Annual report 2022

Dual-play growth & green leadership

Elkem

Delivering your potential

We are Elkem

Advanced silicon-based materials shaping a better and more sustainable future

Elkem in brief

Who we are and what we do

45.9
NOK billion total operating income

28%
EBITDA margin

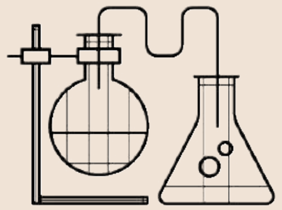
>80%
renewable electricity

0
net zero emissions by 2050

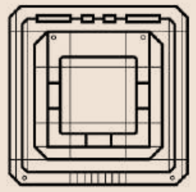
Elkem is one of the world's leading suppliers of advanced silicon-based materials shaping a better and more sustainable future. The company develops silicones, silicon products and carbon solutions by combining natural raw materials, renewable energy and human ingenuity. Elkem helps its customers create and improve essential innovations like electric mobility, digital communications, health and personal care as well as smarter and more sustainable cities.

With a strong track record since 1904, Elkem's global team of more than 7,300 people has a joint commitment to stakeholders: Delivering your potential. Elkem is listed on the Oslo Stock Exchange (ticker: ELK) where it is part of the OBX® ESG Index, a selection of 40 blue-chip companies demonstrating best Environmental, Social and Governance (ESG) practices.

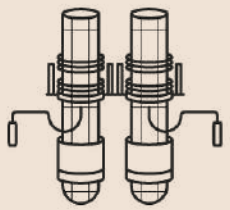
Our divisions



Silicones



Silicon Products



Carbon Solutions

Table of contents

Elkem's history

1904

Foundation

- Sam Eyde establishes Elkem
- Development of electrometal-lurgical processes

Innovation

- The Fiskaa Verk, Norway site is purchased in 1917 for experimental and research purposes
- Elkem patents the Söderberg electrode in 1918
- Elkem listed on Oslo Stock Exchange

Expansion

- Producer of aluminium
- Partner with Alcoa
- Rhône-Poulenc is established in 1948

Industrial giant

- Elkem merges with Christiania Spigerverk to become one of Norway's largest companies
- Xinghuo plant is established in 1968

1950

Internationalisation

- International expantion; steel and ferroalloys
- Acquisition of Union Carbide

Portfolio optimisation

- Sold metal business
- Acquisition of Icelandic Alloys
- Start-up of Elkem Solar
- Elkem acquired by Orkla and delisted from the Oslo Stock Exchange

2000

Growth & specialisation

- Rhodia Silicones acquired by Bluestar in 2007, renamed Bluestar Silicones International (BSI)
- Elkem acquired by Bluestar in 2011
- Merger with BSI in 2015
- Spin-off of Elkem Solar

Integration

- Becoming a global, integrated leader in silicon-based advanced material solutions
- Initial public offering: Re-listing on the Oslo Stock Exchange in 2018
- Integrated with and acquisition of Xinghuo and Yongdeng, with successful branch expansion at Xinghuo

Dual-play growth and green leadership

- Record financial results in 2021 and 2022
- Solid balance sheet enables attractive dividend and growth investments

2020

- Well-positioned for global megatrends like green transition and digitalisation
- Good portfolio balance between East and West – and upstream and downstream
- Awarded double A- scores from CDP on climate and forests
- Aiming to be one of the winners in the green transition
- Vianode, with Elkem as largest shareholder, investing NOK 2 billion in battery materials plant

10 highlights from 2022

In 2022, Elkem delivered its best financial result in the company's 118-year history. Elkem benefitted from its robust business model and high market prices.

1Q-2022

- Elkem was awarded a platinum rating on sustainability transparency from EcoVadis, one of the world's largest and most trusted providers of sustainability ratings
- Elkem announced a partnership with Hydro and Altor to accelerate the growth of Vianode. Hydro and Altor to have 30% ownership each, while Elkem retained 40% ownership
- Elkem made a decision to invest NOK 150 million in a flagship R&I centre in Shanghai, China to meet the growing demand for advanced silicone products and technologies

2Q-2022

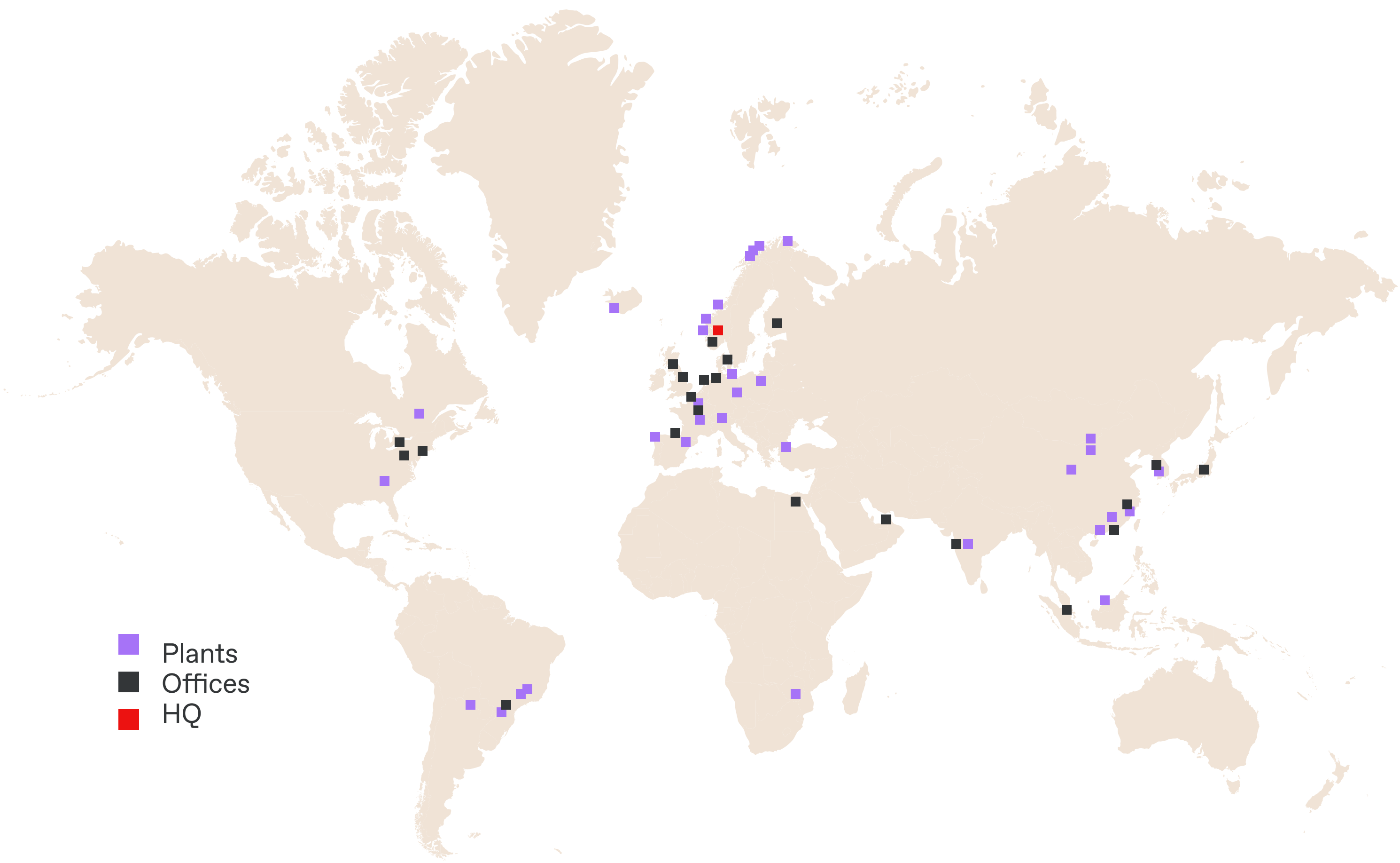
- Elkem signed a new credit facilities agreement of EUR 1,000 million. The facilities agreement includes sustainability performance targets linked to health and safety and reduction of the group's product carbon footprint
- Elkem entered into new 7-year power contract in Norway starting from 2027 with an aggregate volume of 2.5 TWh

3Q-2022

- In September, Elkem celebrated the opening of its new specialised silicones facility in York, S.C., USA for production of high purity silicone materials to medical implantable and pharmaceutical applications
- Elkem Silicones was declared 2022 R&D 100 Awards winner in Mechanical Materials category for safety and reliability for silicone solutions for electric vehicle thermal management
- Supported by Elkem, Hydro and Altor, Vianode made the decision to build the first phase production plant for advanced battery materials at Herøya, Norway

4Q-2022

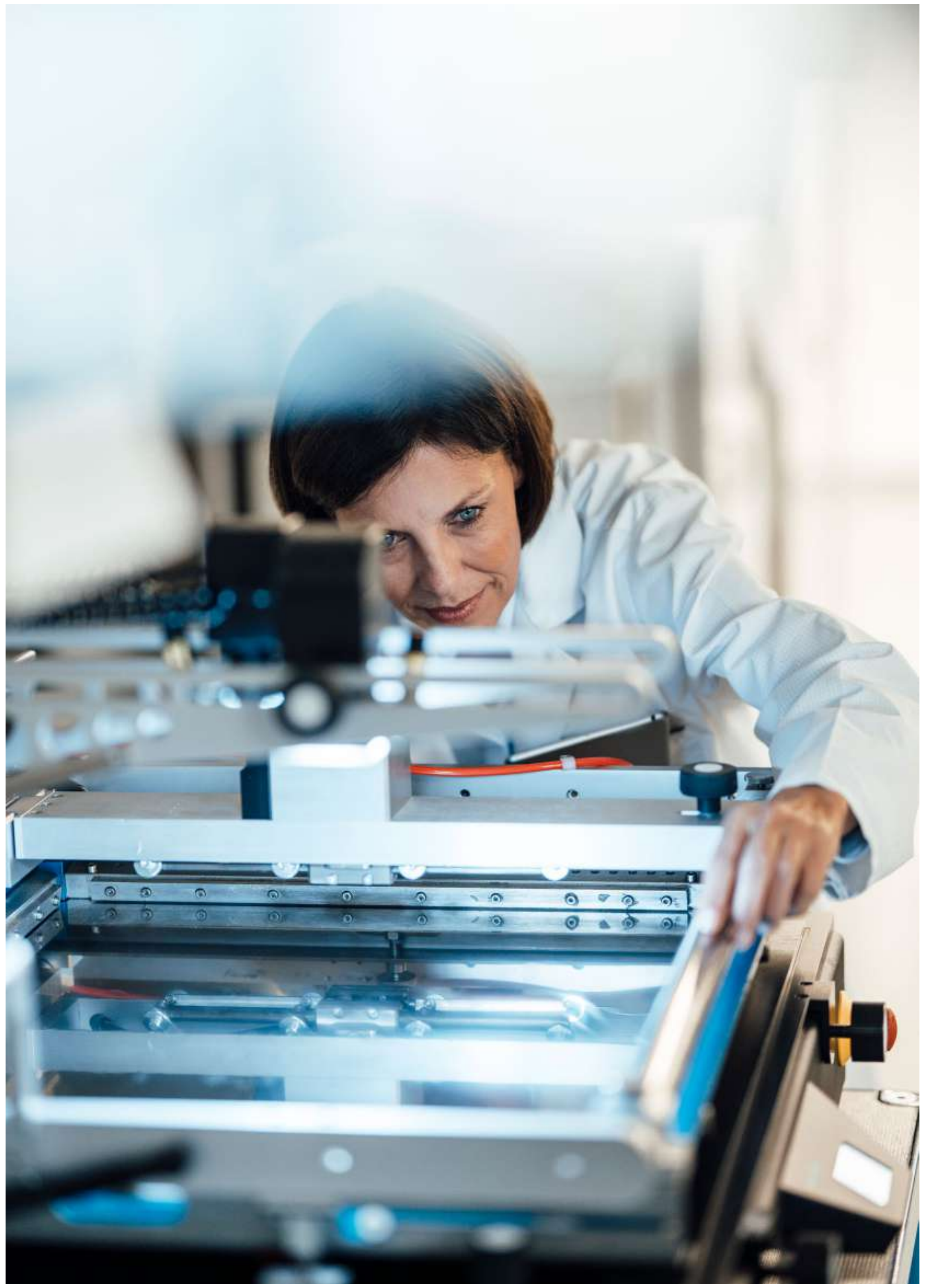
- Elkem successfully placed a series of floating rate loans in the Schuldschein market, amounting to EUR 200 million
- Inauguration of the world's first carbon capture pilot for smelters in Rana, Norway, with main goal to verify the technology on industrial gases from smelters and other process industries
- Elkem awarded double A- scores from CDP for efforts on climate and forests, and B score on water security



