	32	-	28	<b>65</b>
Service agreements with related parties	8	5	0	4	75	<b>92</b>
Other revenue from contracts with customers	20	41	13	42	146	<b>261</b>
<b>Total revenue from contracts with customers</b>	<b>9 921</b>	<b>5 001</b>	<b>4 035</b>	<b>1 356</b>	<b>859</b>	<b>21 171</b>
Rental income	2	1	1	1	1	<b>6</b>
Realised currency hedging effects (note 27)	-	5	(3)	-	(47)	<b>(45)</b>
<b>Total revenue</b>	<b>9 922</b>	<b>5 006</b>	<b>4 033</b>	<b>1 357</b>	<b>813</b>	<b>21 133</b>

Sale of foundry products in Silicon Materials is mainly related to sales from Elkem Rana AS.

**Details of other operating income**

<i>Amounts in NOK million</i>	2018	2017
Gain on disposal of fixed assets	<b>7</b>	8
Insurance settlements	<b>21</b>	23
Grants (note 8)	<b>211</b>	197
Other	<b>6</b>	8
<b>Total other operating income</b>	<b>244</b>	236

**Note 08 Grants**

<i>Amounts in NOK million</i>	2018		2017	
	Other operating income	Deduction of carrying amount FA	Other operating income	Deduction of carrying amount FA
R&D grants from the Norwegian government	<b>32</b>	-	33	-
R&D grants from the French government	<b>47</b>	-	44	-
Other R&D grants	<b>15</b>	-	5	-
CO <sub>2</sub> compensation from the Norwegian Environment Agency	<b>85</b>	-	77	-
Energy recovery related grants	<b>0</b>	<b>40</b>	-	26
Other government grants	<b>30</b>	<b>5</b>	35	12
<b>Government grants</b>	<b>211</b>	<b>45</b>	194	38
Norwegian NOx fund for reduced emission of NOx	-	<b>15</b>	-	6
Norwegian emission fund for reduced emission of SO <sub>2</sub>	-	<b>22</b>	3	10
<b>Grants from other than governments</b>	-	<b>36</b>	3	16
<b>Total grants</b>	<b>211</b>	<b>81</b>	197	54
Grants receivables related to fixed assets		<b>1</b>		8
Grants receivables related to income		<b>319</b>		289
Deferred income, grants		<b>(8)</b>		(9)

**CO<sub>2</sub> ALLOWANCES**

CO<sub>2</sub> allowances allocated from the government are classified as grants, measured at nominal value (zero). The scheme pertains to the group's plants in Norway and Iceland. If actual emissions exceed the amount of allocated emission allowances, additional allowances are purchased. Purchased CO<sub>2</sub> allowances are recognised at cost as other operating expenses. As at 31 December 2018, Elkem owns approximately 200 thousand allowances measured at nominal value zero. Estimated fair value of the allowances is NOK 50 million.

Elkem has received commitments for awarding of further 430 thousand CO<sub>2</sub> allowances for the period from 2013 to 2018 from the Norwegian government. The grant is subject to approval by ESA.

**CO<sub>2</sub> COMPENSATION**

The Norwegian government has, from 2013, established a CO<sub>2</sub> compensation scheme to compensate for CO<sub>2</sub> costs included in the power price. The amount being compensated is based on the market price of CO<sub>2</sub> allowances, and as such varies with the price devel-

opment. The percentage of the costs compensated is approximately 80% in 2018 and will decrease with 5%-points in 2019 and 2020 compared with 2018. The current CO<sub>2</sub> 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<sub>2</sub> compensation scheme applies for Elkem's Norwegian plants and is recognised as other operating income when there is reasonable assurance that the entity will comply with the conditions attached and the grants will be received.

**NO<sub>x</sub> AND SO<sub>2</sub> FUND**

The industry in Norway pays a fee for their emission of NO<sub>x</sub> and SO<sub>2</sub> to two different foundations. The two foundations are self-financed by the fee and their purpose is to support projects that reduces SO<sub>2</sub> and NO<sub>x</sub> emissions from the industry in Norway.

**OTHER**

The remaining grants, mainly R&D and energy recovery, are related to specific projects.

**Note 09 Employee benefit expenses**

<i>Amounts in NOK million</i>	<b>2018</b>	2017
Salaries, holiday pay and variable compensation	<b>(2 721)</b>	(2 487)
Employer's national insurance contributions / social security tax	<b>(549)</b>	(494)
Pension expenses (note 10)	<b>(105)</b>	(95)
Share-based payment (note 11)	<b>(6)</b>	-
Other payments / benefits	<b>(68)</b>	(69)
<b>Total employee benefit expenses</b>	<b>(3 449)</b>	(3 145)
Number of full-time equivalents in Elkem	<b>6 252</b>	6 022

Project bonuses expensed in 2018 related to the IPO process are classified as other items, NOK 25 million.

**Note 10 Employee benefit obligations**

<i>Amounts in NOK million</i>	Non-current		Current	
	31.12.2018	31.12.2017	31.12.2018	31.12.2017
Pension plan assets (note 21)	<b>6</b>	0	-	-
Pension contribution fund (note 21)	<b>1</b>	1	<b>2</b>	3
Employee prepayments etc. (note 21)	-	-	<b>8</b>	8
<b>Total employee benefit assets</b>	<b>7</b>	2	<b>10</b>	10
Salaries, holiday pay and variable compensation	-	-	<b>512</b>	430
Social security tax / contributions	-	-	<b>151</b>	145
Pension plans	<b>440</b>	445	-	-
Other benefit plans	<b>123</b>	111	<b>8</b>	11
<b>Total employee benefit obligations</b>	<b>563</b>	556	<b>671</b>	587

**(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 96,883 as at 1 May 2018. 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 2018 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 2019 in per cent of salary will be equal to 2018.

**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 18%, France 46%, other Europe 20%, Canada 14%, other countries 2%, based on net pension obligation per 31 December 2018. 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 fund, and some individual retirement schemes. The individual retirement schemes are closed, except for the CEO's early retirement scheme from the age 68 (note 12 Management remuneration).

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**

<i>Amounts in NOK million</i>	<b>2018</b>	<b>2017</b>
Current service expenses	<b>(28)</b>	(28)
Accrued employer's national insurance contribution	<b>(1)</b>	(0)
Administration expenses	<b>(0)</b>	(1)
Curtailment/settlement of pension plans	<b>(0)</b>	4
<b>Net pension expenses, defined benefit plans</b>	<b>(30)</b>	(24)
Defined contribution plans	<b>(61)</b>	(57)
Early retirement scheme AFP (Norway)	<b>(14)</b>	(14)
<b>Pension expenses total</b>	<b>(105)</b>	(95)
In addition, interest expenses on net pension liabilities is recognised as a part of finance expenses	<b>(10)</b>	(9)

**Net liabilities arising from defined benefit obligations**

<i>Amounts in NOK million</i>	2018	2017
Present value of funded pension obligations	<b>(387)</b>	(423)
Fair value of plan assets	<b>367</b>	386
<b>Net funded pension obligations</b>	<b>(20)</b>	(37)
Present value of unfunded pension obligations	<b>(414)</b>	(407)
<b>Net value of funded and unfunded obligations</b>	<b>(434)</b>	(444)
Net pension assets	<b>6</b>	0
Net pension liabilities	<b>(440)</b>	(445)
<b>Net pension liabilities</b>	<b>(434)</b>	(444)

**Movements in the defined benefit obligations and plan assets**

<i>Amounts in NOK million</i>	2018			2017		
	Defined benefit obligations	Defined benefit plan assets	Net pension obligations	Defined benefit obligations	Defined benefit plan assets	Net pension obligations
Opening balance	<b>(830)</b>	<b>386</b>	<b>(444)</b>	(818)	395	(423)
Current service expenses incl. social contribution tax	<b>(29)</b>	-	<b>(29)</b>	(28)	-	(28)
Interest (expenses) income	<b>(22)</b>	12	<b>(10)</b>	(23)	14	(9)
Administration expenses	-	<b>(0)</b>	<b>(0)</b>	-	(1)	(1)
Remeasurement gains (losses)	<b>29</b>	<b>(12)</b>	<b>17</b>	8	(7)	1
Contributions from employer	-	<b>14</b>	<b>14</b>	-	16	16
Benefits paid	<b>47</b>	<b>(24)</b>	<b>23</b>	47	(25)	22
Curtailments / settlements	-	-	-	60	(56)	4
Other changes	<b>(1)</b>	<b>(1)</b>	<b>(2)</b>	(42)	41	(1)
Currency translation	<b>5</b>	<b>(8)</b>	<b>(2)</b>	(35)	8	(26)
<b>Present value as at 31 December</b>	<b>(800)</b>	<b>367</b>	<b>(434)</b>	(830)	386	(444)

**Breakdown of pension plan assets as at 31 December**

<i>Amounts in NOK million</i>	2018		2017	
	Distribution%	Fair value of plan assets	Distribution%	Fair value of plan assets
Cash, cash equivalents and money market investments	2%	<b>9</b>	2%	10
Bonds	46%	<b>169</b>	45%	172
Shares	50%	<b>184</b>	52%	199
Property	1%	<b>5</b>	1%	5
<b>Total pension assets</b>	<b>100%</b>	<b>367</b>	<b>100%</b>	<b>386</b>
Actual return on plan assets	<b>0.0%</b>	<b>0</b>	4.8%	21

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 long-term pension funds, except next year's expected contributions which are classified as short-term (see note 21 Other assets)

### Pension contribution funds

<i>Amounts in NOK million</i>	2018	2017
Current part of contribution fund	2	3
Non-current part of contribution fund	1	1
	<b>4</b>	<b>4</b>

### Principal assumptions used for the actuarial valuations in 2018 (2017):

	Norway	France	Canada	Germany	UK
Discount rate	2.5% (2.2%)	1.5% (1.5%)	4.0% (3.5%)	1.8% (1.7%)	2.8% (2.4%)
Expected rate of salary increase	2.5% (2.3%)	2.5% (2.5%)	3.5% (3.5%)	3.0% (3.0%)	3.4% (3.3%)
Annual regulation of pensions paid	1.5% (1.0%)	-	-	2.0% (2.0%)	-
Change in public pension base rate (G)	2.5% (2.3%)	-	-	-	-

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 exposes 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

<i>Amounts in NOK million</i>	Discount rate		Life expectancy		Salary growth	
	0.5% increase	0.5% decrease	1 year increase	1 year decrease	0.5% increase	0.5% decrease
<b>2018: Effect on the pension liability</b>	<b>(51)</b>	<b>57</b>	<b>24</b>	<b>(24)</b>	<b>22</b>	<b>(22)</b>
2017: Effect on the pension liability	(51)	56	28	(29)	21	(20)

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

<i>Amounts in NOK million</i>	Norway	France	Canada	Germany	UK
Contribution to be paid to defined pension plans next year	5	26	19	2	4
Weighted average duration of the defined benefit obligation	8 years	10 years	17 years	14 years	16 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 long term provisions, NOK 68 million relate to jubilee and long-service benefits in the Silicones segment, mainly in France. Estimated duration of the obligation is 9 years. The provisions for Elkem's Chinese entities is calculated to NOK 46 million, mainly consisting of post-employment benefits. The benefits are related to em-

ployees laid off due to reorganisation, mainly in the Silicon Materials segment, no further obligations are expected to incur. Payments in 2018 are about NOK 5 million and estimated remaining duration of the obligation is 15 years.

A legal 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 plan at the reporting date.

**Note 11 Share-based payment**

19 September 2018 a total of 7,850,000 options are granted to members of the management and certain other key employees. 40 employees are included in the option program. Each option gives the 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. The options will vest over a period of three years from 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.

The fair value of the options is set on the grant date and expensed over the vesting period. NOK 6 million has been expensed in 2018. The average fair value of options granted in 2018 was NOK 4.85 per option. 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.

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 in average 31.43%, is based on historical volatility for a selection of comparable listed companies. The estimated dividend per share is NOK 2.50 per annum. The risk-free interest rate is set equal to the interest on Norwegian government bonds with same maturity as the option, 1.26%.

**Overview of outstanding options**

	2018
Outstanding options 1.1.	-
Options granted	7 850 000
Outstanding options 31.12	7 850 000
Of which exercisable	-

Weighted average remaining contractual life of outstanding options is 3.75 years. See note 12 Management remuneration for options granted to Elkem's corporate management.

**Note 12 Management remuneration****(a) 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.

The board of directors has appointed a dedicated Remuneration Committee as a preparatory and advisory committee in questions relating to the company'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 philosophy, 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 the company's corporate management. The SVP Human Resource officer normally 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 the company's remuneration policy is to encourage a strong, sustainable and performance-based culture,



aimed at continuous improvement. The remuneration policy should also ensure Elkem has a strong ability to attract, retain and develop qualified people with adequate leadership and professional competencies and skills, in order to support and contribute to profitable growth and creation of long-term shareholder value.

The fundamental principle in the company'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 the company's worldwide operations and reflects the company's objections for sustainability and growth. The company shall seek to offer a remuneration level on market terms satisfying the company's need to recruit and keep 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 other remuneration at a level reflecting the principles mentioned above.

The description of the CEO's remuneration; fixed compensation, benefits, pension, insurances and the short term incentive scheme as well as the termination of employment clauses referred to in this declaration, is a summary of his contracted terms valid already prior to the IPO. The remuneration committee will review the total compensation package of the CEO and the corporate management during 2019.

#### Remuneration includes

1. Fixed compensation - The fixed base salary will be determined based on the following criteria: job level, local conditions in the labor market, performance level, 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 in the corporate management compensation.
2. Benefits, pension and insurances – The benefits are determined considering market standards and job level and include elements such as mobile phone, access to Wi-Fi, laptop and car allowance / company car. The corporate management participate in the relevant local pension schemes in their countries of residence in line with established market practices. In addition to the general pension schemes, the CEO has the right to retire at the age of 68 with an entitlement to 60% of pensionable salary until the age of 70. 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 (STI) linked to achievements of both financial, strategic and operational targets. The financial targets are linked to EBITDA and cash flow from operations. The annual bonus is limited to 12 months' salary for the CEO and 6 months' salary for the rest of the corporate management. In 2018 STI, the average of 70% of the total bonus paid was an IPO success bonus for the CEO, CFO, SVP Business Development and the SVP of Silicones. The CEO

and CFO had an obligation to invest one annual net base salary of the IPO bonus in company shares.

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 (share option program) for the corporate management and selected other key employees of Elkem. The annual general meeting authorized the board of directors to approve the size and the terms and conditions of such scheme at its discretion.

The share option program shall be part of the total compensation package of the target group employees to strengthen the commitment and ownership to the value creation and 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 share option program on the following criteria:

Options are 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. No more than eight million options may be granted under the program and the maximum number of options granted to each category of employees is as follow:

- CEO: 500,000 options;
- Other members of the corporate management: 300,000 options; and
- Other key employees: 150,000 options.

The total number of options granted under the program in 2018 is 7,850,000. 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 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 the company's release of its annual and quarterly results and for 15 Norwegian business days thereaf-

ter. Should the employment with an option holder be terminated, unvested options shall lapse, and vested options must be exercised within certain deadlines. The company may honour options when exercised by the delivery of either new shares, treasury shares or settlement in cash, at the discretion of the company. The exercise price shall be adjusted for dividends and other factors relevant to the share capital of the company (changes in capitalization, 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.

#### 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 2019.

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 last day of the month in which the written notice is given, and a termination payment equal to 12 months' fixed base salary if Elkem initiate the termination. In addition, the CEO is entitled to a severance pay equal to 18 months' fixed base salary in the event the CEO's employment is terminated unilaterally by Elkem.

Elkem has been compliant with the above during the course of the last financial year.

#### Remuneration to corporate management

Amounts in NOK thousand	Position	Fixed compensation	Variable compensation - STI	Variable compensation - LTI	Other benefits	Pension benefits	Total
<b>2018</b>							
Helge Aasen <sup>2)</sup>	CEO	5 407	12 394	429	146	710	<b>19 086</b>
Morten Viga <sup>2)</sup>	CFO	2 850	5 366	258	141	348	<b>8 963</b>
Katja Lehland	SVP Human Resources	2 429	1 078	258	149	286	<b>4 200</b>
Asbjørn Søvik <sup>1)</sup>	SVP Business development	2 648	1 238	258	156	316	<b>4 616</b>
Håvard Moe	SVP Elkem Technology	2 138	950	258	141	245	<b>3 732</b>
Louis Vovelle	SVP Innovation R&D	1 928	882	258	36	213	<b>3 317</b>
Frédéric Jacquin <sup>2)</sup>	SVP Silicones	2 646	5 257	258	51	595	<b>8 807</b>
Trond Sæterstad	SVP Silicon Materials	2 438	1 084	258	141	289	<b>4 210</b>
Jean Villeneuve	SVP Foundry Products	2 614	1 206	258	181	431	<b>4 690</b>
Inge Grubben-Strømnes <sup>1)2)</sup>	SVP Carbon	2 515	4 621	258	145	297	<b>7 836</b>

1) Asbjørn Søvik and Inge Grubben-Strømnes changed positions as of 1 August 2018.

2) STI includes IPO project bonus, in average 70% of the total bonus paid.

Of the IPO bonus received, the CEO and the CFO was obligated to invest the net amount of one annual base salary in Elkem shares.

Amounts in NOK thousand	Position	Fixed compensation	Variable compensation - STI	Variable compensation - LTI	Other benefits	Pension benefits	Total
<b>2017</b>							
Helge Aasen <sup>1)</sup>	CEO	5 417	8 526	-	146	693	<b>14 782</b>
Morten Viga <sup>1)</sup>	CFO	2 867	3 262	-	142	340	<b>6 611</b>
Katja Lehland	SVP Human Resources	2 420	1 165	-	140	280	<b>4 005</b>
Inge Grubben-Strømnes <sup>1)</sup>	SVP Business development	2 415	2 745	-	140	275	<b>5 575</b>
Håvard Moe	SVP Elkem Technology	2 145	1 027	-	148	239	<b>3 559</b>
Louis Vovelle	SVP Innovation R&D	1 833	877	-	34	206	<b>2 950</b>
Frédéric Jacquin <sup>1)</sup>	SVP Silicones	2 273	2 632	-	48	575	<b>5 528</b>
Trond Sæterstad	SVP Silicon Materials	2 452	928	-	140	282	<b>3 802</b>
Jean Villeneuve	SVP Foundry Products	2 589	858	-	184	401	<b>4 032</b>
Asbjørn Søvik	SVP Carbon	2 515	756	-	173	292	<b>3 736</b>

1) STI includes a project bonus

**(b) Board of directors**

The remuneration policy for the board of directors is presented in section Corporate governance.

In addition to the remuneration below, the employee representatives receive marked based salaries for their ordinary employment in Elkem. The board of directors are 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**

*Amounts in NOK thousand*

Name	Position	Committee	Board remuneration	Committee remuneration	Total
<b>2018</b>					
Michael Koenig <sup>1)</sup>	Chair of the board	Leader of the remuneration committee	-	-	-
Olivier de Clermont-Tonnerre <sup>1)</sup>	Board member	Member of the audit committee	-	-	-
Guihua Pei (from March) <sup>1)</sup>	Board member		-	-	-
Anja Isabel Dotzenrath (from March)	Board member	Member of the remuneration committee	272	62	<b>334</b>
Caroline Grégoire Sainte Marie (from March)	Board member	Member of the remuneration committee	275	62	<b>337</b>
Dag Opedal (from March)	Board member	Leader of the audit committee	272	97	<b>369</b>
Sverre S. Tysland (board member until March)	Board member	Leader of the nomination committee	166	-	<b>166</b>
Yougen Ge (until March) <sup>1)</sup>	Board member		-	-	-
Helge Aasen (board member until March)	Board member and CEO		-	-	-
Zhigang Hao (until March) <sup>1)</sup>	Board member		-	-	-
Marianne Færøyvik	Board member (employee representative)		169	-	<b>169</b>
Terje Andre Hanssen	Board member (employee representative)		128	-	<b>128</b>
Einar Støfringhaug (until July)	Board member (employee representative)		84	-	<b>84</b>
Per Tronvoll	Board member (employee representative, observer)		85	-	<b>85</b>
Knut Sande (from July)	Board member (employee representative, observer)		43	-	<b>43</b>

*1) Representatives for the majority shareholder.*

*Amounts in NOK thousand*

Name	Position	Board remuneration	Comitee remuneration	Total
<b>2017</b>				
Michael Koenig <sup>1)</sup>	Chair of the board	-	-	-
Olivier de Clermont-Tonnerre <sup>1)</sup>	Board member	-	-	-
Yougen Ge <sup>1)</sup>	Board member	-	-	-
Sverre S. Tysland	Board member	166	-	166
Helge Aasen	Board member and CEO	-	-	-
Einar Støfringhaug	Board member (employee representative)	165	-	165
Marianne Færøyvik	Board member (employee representative)	165	-	165
Terje Andre Hanssen	Board member (employee representative, observer)	82	-	82
Per Tronvoll	Board member (employee representative, observer)	82	-	82

1) Representatives for the majority shareholder.