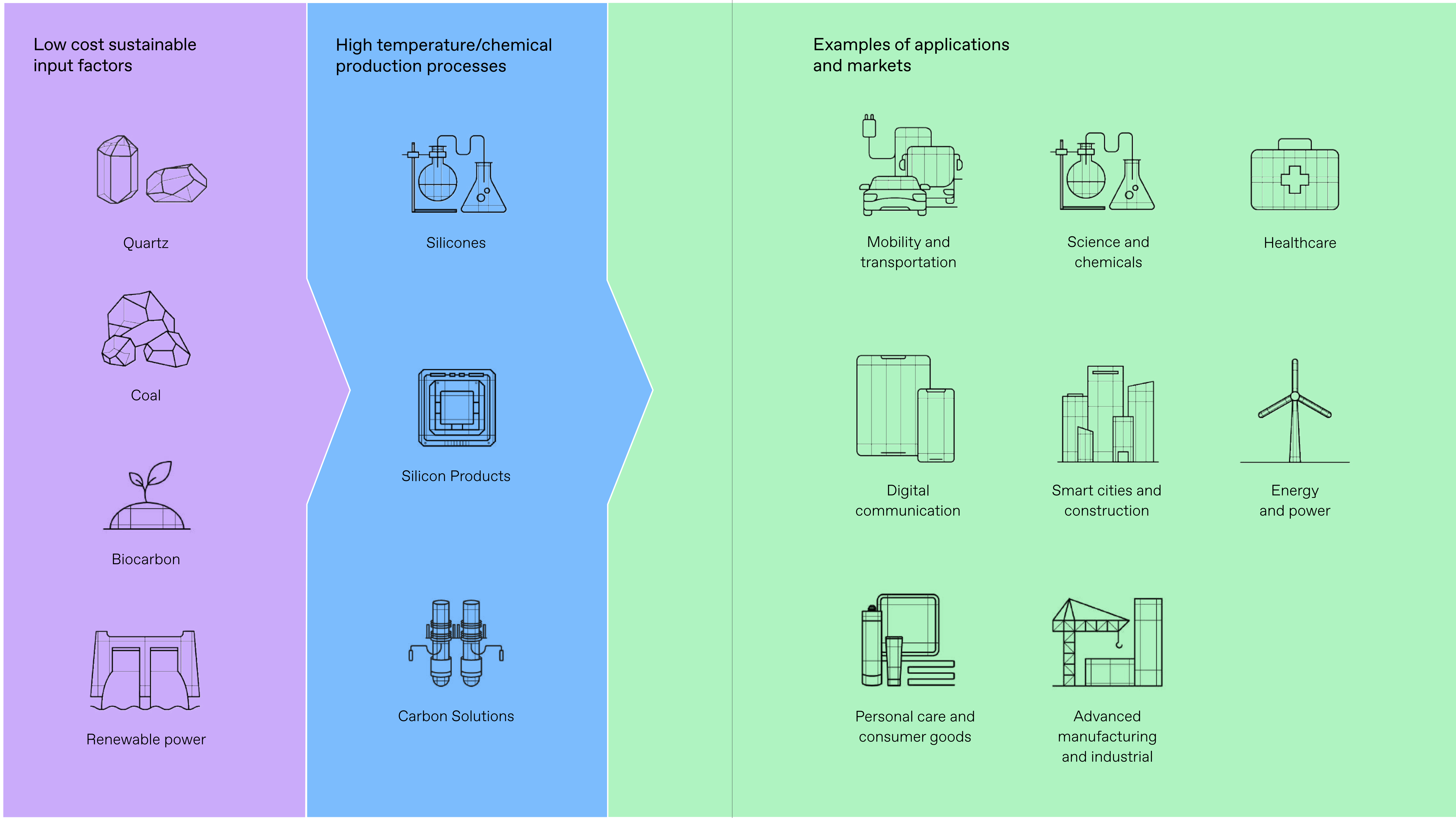
Key figures

	Unit	**2022**	2021	2020	2019	2018	2017	2016
Total operating income	NOK million	**45 898**	33 717	24 691	22 668	25 230	20 985	16 594
Operating income growth	Ratio	**36%**	37%	9%	-10%	20%	26%	
EBITDA	NOK million	**12 925**	7 791	2 675	2 656	5 793	3 188	1 559
EBIT	NOK million	**10 898**	5 899	948	1 189	4 522	1 927	264
Profit (loss) for the period	NOK million	**9 642**	4 664	278	897	3 367	1 249	-268
Cash flow from operations	NOK million	**9 551**	4 100	1 513	2 133	4 031	2 336	627
Reinvestments in % of D&A	Ratio	**84%**	91%	81%	80%	84%	72%	57%
Total assets	NOK million	**52 781**	41 850	30 888	29 004	31 129	25 507	23 092
Net interest-bearing debt	NOK million	**2 615**	4 827	8 058	5 722	3 264	8 111	9 502
Debt leverage	Ratio	**0.2**	0.6	3.0	2.2	0.6	2.5	6.1
Equity	NOK million	**28 773**	19 874	12 635	12 952	13 722	8 565	5 830
Equity share	Ratio	**55%**	47%	41%	45%	44%	34%	25%
Return on capital employed (ROCE)	Ratio	**40%**	26%	5%	7%	26%	12%	2%
Earnings per share (EPS)	NOK	**15.09**	7.49	0.41	1.47	5.74	2.08	(0.52)
Number of employees	Number	**7 372**	7 074	6 856	6 370	6 280	6 113	6 022
Total recordable injury rate H1+H2	Ratio	**3.2**	3.7	2.3	2.2	2.2	3.1	5.3
NO_x emissions	Tonnes	**6 519**	8 932	6 610	6 718	7 068	7 109	7 309
Total CO_2 emissions (Scope 1, 2 and 3)*	Mill tonnes	**10.74**	11.60	10.27				
Energy consumption	TWh	**6.54**	6.54	6.40	6.01	6.23	5.28	4.40

** Total scope not reported before 2020.*



Elkem's value chain



Letter from the CEO

All-time high results in an extraordinary year

The unprecedented market momentum continued into 2022, enabling Elkem to deliver all-time high revenues and financial results. We also continued to position for the future by launching an updated corporate strategy focusing on our integrated business model and green leadership.

Elkem continued to benefit from exceptionally strong markets in 2022. However, the all-time high results were also largely a result of strong cost and market positions, built-up over time through continuous improvement and strategic choices. We have secured access to low-cost and sustainable input factors and been able to maintain and deliver high productivity and quality, despite supply chain challenges and trade restrictions.

Our record results and current solid balance sheet will enable an attractive dividend to shareholders and secure continued investments in growth, driven by global megatrends like the green transition and digitalisation.

Good operational performance

I am impressed by how our entire global team in Elkem has delivered excellent operational performance throughout a challenging year. The restrictions related to the coronavirus pandemic (Covid-19) continued but were eased significantly in most countries during the year.

Russia's invasion of Ukraine has significantly influenced market dynamics, primarily through the impact on energy prices. At the outbreak, Elkem did not have any manufacturing or own employees in Ukraine or Russia and these countries accounted for a very limited part of our revenue. We continuously monitor and comply with all sanctions on Russia relevant to our operations.

At the end of the year, we decided to partially curtail production at two plants in Norway due to high power prices. This enabled us to optimise value creation and contribute to increased flexibility in a tight power market for households and businesses in Norway.

Focus on safety improvement

Regrettably, we have had two high-severity incidents involving contractors during the year, and in general experienced a setback during the pandemic with a high number of low-severity incidents both in 2021 and 2022.

A new and reinforced system for Health, Safety and the Environment (HSE) improvement is now being rolled out globally in Elkem in order to reverse the trend.

Prepared for the future

In the near term, we expect a slowdown in global economic activity and that market prices will come down to more normal levels. However, there is significant uncertainty on how macro-economic development and inflationary pressure will impact demand, and continued volatility in our markets is likely.

In the longer term, global megatrends remain strong, and the critical raw materials are increasingly important in building a sustainable future.

Helge Aasen
CEO, Elkem ASA

Strong growth in Asia combined with re-industrialisation in the western part of the world will create opportunities for Elkem. In the green transition, we have a particular focus on the fast-growing electric mobility segment. An electric vehicle typically contains four times more silicones than a conventional car.

Geopolitical tensions are on the rise, and increasing trade barriers create risks, but also opportunities. Elkem is among very few companies with complete and integrated value chains in different regions, making us less vulnerable to disruptions in supply chains and trade flows.

A strategy of dual-play growth and green leadership

It is on this basis we have set out specific growth ambitions for Elkem: We aim to become among the top three players in the silicones industry worldwide, and to be the number one player in silicon products and carbon solutions in the West.

This means growing not just with the markets we are in, but faster. We aim to grow by more than five per cent per year, but also to do so profitably, with an EBITDA margin of at least fifteen per cent per year.

We have a good balance between Eastern and Western markets, with around 60% of our revenues in the West and 40% in the East. This balance provides more stability in revenue and earnings. As we have seen during the pandemic, weakness in one region has largely been offset by a more positive development in other regions. In addition, the pandemic showed the vulnerability of global supply chains.

We have experienced that Elkem's integrated value chain provides significant competitive advantage and margin protection.

Green leadership: One of the winners in the green transition

Elkem aims to be part of the solution to combat climate change – and to be one of the winners in the green transition. We will do this through three key levers:

- → Reducing our emissions: we already have a strong position with 83% of our energy consumption being renewable. Our target is to reduce overall CO_2 emissions by 28% within 2031. In December, Elkem was awarded double A- scores from CDP for the company's efforts on climate and forests.
- → Supplying to the transition: Elkem aims to grow its supplies of advanced materials to green markets such as better buildings, electric vehicles and renewable energy. Our largest single customer across Elkem globally is now a globally recognised producer of electric vehicles.
- → Enabling circular economies: we continue to work closely with customers and researchers to increase recycling within our own operations, as well as developing the eco-design of innovative products.

Unprecedented volatility – but also opportunity

For us in Elkem, and our entire global team, across geographies and divisional lines, from top management to front-line workers, we are aligned around a clear mission: To provide advanced silicon-based materials shaping a better and more sustainable future. This describes what we do, but also why we do it and why it is so important.

I have been in Elkem's top management for twenty-two years, and now more than twelve years as CEO.

I have never seen such volatility in markets combined with inflationary pressure and uncertainty regarding future economic activity as now. At the same time, I also see an unprecedented opportunity for Elkem given our diversity geographically and culturally, our broad product range, and good positions to take part in the green transition.

This gives me confidence that we will be able to continue to deliver value for all our stakeholders – in line with our purpose: Delivering your potential. Not just in 2022, which has been an exceptional year, but in many years to come.

Helge Aasen

Helge Aasen,
CEO, Elkem ASA

Who we are, how we work and why we are here

The Elkem way

We are Elkem

→ A leading global provider of silicon-based advanced materials

Our mission
Advanced silicon-based materials shaping a better and more sustainable future, adding value to stakeholders globally

→ Elkem's products are critical input factors to a vast number of applications that are necessary in sustainable solutions enabling renewable energy, energy storage, mobility solutions, infrastructure improvements and digital communications
→ Elkem develops its business in accordance with the UN Sustainable Development Goals and the Paris agreement
→ It is our belief that companies that act responsibly and create value by securing sustainable economic growth with a limited environmental footprint will be successful in the long term

Our purpose
Delivering your potential

→ Elkem's purpose is in our commitment to stakeholders: Delivering your potential
→ We believe that the long-term megatrends – like sustainability, energy demand, urbanisation, increased standard of living, ageing and growing population, and digitalisation – will continue
→ This will drive growth in demand for advanced materials, including silicones, silicon and carbon solutions
→ We in Elkem are a team of professionals powered by passion for people. We bring agile and innovative solutions to our customers and our other stakeholders, because we care

Our values
Involvement
Respect
Precision
Continuous improvement

→ **Involvement** commits people. We know that only people can identify problems and opportunities and find solutions. By involving colleagues, customers and other stakeholders, and by being transparent and committed to teamwork, we increase our ability to learn and develop new solutions
→ We **respect** the law, the environment, our employees, colleagues, customers, suppliers, owners, local communities and different cultures. Respect is about being fair, open and honest, trusting your colleagues and partners and appreciating diversity
→ Commitment to **precision** expresses itself through our work to develop and follow standards of best practice and safe and stable production. By establishing work and safety standards, we can measure and continuously improve our performance
→ We know that the value chain can always be improved. We do this through experimenting, using new technology and looking for ways to eliminating waste. **Continuous improvement** means that we are always looking for improvement potential, keeping an open mind and always ready to learn and share our knowledge

Our growth ambitions

→ Top 3 in silicones worldwide
→ Number 1 in silicon products and carbon solutions in the West

Our corporate strategy

Dual-play growth
→ Balanced between geographic regions (East & West)
→ Balanced across the value chain (Upstream & Downstream)

>5%

Growth per year

>15%

EBITDA margin per year

Dual-play growth and green leadership

Green leadership
→ Strengthening position as best in the industry on low CO_2
→ Growing supplies to green transition and creating green ventures

-28%

Reduce CO_2 (2020-2031)

0

net zero emissions by 2050

Silicones
→ Balanced geographical growth
→ Improve cost position
→ Higher degree of specialisation

Silicon Products
→ Selective growth
→ Secure leading cost positions
→ Lower carbon emissions

Carbon Solutions
→ Selective growth
→ Sustainable low-cost position
→ Preferred supplier with high quality

Silicones

Strong growth potential with green shift and global middle-class rising

End markets

- Construction
- Automotive
- Chemical formulators
- Personal care
- Healthcare
- Paper and film release
- Silicone rubber
- Textile

19.3
NOK billion in total operating income

42%
of group sales*

*Share of group sales from external customers ex. Other

Elkem is a fully integrated producer from silicon metal to upstream siloxane and downstream silicone specialties. Silicones can be manufactured into many forms including solids, liquids, semi-viscous pastes, foams, oils and rubber. They are flexible and can resist moisture, chemicals, heat, cold and ultraviolet radiation.

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, consumer and medical items.

Silicones can be encountered every day in a number of areas, including in personal care products, in cars, in the gel on a wound dressing and in sealing and insulating materials in electrical equipment.

The main growth drivers are the green transition and the rise of middle class worldwide to serve markets such as electrification of transportation, electronics, and healthcare.

The division's key strategic focus is on balanced geographical growth between the main markets in the Eastern and Western world, improve the cost position through new investments in France and China, and to focus on R&D and further specialisation of the products portfolio.

14 main plants

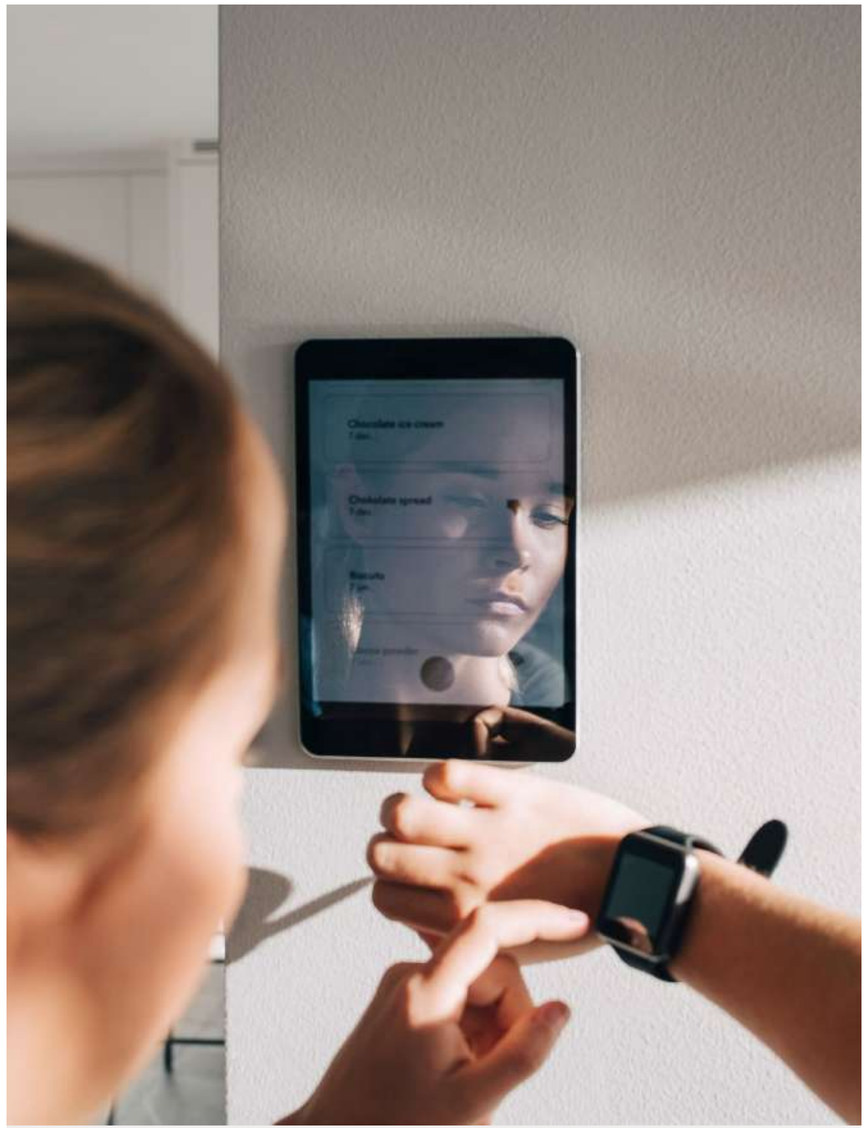
China	Xinghuo, Shanghai, Zhongshan , Yongdeng (silicon)
France	Roussillon, Saint-Fons, Salaise-sur Sanne
Germany	Lübeck
Italy	Caronno
Spain	Santa Perpetua
USA	York
Brazil	Joinville
India	Pune
Korea	Gunsan

Key figures

	2022	2021	2020	2019	2018
Total operating income (in NOK million)	**19 288**	17 429	12 800	11 319	13 130
EBITDA (in NOK million)	**2 022**	3 672	1 326	1 486	3 629
EBITDA margin (in %)	**10%**	21%	10%	13%	28%
Number of employees	**4 637**	4 395	4 224	3 718	3 677
Sales volume (thousands metric tonnes)	**394**	409	372	336	314

Silicon Products

Global leader in silicon-based materials and solutions



24.5

NOK billion in total operating income

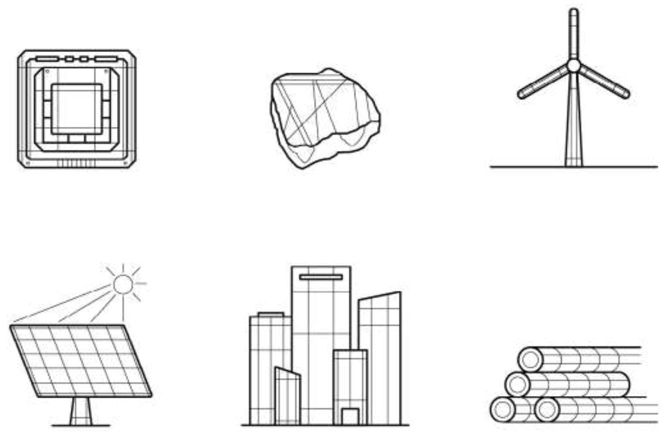
50%

of group sales*

Share of group sales from external customers ex. Other

End markets

→ Automotive
→ Construction/industrial equipment
→ Electronics
→ Specialty steel
→ Solar and wind turbines
→ Refractories
→ Oil and gas



Elkem is a leading producer of silicon-based materials, including silicon, ferrosilicon, specialty alloys based on ferrosilicon and Microsilica®.

Silicon is used in silicones, aluminium alloys and polysilicon, and has a number of favourable chemical and physical properties, including semi-conductivity, making it highly versatile for numerous industrial and electronic applications. Ferrosilicon is mainly used in the steel industry to remove oxygen from the steel and as an alloying element to enhance the quality, including strength and elasticity.

Foundry alloys are used in the production of iron castings to improve their properties such as tensile strength, ductility and impact properties. Microsilica is a process product of the silicon and ferrosilicon production and is used in construction, refractory, oilfield and polymer industries.

The main markets are automotive, construction, electronics, and renewable energy.

Elkem has low-cost positions based on scale and operational excellence, as well as strong market positions in specialty niches based on deep application knowledge and close customer relationships.

The division's strategy is based on selective growth opportunities, securing leading cost positions, and to lower the carbon emissions.

10 main plants

Norway	Salten, Thamshavn, Rana, Bremanger, Bjølvefossen,
Iceland	Grundartangi
China	Shizuishan
India	Nagpur
Paraguay	Limpio
Canada	Chicoutimi

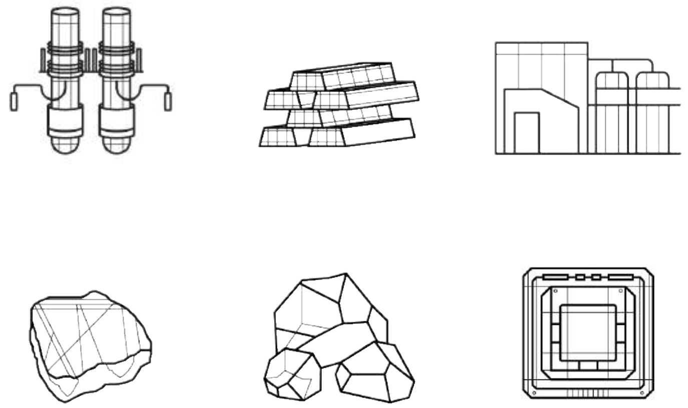
Key figures	**2022**	2021	2020	2019	2018
Total operating income (in NOK million)	**24 457**	14 783	10 804	10 151	10 822
EBITDA (in NOK million)	**10 224**	3 702	1 212	994	1 990
EBITDA margin (in %)	**42%**	25%	11%	10%	18%
Number of employees	**1 958**	1 904	1 890	1 889	1 875
Sales volume (thousands metric tonnes)	**490**	502	479	445	466

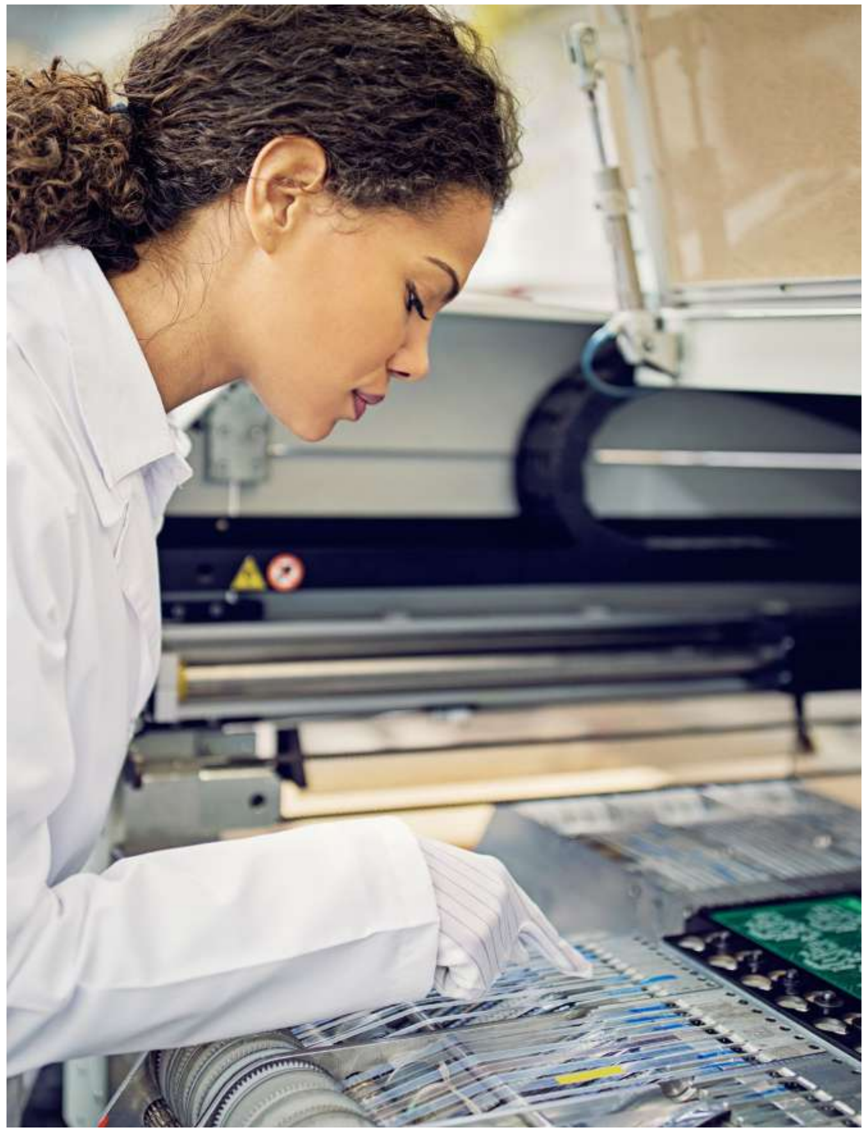
Carbon Solutions

Market leader in electrode paste and specialty products to metallurgical industries

End markets

- → Ferroalloys
- → Silicon
- → Aluminium
- → Iron foundries





3.8

NOK billion in total operating income

8%

of group sales*

**Share of group sales from external customers ex. Other*

Elkem is a leading producer of specialty carbon products for various metallurgical smelting processes and primary aluminium industries and the only producer with a global reach.

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. The Søderberg electrode technology has more than 100 years of successful technology leadership. The technology and carbon products are used by producers of silicon, ferrosilicon, ferrochromium, ferronickel, ferromanganese, silicomanganese, calcium carbide and copper and platinum matte.

The main market drivers are linked to the production of steel and ferroalloys and high-quality electrodes are critical for the customer's productivity.

The division's strategy is based on selective growth opportunities, sustainable low-cost positions and high-quality products giving status as preferred supplier.

6 main plants

Norway	Kristiansand
Brazil	Serra (Carboindustrial and Carboderivados)
South Africa	Emalahleni
China	Shizuishan
Malaysia	Bintulu

Key figures

	2022	2021	2020	2019	2018
Total operating income (in NOK million)	**3 752**	2 176	1 870	1 838	1 895
EBITDA (in NOK million)	**1 166**	508	437	312	335
EBITDA margin (in %)	**31%**	23%	23%	17%	18%
Number of employees	**401**	395	394	420	422
Sales volume (thousands metric tonnes)	**302**	294	256	257	289

The Elkem share

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

NOK 22.5 bn

Elkem's market cap as at 31 December 2022

NOK 6.00

dividend per share for 2022

12,874

shareholders

639.4

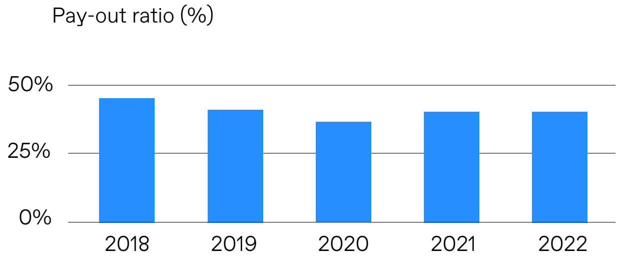
million shares

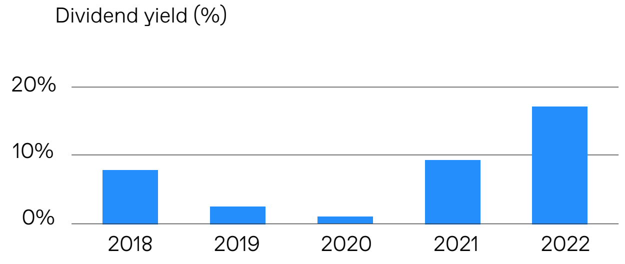
- Elkem ASA is a public limited company. The share is listed on the Oslo Stock Exchange and the ticker code is ELK
- Elkem ASA was re-listed on Oslo Stock Exchange on 22 March 2018
- Elkem ASA has one share class with 639,441,378 ordinary shares, each with a nominal value of NOK 5
- All shares have equal rights and are freely transferable. Each share grants the holder one vote and there are no structures granting disproportionate voting rights
- Bluestar Elkem International Co. Ltd. SA, owned by China National Bluestar is the majority shareholder with 52.9%
- Nine analysts are covering Elkem, providing market updates and estimates for Elkem's financial development

Elkem's financial targets

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

Dividend overview





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

The proposed dividend for 2022, subject to approval from the annual general meeting in 2023, is NOK 6 per share, representing 40% of the group's profit for the year.