**Attendance at board meetings and board committee meetings in 2018 for board members after 22 March 2018 (post IPO)**

<i>Amounts in NOK thousand</i>	Position	Comittee	Board meetings	Audit committee meetings	Remuneration committee meetings
<b>2018</b>					
Michael Koenig <sup>1)</sup>	Chair of the board	Leader of the remuneration committee	9/9		4/4
Olivier de Clermont-Tonnerre <sup>1)</sup>	Board member	Member of the audit committee	8/9	4/4	
Guihua Pei (from March) <sup>1)</sup>	Board member		9/9		
Anja Isabel Dotzenrath (from March)	Board member	Member of the remuneration committee	9/9		4/4
Caroline Grégoire Sainte Marie (from March)	Board member	Member of the remuneration committee	9/9		4/4
Dag Opedal (from March)	Board member	Leader of the audit committee	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		

1) Representatives for the majority shareholder.

**(c) Number of shares owned by the corporate management and board of directors**

Name	Position	Number of shares 2018	Number of options 2018
Helge Aasen	CEO	86 206	500 000
Morten Viga	CFO	46 896	300 000
Katja Lehland	SVP Human Resources	-	300 000
Asbjørn Søvik	SVP Business development	10 000	300 000
Håvard Moe	SVP Elkem Technology	17 241	300 000
Louis Vovelle	SVP Innovation R&D	6 896	300 000
Frédéric Jacquin	SVP Silicones	6 551	300 000
Trond Sæterstad	SVP Silicon Materials	-	300 000
Inge Grubben-Strømnes	SVP Carbon	35 189	300 000
Jean Villeneuve	SVP Foundry Products	-	300 000
Michael Koening	Chairperson	68 965	-
Olivier de Clermont-Tonnerre	Board member	15 517	-
Guihua Pei	Board member	-	-
Anja Isabel Dotzenrath	Board member	-	-
Caroline Grégoire Sainte Marie	Board member	2 300	-
Dag Opedal	Board member	40 000	-
Marianne Færøyvik	Board member (employee representative)	2 700	-
Terje Andre Hanssen	Board member (employee representative)	-	-
Per Tronvoll	Board member (employee representative, observer)	-	-
Knut Sande	Board member (employee representative, observer)	-	-

**Note 13** Other operating expenses

Amounts in NOK million	2018	2017
Loss on disposal of fixed assets	(17)	(1)
Freight and commission expenses	(1 214)	(1 126)
Leasing expenses (note 14)	(139)	(163)
External services <sup>1)</sup>	(1 479)	(1 429)
Insurance expenses	(74)	(63)
Impairment losses assets / receivables	(31)	(15)
Other operating expenses <sup>2) 3)</sup>	(1 669)	(1 447)
<b>Total other operating expenses</b>	<b>(4 622)</b>	<b>(4 245)</b>

1) Including services from auditor, see specification below

2) Including changes in inventories of finished and semi-finished goods of NOK 213 million (NOK 47 million)

3) Including capitalised salary on fixed asset projects of NOK 73 million (NOK 65 million). Employee benefit expenses are presented gross in note 9.

During 2018, Elkem expensed NOK 495 million (NOK 387 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 68 million (NOK 54 million).

Grants received relating to research and development amount to NOK 95 million (NOK 83 million) are included in other operating income.

KPMG is the group auditor of Elkem.

The following table shows fees to KPMG and other audit firms.

#### Audit and other services

<i>Amounts in NOK million</i>	2018	2017
<b>KPMG</b>		
Audit fee	(17)	(12)
Other assurance services	(2)	(0)
Tax services	(1)	(0)
Other services	(8)	(0)
<b>Other audit firms</b>		
Audit fee	(1)	(2)
Other assurance services	(1)	(1)
Tax services	(2)	(5)
Other services	(2)	(4)
<b>Total</b>	<b>(32)</b>	<b>(24)</b>

In addition to the above, audit and assurance services from KPMG have been provided and invoiced through Elkem ASA to Bluestar Elkem International Co., Ltd. S.A. with NOK 3 million (NOK 16 million).

Fees to auditors are reported exclusive of VAT.

#### Note 14 Operating lease

<i>Amounts in NOK million</i>	Land, buildings and other properties	Machinery and plant	Equipment, furniture, systems and vehicles	<b>Total</b>
<b>2018</b>				
Leasing expenses, current year (note 13)	(85)	(35)	(19)	<b>(139)</b>
<b>Minimum future lease payments due in accordance with non-cancellable operating lease contracts:</b>				
Within one year	(55)	(14)	(13)	<b>(82)</b>
Within two years	(48)	(10)	(8)	<b>(66)</b>
Within three years	(38)	(5)	(3)	<b>(46)</b>
More than three years	(135)	(7)	(5)	<b>(146)</b>
<b>2017</b>				
Leasing expenses, current year (note 13)	(96)	(22)	(45)	<b>(163)</b>
<b>Minimum future lease payments due in accordance with non-cancellable operating lease contracts:</b>				
Within one year	(57)	(7)	(34)	<b>(99)</b>
Within two years	(36)	(1)	(20)	<b>(57)</b>
Within three years	(32)	(1)	(17)	<b>(49)</b>
More than three years	(93)	(2)	(27)	<b>(123)</b>

### New IFRS 16 Leases

IFRS 16 was issued in January 2016 and it replaces 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. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model similar to the accounting for finance leases under IAS 17. The standard includes two recognition exemptions for lessees – leases of 'low-value' assets and short-term leases (i.e., leases with a lease term of 12 months or less). At the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e., the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset). Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset.

Lessees will also be 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.

Lessor accounting under IFRS 16 is substantially unchanged from today's accounting under IAS 17. Lessors will continue to classify all leases using the same classification principle as in IAS 17 and distinguish between two types of leases: operating and finance leases.

IFRS 16, which is effective for annual periods beginning on or after 1 January 2019, requires lessees and lessors to make more extensive disclosures than under IAS 17.

### Transition to IFRS 16

Elkem will apply the standard from its mandatory adoption date of 1 January 2019. The group intends to apply the simplified transition approach and will not restate comparative amounts for the year prior to first adoption. Right-of-use assets will be measured on transition date to an amount equal to the lease liability on adoption (adjusted for any prepaid or accrued lease expenses). Elkem will elect to apply the standard to contracts that were previously identified as leases applying IAS 17 and IFRIC 4. Elkem will therefore not apply the standard to contracts that were not previously identified as containing a lease applying IAS 17 and IFRIC 4.

Elkem will elect to use the exemptions proposed by the standard on lease contracts for which the lease terms ends within 12 months as of the date of initial application, lease contracts for which the underlying asset is of low value and lease of intangible assets. Elkem's pol-

icy is to own its production equipment and main lease commitments are related to lease of office buildings, warehouses and land lease. Elkem's land leases are mainly prepaid. Short term lease commitments are mainly related to rental of equipment in connection with maintenance and installation of new equipment. Lease of low value assets are mainly lease of certain office equipment (i.e., printing and photocopying machines) and propane / gas tanks.

Under the current IFRS, leases classified as operational leases are presented as operating expenses. Under the new IFRS 16 the capitalised leases will be depreciated over the lease term and presented as depreciation, and the interest effect from the discounted liability will be presented as a financial item in the statement of income. The actual impacts of adopting the standard on 1 January 2019 may change until Elkem presents its financial statements for first quarter 2019. Below is an overview of estimated impact of implementation of IFRS 16 Leases:

### Estimated impact on the statement of financial position (increase / (decrease)) based on contracts as at 31 December 2018

<i>Amounts in NOK million</i>	<i>01.01.2019</i>
<b>Assets</b>	
Property, plant and equipment (right-of-use assets)	372
<b>Liabilities</b>	
Lease liabilities non-current	299
Lease liabilities current	73

### Estimated impact on the statement of financial income in 2019 (increase / (decrease)) based on contracts as at 31 December 2018

<i>Amounts in NOK million</i>	<i>2019</i>
Other operating expenses	(70)
Amortisations and depreciations	66
Finance expenses	15

Cash flow from operating activities will increase and cash flow from financing activities decrease by approximately NOK 55 million as repayment of the principal portion of the lease liabilities will be classified as cash flow from financing activities. Cash flow from operations that is used to measure segment performance will increase with additional NOK 15 million due to cash flow related to finance expenses.

The group's activities, as lessor that are mainly related to sublease of office buildings, are not material and hence the group does not expect any significant impact on the financial statements.

**Note 15** Other items

<i>Amounts in NOK million</i>	<b>2018</b>	2017
Change in fair value commodity contracts (note 26)	<b>(319)</b>	26
Ineffectiveness on cash flow hedges (note 26)	<b>19</b>	43
Net foreign exchange gains (losses) - forward currency contracts	<b>29</b>	(3)
Operating foreign exchange gains (losses)	<b>32</b>	(11)
<b>Other gains (losses)</b>	<b>(240)</b>	55
Dividend from interest in other companies	<b>2</b>	4
Change in fair value from shares in other companies	<b>(2)</b>	2
Gains (losses) disposal of subsidiaries	<b>1</b>	0
<b>Other income</b>	<b>1</b>	6
Expenses IPO <sup>1)</sup>	<b>(96)</b>	-
Other <sup>2)</sup>	<b>(47)</b>	(18)
<b>Other expenses</b>	<b>(142)</b>	(18)
<b>Total other items</b>	<b>(380)</b>	44

1) Expenses IPO include NOK 25 million in success bonuses to employees.

2) Mainly related to provisions for environmental measurements, infrastructure obligations and minor business projects / acquisitions.

**Note 16** Finance income and expenses

<i>Amounts in NOK million</i>	<b>2018</b>	2017
Interest income on loans and receivables	<b>41</b>	29
Interest income on loans and receivables to related parties	<b>-</b>	0
Other financial income	<b>1</b>	1
<b>Total finance income</b>	<b>42</b>	30
Foreign exchange gains (losses)	<b>19</b>	(8)
Interest expenses on interest-bearing liabilities measured at amortised cost	<b>(280)</b>	(317)
Interest expenses from other items measured at amortised cost	<b>(92)</b>	(137)
Capitalised interest expenses	<b>0</b>	-
Unwinding of discounted liabilities	<b>(5)</b>	(10)
Interest on net pension liabilities	<b>(10)</b>	(9)
Other financial expenses	<b>(2)</b>	(2)
<b>Total finance expenses</b>	<b>(388)</b>	(474)
<b>Net Finance income (expenses)</b>	<b>(327)</b>	(452)

Interest expenses from other items measured at amortised cost mainly consist of interest on bills payable.



**Note 17** Taxes**income tax recognised in profit or loss**

<i>Amounts in NOK million</i>	<b>2018</b>	2017
Profit (loss) before income tax	<b>3 792</b>	1 519
Current taxes	<b>(450)</b>	(259)
Deferred taxes	<b>25</b>	(10)
<b>Total income tax (expense) benefit</b>	<b>(425)</b>	(269)

**Income taxes recognised in other comprehensive income (OCI)**

<i>Amounts in NOK million</i>	<b>2018</b>	2017
Remeasurement of defined benefit pension plans	<b>(6)</b>	2
Hedging of net investment in foreign operations	<b>7</b>	48
Cash flow hedges	<b>(159)</b>	(4)
<b>Total tax charged to OCI</b>	<b>(158)</b>	46

**Reconciliation of income tax (expense) benefit**

<i>Amounts in NOK million</i>	<b>2018</b>	2017
Profit (loss) before income tax	<b>3 792</b>	1 519
Expected income taxes, 23% of profit before tax (24%)	<b>(872)</b>	(365)
<b>Tax effects of:</b>		
Difference in tax rates for each individual jurisdiction	<b>(115)</b>	(11)
Preferential tax rates	<b>200</b>	1
<b>Permanent differences</b>		
Tax effects of income from Norwegian controlled foreign companies (NOKUS)	<b>(9)</b>	(7)
Tax effects share of profit (loss) from equity accounted companies	<b>(1)</b>	7
Tax effects other permanent expenses	<b>(14)</b>	(10)
Tax relief based on value of equity	<b>17</b>	12
Tax effects other permanent income	<b>46</b>	31
<b>Other effects</b>		
Tax effects of changes in not recognised deferred tax assets	<b>348</b>	78
Tax credits utilised	<b>-</b>	-
Tax effects of change in tax rate	<b>3</b>	11
Other current tax paid	<b>(30)</b>	(24)
Previous year tax adjustment	<b>1</b>	6
<b>Income tax (expense) benefit</b>	<b>(425)</b>	(269)
Effective tax rate	<b>11%</b>	18%

Tax effects of changes in not recognised deferred tax assets are mainly related to use of tax losses in China and debt forgiveness, see separate tables below. The effect of change in tax rates relates mainly to changes in tax rate from 23% to 22% in Norway from 2018 and changes in tax rate from 24% to 23% in Norway from 2017. The changes in tax rates were approved by the governments before year end the respective years.

Xinghuo Silicones has been awarded income tax preference as "High and new technology company" in China with effect from 1 January 2018, which means that the tax rate will decrease from 25% to 15%. This credential needs to be renewed every two years. Xinghuo Silicones has tax assets, which are not recognised, and the change has only effect on the value of not capitalised tax assets. Elkem Silicones Shanghai has this preferential tax rate from previous years.

Other current tax paid relates mainly to taxes that are indirectly calculated based on profit (loss) before income tax.

**Deferred tax assets and deferred tax liabilities**

<i>Amounts in NOK million</i>	31.12.2018		31.12.2017	
	Deductible temporary difference	Deferred tax	Deductible temporary difference	Deferred tax
Derivatives including cash flow hedges	528	116	626	144
Property, plant and equipment and Intangible assets	2 495	395	2 936	741
Pension liabilities	401	114	413	117
Trade receivables	100	15	51	13
Inventories	253	60	268	68
Provisions	316	82	374	100
Other differences	37	11	81	26
Debt forgiveness	644	215	1 221	407
Tax losses to carryforward	1 925	572	2 896	830
<b>Deferred tax assets</b>	<b>6 699</b>	<b>1 579</b>	<b>8 866</b>	<b>2 446</b>
Not capitalised deferred tax assets to tax loss carryforward	(1 477)	(431)	(2 264)	(680)
Not capitalised debt forgiveness	(644)	(215)	(1 221)	(407)
Not capitalised deferred tax assets other items	(2 521)	(391)	(2 981)	(723)
<b>Capitalised deferred tax assets</b>	<b>2 057</b>	<b>542</b>	<b>2 400</b>	<b>637</b>
Netting		(482)		(547)
<b>Net deferred tax assets</b>		<b>60</b>		<b>90</b>
Derivatives including cash flow hedges	433	95	185	43
Property, plant and equipment and Intangible assets	1 853	495	1 907	533
Inventories	232	54	146	35
Other differences	212	46	109	41
<b>Deferred tax liabilities</b>	<b>2 730</b>	<b>689</b>	<b>2 347</b>	<b>652</b>
Netting		(482)		(547)
<b>Net deferred tax liabilities</b>		<b>207</b>		<b>105</b>
<b>Net deferred tax (liabilities) / assets recognised</b>		<b>(147)</b>		<b>(15)</b>

Not recognised deferred tax assets other items are mainly related to Property, plant and equipment.

**Change in net deferred tax assets and deferred tax liabilities**

<i>Amounts in NOK million</i>	2018	2017
Opening balance	(15)	(47)
Recognised in profit or loss for the year	25	(10)
Effect of business combination	(0)	(6)
Recognised in other comprehensive income	(158)	46
Foreign currency exchange differences	1	2
<b>Closing balance</b>	<b>(147)</b>	<b>(15)</b>

**Tax losses to carryforward****31.12.2018**

<i>Amounts in NOK million</i>	Gross tax losses to carryforward	Net tax losses to carryforward	Not recognised tax losses	Recognised deferred tax losses to carryforward
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)	-
<b>Total</b>	<b>1 925</b>	<b>572</b>	<b>(431)</b>	<b>141</b>

**31.12.2017**

<i>Amounts in NOK million</i>	Gross tax losses to carryforward	Net tax losses to carryforward	Not recognised tax losses	Recognised deferred tax losses to carryforward
France	1 067	356	(208)	148
China	1 517	379	(379)	-
Brazil	250	85	(85)	-
USA	4	2	-	2
United Kingdom	5	1	-	1
Malaysia	17	4	(4)	0
Paraguay	33	3	(3)	-
India	3	1	(1)	0
<b>Total</b>	<b>2 896</b>	<b>830</b>	<b>(680)</b>	<b>151</b>

**Tax losses to carryforward by expiry date**

<i>Amounts in NOK million</i>	31.12.2018		31.12.2017	
	Total not recognised losses	Total recognised losses	Total not recognised losses	Total recognised losses
2018	0	-	(37)	-
2019	(19)	-	(19)	-
2020	(22)	-	(62)	-
2021	(39)	-	(261)	-
2022	-	-	-	-
2023	(4)	-	-	-
> 2023	-	-	-	-
Without maturity	(347)	141	(301)	151
<b>Total tax losses carried forward</b>	<b>(431)</b>	<b>141</b>	<b>(680)</b>	<b>151</b>

**Deferred tax assets not recognised current year**

When an entity has a history of recent 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.

**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 2018 are EUR 69 million (EUR 136 million). Elkem Silicones France SAS has repaid NOK 577 million (NOK 108 million) that gives a tax credit of NOK 192 million (NOK 36 million). The amount is included in tax effect of changes in not recognised deferred tax assets in the reconciliation of income tax (expense) benefit above.

**Debt forgiveness in:**

<i>Amounts in NOK million</i>	2010	2012	2013	2014	<b>Total</b>
Gross value of debt forgiveness Usage 2018	680 (577)	186	149	207	<b>1 221 (577)</b>
Total debt that can be reversed	103	186	149	207	<b>644</b>
<b>Deferred tax asset not recognised<sup>1)</sup></b>	34	62	49	69	<b>215</b>

1) Based on tax rate 33,33%, which is applicable in France.

The respective agreements expire in 7 years 9 years 10 years 11 years

**Debt forgiveness in:**

<i>Amounts in NOK million</i>	2010	2012	2013	2014	<b>Total</b>
Gross value of debt forgiveness Usage 2017	788 (108)	186	149	207	<b>1 329 (108)</b>
Total debt that can be reversed	680	186	149	207	<b>1 221</b>
<b>Deferred tax asset not recognised</b>	227	62	49	69	<b>407</b>

The respective agreements expire in 8 years 10 years 11 years 12 years

**Note 18** Property, plant and equipment

2018	Land and other property	Plant and buildings	Machinery, equipment and motor vehicles	Office and other equipment	Construc- tion in progress	Total
<i>Amounts in NOK million</i>						
<b>Cost</b>						
Opening balance	322	5 998	18 241	454	1 517	<b>26 532</b>
Additions	2	2	37	3	1 661	<b>1 705</b>
Transferred from CIP	217	173	1 111	34	(1 535)	<b>-</b>
Reclassifications	2	2	(5)	1	(11)	<b>(10)</b>
Business combinations (note 4)	-	-	7	-	-	<b>7</b>
Disposals	(4)	(63)	(317)	(7)	(47)	<b>(438)</b>
Exchange differences	11	14	30	(0)	33	<b>87</b>
<b>Closing balance</b>	<b>550</b>	<b>6 127</b>	<b>19 103</b>	<b>485</b>	<b>1 619</b>	<b>27 883</b>
<b>Accumulated depreciation</b>						
Opening balance	(101)	(2 060)	(9 467)	(306)		<b>(11 934)</b>
Additions	(10)	(168)	(947)	(31)		<b>(1 156)</b>
Reclassifications	(2)	(2)	4	(1)		<b>(0)</b>
Disposals	3	31	233	5		<b>273</b>
Exchange differences	(1)	0	(36)	(2)		<b>(38)</b>
<b>Closing balance</b>	<b>(111)</b>	<b>(2 198)</b>	<b>(10 213)</b>	<b>(334)</b>		<b>(12 856)</b>
<b>Impairment losses</b>						
Opening balance	(15)	(391)	(2 134)	(0)	(108)	<b>(2 647)</b>
Additions	-	(0)	(5)	(0)	(3)	<b>(8)</b>
Disposals	1	15	35	0	35	<b>86</b>
Exchange differences	(0)	(1)	(12)	(0)	1	<b>(13)</b>
<b>Closing balance</b>	<b>(13)</b>	<b>(377)</b>	<b>(2 116)</b>	<b>(0)</b>	<b>(75)</b>	<b>(2 582)</b>
<b>Net book value</b>	<b>425</b>	<b>3 551</b>	<b>6 774</b>	<b>152</b>	<b>1 544</b>	<b>12 445</b>
Historical cost, assets under financial leasing	-	-	212	1	-	<b>213</b>
Accumulated depreciations, assets under financial leasing	-	-	(211)	(1)	-	<b>(212)</b>
<b>Net book value, assets under financial leasing</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>0</b>	<b>-</b>	<b>1</b>
<b>Original cost of assets fully depreciated but still in use</b>	<b>18</b>	<b>675</b>	<b>3 057</b>	<b>53</b>	<b>-</b>	<b>3 803</b>
Estimated useful life	0–50 years	5–50 years	3–50 years	3–20 years		
Depreciation plan	Straight-line	Straight-line	Straight-line	Straight-line		

Depreciations start when the asset is ready for its intended use. Land is not depreciated.