Year	Earnings per share	Dividend per share	Date proposed	Date approved	Ex date	Pay-out ratio	Dividend yield (%)
2022	15.09	6.00	08.02.2023	28.04.2023	02.05.2023	40%	17%
2021	7.49	3.00	09.02.2022	27.04.2022	28.04.2022	40 %	9 %
2020	0.41	0.15	09.02.2021	27.04.2021	28.04.2021	37 %	1 %
2019	1.47	0.60	12.02.2020	08.05.2020	11.02.2020	41 %	2 %
2018	5.74	2.60	11.02.2019	30.04.2019	02.05.2019	45 %	8 %

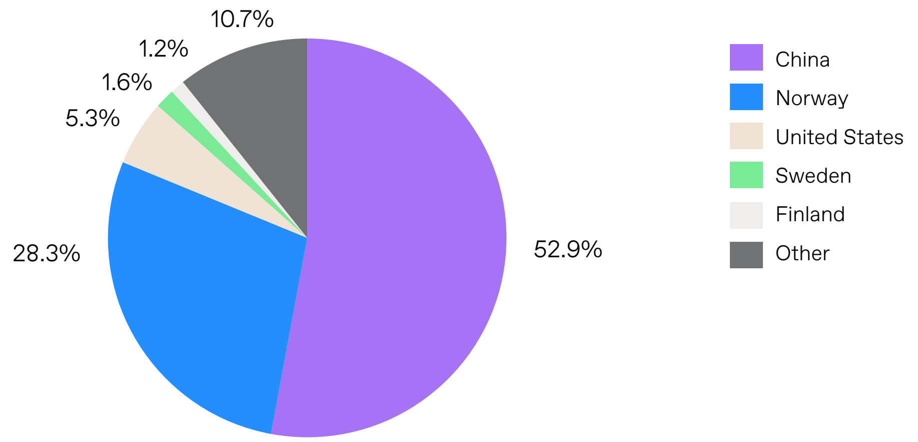
Share price development since listing

Common share data

	2022	2021	2020	2019	2018
Share price high (NOK)	43.70	38.50	29.60	36.10	45.00
Share price low (NOK)	27.30	25.70	11.20	20.20	21.00
Share price avg (NOK)	35.60	32.20	20.40	25.10	34.00
Share price year-end (NOK)	35.20	29.80	28.40	24.80	22.20
Volume	290 206 422	438 749 361	303 729 619	369 570 346	342 107 122
Turnover	10 324 893 777	14 103 001 272	6 114 487 641	9 438 910 774	10 506 950 753
EPS (NOK)	15.09	7.49	0.41	1.47	5.74
Market cap. year-end (NOK billion)	22.50	19.10	16.50	14.40	12.90
Shares outstanding for 2022	634 476 985	633 037 606	581 310 344	581 310 344	581 310 344
Shares issued	639 441 378	639 441 378	581 310 344	581 310 344	581 310 344

Geographical distribution of shareholders

As of 31 December 2022 Elkem had 12,874 shareholders



The 20 largest shareholders as of 31 December 2022

Rank	Name	Holding	Stake	Change from 2021 %		Citizenship
1	China National Bluestar	338 338 536	52.9 %	•	-	China
2	Folketrygdfondet	27 621 555	4.3 %	↓	-6 %	Norway
3	Alfred Berg Kapitalforvaltning	23 394 407	3.7 %	↑	4 %	Norway
4	Must Invest	14 000 000	2.2 %	↑	6 %	Norway
5	Storebrand Asset Management	13 588 521	2.1 %	↑	3 %	Norway
6	Pareto Asset Management	9 841 226	1.5 %	↑	22 %	Norway
7	Vanguard	9 512 660	1.5 %	↑	11 %	United States
8	Arctic Fund Management	7 800 305	1.2 %	↓	-16 %	Norway
9	Nordea Fonder	7 317 911	1.1 %	↓	-29 %	Norway
10	JP Morgan Asset Management	7 170 463	1.1 %	•	New	United States
11	BlackRock	5 399 562	0.9 %	↑	19 %	United States
12	Elkem ASA	4 964 393	0.8 %	↓	-22 %	Norway
13	DNB Asset Management AS	4 193 580	0.7 %	↓	-44 %	Norway
14	SEB Fonder	4 145 695	0.6 %	•	New	Sweden
15	Handelsbanken Fonder	4 062 771	0.6 %	↓	-19 %	Sweden
16	Eika Kapitalforvaltning	3 568 893	0.6 %	↓	-33 %	Norway
17	First Fondene	3 559 529	0.6 %	↓	-35 %	Norway
18	KLP Kapitalforvaltning AS	3 243 825	0.5 %	↓	-40 %	Norway
19	Forsvarets Personellservice	3 179 000	0.5 %	↑	30 %	Norway
20	Dimensional Fund Advisors	2 782 495	0.4 %	•	New	United States
	Total 20 largest shareholders	497 685 327	77.8 %			

Board of directors' report

The best financial result in Elkem's 118-year history

In 2022, Elkem recorded its best financial result ever, underlining Elkem's robust business model and strong cost positions. The underlying demand for Elkem's products has generally been good, with high prices for silicon and ferrosilicon products in particular.

Elkem's mission is to provide advanced silicon-based materials shaping a better and more sustainable future, adding value to stakeholders globally. The board of directors believe that safe and environmentally responsible operations is a prerequisite for value creation. With a highly competent organisation, well-invested assets, attractive market positions and ongoing growth initiatives, Elkem is committed to creating value for all stakeholders.

Elkem concluded 2022 with the best financial result in its 118-year history. The financial results were positively impacted by strong operational performance and attractive sales prices. The strong business performance has benefitted from Elkem's global footprint with competitive value chains from raw material sourcing to attractive end-market positions worldwide. Silicon Products' sales prices were at high levels in 2022, impacted by the energy crisis in Europe and capacity curtailments among other silicon and ferrosilicon producers. The good financial results were supported by dedicated efforts from all employees worldwide, ensuring operational improvements, increased specialisation and attractive investments, further strengthening Elkem's competitiveness. Towards the end of 2022, the global economy was characterised by rapid inflation, increasing interest rates and a slowdown in economic activity. However, the board of directors believes that the long-term underlying growth prospects remain positive for Elkem and is of the opinion that Elkem has a solid asset base and financial capability to support further growth, creating value for all of the group's stakeholders.

Elkem's consolidated operating income increased by 36% Year-over-Year (YoY) to NOK 45,898 million in 2022. The EBITDA [1] margin was 28% compared to 23% in 2021.

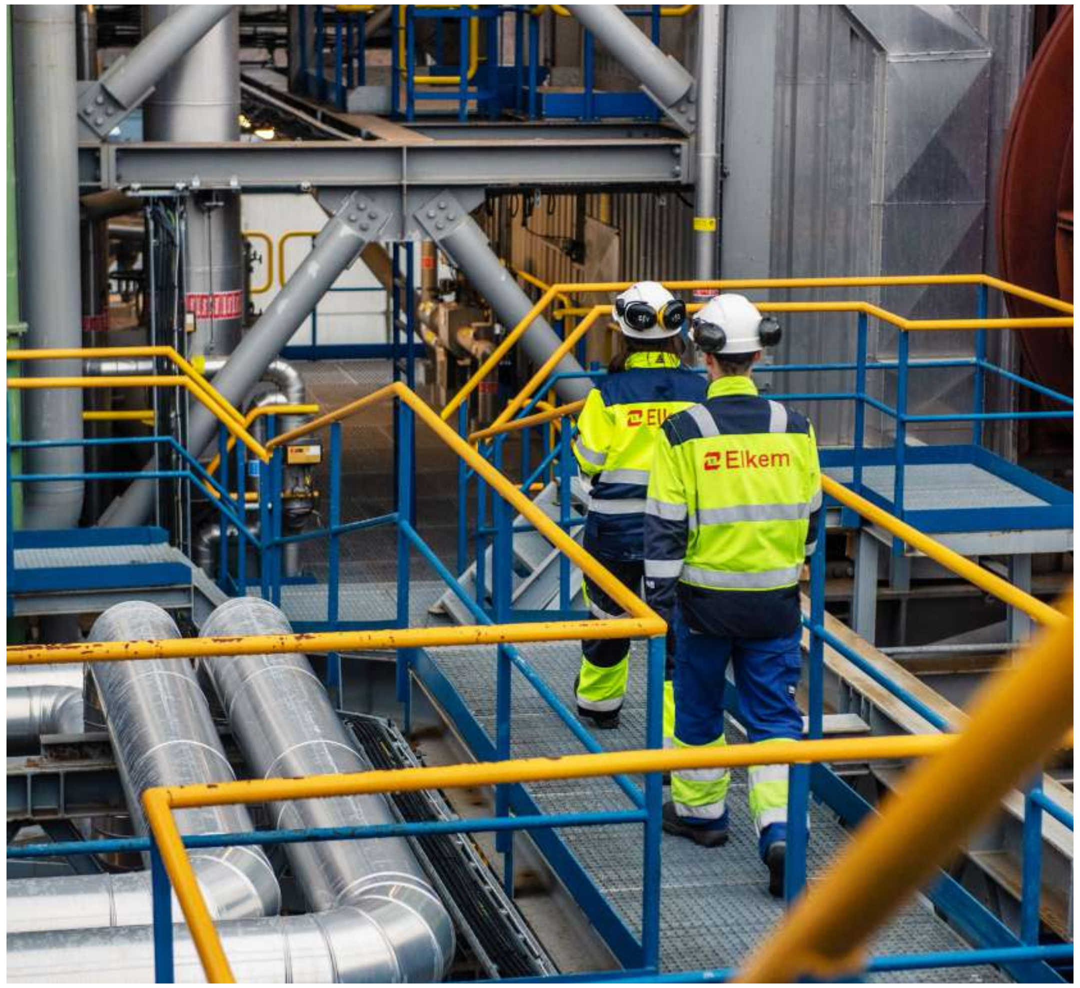
The leverage [2] ratio was 0.2x as at 31 December 2022. This is below the leverage target of 1.0x to 2.0x over the cycle and is a consequence of the strong result for the year.

Elkem's policy is to pay a dividend of 30-50% of the profit for the year. The board of directors has proposed a dividend payment of NOK 6.00 per share for 2022, subject to approval at the annual general meeting, which would represent 40% of profit for the year. The board of directors believes the proposed dividend is appropriate based on the strong financial result and solid financial position, while also taking weaker market outlook and investment plans into consideration. Adjusted for the proposed dividend for 2022, leverage ratio would be 0.5x at 31 December 2022.

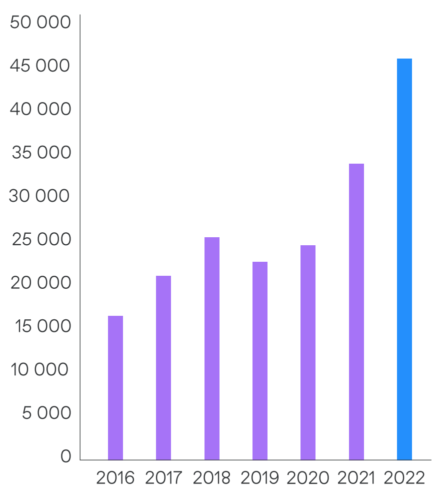
To remain a safe workplace is always the first priority for Elkem. A reinforced Health, Safety and Environment (HSE) system is now being rolled out globally. A comprehensive understanding of health and safety risks has the highest priority in the company, and the understanding is founded on critical process control combined with a culture of precision and continuous improvement.

Environmental, Social and Governance (ESG) is essential for Elkem, enabling environmentally friendly and socially responsible production of advanced silicon-based materials. Elkem aims to take a green leadership and be part of the solution to combat climate change by reducing our emissions, supplying the green transition, and enabling circular economies. Elkem is continuously pursuing its global climate roadmap to reduce the average product group carbon footprint by 39% by 2031 and achieve carbon-neutral production globally by 2050.

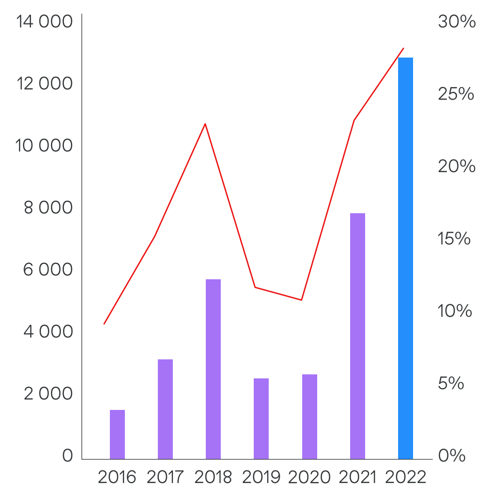
[1] *EBITDA commented under APM section*
[2] *Leverage ratio commented under APM section*



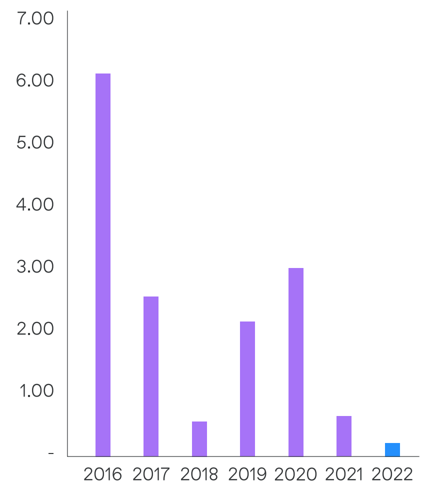
Total operating income
NOK million



EBITDA[1]
NOK million



Leverage[2] ratio



Furthermore, social and governance principles are advocated to support a diverse workforce built on respect and inclusive work culture, and protection of human rights throughout the value chains.

Key business developments 2022

Investments supporting growth and specialisation

Elkem's ambition is to grow revenue by 5-10% per year through the cycle supported by organic growth initiatives and acquisitions. Key investment projects in 2022 include:

- Silicones capacity expansion projects in France and China. The projects are progressing according to plan, targeting upstream capacity increase of 25% in France and 50% in China. These landmark investments will strengthen Elkem's cost positions for upstream silicones, while supporting downstream expansions that meet attractive customer growth in key geographies.
- In January 2022, Elkem secured 100% ownership of the Elkem Salten energy recovery plant through acquiring the remaining 50% stake from Kvitebjørn Energi. The plant recovers 28% of the electrical energy used at Elkem Salten, equal to the power consumption of about 15,000 Norwegian households. The transaction provides increased strategic flexibility to Elkem.
- In April 2022, Elkem made a decision to invest NOK 150 million in a flagship R&I centre in Shanghai, China. The new R&I centre will house several application centres addressing the development trends in key industries such as high-performance silicone products for EVs, medical devices, cosmetics, coating materials for textile, leather and airbags, and products for 3D printing.
- In June 2022, Elkem acquired KeyVest Belgium S.A. a specialist company in sourcing of materials and production of metal powders to the refractory industry and other segments including advanced ceramics. This will expand Elkem's product portfolio, enabling further growth within specialised silicon products, and improved service level and processing capabilities.
- In September 2022, Elkem celebrated the opening of its new specialised silicones facility in York, SC in the US. The facility will produce high purity silicone materials meeting the strict requirements in medical implantable and pharmaceutical applications. Elkem aims to be a leading silicone supplier to the healthcare industry and the new facility opens a potential high-margin market of more than NOK 3 billion in annual revenue.

Strategic initiatives for continued value creation

Key initiatives to ensure growth and create shareholder value have been implemented during the year, providing a solid basis for value creation.

- In 2022, Elkem announced a partnership with Hydro and Altor to accelerate the growth of Vianode, a producer of sustainable battery materials. Hydro and Altor Equity Partners have each acquired 30% ownership in Vianode, while Elkem retains the remaining 40% ownership. Vianode, with the backing of its owners, has decided to invest in the first industrial-scale plant for sustainable battery materials at Herøya in Norway. The investment for this phase 1 investment amounts to around NOK 2 billion.
- In 2022, Elkem signed a new loan facilities agreement of EUR 1,000 million. The facilities agreement includes sustainability performance targets linked to health and safety and reduction of the group's product carbon footprint. In addition, Elkem successfully placed a series of floating rate loans in the Schuldchein market, amounting to EUR 200 million.
- Access to renewable power at competitive terms is a key requirement for sustainable upstream production of silicon and ferrosilicon. In the second quarter, Elkem entered into a new 7-year power contract in Norway starting from 2027 with an aggregate volume of 2.5 TWh. Elkem has hedged approximately 80% of its power consumption in Norway until 2026 at competitive rates.

ESG and climate roadmap is essential in Elkem

People and safety are at the core of Elkem, alongside sustainable operations conducted responsibly through operational excellence. Elkem shall be an attractive employer and aims to be one of the winners in the green transition, taking its part to combat climate change.

- In February 2022, Elkem was awarded the Platinum rating on sustainability transparency from EcoVadis, one of the world's largest and most trusted providers of business sustainability ratings. This positions Elkem among the top 1% of the companies evaluated worldwide.
- In June 2022, Elkem entered into long-term contracts for two climate-friendly ships for North Sea operation, enabling the use of green methanol as fuel, featuring high safety standards and backed by a strong business case. Both vessels are expected to be in operation from the second half of 2024.
- In December 2022, Elkem was awarded double A- scores from CDP for the company's efforts on climate and forests. The company achieved a B score on water security. To earn an A score from CDP, organisations must show environmental leadership. Companies that score a B have addressed the environmental impacts of their business and ensure good environmental management.
- Elkem aims to reduce its total fossil CO_2 emissions by 28% from 2020-31 and increase the supply of products to green transition, resulting in a 39% improvement of its average product carbon footprint in the same period. Elkem's long-term goal is net-zero emissions by 2050.

About Elkem

Established in 1904, Elkem is one of the world's leading providers of advanced silicon-based materials shaping a better and more sustainable future. Elkem is a publicly listed company on the Oslo Stock Exchange (ticker code: ELK) and is headquartered in Oslo, Norway. The company has more than 7,300 employees, 30 production sites and an extensive network of sales offices worldwide. In 2022 Elkem had a total operating income of NOK 45.9 billion. To learn more, please visit www.elkem.com. ↗

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 organised its operations into three business divisions: Silicones, a fully integrated silicones producer; Silicon Products, a provider of silicon, ferrosilicon, foundry alloys, Microsilica and related speciality products; and Carbon Solutions, a supplier of electrode paste and speciality products to the ferroalloys, silicon and aluminium industries.

The Silicones division is one of the world's leading fully integrated silicone companies, with more than 4,600 employees and a global footprint. The division has R&I centres in Europe and Asia, sales offices worldwide, and plants in China, France, Germany, Italy, Spain, USA, Brazil, India, and South Korea. The Silicones division represents 42% of the Group total operating income.

The markets for the Silicones division's products are large and growing. Demand is driven by a number of megatrends, such as the green transition, digitalisation and energy demand growth. The Silicones division serves diverse markets, from electric cars to construction, via electronics, aerospace, healthcare, personal care, packaging, airbag coating and more. Elkem has a comprehensive range of silicone products (> 5000 stock keeping units) with leading market positions in engineering elastomers for EV's, coatings for packaging, hygiene and bakery paper and airbag coatings.

The Silicon Products division is a world-leading supplier of silicon, ferrosilicon, foundry alloys, Microsilica, and other speciality products. The Silicon Products division represents 50% of the Group operating income. Silicon Products has about 1,900 employees and has plants in Norway, Iceland, Canada, India, Paraguay and China, and quartz mines in Norway and Spain.

Silicon has a number of favourable chemical and physical properties, including semi-conductivity, making it highly versatile for numerous industrial and electronic applications. As such, it has a wide range of applications, predominantly as an alloying material for aluminium and in the production of silicones and polysilicon for electronics and solar cells. Ferrosilicon and foundry alloys are used in the steel industry and iron foundry industry, respectively. The Silicon Products division serves customers in a number of end markets, such as chemicals, aluminium, electronics, automotive, speciality steel segments, solar, construction, refractories, and oil & gas. China has been the largest growth market for silicon over the last years and is expected to remain an important growth engine for global demand.

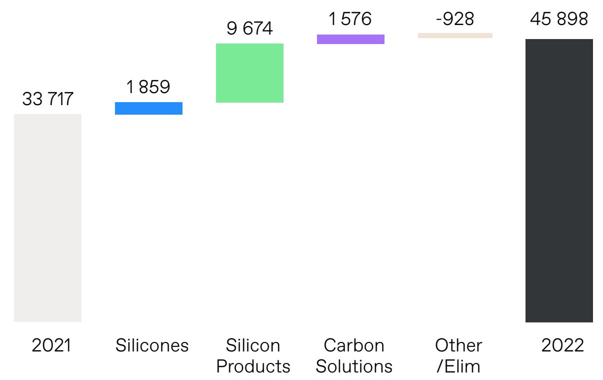
The Carbon Solutions division is the world-leading supplier of electrode paste, prebaked electrodes and speciality products to the ferroalloys, silicon, and aluminium industries. The division has approximately 400 employees and plants in Norway, South Africa, Brazil, Malaysia, and China. The Carbon Solutions division accounts for approximately 8% of Elkem's operating income from external customers. The steel and aluminium industries account for a significant portion of the division's end-user applications and, as a result, drive the demand dynamics in the industry.

Financial performance

The consolidated financial statements are prepared and based on International Financial Reporting Standards (IFRS) as endorsed by the European Union (EU) and effective at 31 December 2022.

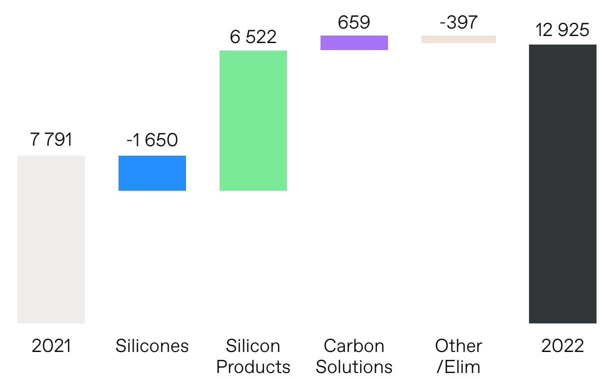
Consolidated profit and loss statement
Consolidated operating income for the Elkem group amounted to NOK 45,898 million compared to NOK 33,717 million in 2021. The 36% increase was driven by higher prices in all divisions. The Silicones division saw an 11% increase in operating income supported by increased prices for specialities, in addition to good commodity prices in the APAC region during the first half of the year. Sales volumes decreased compared to 2021 mainly due to weaker demand in Europe and the US. Operating income for the Silicon Products division increased by 65% due to favourable silicon, ferrosilicon, and foundry prices throughout the year, in addition to improved specialities sales volume. Carbon Solutions' operating income increased by 73%, driven by higher prices countering higher raw material and energy prices in addition to higher sales volumes.

Operating income
NOK million



Consolidated EBITDA ended at NOK 12,925 million compared to NOK 7,791 million in 2021. The corresponding margin increased from 23% in 2021 to 28% in 2022. EBITDA improved YoY supported by strong EBITDA from Silicon Products and Carbon Solutions primarily driven by higher sales prices, increased specialities sales volumes and attractive cost positions. Silicones delivered weaker EBITDA due to higher raw material cost. We refer to "Divisions business performance" for further descriptions.

EBITDA
NOK million



Consolidated operating profit was NOK 12,414 million in 2022 compared to NOK 5,785 million in 2021, an increase of NOK 6,629 million explained mainly by improved consolidated EBITDA, partially countered by increased amortisation, depreciation and impairment losses. Amortisation and depreciation were NOK 1,999 million in 2022 compared to NOK 1,816 million in 2021. The increase in amortisation and depreciation is attributed to higher investment levels from 2020 to 2022. Impairment losses were NOK 28 million in 2022 compared to NOK 76 million in 2021. Other items were positive NOK 2,151 million in 2022 compared to positive NOK 10 million in 2021. Other items are largely related to the net impact from the change in fair value of commodity contracts related to power in Norway, embedded EUR derivatives in power contracts, foreign exchange gains, and gains from the sale of shares in Vianode AS. This was partially countered by restoration expenses related to business in Canada and business projects and acquisitions expenses.

Consolidated profit before income tax ended at NOK 12,236 million for the year, compared to NOK 5,827 million in 2021.

Net financial items were NOK 178 million negative in 2022 compared to NOK 42 million positive in 2021. The share of profit from equity-accounted financial investments was negative NOK 17 million in 2022 compared to positive NOK 37 million in 2021. Finance income was NOK 67 million and foreign exchange gains were NOK 85 million in 2022 compared to NOK 40 million and NOK 241 million in 2021 respectively. Finance expenses were NOK 313 million compared to NOK 276 million in 2021.

The consolidated profit for the year was NOK 9,642 million, after NOK 2,594 million in tax expenses. The tax expenses mainly consisted of taxes on the current year's result. In addition, the tax expenses included effects on changes in both non-recognised deferred tax assets and the change in applicable tax rates from 2021 to 2022.

The main items recognised in the consolidated statement of other comprehensive income are related to cash flow hedges (foreign currency hedges and power price hedges) and currency translation differences. These items had a net income of NOK 1,234 million for 2022, compared to a net income of NOK 1,078 million in 2021.

The share of consolidated profit attributable to shareholders of Elkem ASA was NOK 9,561 million, resulting in basic earnings per share NOK 15.09 per share in 2022 compared to NOK 7.49 per share in 2021.