The weighted average cost of capital for capitalisation of loan interest in 2018 was 4.35% per annum.

2017	Land and other property	Plant and buildings	Machinery, equipment and motor vehicles	Office and other equipment	Construc- tion in progress	<b>Total</b>
<i>Amounts in NOK million</i>						
<b>Cost</b>						
Opening balance	233	5 850	17 517	422	691	<b>24 713</b>
Additions	1	3	(2)	5	1 192	<b>1 199</b>
Transferred from CiP	48	68	510	20	(645)	<b>-</b>
Reclassifications	5	1	(10)	5	(1)	<b>1</b>
Business combinations (note 4)	27	-	5	-	252	<b>284</b>
Disposals	(1)	(9)	(153)	(10)	(4)	<b>(177)</b>
Exchange differences	9	86	374	12	32	<b>512</b>
<b>Closing balance</b>	<b>322</b>	<b>5 998</b>	<b>18 241</b>	<b>454</b>	<b>1 517</b>	<b>26 532</b>
<b>Accumulated depreciation</b>						
Opening balance	(91)	(1 879)	(8 449)	(272)		<b>(10 690)</b>
Additions	(6)	(165)	(942)	(31)		<b>(1 144)</b>
Reclassifications	(4)	(1)	6	(1)		<b>-</b>
Disposals	0	7	129	9		<b>144</b>
Exchange differences	(1)	(23)	(211)	(10)		<b>(245)</b>
<b>Closing balance</b>	<b>(101)</b>	<b>(2 060)</b>	<b>(9 467)</b>	<b>(306)</b>		<b>(11 934)</b>
Impairment losses						
Opening balance	(14)	(386)	(2 105)	(0)	(107)	<b>(2 612)</b>
Additions	(0)	(1)	(15)	(1)	-	<b>(17)</b>
Disposals	0	2	17	1	1	<b>21</b>
Exchange differences	(1)	(6)	(31)	(0)	(2)	<b>(39)</b>
<b>Closing balance</b>	<b>(15)</b>	<b>(391)</b>	<b>(2 134)</b>	<b>(0)</b>	<b>(108)</b>	<b>(2 647)</b>
<b>Net book value</b>	<b>206</b>	<b>3 547</b>	<b>6 640</b>	<b>148</b>	<b>1 409</b>	<b>11 950</b>
Historical cost, assets under financial leasing						
Historical cost, assets under financial leasing	-	-	213	1	-	<b>214</b>
Accumulated depreciations, assets under financial leasing	-	-	(210)	(1)	-	<b>(210)</b>
<b>Net book value, assets under financial leasing</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>1</b>	<b>-</b>	<b>4</b>
<b>Original cost of assets fully depreciated but still in use</b>	<b>16</b>	<b>548</b>	<b>1 854</b>	<b>31</b>	<b>-</b>	<b>2 449</b>
Estimated useful life	0-50 years	5-50 years	3-50 years	3-20 years		
Depreciation plan	Straight-line	Straight-line	Straight-line	Straight-line		

**Note 19** Intangible assets and goodwill

<i>Amounts in NOK million</i>	Goodwill	Leasehold land and land use rights	Technology and licences	Software	Develop- ment	Other intangible	Intangible assets under con- struction	<b>Total</b>
<b>2018</b>								
<b>Cost</b>								
Opening balance	326	326	526	409	548	53	117	<b>1 980</b>
Additions	-	9	0	15	2	0	76	<b>102</b>
Transferred from CIP	-	-	10	2	31	-	(43)	<b>-</b>
Reclassification	-	(2)	-	9	2	1	-	<b>10</b>
Business combinations (note 4)	15	-	-	-	-	3	-	<b>3</b>
Disposals	-	(7)	(2)	(45)	-	-	-	<b>(54)</b>
Exchange differences	1	2	5	2	8	0	3	<b>20</b>
<b>Closing balance</b>	<b>342</b>	<b>328</b>	<b>540</b>	<b>392</b>	<b>591</b>	<b>57</b>	<b>154</b>	<b>2 062</b>
<b>Accumulated amortisation</b>								
Opening balance		(82)	(365)	(289)	(314)	(19)		<b>(1 068)</b>
Additions		(5)	(26)	(28)	(44)	(4)		<b>(107)</b>
Reclassification		-	-	1	-	(1)		<b>0</b>
Disposals		1	2	45	-	-		<b>48</b>
Exchange differences		(1)	(4)	(2)	(5)	(0)		<b>(12)</b>
<b>Closing balance</b>		<b>(87)</b>	<b>(392)</b>	<b>(272)</b>	<b>(364)</b>	<b>(24)</b>		<b>(1 139)</b>
<b>Impairment losses</b>								
Opening balance	-	(1)	-	-	-	-	-	<b>(1)</b>
Exchange differences	-	(0)	-	-	-	-	-	<b>(0)</b>
<b>Closing balance</b>	<b>-</b>	<b>(1)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(1)</b>
<b>Net book value</b>	<b>342</b>	<b>240</b>	<b>147</b>	<b>120</b>	<b>227</b>	<b>33</b>	<b>154</b>	<b>922</b>
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.

2017		Leasehold land and land use rights	Technology and licences	Software	Develop- ment	Other intangible	Intangible assets under con- struction	Total
<i>Amounts in NOK million</i>	Goodwill							
<b>Cost</b>								
Opening balance	343	318	485	385	416	49	153	<b>1 807</b>
Additions	-	(0)	(0)	3	(5)	0	85	<b>82</b>
Transferred from CiP	-	-	7	21	100	-	(127)	<b>-</b>
Reclassification	-	-	(2)	(0)	-	1	-	<b>(1)</b>
Business combinations (note 4)	(20)	(2)	-	0	-	-	-	<b>(2)</b>
Disposals	-	-	(0)	(4)	-	-	-	<b>(5)</b>
Exchange differences	4	10	37	5	37	2	7	<b>99</b>
<b>Closing balance</b>	<b>326</b>	<b>326</b>	<b>526</b>	<b>409</b>	<b>548</b>	<b>53</b>	<b>117</b>	<b>1 980</b>
<b>Accumulated amortisation</b>								
Opening balance		(71)	(316)	(260)	(254)	(14)		<b>(914)</b>
Additions		(6)	(25)	(28)	(38)	(4)		<b>(101)</b>
Reclassification		-	1	(0)	-	(0)		<b>-</b>
Disposals		-	0	4	-	-		<b>5</b>
Exchange differences		(4)	(25)	(5)	(22)	(1)		<b>(58)</b>
<b>Closing balance</b>		<b>(82)</b>	<b>(365)</b>	<b>(289)</b>	<b>(314)</b>	<b>(19)</b>		<b>(1 068)</b>
<b>Impairment losses</b>								
Opening balance	-	(1)	-	-	-	-	-	<b>(1)</b>
Exchange differences	-	(0)	-	-	-	-	-	<b>(0)</b>
<b>Closing balance</b>	<b>-</b>	<b>(1)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(1)</b>
<b>Net book value</b>	<b>326</b>	<b>244</b>	<b>162</b>	<b>121</b>	<b>234</b>	<b>33</b>	<b>117</b>	<b>911</b>
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 2017 mainly consist of capitalisation of development projects of NOK 54 million.

## Note 20 Impairment assessments

Impairment tests are performed by comparing the carrying amount for the asset or the Cash Generating Unit (CGU) including goodwill, with the recoverable amount. The recoverable amount is based on

value in use, calculated using the discounted cash flow method. A CGU is the lowest level at which independent cash inflows can be measured.



**Goodwill per entity/CGU – 31 December 2018**

<i>Amounts in NOK million</i>	Silicones	Silicon Materials	Foundry Products	Carbon	Total
Silicones	76	-	-	-	<b>76</b>
Elkem Rana AS	-	40	-	-	<b>40</b>
Elkem Oilfield Chemical FZCO	-	20	-	-	<b>20</b>
Elkem Materials Process Services BV	-	0	-	-	<b>0</b>
Elkem Foundry Hingna Nagpur	-	-	39	-	<b>39</b>
Elkem UK Holdings Ltd.	-	-	15	-	<b>15</b>
Ferroveld JV	-	-	-	45	<b>45</b>
Elkem Participações Indústria e Comércio Limitada	-	-	-	9	<b>9</b>
Elkem Carbon China Comp Ltd.	-	-	-	1	<b>1</b>
NEH Inc.	-	23	59	15	<b>97</b>
<b>Total Goodwill</b>	<b>76</b>	<b>83</b>	<b>113</b>	<b>70</b>	<b>342</b>

**Goodwill per entity/CGU – 31 December 2017**

<i>Amounts in NOK million</i>	Silicones	Silicon Materials	Foundry Products	Carbon	Total
Silicones	75	-	-	-	<b>75</b>
Elkem Rana AS	-	40	-	-	<b>40</b>
Elkem Oilfield Chemical FZCO	-	19	-	-	<b>19</b>
Elkem Materials Process Services BV	-	0	-	-	<b>0</b>
Elkem Foundry Hingna Nagpur	-	-	40	-	<b>40</b>
Ferroveld JV	-	-	-	49	<b>49</b>
Elkem Participações Indústria e Comércio Limitada	-	-	-	10	<b>10</b>
Elkem Carbon China Comp Ltd.	-	-	-	1	<b>1</b>
NEH Inc.	-	21	56	14	<b>91</b>
<b>Total Goodwill</b>	<b>75</b>	<b>81</b>	<b>96</b>	<b>75</b>	<b>326</b>

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, gross operating profit (loss) 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 margin before depreciation and amortisation, and it is 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 forward have been used for the impairment tests:

	WACC	Growth
Silicones	9.4%	2.0%
Silicon Materials	9.4%	2.0%
Foundry Products	8.8%	2.0%
Carbon	10.6%	2.0%

#### Impairment – test results and conclusion

Value in use for each CGU exceeds carrying amount. The impairment tests indicate no requirement for write-down.

#### Sensitivity of estimated cash flows

An increase of 2 percentage points in WACC will not result in an impairment for Elkem.

A change of 10% in other key assumptions will not result in an impairment for Elkem.

## Note 21 Other assets

Amounts in NOK million	Non-current		Current	
	31.12.2018	31.12.2017	31.12.2018	31.12.2017
Other shares	52	51	-	-
Restricted deposits	97	95	-	-
Other deposits	11	31	-	-
Pension assets, defined benefits and contribution plans (note 10)	7	2	2	3
Prepayments for construction in progress	56	23	-	-
Prepayments for goods and equipment	-	-	98	84
Prepayments for other expenses	31	33	50	46
Prepayments to related parties (note 33)	-	-	4	1
Receivables from related parties, interest-bearing (note 33)	2	2	-	-
Receivables from related parties, interest free (note 33)	-	-	4	1 354
Grants receivable (note 8)	172	155	148	141
Value added tax	-	-	452	380
Corporate income tax	-	-	38	25
Interest receivables	-	-	0	0
Other receivables	8	8	21	44
Other assets	5	8	17	13
<b>Total other assets</b>	<b>441</b>	<b>407</b>	<b>836</b>	<b>2 091</b>
Provision for impairment other receivables	-	-	(38)	(29)
Provision for impairment prepayments	-	-	(27)	(17)

Restricted deposits mainly consist of restricted deposits related to the ongoing tax litigation in Elkem's business in Brazil of NOK 75 million (NOK 76 million), see note 25 Provisions and other liabilities, and

long-term deposit for pension guarantee, related to unfunded pension liabilities for salaries above 12G, of NOK 22 million (NOK 19 million).

## Note 22 Inventories

Amounts in NOK million	31.12.2018		31.12.2017	
	Cost price	Provision	Cost price	Provision
Raw materials	1 278	(10)	918	(16)
Semi-finished goods	527	(17)	332	(17)
Finished goods	3 284	(48)	2 506	(48)
Operating materials and spare parts	476	(23)	463	(39)
<b>Total inventories</b>	<b>5 564</b>	<b>(98)</b>	<b>4 220</b>	<b>(120)</b>

This year's change in write down on inventory of NOK 23 million (loss of NOK 23 million) is included in raw materials and energy for smelting.

**Note 23** Trade receivables

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	31.12.2017
Trade receivables	<b>2 071</b>	2 270
Trade receivables, related parties	<b>44</b>	51
Provision for doubtful accounts	<b>(78)</b>	(75)
Bills receivable	<b>354</b>	272
<b>Total trade receivables</b>	<b>2 391</b>	2 518

Elkem has entered into a non-recourse factoring agreement of EUR 50 million, NOK 497 million. The receivables are derecognised, as the group has no right to the cash flow from the transferred receivables. There is a recourse clause for maximum 10% of the face value of the individual receivable sold under the agreement.

A bill receivable is a document where the customer formally agrees to pay for delivered goods or services at maturity date, and is normally guaranteed by a financial institution. A bill receivable is transferable and can be used to pay trade payables or settled in cash with a finance institution. The bills receivable-document effectively re-

places, 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.

Bills receivables consist of NOK 354 million (NOK 272 million) bank acceptance bills and NOK 0 million (NOK 0.3 million) commercial acceptance bills. At the end of December a total of NOK 1,125 million (NOK 1,414 million) in unmatured bills receivables are discounted or endorsed, and therefore derecognised as the risk and rewards are deemed as transferred.

**Analysis of gross trade receivables by age, presented based on the due date**

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	31.12.2017
Not due	<b>1 664</b>	1 811
1-30 days	<b>268</b>	311
31-60 days	<b>57</b>	78
61-90 days	<b>32</b>	33
More than 90 days	<b>94</b>	88
<b>Total trade receivables<sup>1)</sup></b>	<b>2 115</b>	2 321

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 provisions for doubtful accounts**

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	31.12.2017
Opening balance	<b>(75)</b>	(64)
Losses during the year	<b>8</b>	2
New provisions	<b>(22)</b>	(16)
Reversed provisions	<b>11</b>	6
Foreign currency exchange differences	<b>(0)</b>	(2)
<b>Closing balance</b>	<b>(78)</b>	(75)

**Analysis of trade receivables that are overdue and impaired, by age**

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	31.12.2017
<b>Overdue by:</b>		
0-3 months	<b>(6)</b>	(9)
3-6 months	<b>(3)</b>	(4)
6-12 months	<b>(6)</b>	(1)
More than 1 year	<b>(64)</b>	(60)
<b>Total provisions for doubtful accounts</b>	<b>(78)</b>	(75)

**Note 24** Interest-bearing assets and liabilities

<i>Amounts in NOK million</i>	Non-current		Current	
	<b>31.12.2018</b>	31.12.2017	<b>31.12.2018</b>	31.12.2017
<b>Non-current interest-bearing liabilities</b>				
Loans from related parties	-	7	-	-
Financial leases	-	0	<b>0</b>	1
Loans from external part, other than bank	<b>2 731</b>	80	<b>195</b>	61
Bank financing	<b>4 400</b>	4 498	<b>1 834</b>	3 418
Accrued interest, related parties <sup>1)</sup>	-	-	-	157
Accrued interest	-	-	<b>23</b>	10
<b>Total interest-bearing liabilities</b>	<b>7 131</b>	4 585	<b>2 052</b>	3 647
<b>Bills payable</b>	-	-	<b>1 740</b>	2 650
<b>Total interest-bearing liabilities including bills payable</b>	<b>7 131</b>	4 585	<b>3 792</b>	6 297
<b>Interest-bearing assets</b>				
Cash and cash equivalents	-	-	<b>7 082</b>	1 751
Restricted deposits bills payable	-	-	<b>569</b>	1 016
Other restricted deposits	<b>97</b>	95	<b>8</b>	4
Receivables from related parties	<b>2</b>	2	-	-
Loans to external parties	<b>8</b>	7	-	-
Accrued interest income	-	-	<b>0</b>	0
<b>Total interest-bearing assets</b>	<b>106</b>	104	<b>7 659</b>	2 771
<b>Net interest-bearing assets / (liabilities)</b>	<b>(7 025)</b>	(4 481)	<b>3 867</b>	(3 526)

1) The accrued interests in 2017 relates to a loan from China National Bluestar group Co. Ltd., settled in 2017. The interest was settled in first quarter 2018.

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 cent age of the nominal value of the bill payable into a restricted bank account. All bills payable in Elkem are bank acceptance bills.

**Interest-bearing liabilities by currency**

<i>Amounts in million</i>	Currency amount	NOK 31.12.2018	Currency amount	NOK 31.12.2017
EUR	538	<b>5 352</b>	317	3 122
USD	15	<b>132</b>	27	218
NOK	1 708	<b>1 708</b>	(6)	(6)
CNY	2 946	<b>3 731</b>	5 982	7 539
Other currencies	-	<b>1</b>	-	10
<b>Total interest-bearing liabilities</b>		<b>10 923</b>		10 882

**Maturity of interest-bearing liabilities as at 31 December 2018**

<i>Amounts in NOK million</i>	2019	2020	2021	2022	2023	2024 and later	Total
Financial leases	0	-	-	-	-	-	<b>0</b>
Loans from external part, other than bank	195	11	1 864	527	15	314	<b>2 926</b>
Bank financing	1 834	308	53	53	4 033	-	<b>6 281</b>
Bills payable	1 740	-	-	-	-	-	<b>1 740</b>
Accrued interest	23	-	-	-	-	-	<b>23</b>
<b>Total</b>	3 792	319	1 917	580	4 048	314	<b>10 970</b>
Prepaid loan fees							<b>(47)</b>
<b>Total interest bearing liabilities</b>							<b>10 923</b>

**Maturity of interest-bearing liabilities as at 31 December 2017**

<i>Amounts in NOK million</i>	2018	2019	2020	2021	2022	2023 and later	Total
Loans from related parties	-	7	-	-	-	-	<b>7</b>
Financial leases	1	0	-	-	-	-	<b>2</b>
Loans from external part, other than bank	61	12	13	13	13	28	<b>140</b>
Bank financing	3 418	597	2 946	758	118	88	<b>7 925</b>
Bills payable	2 650	-	-	-	-	-	<b>2 650</b>
Accrued interest, related parties	157	-	-	-	-	-	<b>157</b>
Accrued interest	10	-	-	-	-	-	<b>10</b>
<b>Total</b>	6 297	617	2 959	771	132	116	<b>10 890</b>
Prepaid loan fee							<b>(8)</b>
<b>Total interest bearing liabilities</b>							<b>10 882</b>

**Refinancing**

In connection with the IPO and the acquisition of the Chinese entities Elkem has refinanced a significant part of its interest-bearing liabilities. The external financing in Norway is increased in favour of decreased external financing in Xinghuo Silicones and Yongdeng Silicon Materials. Gradually the external bank financing in Xinghuo Silicones and Yongdeng Silicon Materials have decreased, partly by excess cash generation in 2018, and partly with shareholder loans from parent. Refinancing of the bank financing in Xinghuo Silicones is expected to continue in 2019.

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 the term loan facility, bridge financing, of EUR 500 million was terminated and replaced with other facilities. At the end of December 2018 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. An application will be made for the bond to be listed on Oslo Børs. There are no covenants related to the bond loan.

10 December 2018 Elkem issued a series of floating and fixed rate loans in the Schuldschein market. Total size of the transaction is EUR 215 million where of EUR 91.5 million was issued at 31 December and the remainder EUR 123.5 million in January 2019. Of the total transaction amount EUR 15 million are in fixed rate loans. The loans are unsecured. The interest rate of the fixed rate loans was set on 11 December 2018 and there are no significant subsequent changes in the interest path, hence there are no material differences between fair value of the fixed rate loan and book value.