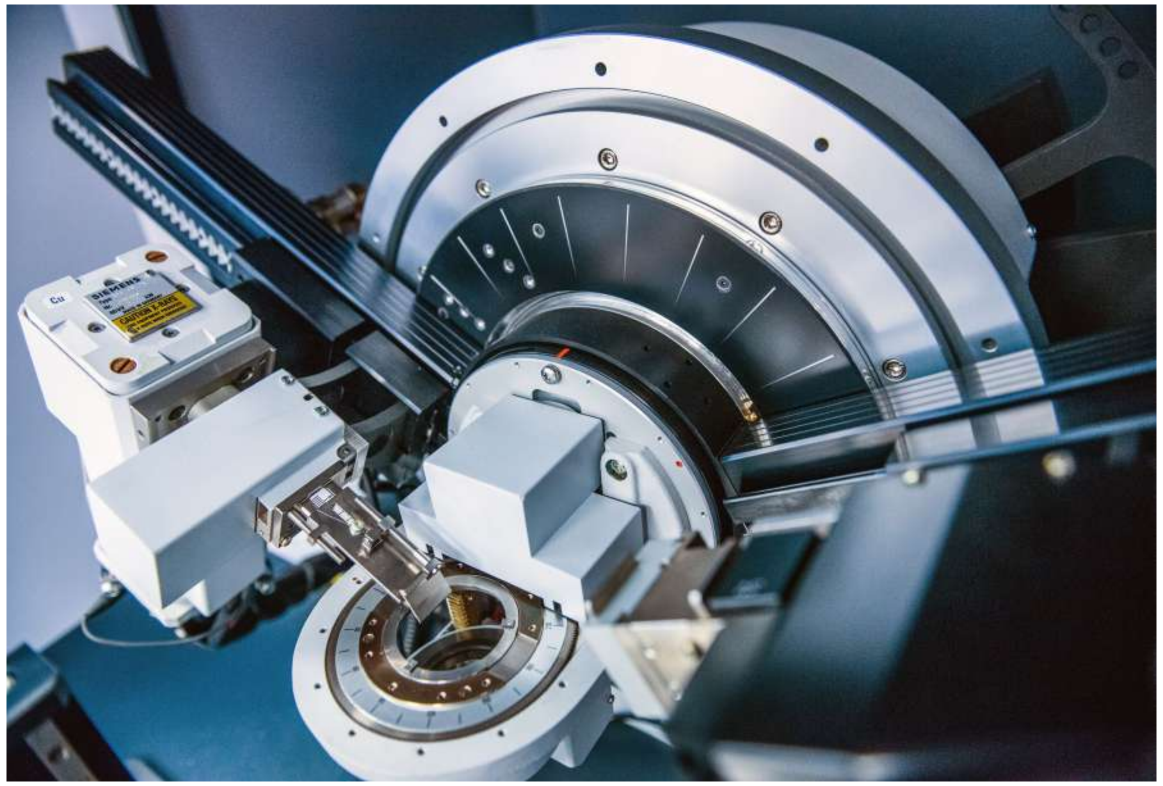
The total comprehensive income for the year was NOK 10,876 million in 2022 compared to NOK 5,742 million in 2021.

Divisions' business performance
The Silicones division had an operating income in 2022 of NOK 19,288 million (NOK 17,429 million in 2021). EBITDA was NOK 2,022 million in 2022 compared to NOK 3,672 million in 2021. The EBITDA decrease was caused by significantly higher raw material costs particularly for silicon in both France and China. This was only partially countered by higher realised sales prices of specialities and positive currency effects. From attractive levels in the first half of 2022, commodity sales prices in China decreased to weak levels towards the end of the year driven by oversupply and negative demand impact from the Covid-19 situation. Sales volumes decreased by 4% YoY from 409,000 metric tonnes (mt) in 2021 to 394,000 mt in 2022.

The Silicon Products division had an operating income in 2022 of NOK 24,457 million (NOK 14,783 million in 2021). EBITDA was NOK 10,224 million in 2022 compared to NOK 3,702 million in 2021. The record high EBITDA was mainly attributable to good operations and higher sales prices for all products, particularly for silicon and ferrosilicon, in addition to higher sales prices and sales volumes of foundry alloys and attractive cost positions. The energy crisis in Europe and capacity curtailments among silicon and ferrosilicon producers resulted in a tight supply situation in Europe. Sales volumes decreased from 502,000 mt in 2021 to 490,000 mt in 2022. The positive sales price impact was only partially offset by higher raw material cost of reduction materials such as coal and coke.

The Carbon Solutions division had an operating income in 2022 of NOK 3,761 million (NOK 2,176 million in 2021). EBITDA was record high at NOK 1,166 million in 2022 compared to NOK 508 million in 2021. The improved EBITDA was mainly due to higher prices that countered increased raw material cost, strong operational excellence and sales volumes increasing by 3% from 294,000 mt in 2021 to 302,000 mt in 2022.

Cash flow and statement of financial position
Cash flow from operating activities was NOK 9,314 million for the year, compared to NOK 4,913 million in 2021. Positive cash flow contribution from EBITDA (NOK 12,925 million) was countered by increased working capital (NOK 1,583 million), gains from equity accounted companies (NOK 108 million), changes in fair value of derivatives (NOK 1,139 million), changes in provisions, bills receivable and other (NOK 539 million), gains on disposal of subsidiaries (NOK 159 million), interest payments (NOK 319 million) and higher income taxes paid (NOK 1,345 million).



Amortisation, depreciation and impairment increased in 2022. The increase is attributed to higher investment levels during the past few years, particularly in Silicones in China, but also considerable investments in Europe and the Americas, underlining the dual-play growth strategy and green leadership ambition.

Changes in working capital were negative YoY mainly due to an increase in inventories. Higher inventories were explained by higher raw material prices, impacting the value of raw materials and finished goods, and higher volumes of critical raw materials. Management continues the high focus on optimising working capital. Optimisation actions include a careful review and adjustments to match production and sales forecasts, optimising minimum and maximum stock levels, an active push to sell slow-moving stocks, individual follow-up of credit days towards customers and suppliers, in addition to adjustments of factoring arrangements for the group.

Cash flow from investing activities amounted to NOK 4,404 million for the year, compared to NOK 3,185 million in 2021. Elkem invested NOK 1,682 million in maintenance, environment, health and safety (EHS), and productivity improvement initiatives during the year. In addition, Elkem had NOK 2,797 million in strategic investments. The cash flow from investing activities in 2022 is mainly explained by investments in the Silicones division, investments in Vianode AS and a pilot for biogenic reduction materials in Canada.

Cash flow from financing activities was negative NOK 2,899 million, compared to positive NOK 2,056 million in 2021 supported by capital increase. The negative cash flow from financing activities in 2022 was mainly related to dividends paid to the owners (NOK 1,900 million). In addition, other items in cash flow from financing activities in 2022 that were net negative include changes in bills payables and restricted deposits (NOK 218 million), payment of lease liabilities (NOK 116 million) and payment of interest-bearing loans and borrowings (NOK 7,237 million) countered by new interest-bearing loans and borrowings (NOK 6,648 million).

Change in cash and cash equivalents was NOK 2,011 million for the year.

Elkem's financial position improved during 2022 due to the strong financial results. The group's equity ratio improved from 47% in 2021 to 55% at the end of the year. The leverage ratio for the group was reduced from 0.6x in 2021 to 0.2x at the end of 2022. The board of directors views the group's underlying competitive positions and the strong equity ratio as a good basis to support further growth of the group.

Total interest-bearing liabilities was NOK 12,278 million as of 31 December 2022, of which NOK 1,946 million matures in 2023. Debt maturities in 2023 mainly consist of short-term loans in China for local working capital financing. Cash and cash equivalents amounted to NOK 9,255 million in addition to NOK 6,356 million in undrawn credit facilities. Net interest-bearing debt [3] amounted to NOK 2,615 million as of 31 December 2022. The board views the group's cash and financial position to be strong.

Going concern

The board of directors is of the opinion that the Elkem Group has the ability to continue its business in the foreseeable future and hence confirms that the accounts have been prepared on a going concern basis and that this assumption is appropriate at the date for the accounts, and that the group, after the proposed dividend, has sufficient equity and liquidity to fulfil its obligations.

Strategic priorities

The board of directors conducts an annual review of Elkem's strategy. This review includes an assessment of strategic priorities and financial scenarios based on industry trends, market development and other framework conditions.

In the near term, there is macroeconomic uncertainty, and we expect a slowdown in global economic activity. Geopolitical tensions are on the rise and increasing trade barriers create risks. Elkem is among very few companies with complete and integrated value chains in different regions, making us less vulnerable to disruptions in supply chains and trade flows.

In the longer-term, global megatrends remain strong and are expected to drive demand for Elkem's products. Growth in Asia, combined with re-industrialisation in the West, will also create opportunities for Elkem, based on the company's geographic presence. Elkem aims to grow by more than 5% per year, with an EBITDA margin over the cycle of at least 15%.

The main strategic priorities are dual-play growth and green leadership. Dual-play growth means that Elkem will target balanced growth between geographic regions (East and West), and balanced growth across the value chain (Upstream and Downstream).

Green leadership means that Elkem aims to be part of the solution to combat climate change by reducing our emissions, supplying the green transition, and enabling circular economies. The target is to reduce overall CO_2 emissions by 28% within 2031. Elkem aims to grow its supplies of advanced materials to green markets such as better buildings, electric vehicles and renewable energy. In addition, we continue to work closely with customers and researchers to increase recycling within our own operations, as well as developing the eco-design of innovative products.

The focus on a higher degree of product specialisation through R&I and selected acquisitions remain a key strategic measure to improve and stabilise the group's profitability through the business cycle.

To support its strategic goals, Elkem will focus on operational excellence, digitalisation, people development and ESG. In addition, Elkem's divisions will focus on developing and maintaining sustainable low-cost positions. Together, these initiatives comprise the group's strategic and operational goals to secure profitable and sustainable growth. Our experience is that Elkem's integrated value chain provides significant competitive advantage and margin protection.

Operational excellence and the principles of lean manufacturing are deeply rooted in Elkem Business System (EBS). EBS is built on Elkem's core values and is designed to involve everyone in improvement activities and promote a culture of operational excellence, continuous improvement, and deep learning. The goal is to ensure that Elkem remains a competitive producer based on strong operational performance, economies of scale, and an integrated value chain from raw materials through to advanced end products.

To achieve this, Elkem focuses on developing its employees to identify problems and eliminate their root causes. Motivated and highly skilled people are essential for successful strategy implementation. In addition, Elkem is focusing on digitalisation as a strategic measure to accelerate improvement activities in the whole value chain. The goal is to make Elkem an increasingly data-driven company by implementing digital initiatives to streamline processes, optimising resource allocation, and developing cultural capabilities and agile working methods.

Research and innovation is vital to support and realise Elkem's strategy on sustainable growth and specialisation

Elkem devotes considerable effort and resources to Research and Innovation (R&I) activities with more than 2.5% of 2022 revenues dedicated to new products and new processes, including technical support to customers. With this investment, carried by more than 550 researchers around the world across 14 R&I and application centres, the R&I teams filed more than 35 new patents during the year. New products introduced less than five years old represent more than 20% of Elkem's turnover.

R&I efforts are key to create and develop innovative products for new market needs R&I and include environmentally friendly products and energy-efficient production technologies. This global optimisation of the value chain is at the heart of the projects managed by Elkem and is a key part of Elkem's strategy.

[3] *See APM section*

Elkem's R&I facilities within chemistry and new chemicals, new materials and supporting laboratories, play a crucial role in our customers' successes. Elkem's R&I efforts contribute to the development of new products with tailored properties for high-end markets, new additives for process aids, or reinforced materials and support with critical analysis information needed for troubleshooting. Elkem's R&I focus remains imperative to reach the group's ambition related to specialisation and growth based on global megatrends.

During 2022, Elkem put in place a proactive roadmap to remain competitive and be more responsive to customer needs and demands, which was implemented around the digitalisation of our R&I from data acquisition to formulation optimisation.

Open innovation and collaborative mindset
With around 30 national and European collaborative projects in partnerships with start-ups, small and medium-sized enterprises, academics and clusters, Elkem is highly recognised for its open and innovative mindset. Through collaboration, Elkem wants to be at the forefront of new technologies exploring mainly five essential topics, including:

→ Energy efficiency and CO_2 emission reduction by, for example, replacing fossil coal with biomass in the production of silicon and ferrosilicon alloys.

→ Circular economy, mainly on recycling (including waste and end-of-life) and eco-design (products and processes).

→ New materials, for instance in 3D printing and additive manufacturing processes, battery cells and batteries, and lightweight materials.

→ R&I digitalisation, processes and new materials modelling to speed up the capture of value.

→ Technology scouting to better anticipate the future needs of our customers and markets.

Highlights include:
→ Focus on 3D printing
  → 3Deus Dynamics, a Silicones 3D printing start-up in which Elkem has invested with a long-term perspective, has just been awarded by the European Innovation Council (EIC accelerator) funding of more than 2.5 million euros to develop the medicine of the future.
→ Focus on new materials
  → Elkem Silicones was named a winner in the renowned worldwide competition of the 2022 R&I 100 awards in the Mechanical Materials category with the BLUESIL™ RT Foam Range with Silicone Solutions for Electric Vehicle Thermal Management.
  → "Cast the Future", Elkem Silicon Products received the highly coveted "Best Paper Gold Award Technology" for the superb paper outlining the performance of specialised cerium inoculants to produce high integrity ductile iron castings.

→ Focus on climate strategy and circular economy
  → A global roadmap includes the carbon management including CO_2 modelling, methodology for climate reporting, the carbon capture initiatives and the development in the future of new silicon processes (SiCaLo project in collaboration with Norwegian University of Science and Technology and SINTEF).
  → Project on chemical recycling of silicones' wastes reducing CO_2 emissions by 65% and waste by 75% (project in collaboration with University of Lyon and start-ups).

To maintain and develop this technological edge, Elkem is evolving through internal projects and the support of collaborative platforms, such as:

→ Axel One in Lyon, France, is one of the hubs for smart processes, online analysis, new materials and circular economy. The partnerships with the region and the French government have created a centre of excellence around the industry of the future, integrating environmental and societal concerns and process optimisation.

→ The pilot facility at Elkem's corporate R&I centre in Kristiansand, Norway, is an important asset for both process and product development. The partnership with the Norwegian Catapult Centre, Future Materials, and new collaborative projects, national and European, has further strengthened the position of the centre.

R&I initiatives and expansion
At Elkem's production sites, new applications are developed and supported by laboratory expertise and analysis to ensure that the latest technologies and capabilities are implemented in practice. In addition, the working methodology is used across all segments and markets to optimise the customer or market interaction.

In 2021, Elkem's new R&I centre ATRiON opened at the Saint-Fons site in Lyon, France, at the heart of the so-called "Chemistry Valley" to reinforce innovation within Elkem and Open Innovation together with external partners. The state-of-the-art R&I centre is dedicated to the Silicones division and brings together more than 130 researchers.

In 2022, Elkem announced a plan to invest more than RMB 100 million to enlarge its Flagship Asia-Pacific R&I Center in Shanghai. The centre will be created to help Elkem Silicones' customers in the Asia-Pacific region improve their innovation capabilities, accelerate the development of new products and applications and seize emerging opportunities.

As a part of Elkem's specialisation strategy, the Silicones division has increased R&I personnel by more than 20% worldwide in the last four years, with a clear strategy in place to leverage this capacity worldwide.

Sustainability: Environmental, social and governance (ESG)

Elkem is a signatory to the UN Global Compact and is committed to develop the business in line with the UN Sustainable Development Goals and the Paris agreement.

The group believes that safe and environmentally friendly production will be even more important in the future and that together with its customers and partners, the group can create both today's and tomorrow's solutions.

Elkem works to ensure best practices within ESG to ensure socially responsible and sustainable business practices for all stakeholders. Elkem evaluates the sustainability materiality at least once a year in accordance with the widely used reporting framework Global Reporting Initiative (GRI). Prioritised targets and actions are introduced to make sure that improvements are implemented. The key topics that have been identified as material according to the updated GRI 2021 materiality assessment, the material topics for Elkem in 2022 are CO_2 and other GHG emission reductions, including energy management, local emissions, biodiversity, water management, waste management and circularity, health and safety on site, environmental and social due diligence in the supply chain, responsible economic practices, product governance and supplying the green transition.

More information about our response to the material topics is found in the ESG report, which details our commitments and activities within environmental, social and governance and is prepared according to GRI framework. The ESG report can be found on page 74. This report is an integral part of the annual report and has been independently verified by a third party. ↗

Health, Safety and Environment

HSE is the backbone of Elkem's business and is always the first priority. Our HSE efforts are based on a zero-harm philosophy and our HSE management system is systematically implemented to work towards this goal.

The safety of our employees is the most critical pillar of our philosophy. The group strongly believes, and has demonstrated, that Elkem's operations can be done without any harm to employees and people. Elkem uses considerable resources to identify hazards and to implement appropriate measures to reduce risk to an acceptable level so that all employees and contractors performing working at Elkem can leave work just as healthy as they were when they arrived.

In 2023 we will be rolling out a new safety management system called FORUS to enhance this work. The system is aligned to global best practice related to HSE (Health, Safety and Environment) and will be used to improve our overall HSE performance.

Elkem has a strict reporting regime for injuries and requires all injuries to be reported, investigated, and mitigated independently of the severity. Unfortunately, Elkem experienced two subcontractor fatalities at our sites in 2022. In addition, there was one high-consequence work-related injury for our own employees. This shows that our health and safety work must be maintained and improved and that we can never lose focus. The total recordable injury rate went down from 3.7 in 2021, to 3.2 in 2022, and the lost workday rate (LWR) was 0.9, down from 1.5 in 2021.

More detailed information about Elkem's management system, reporting, safety numbers and how the company follows up throughout the organisation and value chain can be found in the Social chapter in the ESG report, page 120.

In addition to a safe and healthy working environment, secure labour rights and respect for internationally recognised human rights in our own operations and the value chains are key priorities for Elkem. For more information about how the company assesses and addresses human and labour rights risks, please see the Social chapter in the ESG report, page 128.

Elkem affects the environment and communities around the world. Therefore, Elkem is always looking for new and innovative ways to reduce waste and emissions and to increase the yield from raw materials. This means using highly developed production technologies and running operations with resource-efficient processes. For more information about how Elkem is reducing its environmental footprint and increasing the positive impact of its products, see the ESG report under the chapter Environmental, page 98.

In accordance with the Transparency Act section 5, Elkem reports on human rights due diligence as part of our annual ESG report. The relevant account can be found in the chapters on "Human rights" (pp. 128-131) and "Responsible value chain management" (pp. 148-149). The ESG report is made available on Elkem's website.

Diversity, inclusion, and equality

Elkem is committed to creating equal opportunities in a diverse and inclusive working environment. The group appreciates that every individual is unique and valuable and should be respected for their individual abilities. Elkem expects that all colleagues act accordingly and promote the four Elkem values.

Elkem believes that its human capital is its most valuable asset. The collective sum of the individual differences, life experiences, knowledge, inventiveness, self-expression, unique capabilities, and talent that employees invest in their work represent a significant part of not only Elkem's culture but its reputation and the company's results. The group has zero-tolerance for any form of harassment or discrimination.

The company has well-established policies and practices related to diversity, equality, and inclusion (DEI). The policies include the code of conduct, human rights policy, people policy, and the global standard procedures cover processes such as, recruitment, working conditions, promotions, development, on- and off-boarding, and protection against harassment.

Elkem's DEI vision is to cultivate a diverse, equitable and inclusive workplace where all employees feel engaged, valued, and have a sense of belonging. Promoting diversity, inclusion, and equality are essential in attracting and retaining talent to establish and maintain profitability, competitive advantage, and sustained success at Elkem. The group's objective is to create a culture of inclusivity where all voices are heard. As a result, the company benefits from people who dare to ask questions, are not afraid to try new approaches and bring diverse perspectives to the table. By creating and sustaining a diverse, equal, and inclusive working culture, Elkem aims to increase its ability to deliver market-leading products and services to customers profitably. In 2022 Elkem conducted its first global employee engagement survey and both the high response rate and the overall high engagement score (above industry standard) provide good conditions for the company to continue its improvement work in all parts of the value chain. Please see the Activity and reporting duty report for updated 2022 information. ↗

Governance

The board of directors recognises the importance of good corporate governance, and the goal is to ensure the protection of all shareholders' interests and that the company complies with high ethical and social standards.

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

Elkem's board consist of 11 board members as of 31 December 2022, of which eight are shareholder-elected and three are employee-elected. Four of the shareholder-elected board members represent the majority shareholder, while the other four shareholder-elected members are independent. Elkem had seven board meetings in 2022. A detailed overview of the board members' attendance may be found in the board of directors' report on salary and other remuneration to leading personnel in Elkem.

The board of directors' report on corporate governance can be found on page 53 in this report and is an integral part of the Report of the board of directors.

Risk management

Elkem's board and management have a strong focus on risk management to monitor the group's risk profile, ensuring that adequate risk management processes are in place.

Elkem conducts a yearly risk mapping process based on interviews with divisions and corporate staff. Each risk is evaluated based on internal and external conditions and takes deemed likelihood, estimated financial impact, time horizon and mitigating activities into consideration. The purpose is to gain a thorough understanding of the group's risk profile and financial risk tolerance. A summary of the risk analysis is presented on page 68 in this annual report.

The evaluation of climate-related risks and opportunities has become an increasingly important part of Elkem's overall risk management processes. In 2021, Elkem implemented reporting on climate risks and opportunities according to TCFD. This framework has been further developed in 2022 and climate risks have become an integrated part of the risk mapping process.

Large crises can sometimes be triggered by events that are unexpected and unpredictable. Such events are often referred to as "black swans". Recent examples include

Covid-19, the war in Ukraine and the energy crisis in Europe. "Black swans" demonstrate the need for general risk preparedness and the need for proactive, professional and agile reaction to unforeseen and severe incidents. Elkem's robust business model and strong financial position have shown good resilience during the previous crisis scenarios.

The main business risks impacting the group's financial performance relate to sales prices and sales volumes for silicon-related materials and costs for key raw materials, energy and other consumables. The demand for silicon-based materials has increased, 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. Particularly in commodity markets, the sales prices are impacted by supply and demand developments. Elkem is seeking to mitigate and reduce the financial impact by investing in R&I and capturing specialised market positions to reduce commodity price exposure. In addition, Elkem's integrated value chain provides flexibility to change production between product groups and between commodities and specialties. Combined with diversified end-markets and long-term customer relationships, this is expected to reduce the market risk exposure.

Sanctions and regulatory framework conditions have also become increasingly important over the past years. Elkem has operations in many countries and could be exposed to trade tensions, sanctions and other changes in regulatory framework conditions. This could impact access to raw materials sourcing, as well as access to attractive end-markets. Breach of sanctions could also have severe consequences, for example on the group's financing arrangements or business activities. Elkem maintains a tight monitoring of the prevailing sanction lists and trade related restrictions to ensure compliance. Our integrated business model also means that Elkem is among very few companies with complete and integrated value chains in different regions.

Elkem operates in an international market and is exposed to a variety of financial risk factors, including currency risk, interest rate risk, liquidity risk and counterparty risk. Elkem's results, cash flow and equity are exposed to fluctuations in currency exchange rates, and Elkem seeks to reduce the impact from changes in currency exchange rates by a pre-defined cash flow hedging programme. The balance sheet risk is mitigated by keeping loans in foreign currencies to match the underlying assets. Elkem operates in capital intensive industries and is exposed to interest rate fluctuations on its net interest-bearing debt. Elkem has adopted a floating interest rate policy, which is deemed to give adequate protection through economic up- and downturns. Future hedging of interest-rate exposure may be evaluated based on exposure and sensitivity.

Liquidity risk relates to the company's ability to meet financial obligations. Elkem has a strong cash position, good access to undrawn credit facilities and satisfactory long-term financing arrangements. In 2022, Elkem raised new loan facilities of EUR 1,000 million and EUR 200 million in the bank and Schuldschein markets. The transactions have improved the group's maturity profile and liquidity position. Elkem has a credit rating from Scope and the rating of BBB/Stable was affirmed in 2022. The rating reflects Elkem's strong financial profile, solid position in the global silicone and advanced materials markets, as well as the company's solid global footprint.

Counterparty credit risk is managed by close monitoring of the receivables portfolio combined with credit insurance and payment conditions. Elkem's financial transactions and deposits are with solid and reputable banks.

Elkem has signed a liability insurance policy that covers any past, present or future member of the board of directors and company officer. The insurance covers pure financial losses, including defence costs, that the insured persons are legally obliged to pay, resulting from, or as a consequence of, a claim. The liability insurance covers any losses to the company and its subsidiaries due to securities claims and indemnified claims against the board of directors and company officers.

See note 27 in the financial statements for more details on financial risk.

Financial reporting process

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

The financial reporting plan includes controls and checks of reports to ensure consistency of the financial reporting. The financial information is consolidated and controlled at several levels within the respective divisions.

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

Future prospects

The past two years have been characterised by unprecedented societal impact related to Covid-19 and supply chain disruptions. The recent volatility in markets related to the energy crisis, combined with inflationary pressures, adds to the uncertainty regarding economic activity. The board of directors' assessment is that the fundamentals and long-term prospects for Elkem are positive. Elkem has a dedicated and competent global organisation, cost competitive integrated business model and a solid financial position at the end of 2022, providing a solid starting point to execute on the dual-play growth strategy and green leadership.

Elkem aims to grow both in the Western and Eastern world while focusing on sustainability and the green transition. Potential geopolitical polarisation could lead to trade barriers creating opportunities for dual-play providers. Climate risk and environmental regulations will require reduced emissions and more sustainable solutions, and Elkem is well positioned based on its high proportion of renewable electricity and targeted climate ambitions. Elkem will continue to pursue its main strategic initiatives to become top 3 in silicones worldwide and number 1 in silicon products and carbon solutions in the West.

Elkem's financial position is considered to be strong at the end of the year with a robust equity ratio, low leverage ratio and strong cash flow generation and liquidity position.

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 16,455 million in 2022 compared to NOK 9,740 million in 2021. The operating profit ended at NOK 7,543 million in 2022, compared to NOK 1,799 million in 2021.

The net change in cash and cash equivalents amounted to NOK 1,056 million. Cash flow from operating activities amounted to positive NOK 5,314 million, countered by investing activities of NOK 3,089 million and negative cash flow from financing activities of NOK 1,169 million.

Elkem ASA's equity was NOK 14,009 million at the end of 2022. The equity ratio ended at 40%. Profit for the year was NOK 5,990 million. The net interest-bearing debt amounted to NOK 2,301 million per 31 December 2022. Cash and cash equivalents amounted to NOK 5,316 million. The board of directors' view is that the dividend proposal for the year is appropriate based on the group's overall financial position and the current market outlook.

Allocation of 2022 net profit:
The profit for the year was NOK 5,990 million. The board of directors proposes to distribute NOK 6,00 per share corresponding to NOK 3,813 million as dividend distributed from other paid-in capital and retained earnings. In total the board of directors proposes the following allocation (in NOK million):

Dividends from other paid-in capital	**-2 716**
Dividends from retained earnings	**-1 097**
Profit for the year to retained earnings	**5 990**

The board of directors of Elkem ASA
Oslo, 8 March 2023

Zhigang Hao
Chair of the Board

Dag Jakob Opedal
Vice chair

Olivier Tillette de Clermont-Tonnerre
Board member

Yougen Ge
Board member

Jingwan Wu
Board member

Grace Tang
Board member

Nathalie Brunelle
Board member

Marianne Elisabeth Johnsen
Board member

Terje Andre Hanssen
Board member

Marianne Færøyvik
Board member

Thomas Eggan
Board member

Helge Aasen,
CEO, Elkem ASA

Board of directors 2022

Zhigang Hao
Chair

Dag Jakob Opedal
Vice chair

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Board member

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Board member

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Jingwan Wu
Board member

Grace Tang
Board member

Nathalie Brunelle
Board member

Marianne Færøyvik
Board member

Terje Andre Hanssen
Board member

Thomas Eggan
Board member

For more information, please see Elkem.com ↗

Corporate management 2022

Helge Aasen
CEO

Morten Viga
CFO

Katja Lehland
SVP Human Resources

Asbjørn Søvik
SVP Green Ventures & Digital

Håvard Moe
SVP Technology

Louis Vovelle
SVP Innovation and R&D

Frederic Jacquin
SVP Strategy & Business Development

Larry Zhang
SVP Silicones

Inge Grubben-Strømnes
SVP Silicon Products

Luiz Simao
SVP Carbon Solutions

For more information, please see Elkem.com ↗

Corporate governance

The board of directors' report on corporate governance

Good corporate governance is important to ensure confidence in the company and value creation in the best interest of shareholders, employees and other stakeholders. Governance criteria are, together with Environmental and Social criteria (ESG), increasingly used to evaluate the performance of a company. This report, combined with the ESG report, annual report and website, document Elkem's group activities and results.