#### Net investment hedge

Elkem has in 2017 entered 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 2018 was NOK 2,736 million (NOK 2,707 million). The foreign exchange loss of NOK 29 million (a loss of NOK 209 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 27 million (EUR 32 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 2018 the group is granted credit facilities of NOK 2,854 million. The credit facilities are undrawn at 31 December 2018.

As of 31 December 2017 the group has drawn NOK 626 million of total granted credit facilities of NOK 2,978 million. The drawn amounts are classified as short-term bank financing and bills payable.

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 2,487 million) and NOK 250 million respectively. See note 28 Financial risk, section liquidity risk for more information.

#### Loan covenant

Elkem has financial covenants related to its bank financing and parts of loans from external part, other than bank (Schuldschein). The interest-bearing loans in China have no financial covenants. In addition to the covenants on these loan facilities in Elkem ASA are loan covenants related to the credit facilities in Elkem Metal Canada Inc of CAD 2 million. Elkem and Elkem Metal Canada Inc. are not in breach of their covenants at the end of 2018 and 2017.

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 5,156 million (NOK 3,023 million) in Elkem ASA

		31.12.2018	31.12.2017	Loan covenant
Total Equity	NOK	13 722	8 333	
Total Assets	NOK	31 129	16 348	
<b>Equity ratio</b>		<b>44%</b>	51%	> 30%
EBITDA	NOK	5 793	2 098	
Net finance charges	NOK	336	67	
<b>Interest cover ratio</b>		<b>17.22</b>	31.44	> 4.00

## Movements in interest-bearing liabilities

<i>Amounts in NOK million</i>	Cash flows		Non-cash changes				31.12.2018
	31.12.2017	Receipts/ Payments	Debt conversion	Reclassifi- cation	Business combina- tion	Foreign exchange changes	
Loans from related parties	7	(7)	-	-	-	(0)	-
Financial leases	0		-	(0)	-	-	-
Loans from external part, other than bank	80	2 655	-	(16)	-	13	<b>2 731</b>
Bank financing	4 498	1 591	-	(1 700)	-	11	<b>4 400</b>
<b>Total movements non-current</b>	<b>4 585</b>	<b>4 239</b>	<b>-</b>	<b>(1 716)</b>	<b>-</b>	<b>23</b>	<b>7 131</b>
Financial leases	1	(2)	-	0	-	(0)	<b>0</b>
Loans from external part, other than bank	61	109	-	16	-	9	<b>195</b>
Bank financing	3 418	(3 290)	-	1 700	-	6	<b>1 834</b>
<b>Total movements current</b>	<b>3 480</b>	<b>(3 182)</b>	<b>-</b>	<b>1 716</b>	<b>-</b>	<b>15</b>	<b>2 029</b>
<b>Total movements</b>	<b>8 065</b>	<b>1 057</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>38</b>	<b>9 160</b>

## Movements in interest-bearing liabilities

<i>Amounts in NOK million</i>	Cash flows		Non-cash changes				31.12.2017
	31.12.2016	Receipts/ Payments	Debt conversion	Reclassifi- cation	Business combina- tion	Foreign exchange changes	
Loans from related parties	6	-	-	-	-	1	7
Financial leases	1	(4)	-	3	-	0	0
Loans from external part, other than bank	-	-	-	-	77	3	80
Bank financing	5 106	(231)	-	(731)	84	271	4 498
<b>Total movements non-current</b>	<b>5 113</b>	<b>(236)</b>	<b>-</b>	<b>(728)</b>	<b>161</b>	<b>274</b>	<b>4 585</b>
Financial leases	4	-	-	(3)	-	-	1
Loans from related parties	761	-	(670)	(86)	-	(4)	0
Loans from external part, other than bank	58	(9)	-	0	8	3	61
Bank financing	3 219	(555)	-	731	-	23	3 418
<b>Total movements current</b>	<b>4 043</b>	<b>(564)</b>	<b>(670)</b>	<b>642</b>	<b>8</b>	<b>21</b>	<b>3 480</b>
<b>Total movements</b>	<b>9 156</b>	<b>(799)</b>	<b>(670)</b>	<b>(86)</b>	<b>169</b>	<b>295</b>	<b>8 065</b>

**Note 25** Provisions and other liabilities

<i>Amounts in NOK million</i>	Non-current		Current	
	31.12.2018	31.12.2017	31.12.2018	31.12.2017
Employee withholding taxes and other public taxes	-	-	108	84
VAT payables	-	-	265	148
Prepayments	-	42	160	187
Prepayments from related parties	-	-	16	1
Liabilities to related parties	-	-	328	324
Provisions	164	149	77	62
Contract obligation, business combinations	62	124	64	82
Accrued expenses	-	-	194	154
Deferred income grants	-	-	8	9
Other liabilities	6	-	1	34
<b>Provisions and other liabilities</b>	<b>232</b>	<b>315</b>	<b>1 221</b>	<b>1 083</b>

The contract obligation relates to the purchase of Fesil Rana. The provision is calculated based on differences between contract price and market price at date of purchase, 1 December 2016 and subsequently measured at cost. The contract lasts until 31 December 2020.

**Provisions include the following**

<b>2018</b> <i>Amounts in NOK million</i>	Site restoration	Environmen- tal measures	Litigations	Customers	Other provisions	Total provisions
<b>Opening balance</b>	26	63	106	14	2	211
Additional provisions recognised	2	25	12	2	10	50
Used during the year	-	-	(8)	(1)	(2)	(10)
Foreign currency exchange differences	0	(1)	(10)	0	0	(10)
<b>Closing balance</b>	<b>28</b>	<b>88</b>	<b>101</b>	<b>15</b>	<b>10</b>	<b>241</b>
Hereof non-current	28	47	86	3	-	164
Hereof current	-	41	15	12	10	77
<b>Closing balance</b>	<b>28</b>	<b>88</b>	<b>101</b>	<b>15</b>	<b>10</b>	<b>241</b>

**Provisions include the following**

<b>2017</b> <i>Amounts in NOK million</i>	Site restoration	Environmen- tal measures	Litigations	Customers	Other provisions	Total provisions
<b>Opening balance</b>	25	51	162	10	8	255
Additional provisions recognised	10	14	27	3	2	55
Used during the year	(9)	(5)	(74)	(2)	(8)	(97)
Foreign currency exchange differences	0	3	(8)	3	(0)	(2)
<b>Closing balance</b>	<b>26</b>	<b>63</b>	<b>106</b>	<b>14</b>	<b>2</b>	<b>211</b>
Hereof non-current	26	23	97	3	-	149
Hereof current	-	40	10	11	2	62
<b>Closing balance</b>	<b>26</b>	<b>63</b>	<b>106</b>	<b>14</b>	<b>2</b>	<b>211</b>



**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 estimated provisions relates to estimated clean-up costs in connection with a closed production site and landfills.

Elkem has a potential future obligation for remediation work of the fjord nearby the Carbon plant in Kristiansand in Norway. Elkem submitted in June 2018 a clean-up plan to Miljødirektoratet. Elkem is still awaiting final reply to this plan. At the end of the reporting period 2018 a provision of NOK 19 million has been made.

**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 included in other non-current assets, see note 21 Other assets.

**Customers**

The provisions are related to customer complaints, mainly in the Silicones division.

**Other provisions**

Other provisions consist mainly of obligations related to upgrade of infrastructure in China.

**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****Assets by category 31 December 2018**

<i>Amounts in NOK million</i>	<i>Note</i>	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	<b>Total</b>
Derivatives, non-current		71	60	-	-	-	<b>131</b>
Other non-current assets	21	2	-	50	118	271	<b>441</b>
Trade receivables	23	-	-	-	2 391	-	<b>2 391</b>
Derivatives, current		74	229	-	-	-	<b>303</b>
Other current assets	21	-	-	-	26	811	<b>836</b>
Restricted deposits	24	-	-	-	577	-	<b>577</b>
Cash and cash equivalents	24	-	-	-	7 082	-	<b>7 082</b>
<b>Total</b>		147	289	50	10 193	1 082	

**Liabilities by category 31 December 2018**

<i>Amounts in NOK million</i>	<i>Note</i>	Liabilities at fair value through profit or loss	Liabilities at fair value - hedging instruments	Liabilities at amortised cost	Non-financial liabilities	<b>Total</b>
Interest-bearing liabilities, non-current <sup>1)</sup>	24	-	20	7 111	-	<b>7 131</b>
Derivatives, non-current		369	81	-	-	<b>450</b>
Provisions and other non-current liabilities	25	-	-	62	170	<b>232</b>
Trade payables		-	-	2 731	-	<b>2 731</b>
Interest-bearing liabilities, current <sup>1)</sup>	24	-	5	2 048	-	<b>2 052</b>
Bills payable	24	-	-	1 740	-	<b>1 740</b>
Derivatives, current <sup>2)</sup>		18	60	-	-	<b>79</b>
Provisions and other current liabilities	25	-	-	586	635	<b>1 221</b>
<b>Total</b>		<b>387</b>	<b>166</b>	<b>14 278</b>	<b>805</b>	

**Assets by category 31 December 2017**

<i>Amounts in NOK million</i>	<i>Note</i>	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	<b>Total</b>
Derivatives, non-current		126	25	-	-	-	<b>152</b>
Other non-current assets	21	4	-	47	-	356	<b>407</b>
Trade receivables	23	-	-	-	2 518	-	<b>2 518</b>
Derivatives, current		1	33	-	-	-	<b>33</b>
Other current assets	21	-	-	-	-	2 091	<b>2 091</b>
Restricted deposits	24	-	-	-	1 020	-	<b>1 020</b>
Cash and cash equivalents	24	-	-	-	1 751	-	<b>1 751</b>
<b>Total</b>		<b>131</b>	<b>58</b>	<b>47</b>	<b>5 289</b>	<b>2 447</b>	

**Liabilities by category 31 December 2017**

<i>Amounts in NOK million</i>	<i>Note</i>	Liabilities at fair value through profit or loss	Liabilities at fair value - hedging instruments	Liabilities at amortised cost	Non-financial liabilities	<b>Total</b>
Interest-bearing liabilities, non-current <sup>1)</sup>	24	-	22	4 563	-	<b>4 585</b>
Derivatives, non-current		18	361	-	-	<b>379</b>
Provisions and other non-current liabilities	25	-	-	124	191	<b>315</b>
Trade payables		-	-	2 650	-	<b>2 650</b>
Interest-bearing liabilities, current <sup>1)</sup>	24	-	4	3 643	-	<b>3 647</b>
Bills payable	24	-	-	2 650	-	<b>2 650</b>
Derivatives, current <sup>2)</sup>		(18)	265	-	-	<b>247</b>
Provisions and other current liabilities	25	-	-	560	524	<b>1 083</b>
<b>Total</b>		<b>(0)</b>	<b>652</b>	<b>14 190</b>	<b>715</b>	

1) In addition to the hedging instruments specified below, currency effect of an 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

<i>Amounts in NOK million</i>	Level 1	Level 2	Level 3	Total 2018	Level 1	Level 2	Level 3	Total 2017
Financial assets at fair value through profit or loss	2	(1)	145	<b>147</b>	4	1	126	131
Derivatives designated in a hedging relationship	-	34	255	<b>289</b>	-	58	-	58
Assets at fair value through other comprehensive income		-	50	<b>50</b>	7	-	40	47
<b>Total assets</b>	<b>2</b>	<b>33</b>	<b>450</b>	<b>486</b>	<b>11</b>	<b>59</b>	<b>166</b>	<b>236</b>
Financial liabilities at fair value through profit or loss	-	84	303	<b>387</b>	-	89	(89)	(0)
Derivatives designated in a hedging relationship	-	241	(75)	<b>166</b>	26	208	417	652
<b>Total liabilities</b>	<b>-</b>	<b>325</b>	<b>228</b>	<b>553</b>	<b>26</b>	<b>297</b>	<b>329</b>	<b>652</b>

##### 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. The 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 these 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 2028, CfD prices are only observable for a short time period and currency rates are observable until 2023. 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 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 are 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.

- Power prices: Market prices per 31 December 2018 until 2028, thereafter prices are based on 2028, adjusted with inflation rate.
- CfD's: 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.

*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.

In addition, level 3 includes shares in unlisted external companies, where historical cost minus any write down for identified impairment is used as an approximation of fair value.

See note 28 Financial risk for sensitivity analysis.

**Specification of movements in fair value measurement level 3**

<i>Amounts in NOK million</i>	<b>2018</b>	2017
Opening balance 01.01	<b>(162)</b>	(428)
Transfer to / from other levels	<b>7</b>	-
Change in fair value recognised in OCI, cash flow hedges	<b>892</b>	136
Settlement / realised effects	<b>(222)</b>	56
Disposal	-	(0)
Acquisition	-	1
Other changes in fair value through profit or loss, unrealised	<b>(293)</b>	70
Translation effects	<b>0</b>	3
<b>Closing balance 31.12</b>	<b>222</b>	(162)

**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 <sup>1)</sup> 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	4 800	EUR	482	Embedded <sup>2)</sup>	9.9488	2019-2034	(229)	4 800
<b>Total fair value<sup>3)</sup></b>							<b>(281)</b>	

## Details of currency exchange contracts – 31 December 2017

Purchase currency	Purchase ccy million	Sale currency	Sale ccy million	Type of instrument	Currency deal rate	Due	Fair value NOK	Notional amount <sup>1)</sup> NOK
USD	1	JPY	143	Fwd	0.0089	2018	0	10
NOK	9	AUD	2	Fwd	6.2366	2018	(0)	10
CAD	28	EUR	19	Fwd	1.4912	2018	(3)	185
NOK	2 505	EUR	262	Fwd	9.5639	2018	(88)	2 578
CAD	2	NOK	12	Fwd	0.1548	2018	0	12
NOK	91	GBP	9	Fwd	10.6867	2018	(4)	94
NOK	115	JPY	1 406	Fwd	0.0818	2018	12	102
NOK	742	USD	91	Fwd	8.1324	2018	(2)	748
NOK	110	JPY	1 316	Fwd	0.0839	2019	13	96
NOK	108	JPY	1 268	Fwd	0.0850	2020	12	92
NOK	4 060	EUR	396	Embedded <sup>2)</sup>	10.2419	2018-2034	(184)	3 902
<b>Total fair value<sup>3)</sup></b>							<b>(244)</b>	

1) Notional value of the contracts, based on currency rates 31.12.

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'. 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 2018

Amounts in NOK million	Volume GWh / Oz	Due	Fair value	Notional amount <sup>1)</sup>
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 Saltern Energigjenvinning AS (note 33)	1 856	2021-2035	16	541
Commodity contracts Platinum	6 192	2019	(1)	21
<b>Fair value contracts within scope of IFRS 9<sup>2)</sup></b>			<b>186</b>	

## Details of power contracts and other commodity contracts within the scope of IFRS 9 – 31 December 2017

Amounts in NOK million	Volume GWh / Oz	Due	Fair value	Notional amount <sup>1)</sup>
Forward power contracts financial institutions	299	2018	6	74
Power contract "30-øringen"	501	2018	(20)	147
Power contract "30-øringen"	6 016	2019-2030	126	1 693
Power contract Statkraft (bought from Norske Skog)	1 498	2018	(79)	447
Power contract Statkraft (bought from Norske Skog)	3 000	2019-2020	(170)	926
Power contracts Statkraft, swap	201	2018	(16)	65
Power contracts Statkraft, swap	605	2019-2021	(44)	196
Commodity contracts Platinum	900	2018	0	4
Commodity contracts Platinum	980	2019	(0)	8
<b>Fair value contracts within scope of IFRS 9<sup>2)</sup></b>			<b>(197)</b>	

1) Notional value of underlying asset at the end of reporting period, calculated as volume \* price \* currency rate as 31.12 (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 financial assets and liabilities**

<i>Amounts in NOK million</i>	Gross amount of financial assets	Gross amount of financial liabilities set off in the statement of financial position	Net amounts of financial assets / presented	Financial instruments not set off in the statement of financial position	Cash collateral pledged	Net amount
<b>31 December 2018</b>						
Power contracts including embedded derivatives	36	(17)	19	-	-	19
Forward currency contracts	18	-	18	(1)	-	18
<b>Total</b>	<b>54</b>	<b>(17)</b>	<b>37</b>	<b>(1)</b>	<b>-</b>	<b>36</b>

<i>Amounts in NOK million</i>	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
<b>31 December 2018</b>						
Power contracts including embedded derivatives	229	(17)	211	-	-	211
Forward currency contracts	71	-	71	(1)	-	70
<b>Total</b>	<b>299</b>	<b>(17)</b>	<b>282</b>	<b>(1)</b>	<b>-</b>	<b>281</b>

<i>Amounts in NOK million</i>	Gross amount of financial assets	Gross amount of financial liabilities set off in the statement of financial position	Net amounts of financial assets / presented	Financial instruments not set off in the statement of financial position	Cash collateral pledged	Net amount
<b>31 December 2017</b>						
Power contracts including embedded derivatives	9	(3)	6	-	-	6
Forward currency contracts	53	-	53	(27)	-	26
<b>Total</b>	<b>62</b>	<b>(3)</b>	<b>59</b>	<b>(27)</b>	<b>-</b>	<b>32</b>

<i>Amounts in NOK million</i>	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
<b>31 December 2017</b>						
Power contracts including embedded derivatives	187	(3)	184	-	-	184
Forward currency contracts	113	-	113	(27)	-	86
<b>Total</b>	<b>300</b>	<b>(3)</b>	<b>297</b>	<b>(27)</b>	<b>-</b>	<b>270</b>

## Note 27 Hedging

Based on IFRS 9 Elkem has chosen to continue applying the hedge accounting requirements of IAS39.

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 the plants located in Norway, Elkem's policy is that minimum 80% of the power consumption shall be covered by fixed price contract for the current and next year. For the following period, the ratio extends until 4 years ahead and declines with 10%-point per year ending at 50%. Elkem currently fulfils this minimum hedge policy, and also has a substantial amount of power hedged beyond 4 years ahead. 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 booked as an adjustment of the power cost (included in raw materials and energy for smelting) when realised.

### Cash flow hedging instruments, by type

<i>Amounts in NOK million</i>	2018		2017	
	Assets fair value	Liabilities fair value	Assets fair value	Liabilities fair value
Forward currency contracts	18	83	52	126
Power contracts financial institutions	15	-	6	-
Power contract Statkraft	220	-	-	436
Power contracts Statkraft swap	19	(75)	-	(18)
Power contract Salten Energigjenvinning AS	16	-	-	-
Power contracts embedded derivatives	-	133	-	82
Currency effect loan EUR (note 24)	-	25	-	26
<b>Total hedging instruments</b>	<b>289</b>	<b>166</b>	<b>58</b>	<b>652</b>
<b>Less non-current portion:</b>				
Forward currency contracts	4	2	25	-
Power contracts financial institutions	37	-	-	301
Power contract Statkraft	45	-	-	(12)
Power contracts Statkraft swap	-	-	-	72
Power contract Salten Energigjenvinning AS	16	-	-	-
Power contracts embedded derivatives	-	124	-	-
Currency effect loan EUR (note 24)	-	20	-	22
<b>Current portion of hedging instruments</b>	<b>186</b>	<b>20</b>	<b>33</b>	<b>269</b>

As of 31 December 2018 financial power contracts designated in a hedging relationship comprise 54% of expected consumption in 2019, 50% in 2020 and about 20% in the period 2021 - 2030.

Elkem has hedged approximately 17% of the expected revenues in EUR and approximately 7% of expected revenues in USD for 2019. For the years 2020-2034 only EUR is hedged at 31 December 2018, at a range of 3 - 6%.

## Financial instruments

Amounts in NOK million	Net fair value 31.12	Hereof recognised in OCI	Effects to be recycled from OCI			
			Within 1 year	Within 2 years	Within 3 years	4 years or more
Forward currency contracts	(52)	(65)	(67)	2	-	-
Embedded EUR derivatives	(229)	(133)	(9)	(12)	(13)	(99)
Power contracts <sup>1)</sup>	187	332	234	64	28	6
Commodity contracts Platinum	(1)	0	-	-	-	-
<b>Total</b>	<b>(94)</b>	<b>134</b>	<b>158</b>	<b>55</b>	<b>15</b>	<b>(94)</b>
EUR loan designed as cash flow hedging instrument	(263)	(25)	(5)	(5)	(5)	(10)
<b>Total</b>		<b>110</b>	<b>153</b>	<b>50</b>	<b>10</b>	<b>(104)</b>

1) For certain contracts and part of contracts, hedge accounting is applied. Remaining power contracts are assessed to be for own use and are not financial instruments according to IFRS, hence these are not recognised in the statement of financial position.

## Realised effects hedge accounting, recycled from OCI

Amounts in NOK million	2018	2017
Realised effects from forward currency contracts, included in revenue	<b>(34)</b>	(41)
Realised effects from embedded derivatives EUR, included in revenue	<b>(3)</b>	(1)
Realised effects from EUR loans, included in revenue	<b>(3)</b>	(2)
Realised effects from power contracts, included in raw materials and energy for smelting	<b>216</b>	(60)
<b>Total realised hedging effects</b>	<b>176</b>	(105)

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

## 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 <sup>1)</sup>	(429)	757	(120)	207
Hedging of future need for power, contracts with Statkraft (swap) <sup>2)</sup>	18	117	(42)	93
Hedging of future need for power, contract with Salten Energigjenvinning AS	-	16	-	16
Hedging of future sales, embedded EUR derivatives in own use power contracts <sup>2)</sup>	(82)	(54)	3	(133)
Hedging of future sales, currency effects EUR loan	(26)	(2)	3	(25)
<b>Total (before tax)</b>	<b>(588)</b>	<b>873</b>	<b>(176)</b>	<b>110</b>



## 2017

<i>Amounts in NOK million</i>	Opening balance	Net change in fair value	Reclassified to P&L	Closing balance
Hedging of future sales, forward currency contracts	(25)	(90)	41	(74)
Hedging of future need for power, contracts with financial institutions	21	(3)	(12)	6
Hedging of future need for power, contract with Statkraft <sup>1)</sup>	(643)	133	81	(429)
Hedging of future need for power, contracts with Statkraft (swap) <sup>2)</sup>	24	3	(9)	18
Hedging of future sales, embedded EUR derivatives in own use power contracts <sup>2)</sup>	45	(128)	1	(82)
Hedging of future sales, currency effects EUR loan	(2)	(26)	2	(26)
<b>Total (before tax)</b>	<b>(582)</b>	<b>(111)</b>	<b>105</b>	<b>(588)</b>

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. For 2018 Elkem increased the hedging of net exposure for EUR and USD to 75%. Elkem also hedged JPY until 2020, related to a long-term customer contract. 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 2018, Elkem realised a loss of NOK 40 million from this hedging program (loss of NOK 45 million).

### Currency effects included in financial statement

<i>Amounts in NOK million</i>	2018	2017
Net foreign exchange gains (losses) - forward currency contracts - included in other items	29	(3)
Operating foreign exchange gains (losses) - included in other items	32	(11)
Net foreign currency exchange gain/loss on financing activities - included in foreign exchange gains (losses)	19	(8)
Currency translation differences - included in other comprehensive income	112	279
Hedging of net investment in foreign operations - included in other comprehensive income	(29)	(209)

**Currency exposure as at 31 December**

The amounts in the tables below are exchange-rates against NOK per 31 December 2018.

Currency	Exchange rate
USD	8.6851
EUR	9.9488
CNY	1.2662
CAD	6.3711

**Currency exposure affecting statement of income**

The table below shows assets and liabilities denominated in foreign currencies different from the entities functional currency, where changes in currency rates will affect profit and loss. The table includes notional amount of currency exchange contracts (note 26).

**31 December 2018**

Amounts in NOK million	USD	EUR	CNY	CAD	NOK	Other	Total
Other non-current assets	-	-	-	-	-	-	-
Trade receivables	333	18	-	-	-	75	<b>427</b>
Other assets	-	-	-	-	-	-	-
Restricted deposits	-	-	-	-	-	-	-
Cash and cash equivalents	587	1 589	0	49	-	147	<b>2 372</b>
<b>Total monetary assets</b>	<b>920</b>	<b>1 607</b>	<b>0</b>	<b>49</b>	<b>-</b>	<b>223</b>	<b>2 798</b>
Interest-bearing liabilities	-	2 616	-	-	-	-	<b>2 616</b>
Other liabilities	-	-	-	-	-	-	-
Trade payables	316	219	-	2	0	66	<b>604</b>
Bills payable	-	-	-	-	-	-	-
<b>Total monetary liabilities</b>	<b>316</b>	<b>2 835</b>	<b>-</b>	<b>2</b>	<b>0</b>	<b>66</b>	<b>3 220</b>
<b>Derivatives, notional value</b>	<b>344</b>	<b>6 030</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>315</b>	<b>6 689</b>
<b>Net currency exposure financial position</b>	<b>260</b>	<b>(7 258)</b>	<b>0</b>	<b>46</b>	<b>(0)</b>	<b>(159)</b>	<b>(7 111)</b>

Sensitivity on profit and loss from financial assets and liabilities:  
The sensitivity related to financial assets and liabilities 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 a reduced profit before tax of approximately NOK 711 million (NOK 205 million) whereof NOK 463 million (NOK 387 million) will be booked against OCI and recycled through profit before tax when 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 2018**

<i>Amounts in NOK million</i>	USD	EUR	CNY	CAD	NOK	Other	<b>Total</b>
Other non-current assets	-	232	65	6	45	92	<b>441</b>
Trade receivables	715	512	616	15	96	437	<b>2 391</b>
Other assets	42	209	98	11	370	106	<b>836</b>
Restricted deposits	2	-	575	-	0	-	<b>577</b>
Cash and cash equivalents	771	1 769	657	58	3 443	385	<b>7 082</b>
<b>Total monetary assets</b>	<b>1 529</b>	<b>2 722</b>	<b>2 010</b>	<b>90</b>	<b>3 955</b>	<b>1 020</b>	<b>11 327</b>
Asset non-monetary items	1 309	3 755	6 916	654	6 323	844	<b>19 802</b>
<b>Total assets</b>	<b>2 838</b>	<b>6 477</b>	<b>8 927</b>	<b>744</b>	<b>10 279</b>	<b>1 865</b>	<b>31 129</b>
Interest-bearing liabilities	132	5 352	1 991	-	1 708	1	<b>9 184</b>
Other liabilities	11	102	497	28	444	139	<b>1 221</b>
Trade payables	417	998	724	57	394	140	<b>2 731</b>
Bills payable	-	-	1 740	-	-	-	<b>1 740</b>
<b>Total monetary liabilities</b>	<b>560</b>	<b>6 452</b>	<b>4 952</b>	<b>85</b>	<b>2 546</b>	<b>279</b>	<b>14 875</b>
Liabilities non-monetary items	90	602	191	174	1 300	175	<b>2 532</b>
<b>Total liabilities</b>	<b>650</b>	<b>7 054</b>	<b>5 144</b>	<b>259</b>	<b>3 847</b>	<b>453</b>	<b>17 407</b>

Sensitivity on statement of financial position from financial assets and liabilities: The sensitivity related to financial assets and liabilities 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 an reduced equity of NOK 355 million (NOK 580 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 consist 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, 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**

<i>Amounts in NOK million</i>		Fair value 31.12.2018	Adjusted NPV
Discount rate (used 3.6%)	change to 0%	(234)	(314)
Discount rate (used 3.6%)	change to 5%	(234)	(209)
CPI (used 2%)	change to 1%	(234)	(159)
CPI (used 2%)	change to 3%	(234)	(315)
Power price	decrease -10%	(234)	(294)
Power price	increase + 10%	(234)	(180)

**Power contract Statkraft (bought from Norske Skog)**

<i>Amounts in NOK million</i>		Fair value 31.12.2018	Adjusted NPV
Power price	decrease -10%	354	224
Power price	increase + 10%	354	483
Discount (used 1.68%)	change to 0%	354	359
Discount (used 1.68%)	change to 5%	354	344

**(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.

**As at 31 December 2018 Elkem has the following interest-bearing assets and liabilities**

<i>Amounts in NOK million</i>	Floating	Fixed	Total
Interest-bearing liabilities	10 774	149	<b>10 923</b>
Interest-bearing assets	7 765	-	<b>7 765</b>
<b>Net exposure</b>	<b>3 009</b>	<b>149</b>	<b>3 158</b>

*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 ba-

sis points higher for a full year, based on net debt as at 31 December 2018, with all other variables held constant, the profit (loss) for the year would have been NOK 12 million lower (NOK 30 million). 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 - 90 per cent is covered by credit insurance.

Elkem realised credit losses of NOK 11 million in 2018 (NOK 10 million). The maximum exposure to credit risk for the group is NOK 2,400 million per 31 December 2018 (NOK 2,530 million). Please also refer to note 21 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 2018 or 2017 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 2018 Elkem has unrestricted cash of NOK 7,082 million (NOK 1,751 million). In ad-

dition, revolving credit facilities amount to NOK 2,854 million (NOK 2,978 million), of which NOK 2,854 million is undrawn (NOK 2,351 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 2018 and also complied with the covenants as of 31 December 2017.

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 2018 for Elkem is shown in the table below.

### Year / maturity

<i>Amounts in NOK million</i>	2018	2020	Total
Total amount of credit facilities	367	2 487	<b>2 854</b>

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.

<b>At 31 December 2018</b>							2024	Total	Carrying amount
<i>Amounts in NOK million</i>	2019	2020	2021	2022	2023	and later			
Trade receivables	2 391	-	-	-	-	-	-	<b>2 391</b>	2 391
Derivative assets	305	117	12	7	1	(2)	-	<b>440</b>	433
Trade payables	2 731	-	-	-	-	-	-	<b>2 731</b>	2 731
Derivative liabilities	78	4	36	50	71	398	-	<b>637</b>	528
Financial leases	0	-	-	-	-	-	-	<b>0</b>	0
Loans from external part, other than bank	208	66	1 919	537	19	318	-	<b>3 067</b>	2 926
Bank financing	1 989	382	115	114	4 093	-	-	<b>6 692</b>	6 281
Bills payable	1 740	-	-	-	-	-	-	<b>1 740</b>	1 740

<b>At 31 December 2017</b>							2023 and	Total	Carrying amount
<i>Amounts in NOK million</i>	2018	2019	2020	2021	2022	later			
Trade receivables	2 518	-	-	-	-	-	-	<b>2 518</b>	2 518
Derivative assets	33	(8)	(7)	14	18	188	-	<b>237</b>	185
Trade payables	2 650	-	-	-	-	-	-	<b>2 650</b>	2 650
Derivative liabilities	248	118	122	39	25	105	-	<b>656</b>	626
Loans from related parties	-	7	-	-	-	-	-	<b>7</b>	7
Financial leases	1	0	-	-	-	-	-	<b>2</b>	2
Loans from external part, other than bank	62	12	13	13	13	28	-	<b>141</b>	140
Bank financing	3 727	753	3 091	809	128	133	-	<b>8 640</b>	7 925
Bills payable	2 650	-	-	-	-	-	-	<b>2 650</b>	2 650

## Note 29 Capital management

Elkem will focus on having a balanced capital structure. The target is to have a leverage between 1.0x and 2.0x. The leverage ratio is defined as Net interest bearing assets, less non-current interest-bearing assets (see note 24 Interest-bearing liabilities and assets), divided by EBITDA.

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 net income. 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 2018, Elkem's equity was NOK 13,722 million, including minority interests of NOK 102 million. The equity ratio was 44%.

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. The company aims to have a long-term and smooth maturity profile on its loan portfolio. Available liquidity reserves, defined as cash and cash equivalents and available long-term credit facilities, should exceed 10% of annual turnover.

## 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. The development in the number of issued and outstanding shares is as follows:

	Shares outstanding
As at 1 January 2018	1
Share split	401 999 999
Capital increase	179 310 344
<b>As at 31 December 2018</b>	<b>581 310 344</b>

In an extraordinary general meeting in Elkem ASA 23 February 2018, it was approved a split of Elkem's one share into 402 million shares.

On 22 March 2018 Elkem ASA's shares were re-listed on Oslo Børs. At the same date the share capital was increased by 179,310,344 shares. The capital increase was completed at an offer price of NOK 29 per share, which gives a gross capital increase of NOK 5,200 million. Expenses related to the capital increase amount to NOK 29 million. Net expenses after taxes was NOK 23 million.

In the extraordinary general meeting held on 23 February 2018, the board of directors was granted an authorisation to repurchase the company's own shares within a total nominal value of up to NOK 200,000,000. 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 2019, but not later than 30 June 2019. 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.

The board has resolved to implement a long-term share incentive scheme for the members of the management and certain other key employees in the group. The board of directors has been granted an authorisation to increase the share capital by up to NOK 40 million to be used in connection with the issuance of new shares under share incentive scheme. The authorisation does not cover capital increases against contribution in kind or capital increases in connection with mergers. In 2018 a total of 7,850,000 are granted, see note 11 Share-based payment.

## Note 31 Earnings per share

	2018	2017
Weighted average number of shares outstanding	<b>581 310 344</b>	581 310 344
Effects of dilution	-	-
<b>Weighted average number of shares outstanding - diluted</b>	<b>581 310 344</b>	581 310 344
Owners of the parent's share of profit (loss) (NOK)	<b>3 337</b>	1 211
Earnings per share (NOK)	<b>5.74</b>	2.08
Diluted earnings per share (NOK)	<b>5.74</b>	2.08

Earnings per share has been presented as if the number of shares at the IPO date 22 March 2018 at total of 581,310,344 was outstanding for all periods presented.

### Note 32 Supplemental information to the consolidated statement of cash flows

#### The liquidity effect of acquisitions consist of

<i>Amounts in NOK million</i>	2018	2017
Purchase price for business combinations under common control	3 995	-
Purchase price for business combinations	59	-
Adjustments in purchase price prior periods	-	(4)
Cash and cash equivalents of the acquiree	(5)	-
<b>Acquisition of subsidiaries net of cash acquired</b>	<b>4 049</b>	<b>(4)</b>

### 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 Bluestar (group) Co. Ltd (Bluestar) 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 Bluestar and transactions with other related parties, such as transactions with companies held by minority shareholders, are disclosed below.

#### 2018

<i>Amounts in NOK million</i>	Trade sales	Trade purchases	Sale of services	Purchase of services	Interest income	Interest expenses
Bluestar Elkem International Co. Ltd S.A.	-	-	0	-	-	-
Joint arrangements and associates	-	-	17	(130)	0	-
Related parties within Bluestar	663	(535)	59	(145)	-	-
Other related parties	1	(19)	-	(13)	-	-
<b>Total</b>	<b>664</b>	<b>(554)</b>	<b>77</b>	<b>(287)</b>	<b>0</b>	<b>-</b>

#### 2017

<i>Amounts in NOK million</i>	Trade sales	Trade purchases	Sale of services	Purchase of services	Interest income	Interest expenses
Bluestar Elkem International Co. Ltd S.A.	-	-	12	-	0	-
Joint arrangements and associates	-	-	11	(144)	2	-
Related parties within Bluestar	514	(548)	70	(4)	-	-
<b>Total</b>	<b>514</b>	<b>(548)</b>	<b>93</b>	<b>(148)</b>	<b>2</b>	<b>-</b>

**Balances with related parties**

<i>Amounts in NOK million</i>	Non-current		Current	
	31.12.2018	31.12.2017	31.12.2018	31.12.2017
Receivables from related parties within Bluestar, interest-bearing	-	-	-	0
Receivables from joint ventures and associates, interest-bearing	2	2	-	-
Receivables from related parties within Bluestar, interest free	-	-	4	1 354
Loans from related parties within Bluestar	-	(7)	-	-
Accrued interests from related parties within Bluestar	-	-	-	(157)
Liabilities to related parties within Bluestar, interest free	-	-	(328)	(324)
Trade receivables, Bluestar Elkem Investment Co. Ltd. S.A	-	-	-	1
Trade receivables, related parties within Bluestar	-	-	35	45
Trade receivables, joint ventures and associates	-	-	9	5
Trade payables, Bluestar Elkem Investment Co. Ltd. S.A	-	-	(5)	-
Trade payables, related parties within Bluestar	-	-	(75)	(124)
Trade payables, joint ventures and associates	-	-	(11)	(10)
Trade payables, other related parties	-	-	(2)	-
Prepayments to related parties within Bluestar	-	-	4	1
Prepayments from related parties within Bluestar	-	-	(0)	(1)
Prepayments from joint ventures and associates	-	-	(16)	-
Financial power contract	16	-	-	-
<b>Total</b>	<b>18</b>	<b>(5)</b>	<b>(384)</b>	<b>791</b>

**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
- Power supply and 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 Bluestar
- Purchase of raw materials from companies within Bluestar
- Sale of management and technology services to Salten Energigjenvinning AS.
- Financial power contract against Salten Energigjenvinning AS (note 26)

In 2017 Elkem also has loans and accrued interest from other related parties within Bluestar. The main loans are given from:

- China National Bluestar (group) Co. Ltd
- Bluestar Silicones Investment Co. Ltd

The sale and purchase 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 receiv-

ables to the joint ventures and associates are currently 3%.

The non-current loans are interest-bearing, and the interest is calculated based on interbank rates (for example LIBOR and EURIBOR) plus a margin. The non-current loans were repaid in 2017 and 2018.

**Commitments 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, of Salten Energigjenvinning AS. Estimated value of the guarantee is NOK 1,081 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 at 31 December 2018.

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 12 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:

#### 6. 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)

#### 7. 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

#### 8. 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. Approximately half 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.

The main parts of the pledged building is in connection with provisions that are settled. The pledge remains until February 2019 despite the provision is fully settled.

Elkem makes limited use of guarantees, see specification below.

#### Book value liability

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	31.12.2017
Guaranteed liabilities	<b>1 988</b>	4 725
Pledged liabilities	<b>0</b>	118
Pledged provisions	-	-
<b>Book value pledged assets</b>		
Building	<b>179</b>	380
Machinery and plant	-	45
Other assets	-	36

#### Guarantee commitments

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	31.12.2017
Guarantee commitment KLIF (Climate and Pollution Agency)	<b>26</b>	31
Guarantee commitment tax cases Brazil	<b>43</b>	-
Other guarantees	-	0

### Note 35 Events after the reporting period

No events have taken place after the reporting period that would have had a material impact on the financial statements or any assessments carried out.

## Income statement – Elkem ASA

<i>Amounts in NOK million</i>	<i>Note</i>	<b>2018</b>	2017
<b>1 January - 31 December</b>			
Revenue	4	<b>6 846</b>	7 068
Other operating income	4, 5	<b>98</b>	109
<b>Total operating income</b>		<b>6 944</b>	7 177
Raw materials and energy for smelting		<b>(3 459)</b>	(3 853)
Employee benefit expenses	6, 7	<b>(1 031)</b>	(969)
Amortisations and depreciations	13, 14	<b>(333)</b>	(329)
Impairment losses	13, 14	<b>(2)</b>	(15)
Other gains (losses) related to operating activities	10	<b>(246)</b>	(53)
Other operating expenses	8, 9	<b>(1 610)</b>	(1 624)
<b>Total operating expenses</b>		<b>(6 681)</b>	(6 843)
<b>Operating profit (loss)</b>		<b>263</b>	333
Income from subsidiaries	15	<b>647</b>	304
Income from joint ventures	16	<b>(23)</b>	(1)
Finance income	11	<b>75</b>	47
Foreign exchange gains (losses)	11	<b>34</b>	(240)
Finance expenses	11	<b>(161)</b>	(87)
<b>Profit (loss) before income tax</b>		<b>834</b>	357
Income tax (expenses) / benefit	12	<b>(62)</b>	(47)
<b>Profit (loss) for the year</b>		<b>772</b>	310

## Balance sheet – Elkem ASA

<i>Amounts in NOK million</i>	<i>Note</i>	<b>31.12.2018</b>	31.12.2017
<b>ASSETS</b>			
Property, plant and equipment	13	<b>2 026</b>	1 934
Intangible assets	14	<b>263</b>	338
Investments in subsidiaries	15	<b>9 543</b>	4 680
Investments in joint ventures	16	<b>9</b>	19
Derivatives	26	<b>23</b>	25
Other non-current assets	17	<b>1 984</b>	926
<b>Total non-current assets</b>		<b>13 848</b>	7 923
Inventories	18	<b>1 581</b>	1 137
Trade receivables	19	<b>553</b>	967
Derivatives	26	<b>56</b>	33
Other current assets	20	<b>426</b>	580
Cash and cash equivalents	23	<b>5 596</b>	847
<b>Total current assets</b>		<b>8 213</b>	3 565
<b>Total assets</b>		<b>22 061</b>	11 488
<b>EQUITY AND LIABILITIES</b>			
Paid-in capital	21	<b>6 591</b>	2 918
Retained earnings	21	<b>2 270</b>	1 503
<b>Total equity</b>		<b>8 861</b>	4 421
Non-current interest-bearing liabilities	23	<b>6 867</b>	2 634
Deferred tax liabilities	12	<b>29</b>	48
Pension liabilities	7	<b>69</b>	65
Derivatives	26	<b>450</b>	210
Provisions and other non-current liabilities	23	<b>63</b>	56
<b>Total non-current liabilities</b>		<b>7 478</b>	3 013
Trade payables		<b>769</b>	752
Income tax payables	12	<b>79</b>	89
Current interest-bearing liabilities	23	<b>2 749</b>	2 631
Derivatives	26	<b>77</b>	146
Dividend	21	<b>1 511</b>	-
Other current liabilities	25	<b>536</b>	435
<b>Total current liabilities</b>		<b>5 722</b>	4 053
<b>Total equity and liabilities</b>		<b>22 061</b>	11 488

The Board of Directors of Elkem ASA – Oslo, 6 March 2019

  
Michael Koenig

  
Olivier de Clermont-Tonnerre

  
Guihua Pei

  
Anja Isabel Dotzenrath

  
Caroline Grégoire Sainte Marie

  
Dag Opedal

  
Marianne Færøyvik

  
Terje Andre Hanssen

  
Helge Aasen  
CEO

## Cash flow statement – Elkem ASA

<i>Amounts in NOK million</i>	<i>Note</i>	<b>2018</b>	<b>2017</b>
Operating profit (loss)		<b>263</b>	333
Changes fair value financial instruments		<b>238</b>	4
Amortisation, depreciation and impairment changes	13	<b>335</b>	344
Changes in working capital <sup>1)</sup>		<b>13</b>	136
Changes in provisions, pension obligations and other		<b>12</b>	(109)
Interest payments received		<b>33</b>	43
Interest payments made		<b>(172)</b>	(78)
Income taxes paid		<b>(95)</b>	(36)
<b>Cash flow from operating activities</b>		<b>628</b>	638
Investments in property, plant and equipment and intangible assets	13	<b>(327)</b>	(291)
Sale of property, plant and equipment	13	<b>1</b>	0
Acquisition and capital increase in subsidiaries	15	<b>(4 928)</b>	(30)
Acquisition of joint ventures	16	<b>(21)</b>	(20)
Increase / decrease in loans to subsidiaries		<b>87</b>	281
Dividends and group contributions		<b>237</b>	181
Other investments /sales		<b>0</b>	(0)
<b>Cash flow from investing activities</b>		<b>(4 952)</b>	121
Dividend	21	<b>0</b>	(144)
Capital increase	21	<b>5 171</b>	0
New interest-bearing loans and borrowings		<b>6 643</b>	50
Repayment of interest-bearing loans and borrowings		<b>(2 739)</b>	(112)
<b>Cash flow from financing activities</b>		<b>9 074</b>	(205)
<b>Change in cash and cash equivalents</b>		<b>4 750</b>	554
Currency exchange differences		<b>0</b>	0
<b>Net change in cash and cash equivalents</b>		<b>4 750</b>	554
<b>Cash and cash equivalents Opening balance</b>	23	<b>847</b>	292
<b>Cash and cash equivalents Closing balance</b>	23	<b>5 596</b>	847

1) Working capital is defined as trade receivable, inventory, other current assets, accounts payable 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 and whose shares are publicly traded on Oslo Børs. The main activities are related to production and sale of silicon materials, ferrosilicon, speciality 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 Bluestar (group) Co. Ltd (Bluestar), a company registered and domiciled in China.

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

### 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 AND CLASSIFICATION

Changes in accounting policies are recognised directly in the 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.

#### ACCOUNTING ESTIMATES

In the event of uncertainty, the best estimate is applied, based on the information available when the annual accounts 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 Kroner (NOK). Transactions in currencies other than the entity's functional currency are translated using the transaction date's currency rate. 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. Monetary items in foreign currencies are presented at the exchange rate applicable on the balance sheet date. 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 considerations 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 have 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 are 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 are 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. Prices for sale of electric power are mainly set based on spot prices at Nord Pool spot and delivery is when the power is delivered to the customers through the relevant grid area. Revenue connected to energy recovery are mainly based on long term contracts where the prices are regulated yearly based on changes in CPI's 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 settlements are recognised when it is virtually certain that the group 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 shareholder's meeting.

**Intangible assets**

Intangible assets are stated in the financial statement 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 are presented at cost, less accumulated depreciations and any accumulated impairment losses. Construction in progress are 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 removing 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 is 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 arising on the 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 exist, 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.

**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.

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 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 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 have expired or when substantially 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.

Financial assets classified as held for trading are assets that have been acquired for the purpose of selling in the near term. These assets are carried in the balance sheet at fair value with gains or losses recognised in the income statement.

#### **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 other non-current assets or other current assets, if the repayment schedule is 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 fund and short term deposits. 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 profit or loss 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 the 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 the equity are reclassified into profit or loss 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 and is recognised when 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 smelting, 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 smelting, employee benefits and other operating cost, 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 profit and loss or directly in equity. If the temporary difference arises from the initial recognition of goodwill, the deferred tax assets and liabilities are not recognised.

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

### 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. Plan assets are recorded at fair value. Changes in benefit liabilities due to changes in benefit plans, are distributed over average remaining contribution time. Actuarial gains / losses due to changes in financial and actuarial assumptions are recognised directly in the equity. Net pension benefit costs are classified as part of employee benefit expenses. Net interest on pension liabilities/assets are presented as a part of finance expenses.

### Share-based payment

The fair value of options granted under the share-based payment programmes 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 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 exist 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.

### Grants

Grants are recognised when it is reasonable assured that the group 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 property, plant and equipment and intangible assets are deducted from the carrying amount of the asset. The grant is recognised as income over the lifetime of a depreciable asset by reducing the depreciation charge. Grants related to expenses are classified as other operating income.

### Contingent assets and liabilities

Contingent assets are not recognised, but presented in the notes if probable. Contingent liabilities are liabilities that are not recognised because they are possible obligations that have not yet been confirmed, or they are present obligations where an outflow of resources are not probable. Any significant contingent 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 is reviewed, and if necessary adjusted, at least annually.

#### DEFERRED TAX ASSETS

Elkem ASA performs annual tests for impairment of deferred tax assets. Part of the basis for recognising deferred tax assets is based on applying the loss carried forward against future taxable income in the group. This requires the use of estimates when calculating future taxable income.

#### FINANCIAL INSTRUMENTS

Elkem ASA holds financial instruments such as forward currency contracts and commodity contracts which are booked at fair value. For commodity contracts nominated 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.

Net booked value of contracts booked at fair value as at 31 December 2018 is in total negative NOK 448 million, see note 26 Financial instruments.

### Note 04 Operating income

#### Operating income by type

<i>Amounts in NOK million</i>	<b>2018</b>	2017
Revenue from sale of goods <sup>1)</sup>	<b>5 220</b>	5 558
Revenue from sale of goods - group	<b>1 273</b>	1 140
Other operating revenue	<b>180</b>	176
Other operating revenue - group	<b>172</b>	194
<b>Total revenue</b>	<b>6 846</b>	7 068
Other operating income	<b>98</b>	109
<b>Total operating income</b>	<b>6 944</b>	7 177

*1) Included in Revenue from sale of goods is sale of power NOK 687 million (NOK 445 million).*

**Operating income by geographic market**

<i>Amounts in NOK million</i>	<b>2018</b>	<b>2017</b>
Nordic countries	<b>1 524</b>	1 197
United Kingdom	<b>324</b>	470
Germany	<b>1 040</b>	1 419
France	<b>586</b>	665
Italy	<b>224</b>	359
Poland	<b>171</b>	301
Spain	<b>196</b>	215
Netherlands	<b>77</b>	65
Other European countries	<b>691</b>	1 043
<b>Europe</b>	<b>4 834</b>	5 735
<b>Africa</b>	<b>28</b>	17
North America	<b>534</b>	226
South America	<b>45</b>	21
<b>America</b>	<b>579</b>	247
China	<b>204</b>	86
Japan	<b>294</b>	299
South Korea	<b>447</b>	300
Other Asian countries	<b>543</b>	479
<b>Asia</b>	<b>1 488</b>	1 164
<b>The rest of the world</b>	<b>15</b>	13
<b>Total operating income</b>	<b>6 944</b>	7 177

**Details of other operating income**

<i>Amounts in NOK million</i>	<b>2018</b>	<b>2017</b>
Sale of fixed assets	<b>1</b>	0
Insurance settlement	<b>2</b>	15
Grants (note 5)	<b>96</b>	94
<b>Total other operating income</b>	<b>98</b>	109

**Note 05** Grants**Elkem has received the following government grants**

<i>Amounts in NOK million</i>	<b>2018</b>	<b>2017</b>
R&D grants from the Norwegian government	<b>28</b>	30
CO <sub>2</sub> compensation from the Norwegian Environment Agency	<b>67</b>	60
Energy recovery related grants	<b>12</b>	14
Other government grants	<b>1</b>	0
<b>Total government grants received</b>	<b>108</b>	106

**Elkem has received the following grants from other**

<i>Amounts in NOK million</i>	2018	2017
Norwegian NOx fund for reduced emission of NOx	15	6
Other grants received other than government	-	3
<b>Total other grants received</b>	<b>15</b>	<b>9</b>
<b>Grants received is included in the financial statement as follows:</b>		
Other operating income	96	94
Deduction of carrying amount of fixed assets	27	20
<b>Total</b>	<b>123</b>	<b>114</b>
Receivables related to grants	75	75
Deferred income related to grants	(5)	(3)

**CO<sub>2</sub> allowances**

CO<sub>2</sub> allowances allocated from the government are classified as grants, measured at nominal value (zero). The scheme pertains to the group's plants in Norway and Iceland. If actual emissions exceed the amount of allocated emission allowances, additional allowances are purchased. Purchased CO<sub>2</sub> allowances are recognised at cost as other operating expenses.

Elkem has received commitments for awarding of further 430 thousand CO<sub>2</sub> allowances for the period from 2013 to 2018 from the Norwegian government. The grant is subject to approval by ESA.

**CO<sub>2</sub> compensation**

The Norwegian government has, from 2013, established a CO<sub>2</sub> compensation scheme to compensate for CO<sub>2</sub> costs included in the power price. The amount being compensated is based on the market price of CO<sub>2</sub> allowances, and as such varies with the price development. The percentage of the costs compensated is approximately 80% in 2018 and will decrease with 5%-points in 2019 and 2020

compared with 2018. The current CO<sub>2</sub> 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<sub>2</sub> compensation scheme applies for Elkem's Norwegian plants and is recognised as other operating income when there is reasonable assurance that the entity will comply with the conditions attached and the grants will be received.

**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 reduces NOx emissions from the industry in Norway.

**Other**

The remaining grants, mainly R&D and energy recovery, are related to specific projects.

**Note 06 Employee benefit expenses**

<i>Amounts in NOK million</i>	2018	2017
Salaries, holiday pay and variable compensation	(847)	(803)
Employer's national insurance contributions / social security tax	(108)	(97)
Pension expenses (note 7)	(61)	(56)
Share-based payment	(4)	-
Other payments / benefits	(11)	(13)
<b>Total employee benefit expenses</b>	<b>(1 031)</b>	<b>(969)</b>
Number of full-time equivalents in Elkem ASA	1 078	1 044

For further information concerning remuneration to management and sharebased payment, see note 10 Employee benefit expenses and note 11 Share-based payment in the consolidated financial statement.

## Note 07 Retirement benefits

### Defined contribution plans

Pension for employees in Elkem ASA are mainly covered by pension plans that are classified as 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 pension plan asset. In addition a multi-employer plan where sufficient information to calculate each participant's pension obligation is not available should be accounted for as it is a defined contribution plan.

Elkem ASA's 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 96,883 as at 1 May 2018. 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 2018 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 2019 is equal to 2018.

### 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 fund, and some individual retirement schemes. The individual retirement schemes are closed except for the CEO's early retirement scheme from the age of 68 to 70, which entitles the CEO to an annual payment of 60% of pensionable salary.

Net interest is calculated based on pension liability at the start of the period multiplied by the discount rate and are presented as a part of financial expenses.

Remeasurements of the defined benefit plans are recognised directly in equity.

The company's retirement schemes meet the minimum requirement in the Norwegian Act of Mandatory Occupational Pension.

### Breakdown of net pension expenses

<i>Amounts in NOK million</i>	2018	2017
Current service expenses	(2)	(3)
Accrued employer's national insurance contributions	(1)	(0)
<b>Net pension expenses, defined benefit plans</b>	<b>(3)</b>	<b>(3)</b>
Defined contribution plans	(46)	(41)
Early retirement scheme (AFP)	(12)	(12)
<b>Total pension cost</b>	<b>(61)</b>	<b>(56)</b>
<i>Amounts in NOK million</i>	2018	2017
Present value of pension obligations	(69)	(65)
Fair value of plan assets	-	-
<b>Net unfunded pension obligations</b>	<b>(69)</b>	<b>(65)</b>
Active participants in pension scheme for salary above 12G	66	56
Retired participants	50	67
<b>Total effects from remeasurement of pension liabilities recognised in equity / deferred tax</b>	<b>(2)</b>	<b>(0)</b>

**Principal assumptions used for the actuarial valuation**

	2018	2017
Discount rate <sup>1)</sup>	2.5%	2.2%
Change in public pension rate (G)	2.5%	2.25%
Annual regulation of pensions paid	1.5%	1.0%

1) The discount rate is based on high quality corporate bonds reflecting the timing of the benefit payments.

The company's chosen assumptions are in line with "Guide to Pension Assumptions" published by The Norwegian Accounting Standard Board, September 2018.

**Note 08 Other operating expenses**

<i>Amounts in NOK million</i>	2018	2017
Travel expenses	(48)	(45)
Machinery, tools, fixtures and fittings	(282)	(271)
Repair, maintenance and other operating expenses	(149)	(133)
Other external expenses (fees, transport, IT services, etc.)	(353)	(262)
Loss on trade receivables	(1)	(5)
Other energy and fuel expenses	(81)	(76)
Commission expenses	(49)	(82)
External distribution expenses	(427)	(459)
Leasing expenses (note 9)	(34)	(53)
Miscellaneous manufacturing, administration and selling expenses	(186)	(239)
<b>Total other operating costs</b>	<b>(1 610)</b>	<b>(1 624)</b>
<b>Miscellaneous manufacturing, administration and selling expenses include:</b>		
Capitalisation of salary on fixed assets. Employee benefit expenses are presented gross in note 6.	11	11
Changes in inventories of finished and semi-finished goods	85	(19)

During 2018, Elkem ASA expensed NOK 119 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 30 million) are included in other operating income.

**Audit and other services**

<i>Amounts in NOK million</i>	2018	2017
Audit fee	(5)	(4)
Other assurance services	(2)	(0)
Tax services	(0)	-
Other services	(1)	(0)
<b>Total audit fees</b>	<b>(8)</b>	<b>(4)</b>

In addition to the above, audit and assurance services from KPMG, have been provided and invoiced through Elkem ASA to Bluestar Elkem International Co., Ltd. S.A. with NOK 3 million (NOK 16 million).

Fees to auditors are reported exclusive of VAT.

**Note 09** Operating lease

<b>2018</b>				
<i>Amounts in NOK million</i>	Machinery and plant	Land, buildings and other properties	Equipment, furniture, systems and vehicles	<b>Total</b>
Leasing expenses, current year	(8)	(19)	(6)	<b>(34)</b>
<b>Lease in accordance with contract due:</b>				
Within one year	(0)	(15)	(2)	<b>(17)</b>
In the second to fifth year inclusive	-	(43)	(3)	<b>(47)</b>
More than five years	-	(10)	-	<b>(10)</b>
<b>2017</b>				
<i>Amounts in NOK million</i>	Machinery and plant	Land, buildings and other properties	Equipment, furniture, systems and vehicles	<b>Total</b>
Leasing expenses, current year	(13)	(37)	(2)	<b>(53)</b>
<b>Lease in accordance with contract due:</b>				
Within one year	(0)	(14)	-	<b>(14)</b>
In the second to fifth year inclusive	-	(41)	-	<b>(41)</b>
More than five years	-	(20)	-	<b>(20)</b>

**Note 10** Other gains (losses) related to operating activities

<i>Amounts in NOK million</i>	<b>2018</b>	2017
Realised currency gains (losses) from forward currency contracts	<b>(3)</b>	(40)
Unrealised currency gains (losses) from forward currency contracts	<b>8</b>	(58)
Other currency gains (losses) operational	<b>(37)</b>	59
Realised effects other financial instruments (note 26)	<b>20</b>	(9)
Unrealised effects other financial instruments	<b>(234)</b>	(4)
<b>Other gains (losses) related to operating activities</b>	<b>(246)</b>	(53)

**Note 11** Finance income and expenses

<i>Amounts in NOK million</i>	<b>2018</b>	2017
Interest income	<b>11</b>	2
Interest income - group	<b>64</b>	42
Dividend	<b>0</b>	1
Other financial income	<b>0</b>	2
<b>Total finance income</b>	<b>75</b>	47
Foreign exchange gains (losses)	<b>34</b>	(240)
Interest expenses	<b>(125)</b>	(65)
Interest expenses - group	<b>(31)</b>	(18)
Interest expenses net pension liabilities	<b>(2)</b>	(2)
Other financial expenses	<b>(3)</b>	(1)
<b>Total finance expenses</b>	<b>(161)</b>	(87)
<b>Net finance income (expenses)</b>	<b>(52)</b>	(280)

Foreign exchange gains (losses) in 2018 and 2017 are mainly related to the bank loans in EUR and group loans in EUR, CNY and USD.

**Note 12** Taxes**Income tax recognised in profit or loss**

<i>Amounts in NOK million</i>	<b>2018</b>	2017
Current tax expenses	<b>(87)</b>	(91)
Previous year tax adjustment	<b>(1)</b>	(1)
Deferred tax	<b>30</b>	47
Other taxes	<b>(4)</b>	(2)
<b>Total tax expenses</b>	<b>(62)</b>	(47)

**Reconciliation of income tax (expense) benefit**

<i>Amounts in NOK million</i>	<b>2018</b>	<b>2017</b>
<b>Profit before tax</b>	<b>834</b>	357
Applicable tax rate Norway	<b>23%</b>	24%
Tax expense at applicable tax rate	<b>(192)</b>	(86)
<b>Permanent differences</b>		
Tax effect of income from Norwegian controlled foreign companies (NOKUS)	<b>(9)</b>	(7)
Dividend within the Tax exemption method	<b>19</b>	15
Debt forgiveness <sup>1)</sup>	<b>133</b>	27
Tax effects other permanent differences	<b>(7)</b>	(1)
<b>Other effects</b>		
Previous year tax adjustment	<b>(1)</b>	(1)
Tax effect change in tax rate <sup>2)</sup>	<b>(2)</b>	7
Other current tax paid	<b>(4)</b>	(2)
<b>Income tax for the year</b>	<b>(62)</b>	(47)
Effective tax rate	<b>7%</b>	13%

<sup>1)</sup> Elkem ASA has four debt forgiveness agreements with Elkem Silicones France SAS. Nominal value of the agreements as of 31 December are NOK 644 million (EUR 69 million), book value NOK 0,-. Elkem Silicones France SAS has repaid NOK 577 million under this agreement in 2018, the gain is classified as income from subsidiaries. The effect of repayment is tax exempted.

<sup>2)</sup> The effect of change in tax rates relates to changes in tax rate from 23% to 22% from 2018 and changes in tax rate from 24% to 23% from 2017. The changes in tax rates were approved by the Norwegian government before year end the respective years.

**Deferred tax assets and deferred tax liabilities**

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	<b>31.12.2017</b>
Cash flow hedges charged to equity	<b>2</b>	13
Property, plant, equipment and intangible asset	<b>(109)</b>	(115)
Pension liabilities	<b>15</b>	15
Other differences	<b>98</b>	56
Accounts receivable	<b>2</b>	2
Inventory	<b>(38)</b>	(25)
Provisions	<b>0</b>	6
<b>Deferred tax assets (liabilities)</b>	<b>(29)</b>	(48)

**Deferred tax**

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	<b>31.12.2017</b>
Opening balance - net deferred tax assets (liabilities)	<b>(48)</b>	(128)
Charged to Profit and Loss	<b>30</b>	47
Changes in deferred tax hedges charged to equity	<b>(12)</b>	35
Change in actuary gains/losses charged to equity	<b>-</b>	(0)
Other items charged to equity	<b>0</b>	-
Changes in group contributions to subsidiaries	<b>-</b>	(1)
Foreign currency exchange differences	<b>(0)</b>	0
<b>Net deferred tax assets (liabilities)</b>	<b>(29)</b>	(48)



**Note 13** Property, plant and equipment

2018	Land and other property	Buildings	Machinery and plants	Equipment, furniture and transport- vehicles	Construc- tion in progress	Total
<i>Amounts in NOK million</i>						
<b>Opening balance net booked value</b>	46	423	1 201	36	228	<b>1 934</b>
Additions	-	-	-	1	328	<b>329</b>
Disposals	-	-	-	-	-	<b>-</b>
Reclassification / Transferred from CiP	10	22	229	4	(266)	<b>(1)</b>
Impairment losses	-	(0)	(2)	(0)	-	<b>(2)</b>
Depreciation expenses	(4)	(46)	(177)	(9)	-	<b>(235)</b>
Foreign currency exchange differences	-	-	-	-	-	<b>-</b>
<b>Closing balance net booked value</b>	<b>53</b>	<b>399</b>	<b>1 251</b>	<b>32</b>	<b>290</b>	<b>2 026</b>
Fixed assets under financial leasing included in Net booked value	-	-	-	0	-	<b>0</b>
Historical cost	101	1 225	3 794	119	290	<b>5 529</b>
Accumulated depreciation	(47)	(815)	(2 480)	(87)	-	<b>(3 428)</b>
Accumulated impairment losses	(1)	(11)	(63)	(0)	-	<b>(75)</b>
<b>Closing balance net booked value</b>	<b>53</b>	<b>399</b>	<b>1 251</b>	<b>32</b>	<b>290</b>	<b>2 026</b>
Estimated useful life	0-50 years	5-40 years	3-30 years	3-20 years		
Depreciation plan	Straight-line	Straight-line	Straight-line	Straight-line		

Depreciations start when the asset is ready for its intended use. Land is not depreciated.

2017	Land and other property	Buildings	Machinery and plants	Equipment, furniture and transport- vehicles	Construc- tion in progress	Total
<i>Amounts in NOK million</i>						
<b>Opening balance net booked value</b>	24	459	1 198	40	182	<b>1 903</b>
Additions	-	-	1	0	277	<b>278</b>
Disposals	-	-	-	-	-	<b>-</b>
Transferred from CiP	26	13	186	6	(231)	<b>-</b>
Impairment losses	(0)	(1)	(13)	(0)	-	<b>(15)</b>
Depreciation expenses	(3)	(48)	(171)	(10)	-	<b>(232)</b>
Foreign currency exchange differences	-	-	-	0	-	<b>0</b>
<b>Closing balance net booked value</b>	<b>46</b>	<b>423</b>	<b>1 201</b>	<b>36</b>	<b>228</b>	<b>1 934</b>
Fixed assets under financial leasing included in Net booked value	-	-	-	1	-	<b>1</b>
Historical cost	90	1 214	3 630	123	228	<b>5 286</b>
Accumulated depreciation	(43)	(780)	(2 367)	(86)	-	<b>(3 276)</b>
Accumulated impairment losses	(1)	(11)	(63)	(0)	-	<b>(75)</b>
<b>Closing balance net booked value</b>	<b>46</b>	<b>423</b>	<b>1 201</b>	<b>36</b>	<b>228</b>	<b>1 934</b>
Estimated useful life	0-50 years	5-40 years	3-30 years	3-20 years		
Depreciation plan	Straight-line	Straight-line	Straight-line	Straight-line		

**Note 14** Intangible assets

2018	Other intangible assets	IT systems and programmes	Intangible assets under construction	<b>Total intangible assets</b>
<i>Amounts in NOK million</i>				
<b>Opening balance net booked value</b>	241	87	10	<b>338</b>
Additions	3	12	7	<b>22</b>
Reclassification / Transferred from CiP	0	1	(1)	<b>1</b>
Amortisation	(80)	(17)	-	<b>(98)</b>
<b>Closing balance net booked value</b>	164	82	17	<b>263</b>
Historical cost	806	183	17	<b>1006</b>
Accumulated amortisation	(642)	(101)	-	<b>(743)</b>
<b>Closing balance net booked value</b>	164	82	17	<b>263</b>
Estimated useful life Amortisation plan	3-10 years Straight-line	3-10 years Straight-line		

The book value of a power contract against Statkraft of 1.5 TWh. as of 31 December 2018 is 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 926 million.

2017	Other intangible assets	IT systems and programmes	Intangible assets under construction	<b>Total intangible assets</b>
<i>Amounts in NOK million</i>				
<b>Opening balance net booked value</b>	322	98	11	<b>430</b>
Additions	-	1	4	<b>5</b>
Reclassification / Transferred from CiP	(1)	5	(4)	<b>-</b>
Amortisation	(80)	(17)	-	<b>(97)</b>
<b>Closing balance net booked value</b>	241	87	10	<b>338</b>
Historical cost	804	217	10	<b>1030</b>
Accumulated amortisation	(563)	(130)	-	<b>(692)</b>
<b>Closing balance net booked value</b>	241	87	10	<b>338</b>
Estimated useful life Amortisation plan	3-10 years Straight-line	3-10 years Straight-line		

The book value of a power contract against Statkraft of 1.5 TWh. as of 31 December 2017 is NOK 240 million and included in other intangible assets. The notional amount of underlying asset at the end of reporting period, volume \* price, is NOK 1,373 million.

## Note 15 Investments in subsidiaries

### Investment in subsidiaries of Elkem ASA as at 31 December 2018:

<i>Amounts in NOK million</i>	Country	Owner share vote rights (%)	Book value 31.12.18
Bluestar Silicon Material Co. Ltd. (Yongdeng Silicon Materials)	China	100%	1 033
Elkem GmbH	Germany	100%	1
Elkem LTD.	England	100%	19
Elkem S.a.r.l.	France	100%	0
Elkem S.r.l.	Italy	100%	6
Elkem Carbon AS	Norway	100%	113
Elkem Chartering Holding AS	Norway	80%	1
Elkem Distribution Center B.V.	Netherlands	100%	0
Elkem Foundry (China) Ltd. Co	China	100%	66
Elkem Iberia SLU	Spain	100%	0
Elkem Island ehf.	Iceland	100%	784
Elkem International AS	Norway	100%	5
Elkem International Trade (Shanghai) Co. Ltd. <sup>1)</sup>	China	11%	0
Elkem Japan K.K	Japan	100%	0
Elkem Madencilik Metalurji Sanayi Ve Ticaret Ltd. STI <sup>1)</sup>	Turkey	1%	0
Elkem Materials Processing (Tianjin) Co.,Ltd	China	100%	1
Elkem Materials Processing Services BV	Netherlands	100%	1
Elkem Metal Canada Inc	Canada	100%	6
Elkem Milling Services GmbH	Germany	100%	12
Elkem Nordic A.S.	Denmark	100%	5
Elkem Oilfield Chemicals FZCO	Dubai	51%	13
Elkem Rana AS	Norway	100%	351
Elkem Siliconas España S.A.U	Spain	100%	125
Elkem Silicones (UK) Ltd.	United Kingdom	100%	22
Elkem Silicones Brasil Ltda	Brasil	100%	145
Elkem Silicones Canada Corp.	Canada	100%	6
Elkem Silicones Czech Republic s.r.o	Czech Republic	100%	2
Elkem Silicones Finland OY	Finland	100%	5
Elkem Silicones France SAS	France	100%	2 148
Elkem Silicones Germany GmbH	Germany	100%	130
Elkem Silicones Hong Kong Co. Limited	Hong Kong	100%	102
Elkem Silicones Poland p. z o.o	Poland	100%	4
Elkem Silicones Scandinavia AS	Norway	100%	15
Elkem Silicones Services S.à.r.l	France	100%	0
Elkem Silicones Shanghai Co. Limited	China	100%	107
Elkem Silicones USA Corp.	USA	100%	260
Elkem Siliconi Italia S.r.l	Italy	100%	24
Elkem Singapore Materials Pte. Ltd.	Singapore	100%	0
Elkem South Asia Private Limited	India	100%	34
Elkem UK Holdings Ltd.	United Kingdom	100%	37
Elkem Uruguay SA	Uruguay	100%	33
Explotacion de Rocas Industriales y Minerales S.A.	Spain	100%	80
Jiangxi Bluestar Xinghuo Silicones Co. Ltd (Xinghuo Silicones)	China	100%	3 747
NEH LLC	USA	100%	98
<b>Total</b>			<b>9 543</b>

<sup>1)</sup> Elkem ASA and subsidiary owns 100% of Elkem Madencilik Metalurji Sanayi Ve Ticaret Ltd and Elkem International Trade (Shanghai) Co. Ltd.

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 Bluestar (group) Co. Ltd. In addition Elkem ASA has increase the share capital of the companies with CNY 630 million (NOK 785 million).

### Income from investments in subsidiaries

<i>Amounts in NOK million</i>	2018	2017
Dividends and group contributions from subsidiaries	69	189
Repayment of debt forgiveness (note 12)	577	115
<b>Total income</b>	<b>647</b>	<b>304</b>

### Note 16 Investments in joint ventures

	Company address	Country	Owner share voting rights 2018	Owner share voting rights 2017	Accounting method
Elkania DA	Hauge i Dalane	Norway	50%	50%	Proportionate
Salten Energigjenvinning AS	Oslo	Norway	50%	50%	Equity

Main figures for the investments accounted for by equity method. The figures are Elkem ASA's portion.

<i>Amounts in NOK million</i>	2018	2017
<b>Total interests in joint ventures 1 January</b>	<b>19</b>	-
Acquired shares in Joint ventures/change of ownership	21	20
Share of profit / (loss)	(23)	(1)
Share of other comprehensive income	(7)	-
<b>Total interests in joint ventures 31 December</b>	<b>9</b>	<b>19</b>

Main figures for the investments accounted for by proportionate consolidation. The figures are Elkem ASA's portion.

<i>Amounts in NOK million</i>	Elkania DA	Total 2018
Current assets	14	14
Non-current assets	4	4
Current liabilities	17	17
Non-current liabilities	8	8
<b>Net assets</b>	<b>(6)</b>	<b>(6)</b>
Total revenue	1	1
Total expenses	(3)	(3)
Financial items	(0)	(0)
Tax	0	0
<b>Total profit / (loss) for the year</b>	<b>(1)</b>	<b>(1)</b>

<i>Amounts in NOK million</i>	Elkania DA	Total 2017
Current assets	15	<b>15</b>
Non-current assets	4	<b>4</b>
Current liabilities	17	<b>17</b>
Non-current liabilities	8	<b>8</b>
<b>Net assets</b>	(5)	<b>(5)</b>
Total revenue	3	<b>3</b>
Total expenses	(4)	<b>(4)</b>
Financial items	(0)	<b>(0)</b>
Tax	0	<b>0</b>
<b>Total profit (loss) for the year</b>	(1)	<b>(1)</b>

### Note 17 Other non-current assets

<i>Amounts in NOK million</i>	31.12.2018	31.12.2017
Deposit pension guarantee	<b>22</b>	19
Prepaid contribution pension	<b>2</b>	1
Other shares	<b>4</b>	5
Shares in associated companies	<b>9</b>	9
Loan to subsidiaries (note 27)	<b>1 941</b>	883
Other interest-bearing assets	<b>7</b>	7
Other non-current assets	<b>0</b>	1
<b>Total other non-current assets</b>	<b>1 984</b>	926

### Note 18 Inventories

<i>Amounts in NOK million</i>	31.12.2018	31.12.2017
Finished goods	<b>766</b>	583
Semi-finished goods	<b>285</b>	177
Raw materials	<b>346</b>	219
Operating materials and spare parts	<b>185</b>	158
<b>Total inventories</b>	<b>1 581</b>	1 137

As of 31 December 2018 inventories were written down by NOK 7 million.

As of 31 December 2017 inventories were written down by NOK 1 million.

### Note 19 Trade receivables

<i>Amounts in NOK million</i>	31.12.2018	31.12.2017
Trade receivables	<b>148</b>	669
Trade receivables, related parties	<b>415</b>	307
Provision for doubtful accounts	<b>(10)</b>	(8)
<b>Total trade receivables</b>	<b>553</b>	967

Elkem ASA has entered into a non-recourse factoring agreement of EUR 50 million, NOK 497 million. The receivables are derecognised, as Elkem ASA has no right to the cash flow from the transferred re-

ceivables. There is a recourse clause for maximum 10% of the face value of the individual receivable sold under the agreement.

#### Analysis of gross trade receivables by age, presented based on the due date

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	31.12.2017
Not due	<b>72</b>	514
1 - 30 days	<b>50</b>	117
31 - 60 days	<b>16</b>	21
61 - 90 days	<b>4</b>	5
More than 90 days	<b>6</b>	11
<b>Total trade receivables</b>	<b>148</b>	669

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

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	31.12.2017
Opening balance	<b>(8)</b>	(6)
Losses on doubtful accounts during the year	<b>0</b>	3
New provisions	<b>(5)</b>	(8)
Reversed provisions	<b>4</b>	3
<b>Closing balance</b>	<b>(10)</b>	(8)

#### Analysis of current receivables that are past due date and written-down, by age

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	31.12.2017
Less than 30 days	<b>(2)</b>	(1)
31 - 90 days	<b>(2)</b>	(3)
More than 90 days	<b>(6)</b>	(3)
<b>Total provisions for doubtful accounts</b>	<b>(10)</b>	(7)

#### Note 20 Other current assets

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	31.12.2017
Contribution pension fund	<b>2</b>	2
Grants receivable (note 5)	<b>75</b>	75
VAT receivables	<b>214</b>	125
Prepayments	<b>15</b>	15
Receivable subsidiaries	<b>82</b>	214
Receivable group contribution	<b>-</b>	129
Other current assets	<b>39</b>	20
<b>Total other current assets</b>	<b>426</b>	580

**Note 21** Equity**2018**

<i>Amounts in NOK million</i>	Share capital	Other paid in capital	Total paid in capital	Retained earnings	Total equity
<b>Opening balance</b>	2 010	908	2 918	1 503	<b>4 421</b>
Capital increase	897	4 281	5 177	-	<b>5 177</b>
Cash flow hedge	-	-	-	38	<b>38</b>
Share of items booked against equity from joint ventures	-	-	-	(7)	<b>(7)</b>
Share-based payments	-	6	6	-	<b>6</b>
Remeasurement pension obligations gains (losses)	-	-	-	(2)	<b>(2)</b>
Currency translations	-	-	-	0	<b>0</b>
Merger (note 29)	-	-	-	(34)	<b>(34)</b>
Dividends	-	(1511)	(1511)	-	<b>(1 511)</b>
Profit for the year	-	-	-	772	<b>772</b>
<b>Closing balance</b>	<b>2 907</b>	<b>3 684</b>	<b>6 591</b>	<b>2 270</b>	<b>8 861</b>

The share capital of Elkem ASA is NOK 2,906,551,720 divided on 581,310,344 of NOK 5 par value. For more information, see note 30 Number of shares to the consolidated financial statements.

29 per share, which gives a gross capital increase of NOK 5,200 million. Expenses related to the capital increase amount to NOK 29 million. Net expenses after taxes was NOK 23 million.

22 March 2018 Elkem ASA's shares were re-listed on Oslo Børs. At the same date the share capital was increased with 179,310,344 shares. The capital increase was completed at an offer price of NOK

For the year 2018, NOK 2.60 per share has been allocated for the distribution of dividends to the shareholders.

**2017**

<i>Amounts in NOK million</i>	Share capital	Other paid in capital	Total paid in capital	Retained earnings	Total equity
<b>Opening balance</b>	2 010	1 078	3 088	1 285	<b>4 373</b>
Cash flow hedge	-	-	-	(113)	<b>(113)</b>
Remeasurement pension obligations gains (losses)	-	-	-	(0)	<b>(0)</b>
Currency translations	-	-	-	0	<b>0</b>
Merger (note 29)	-	-	-	21	<b>21</b>
Dividends	-	(170)	(170)	-	<b>(170)</b>
Profit for the year	-	-	-	310	<b>310</b>
<b>Closing balance</b>	<b>2 010</b>	<b>908</b>	<b>2 918</b>	<b>1 503</b>	<b>4 421</b>

**Note 22** Shareholders**The 20 largest shareholders as at 31 December 2018**

	Number of Shares	Ownership
Bluestar Elkem International Co. Ltd. S.A.	338 338 536	58.2%
Verdipapirfondet DNB Norge (IV)	14 330 839	2.5%
The Northern Trust Company Ltd. <sup>1)</sup>	11 069 700	1.9%
Folketrygdfondet	9 852 393	1.7%
State Street Bank and Trust Company <sup>1)</sup>	8 393 799	1.4%
Artic Funds PLC	6 245 576	1.1%
Verdipapirfondet Alfred Berg Gambak	6 159 489	1.1%
JPMorgan Chase Bank <sup>1)</sup>	5 862 900	1.0%
Storebrand Norge I Verdipapirfond	4 965 618	0.9%
First Generator	4 599 017	0.8%
Verdipapirfondet DNB Norge Selektiv	4 569 993	0.8%
Ferd AS	4 075 000	0.7%
State Street Bank and Trust Company <sup>1)</sup>	3 778 327	0.6%
JPMorgan Chase Bank <sup>1)</sup>	3 750 279	0.6%
HSBC Trinkaus & Burkhardt AG <sup>1)</sup>	3 615 600	0.6%
State Street Bank and Trust Company <sup>1)</sup>	3 599 444	0.6%
JPMorgan Chase Bank <sup>1)</sup>	3 500 000	0.6%
Must Invest AS	3 451 888	0.6%
Citibank <sup>1)</sup>	3 406 500	0.6%
Verdipapirfondet DNB Norden (III)	3 256 846	0.6%
<b>Total 20 largest shareholders</b>	<b>446 821 744</b>	<b>76.9%</b>

<sup>1)</sup> *Nominee accounts*



**Note 23** Interest-bearing assets and liabilities

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	31.12.2017
<b>Non-current interest-bearing liabilities</b>		
Financing from subsidiaries	<b>61</b>	164
Financial leases	-	0
Bank financing and other liabilities	<b>4 145</b>	2 470
Loans from external part, other than bank	<b>2 660</b>	-
<b>Total non-current interest-bearing liabilities</b>	<b>6 867</b>	2 634
<b>Current interest-bearing liabilities</b>		
Financing from subsidiaries	<b>2 498</b>	2 030
Financial leases	<b>0</b>	0
Bank financing	<b>53</b>	545
Loans from external part, other than bank	<b>179</b>	53
Accrued interest	<b>19</b>	3
<b>Total current interest-bearing liabilities</b>	<b>2 749</b>	2 631
<b>Total interest-bearing liabilities</b>	<b>9 616</b>	5 265
<b>Interest-bearing assets</b>		
Cash and bank balances	<b>5 596</b>	847
Current loans to subsidiaries	<b>61</b>	186
Accrued interest income from subsidiaries	<b>11</b>	-
Restricted deposits	<b>22</b>	19
Non-current loans to subsidiaries	<b>1 941</b>	883
Other interest-bearing assets	<b>7</b>	7
<b>Total interest-bearing assets</b>	<b>7 638</b>	1 942
<b>Net interest-bearing assets / (liabilities)</b>	<b>(1 978)</b>	(3 324)

**Interest-bearing liabilities by currency**

<i>Amounts in NOK million</i>	Currency amount	<b>NOK 31.12.2018</b>	Currency amount	NOK 31.12.2017
EUR	573	<b>5 704</b>	356	3 501
USD	88	<b>768</b>	71	586
NOK	2 929	<b>2 929</b>	586	586
Other currencies	-	<b>215</b>	-	593
<b>Total interest-bearing liabilities</b>		<b>9 616</b>		5 265

**Maturity of interest-bearing liabilities as at 31.12.2018**

<i>Amounts in NOK million</i>	2019	2020	2021	2022	2023	2024 and later	<b>Total</b>
Financing from subsidiaries	2 498	-	-	-	-	61	<b>2 559</b>
Financial leases	0	-	-	-	-	-	<b>0</b>
Bank financing	53	53	53	53	4 033	-	<b>4 245</b>
Loans from external part, other than bank	179	-	1 849	512	-	298	<b>2 839</b>
Accrued interest	19	-	-	-	-	-	<b>19</b>
<b>Total</b>	<b>2 749</b>	<b>53</b>	<b>1 903</b>	<b>566</b>	<b>4 033</b>	<b>360</b>	<b>9 663</b>
Prepaid loan fees							<b>(47)</b>
<b>Total interest bearing liabilities</b>							<b>9 616</b>

**Maturity of interest-bearing liabilities as at 31.12.2017**

<i>Amounts in NOK million</i>	2018	2019	2020	2021	2022	2023 and later	<b>Total</b>
Financing from subsidiaries	2 030	-	-	-	-	164	<b>2 195</b>
Financial leases	0	0	0	-	-	-	<b>1</b>
Bank financing	545	545	1 775	53	53	53	<b>3 023</b>
Loans from external part, other than bank	53	-	-	-	-	-	<b>53</b>
Accrued interest	3	-	-	-	-	-	<b>3</b>
<b>Total</b>	<b>2 631</b>	<b>545</b>	<b>1 776</b>	<b>53</b>	<b>53</b>	<b>217</b>	<b>5 274</b>
Prepaid loan fees							<b>(8)</b>
<b>Total interest bearing liabilities</b>							<b>5 265</b>

**Refinancing**

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 the term loan facility, bridge financing, of EUR 500 million was terminated and replaced with other facilities. At the end of December 2018 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. An application will be made for the bond to be listed on Oslo Børs. There are no covenants related to the bond loan.

10 December 2018 Elkem ASA issued a series of floating and fixed rate loans in the Schuldschein market. Total size of the transaction is EUR 215 million where of EUR 91,5 million was issued at 31 December and the remainder EUR 123,5 million in January 2019. Of the total transaction amount EUR 15 million are in fixed rate loans. The loans are unsecured. The interest rate of the fixed rate loans was set on 11 December 2018 and there are no significant subsequent changes in

the interest path, hence there are no material differences between fair value of the fixed rate loan and book value.

**Credit facilities**

Elkem ASA is granted credit facilities of EUR 250 million (NOK 2,487 million) and NOK 250 million, a total of NOK 2,737 million in granted credit facilities. Both facilities remained undrawn at 31 December 2018. In 2017 Elkem ASA was granted credit facilities of EUR 200,000 thousand (NOK 1,968,960 thousand) and NOK 250,000 thousand, a total of NOK 2,218,930 thousand in granted credit facilities. Both facilities remained undrawn at 31 December 2017.

The credit facilities and the bank financing in Elkem ASA contain financial covenants based on consolidated 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 5,156 million (NOK 3,023 million) has covenants as described below. Elkem ASA is not in breach with its covenants at the end of 2018 and 2017.

**Covenant Elkem group**

<i>Amounts in NOK million</i>		<b>31.12.2018</b>	31.12.2017	Loan covenant
Total Equity	NOK	<b>13 722</b>	8 333	
Total Assets	NOK	<b>31 129</b>	16 348	
<b>Equity ratio</b>		<b>44%</b>	51%	> 30%
EBITDA	NOK	<b>5 793</b>	2 098	
Net finance charges	NOK	<b>336</b>	67	
<b>Interest cover ratio</b>		<b>17.22</b>	31.44	> 4.00

## Note 24 Provisions and other non-current liabilities

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	31.12.2017
Warranties	<b>3</b>	3
Site restoration	<b>33</b>	26
Obligation to finance subsidiary	<b>27</b>	27
<b>Provisions and other non-current liabilities</b>	<b>63</b>	56

### Warranties

Elkem ASA has provisions related to warranties when selling parts used for building of furnaces.

### Employee benefits

Employee benefits consist of provisions for long-service benefits.

### Site restoration

Elkem ASA has provisions for future remediation work related to the necessary site remediation work that it will have to undertake in re-

spect of its quartz mines. In addition Elkem ASA has provisions for future remediation work related to necessary site remediation work that will have to undertake on sites used for waste disposal.

### Obligation to finance

Elkem ASA purchased Elkem Silicones in 2015. The subsidiary Elkem Silicones Services S.à.r.l has a negative equity when Elkem ASA purchased Elkem Silicones and Elkem ASA has an obligation to fund the company's continued operations.

## Note 25 Other current liabilities

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	31.12.2017
Social security tax and withholding tax employees	<b>63</b>	59
Value added tax	<b>154</b>	82
Payroll payables	<b>174</b>	154
Payables to subsidiaries	<b>13</b>	24
Provisions	<b>3</b>	3
Accrued expenses	<b>96</b>	88
Other short-term liabilities	<b>32</b>	25
<b>Total other current liabilities</b>	<b>536</b>	435

## Note 26 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 in the balance sheet as at 31 December 2018.

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. Un-realised effects from that time are booked against equity and later reclassified to revenue when realised.

Realised effects from such derivatives in 2018 are a loss of NOK 3 million (NOK 1 million). See note 10 Other gains (losses) related to operating activities for information of contracts classified as held for trading.

**Details of currency exchange contracts as at 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 <sup>1)</sup>	Notional value <sup>2)</sup>
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 <sup>3)</sup>	10.2419	2018-2034	(229)	4 800
<b>Total fair value</b>							<b>(281)</b>	

**Details of currency exchange contracts as at 31 December 2017***Amounts in NOK million*

Purchase currency	Purchase ccy million	Sale currency	Sale ccy million	Type of instrument	Currency rate	Due	Fair value <sup>1)</sup>	Notional value <sup>2)</sup>
NOK	9	AUD	2	Fwd	6.2366	2018	0	10
CAD	28	EUR	19	Fwd	1.4912	2018	(3)	185
NOK	2 505	EUR	262	Fwd	9.5639	2018	(88)	2 578
CAD	2	NOK	12	Fwd	0.1548	2018	0	12
NOK	91	GBP	9	Fwd	10.6867	2018	(4)	94
NOK	115	JPY	1 406	Fwd	0.0818	2018	12	102
NOK	742	USD	91	Fwd	8.1324	2018	(2)	748
NOK	110	JPY	1 316	Fwd	0.0839	2019	13	96
NOK	108	JPY	1 268	Fwd	0.0850	2020	12	92
NOK	4 060	EUR	396	Embedded <sup>3)</sup>	10.2419	2018-2034	(184)	3 902
<b>Total fair value</b>							<b>(244)</b>	

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 31.12.

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. Realised effects are booked as a part of the energy cost under cost of raw materials and other input factors. The ineffective part is booked as a part of other gains (losses) related to operating activities. See note 10 Other gains (losses) related to operating activities.

In addition, realised effects from hedging of future need for power of NOK 96 million (NOK 21 million) is included in Raw materials and energy for smelting.

**Details of power contracts booked at fair value as at 31 December 2018**

<i>Amounts in NOK million</i>	Volume GWh	Due	Fair value	Notional amount <sup>1)</sup>
Forward power contracts financial institutions	210	2019	15	95
Power contract "30-øringen" <sup>2)</sup>	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 Energigjenvinning AS	1 856	2021-2035	16	541
<b>Total fair value</b>			(167)	

**Details of power contracts booked at fair value as at 31 December 2017**

<i>Amounts in NOK million</i>	Volume GWh	Due	Fair value	Notional amount <sup>1)</sup>
Forward power contracts financial institutions	299	2018	6	74
Power contract "30-øringen" <sup>2)</sup>	501	2018	-	147
Power contract "30-øringen"	6 016	2019-2030	-	1 693
Power contracts Statkraft, swap	201	2018	(16)	65
Power contracts Statkraft, swap	605	2019-2034	(44)	196
<b>Total fair value</b>			(54)	

1) Notional value based on currency rates at 31.12.

2) The contract is booked at the lower of cost and fair value.

**Note 27 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 Bluestar (group) Co. Ltd (Bluestar) a company registered and domiciled in China. The structure of 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. 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 15 Investments in subsidiaries. Details of other transactions between Elkem ASA and the parent company, joint ventures and associates and related parties within Bluestar are disclosed below.

**2018**

<i>Amounts in NOK million</i>	Trade sales	Trade purchases	Services sales	Services purchases	Interest income	Interest expenses
Bluestar Elkem International Co., Ltd. S.A.	-	-	0	-	-	-
Related parties within Bluestar	171	-	50	-	-	-
Subsidiaries	1 103	(629)	195	(230)	61	(15)
Joint ventures and associates	-	-	5	(117)	-	-
<b>Total</b>	1 273	(629)	250	(348)	61	(15)

## 2017

<i>Amounts in NOK million</i>	Trade sales	Trade purchases	Services sales	Services purchases	Interest income	Interest expenses
Bluestar Elkem International Co., Ltd. S.A.	-	-	12	-	0	-
Related parties within Bluestar	-	-	0	-	-	-
Subsidiaries	1 138	(1 772)	253	(168)	41	(20)
Joint ventures and associates	-	-	-	(134)	0	-
<b>Total</b>	<b>1 138</b>	<b>(1 772)</b>	<b>264</b>	<b>(302)</b>	<b>42</b>	<b>(20)</b>

## Loans from/to related parties

<i>Amounts in NOK million</i>	31.12.2018	31.12.2017
Non-current loans, related parties within Bluestar	-	(7)
Non-current loans, subsidiaries	(61)	(157)
Current loans, subsidiaries	(2 498)	(2 030)
Non-current deposits, subsidiaries	1 941	883
Other receivables, subsidiaries	82	214
Accrued interest income, subsidiaries	11	-
Other payables, subsidiaries	(13)	-
Trade receivables, Bluestar Elkem International Co., Ltd. S.A.	-	1
Trade receivables, related parties within Bluestar	162	0
Trade receivables, subsidiaries	250	306
Trade receivables, joint ventures and associates	3	-
Trade payables, Bluestar Elkem International Co., Ltd. S.A.	(5)	-
Trade payables, related parties within Bluestar	(4)	(1)
Trade payables, subsidiaries	(229)	(366)
Trade payables, joint ventures and associates	(10)	(10)
Deferred income, joint ventures and associates	(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 parties relates 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
- Sale of power supply
- Rent of plant facilities and related services

Elkem's set-up for sales is based on an agent structure, rather than a distribution network. Elkem has also sourced companies that purchase 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 also has both long term receivables and long-term 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 to a fixed price for the first 15 years of operations. See note 26 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 start-up date, estimated to fourth quarter 2020, of Salten Energigjenvinning AS. Elkem has committed to cover its proportion of total estimated capital injections in Salten Energigjenvinning AS of NOK 100 million, of which NOK 40 million is paid as of 31 December 2018.

## Transactions with key management personnel

Information on transactions with key management personnel is included in note 12 Management remuneration to the consolidated financial statement.

## Note 28 Guarantees

### Guarantee commitments

<i>Amounts in NOK million</i>	31.12.2018	31.12.2017
Guarantees given on behalf of subsidiaries regarding environmental obligations	26	31
Guarantees given on behalf of subsidiaries regarding financing	131	134

## Note 29 Merger Elkem ASA and subsidiaries

### 2018

In 2018, Elkem ASA merged with the 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% fully owned by Elkem ASA and the merger was effective from 21 November 2018 with Elkem ASA as the surviving entity. The merged entity is included in Elkem ASA based on group book value and the continuity accounting method. 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

<i>Amounts in NOK million</i>	<i>Note</i>	<b>Total</b>
Investments in subsidiaries	15	<b>(37)</b>
Other non-current assets	17	<b>98</b>
<b>Total assets</b>		<b>61</b>
Non-current interest-bearing liabilities, Elkem ASA	23	<b>76</b>
Current interest-bearing liabilities, Elkem ASA	23	<b>10</b>
Accounts payable, Elkem ASA		<b>1</b>
Current interest-bearing liabilities	23	<b>8</b>
<b>Total liabilities</b>		<b>95</b>
<b>Net assets / Equity contributed in the merger</b>		<b>(34)</b>

### 2017

In 2017, Elkem ASA merged with the subsidiary Nor-Kvarts AS. Nor-Kvarts AS owns 100% of the shares in Erimsa, a company which operates five quartz mines in Spain.

The merged subsidiary was 100% fully owned by Elkem ASA and the merger was effective from 18 November 2017 with Elkem ASA as the

surviving entity. The merged entity is included in Elkem ASA based on group book value and the continuity accounting method. For accounting and tax purposes the merged entity was included in Elkem ASA retrospectively as of 1 January 2017.

Details on the merged balance is outlined below:

**Net assets**

<i>Amounts in NOK million</i>	<i>Note</i>	<b>Total</b>
Investments in subsidiaries	15	21
Other non-current assets	20	1
<b>Total assets</b>		<b>21</b>
<b>Total liabilities</b>		<b>0</b>
<b>Net assets / Equity contributed in the merger</b>		<b>21</b>

**Note 30** Events after the reporting period

No events have taken place after the reporting period that would have had a material impact on the financial statements or any assessments carried out.

## Declaration by the Board of Directors

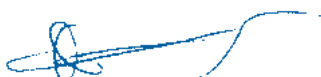
We confirm that, to the best of our knowledge, the financial statements for the period from 1 January to 31 December 2018 have been prepared in accordance with applicable standards and give a true and fair view of the group and the company's assets, liabilities, financial position and results of operations.

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.

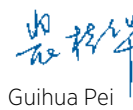
The Board of Directors of Elkem ASA  
Oslo, 6 March 2019



Michael Koenig  
Chairman of the Board



Olivier de Clermont-Tonnerre



Guihua Pei



Anja Isabel Dotzenrath



Caroline Gregoire Sainte Marie



Dag Opedal



Marianne Færøyvik



Terje Andre Hanssen



Helge Aasen

CEO





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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. The financial statements comprise:

- The financial statements of the parent company Elkem ASA (the Company), which comprise the balance sheet as at 31 December 2018, and 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 2018, and the statement of income, statement of other comprehensive income, statement of changes in equity and cash flow statement 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 2018, 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 2018, 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.

KPMG AS, a Norwegian limited liability company and member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

Statsautoriserede revisorer - medlemmer av Den norske Revisorforening

Offices in:

Oslo	Elverum	Mo i Rana	Stord
Alta	Finnsnes	Molde	Straume
Arendal	Hamar	Skien	Tromsø
Bergen	Haugesund	Sandefjord	Trondheim
Bodo	Knarvik	Sandnessjøen	Tynset
Drammen	Kristiansand	Stavanger	Ålesund



Auditor's Report - 2018  
Elkem ASA

#### Common control business combination of Xinghuo and Yongdeng

Refer to Note 1 *General Information and basis of preparation*, Note 2 *Significant accounting policies*, Note 4 *Composition of the group*, and the Board of Directors report

<i>The key audit matter</i>	<i>How the matter was addressed in our audit</i>
<p>In 2018 Elkem ASA acquired 100% of the shares in Jiangxi Bluestar Silicones Co. Ltd. (Xinghuo) and Bluestar Silicon Material Co. Ltd. (Yongdeng) from their parent Bluestar Elkem Investment Co. Ltd. in a common control transaction. The purchase price was NOK 3,995 million.</p> <p>Xinghuo and Yongdeng represent 23% of total revenue and 26% of total assets of the Group in 2018.</p> <p>There is no specific guidance under International Financial Reporting Standards on the accounting treatment for a combination of businesses under common control. Elkem has elected to apply the 'pooling of interest' method whereby the assets and liabilities of the combining entities are reflected at their existing carrying amounts, no new goodwill is recognised as a result of the combination, and comparative period are restated as if the business combination had occurred as at 1 January 2017 (the beginning of the earliest comparative period presented).</p> <p>We consider the common control business combination of Xinghuo and Yongdeng to be a key audit matter due to the significance of the acquired entities to the Group, the impact that these acquisitions have on the scope of the audit, the accounting of the common control transaction, and the consistency of the accounting policies of the acquired entities to the group.</p>	<p>Our audit procedures in this area included:</p> <ul style="list-style-type: none"> <li>• Reading and understanding the share purchase agreements and other relevant documents to assess the appropriateness of the 'pooling of interest' accounting method applied, and to identify other factors which may impact the financial statements.</li> <li>• Recalculating the adjustment to equity for the difference between the consideration paid and the net assets acquired.</li> <li>• Bringing Xinghuo and Yongdeng into scope for the group audit of the 2017 and 2018 consolidated financial statements.</li> <li>• Assessing the accuracy of the restated 2017 comparatives in the consolidated financial statements.</li> <li>• Evaluating management's assessment of impairment of the acquired assets, including identification of impairment indicators and retrospective review of impairment conclusions.</li> <li>• Considering the adequacy of the disclosure of the common control transaction in the notes to the financial statements.</li> </ul>

#### 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.

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.



**Auditor's Report - 2018**  
Elkem ASA

### 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 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 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.
- 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



*Auditor's Report - 2018*  
Elkem ASA

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 proposal for the allocation of the profit 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, 6 March 2019  
KPMG AS

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, 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 return on capital employed (ROCE) as measure 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

2018							Elimi-	
<i>Amounts in NOK million</i>	Silicones	Silicon Materials	Foundry Products	Carbon	Other	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	
<b>EBIT</b>	2 864	833	710	267	(164)	12	4 522	
Impairment losses							8	
Amortisations and depreciations							1 263	
<b>EBITDA</b>	3 535	1 116	931	335	(136)	12	5 793	

2017							Elimi-	
<i>Amounts in NOK million</i>	Silicones	Silicon Materials	Foundry Products	Carbon	Other	nations	Elkem	
Profit (loss) for the year							1 249	
Income tax (expense) benefit							269	
Finance expenses							474	
Foreign exchange gains (losses)							8	
Finance income							(30)	
Share of profit from equity accounted financial investments							1	
Other items							(44)	
<b>EBIT</b>	840	527	486	209	(107)	(28)	1 927	
Impairment losses							17	
Amortisations and depreciations							1 244	
<b>EBITDA</b>	1 515	804	701	274	(78)	(28)	3 188	

**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.

<i>Amounts in NOK million</i>	<b>2018</b>	<b>2017</b>
Reinvestments	<b>(1 064)</b>	(890)
Strategic investments	<b>(726)</b>	(390)
Periodisations <sup>1)</sup>	<b>(125)</b>	154
<b>Investments in property, plant and equipment and intangible assets</b>	<b>(1 916)</b>	(1 126)

1) Periodisations reflects the difference between payment date and accounting date of the investment.

<i>Amounts in NOK million</i>	<b>2018</b>	<b>2017</b>
Cash flow from operating activities	<b>4 460</b>	2 256
Income taxes paid	<b>272</b>	198
Interest payments made	<b>390</b>	446
Interest payments received	<b>(41)</b>	(24)
Changes in provisions, pension obligations and other	<b>(46)</b>	313
Changes in fair value commodity contracts	<b>(321)</b>	79
Other	<b>380</b>	(44)
Reinvestments	<b>(1 064)</b>	(890)
<b>Cash flow from operations</b>	<b>4 030</b>	2 336

**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, Investments equity accounted companies and Accounts payable 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.

- Average capital employed is defined as the average of the opening and ending 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:

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	31.12.2017
Inventories	<b>5 467</b>	4 099
Accounts receivable	<b>2 391</b>	2 518
Bills receivable	<b>(354)</b>	(272)
<b>Accounts receivable</b>	<b>2 037</b>	2 247
Other current assets	<b>836</b>	2 091
Current interest bearing receivables	<b>0</b>	0
Other current receivables to related parties interest free	<b>(4)</b>	(1 354)
Grants receivables	<b>(148)</b>	(56)
Tax receivable	<b>(38)</b>	(25)
Accrued interest	<b>0</b>	0
<b>Other current assets included in working capital</b>	<b>645</b>	656
Accounts payable	<b>2 731</b>	2 650
Accounts payable related to purchase of non-current assets	<b>(307)</b>	(439)
<b>Accounts payable included in working capital</b>	<b>2 423</b>	2 211
Employee benefit obligations	<b>671</b>	587
Provisions and other current liabilities	<b>1 221</b>	1 083
<b>Current provisions</b>	<b>(141)</b>	(155)
Liabilities to related parties	<b>(328)</b>	(324)
<b>Other current liabilities included in working capital</b>	<b>752</b>	604
<b>Working capital</b>	<b>4 303</b>	3 600
<b>Property, plant and equipment</b>	<b>12 445</b>	11 950
<b>Investments equity accounted companies</b>	<b>134</b>	159
Accounts payable and prepayments related to purchase of non-current assets	<b>(251)</b>	(416)
<b>Capital employed</b>	<b>16 631</b>	15 292

#### Elkem's financial APMs, Leverage ratio

- Net interest-bearing debt that is used to measured 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.

<i>Amounts in NOK million</i>	<b>31.12.2018</b>	31.12.2017
Net interest-bearing assets / (liabilities)	<b>(3 158)</b>	(8 007)
Non-current interest-bearing assets	<b>(106)</b>	(104)
<b>Net interest-bearing assets / (liabilities) less non-current interest-bearing assets</b>	<b>(3 264)</b>	(8 111)
<b>EBITDA</b>	<b>5 793</b>	3 188
<b>Leverage ratio</b>	<b>0.6</b>	2.5



## Elkem ASA

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