Elkem is subject to corporate governance reporting requirements according to section 3-3b of the Norwegian Accounting Act and the Continuing obligations of stock exchange listed companies at Oslo Stock Exchange. Further, Elkem's board of directors endorses "The Norwegian Code of Practice for Corporate Governance" (the "Code"), most recently revised on 14 October 2021 and issued by the Norwegian Corporate Governance Policy Board (NCGB). The Code of Practice is available at www.nues.no.

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

Elkem generally follows the recommendations set out in the Code, but has deviations in the following sections:

→ Section 3. The board of directors' authorisation to increase the share capital corresponding to 10% of the current share capital can be used for several purposes, to ensure flexibility and ability to act quickly. Pursuant to the Code, such authorisation should be intended for a defined purpose.

→ Section 6. Voting on members to the board of directors and the nomination committee takes place as a combined vote, reference to section 7. Pursuant to the Code the shareholders should be able to vote on each individual candidate nominated for election. Due to unavailability of the chair, the board was represented by the presence of the vice chair at the annual general meeting in 2022.

→ Section 7. The nomination committee justifies its proposals combined, and not separately for each board member pursuant to the Code. The nomination committee focuses on the combined qualifications and experience, as well as diversification on background and gender.

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, strategies, and risk profile 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, strategy, and risk profile on a yearly basis.

Elkem aspires 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. A summary of the deviations is also provided above.

No deviations from the code.

2. Business

Elkem's mission is to provide advanced silicon-based materials shaping a better and more sustainable future. Elkem develops its business in support of the ambitions of the UN Sustainable Development Goals and the Paris agreement. Our strategy is focused on dual play growth, which means that growth should be balanced both geographically and across the value chain. Green leadership is a key part of Elkem's new strategy, with focus on low CO_2 emissions, and supplies to the green transition and creating green ventures. Operational excellence, a higher degree of specialisation, and securing sustainable low-cost positions are key strategic goals on divisional level.

Elkem's business scope is clearly described in section 3 of the articles of association:

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

With a strong track record since 1904, Elkem is one of the world's leading providers of advanced material solutions. The company is a fully integrated producer with operations throughout the silicon value chain and develops silicones, silicon products and carbon solutions by combining natural raw materials, renewable energy, and human ingenuity. Elkem helps its customers create and improve essential innovations like electric mobility, digital communications, health, and personal care as well as smarter and more sustainable cities.

Elkem is operating in capital intensive and cyclical industries and has 30 production sites and an extensive network of sales offices around the world. While this gives competitive strengths, it also gives exposure to a range of risk factors. The board of directors has defined goals and strategies for the business and has a clear focus on risk profiles and risk management to create value for the company's shareholders. In the past two years several incidents have caused significant market disruptions, for example the Covid-pandemic, the war in Ukraine, shortages of semi-conductors and power disruptions. Elkem has independent and fully integrated value chains both in the East and West and has managed well through these challenging conditions. More details on the main risks and risk management principles are presented in the annual report. See also section 10 below.

In 2022, the board has revised Elkem's strategy and set out dual play growth and green leadership as the main strategic priorities. Dual play growth means that Elkem will target balanced growth between geographic regions (East and West), and balanced growth across the value chain (upstream and downstream). Green leadership means that Elkem will work to strengthening the position as best in the industry on low CO_2 and growing supplies to green transition and creating green ventures. Focus on a higher degree of product specialisation through R&D and selected acquisitions is a key strategic measure to improve and stabilise the group's profitability through the business cycle. To support its strategic goals, Elkem will focus on operational excellence, digitalisation, people development and ESG (Environmental, Social and Governance). In addition, Elkem's divisions will focus on developing and maintain sustainable low-cost positions. Together these initiatives comprise the group's strategic and operational goals to secure profitable and sustainable growth.

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, based on earnings over the business cycle, is to have a leverage ratio of 1.0x - 2.0x, defined as net interest-bearing debt to EBITDA.

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

Elkem has implemented guidelines and procedures in accordance with section 3-3c of the Accounting Act, including code of conduct, policy on anti-corruption and CSR polices. Elkem's ESG report is included in the annual report for 2022.

Elkem's objectives, strategy, risk profile and financial targets are evaluated by the board of directors on an annual basis. The board also reviews the group's performance in ESG and evaluates the climate risks and opportunities and makes regular assessments to ensure compliance and high-quality standards.

No deviations from the Code.

3. Equity and dividends

As at 31 December 2022, the group's equity was NOK 28,773 million, which is equivalent to 55% of total assets. The total issued share capital of Elkem amounted to NOK 3,197,206,890 divided into 639,441,378 shares, each with a nominal value of NOK 5.

Elkem aims to maintain an investment grade profile and targets a leverage ratio, defined as net interest bearing debt to EBITDA, in the level of 1.0 - 2.0x, based on earnings over the business cycle. As at 31 December 2022, the leverage ratio was 0.2x. The leverage ratio has further strengthened compared to 31. December 2021 as a result of higher EBITDA and lower net interest-bearing debt, as Elkem has benefitted from a strong business model and attractive market positions. Adjusted for the proposed dividend payment for 2022, the leverage as at 31 December 2022 would have been 0.5x. The board of director's target is to ensure a leverage ratio in line with policy over the business cycle. In addition, Elkem aims to keep a robust liquidity reserve and a smooth maturity profile on its loan portfolio to mitigate financing and liquidity risk. As at 31 December 2022, available cash amounted to NOK 9,255 million providing a strong liquidity position. In addition, Elkem has undrawn credit facilities amounting to NOK 6,342 million.

In 2022, Elkem signed a new credit facilities agreement of EUR 1,000 million with its bank group. The credit facilities agreement consists of a revolving credit facility in the amount of EUR 500 million and a term loan facility in the amount of EUR 500 million. The facilities agreement also includes certain sustainability performance targets linked to health and safety and reduction of the group's carbon footprint. In addition, Elkem placed a series of floating rate loans amounting to EUR 200 million in the Schuldschein market. These transactions provide a solid financing position for the group. The board of directors considers Elkem's capital structure, including equity and debt structure, to be appropriate to the company's objective, strategy and risk profile.

The company's dividend policy is to aim for dividends distributions to reflect the underlying earnings and cash flow of the group and targets a dividend pay-out ratio of 30-50% of the group's profit for the year.

The proposed dividend pay-out for the financial year ended 31 December 2022 is NOK 3,813 million, which corresponds to NOK 6.00 per share. The proposed dividend represents 40% of the group's profit for 2022. The board of directors has not been granted any authorisation to approve distribution of dividends.

At the annual general meeting on 27 April 2022, the board of directors was granted the following authorisations:

→ In order to give the board of directors financial flexibility and enable quick access to the market in the event of an acquisition in return of shares or for general corporate purposes, the board of directors was granted an authorisation to increase the share capital with an amount up to NOK 319,720,689 corresponding to 10% of the current share capital. The authorisation covers share capital increases against contribution in kind and share capital increase in connections with mergers. The shareholders' preferential rights to new shares may be deviated from. The authorisation is valid until the annual general meeting in 2023, but no longer than to and including 30 June 2023. This authorisation was not utilised in the financial year ended 31 December 2022.

→ The board of directors was granted an authorisation to increase the share capital up to NOK 40,000,000 to be used in connection with the issuance of new shares under the company's share incentive scheme. The authorisation is valid until the annual general meeting in 2023, but no longer than to and including 30 June 2023. This authorisation was not utilised in the financial year ended 31 December 2022.

→ In order to allow the board of directors to utilise the mechanisms permitted by the Norwegian Public Limited Liability Companies Act to acquire own shares, the board of directors was granted an authorisation to acquire own shares with a total nominal value of up to NOK 319,720,689 corresponding to 10% of the current share capital. The maximum amount that can be paid for each share is NOK 150 and the minimum is NOK 1. The authorisation is valid until the annual general meeting in 2023, but no longer than to and including 30 June 2023. Under this authorisation the board of directors announced the acquisition of 5,000,000 own shares on 21 July 2022. The average purchase price per share was NOK 38.46. Parts of the own shares acquired have been sold under the share incentive programme and as at 31 December 2022 Elkem holds 4,964,393 own shares.

Deviations from the Code: The board of directors' authorisation to increase the share capital with an amount up to NOK 319,720,689, corresponding to 10% of the current share capital can be used for several purposes. Elkem believes that this authorisation is important in order to allow the board of directors, in the interest of time, to act quickly in connection with a transaction or other corporate events where it is in the shareholders and Elkem's interest to increase the share capital.

4. Equal treatment of shareholders

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

Elkem has carried out transactions in its own shares during 2022. These transactions were carried out through the stock exchange and ensured equal treatment of all shareholders. Elkem announced the acquisition of 5,000,000 own shares on 21 July 2022. The average purchase price per share was NOK 38.46. Elkem engaged a third party to carry out the share buybacks on behalf of the company and the third party managed the programme and made its trading decisions independently of Elkem.

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. Elkem has only one class of shares. Each share grants the holder one vote and there are no structures granting disproportionate voting rights.

No deviations from the Code.

6. General meetings

The board of directors will ensure that the company's shareholders can participate in the general meetings.

The annual general meeting in 2022 was held as a hybrid meeting. Shareholders had the option to either attend the general meeting physically or digitally by following the live audiocast of the meeting, submit questions relating to the items on the agenda and cast their votes in real time. The digital meeting was organised by DNB Bank ASA, Elkem's registrar in the Central Security Depository, Verdipapirsentralen ASA (Euronext Securities Oslo), and its subcontractor.

The board of directors will further ensure that:

→ notices for the general meetings are sent to all shareholders individually, or to their depository banks, at least 21 days in advance, that all matters to be considered by the meeting are specified and that relevant documents are made available on the company's website;

→ the resolutions and any supporting documentation are sufficiently detailed, comprehensive and specific, allowing shareholders to understand and form a view on all matters to be considered at the general meeting;

→ the CEO, the chair of the board of directors and the chair of the nomination committee attend the general meeting; and

→ the general meeting is able to elect an independent chair for the general meeting.

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

Shareholders who are unable to participate in 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. The Company will nominate a person to act as proxy.

All board members and members of the nomination committee are encouraged, but not obliged, to participate in the annual general meeting. The chair of board was represented by the presence of the vice chair at the annual general meeting in 2022, due to the unavailability of the chair.

Elkem has chosen not to follow the recommendation to vote separately on each candidate nominated for the board of directors and the nomination committee. The process of the nomination committee is focused on the combined qualification and experience of the proposed members to the board of directors and the nomination committee, and the voting should therefore also be carried out as a combined vote.

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

7. Nomination committee

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

After the general meeting in 2022 the nomination committee comprises the following members:

- → **Sverre S. Tysland** / Chair / Practicing lawyer / Independent / Re-elected in 2022 for a term of office of one (1) year until 2023;
- → **Zhu Xiaolei** / Committee member representing the majority shareholder / Re-elected in 2022 for a term of office of one (1) years until 2023; and
- → **Anne Kjølseth Ekerholdt** / Committee member / Practicing lawyer / Independent / Re-elected in 2022 for a term of office of one (1) year until 2023.

The members of the nomination committee have been elected to take into account the interests of shareholders in general and to consider and ensure compliance with the guidelines in section 9 of the Code regarding the composition and independence of the board of directors. The nomination committee does not include members of the board of directors or the executive management. The nomination committee shall make recommendations to the general meeting for the election of shareholder elected board members and members of the nomination committee, and the remuneration of the board of directors and the nomination committee. When nominating shareholder representatives to the board of directors, the nomination committee presents relevant information about the candidates, together with an evaluation of their independence.

In connection with the nomination committee's work with proposing candidates, and to ensure that the candidates represent a broad group of the company's shareholders, the nomination committee is in contact with the board of directors, the CEO and major shareholders. The nomination committee will consider holding individual discussions with each member of the board of directors, and furthermore, ensure that the board of directors is composed to comply with legal requirements and the corporate governance code.

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

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

8. Composition and independence of the board

As of 31 December 2022 the board of directors of Elkem comprises 11 members, of which eight members, including the chair, are shareholder elected. The remaining three members are elected by and among the company's employees.

As of 31 December 2022, the board of directors of Elkem comprise of the following persons:

- → **Zhigang Hao** / Chair / Representing the majority shareholder / Re-elected in 2021 for a term of office of two (2) years until 2023;
- → **Dag Jakob Opedal** / Vice chair / Independent / Re-elected in 2022 for a term of office of two (2) years until 2024;
- → **Olivier Tillette de Clermont-Tonnerre** / Board member / Representing the majority shareholder / Re-elected in 2022 for a term of office of two (2) years until 2024;
- → **Nathalie Brunelle** / Board member / Independent / Elected in 2022 as new board member for a term of two (2) years until 2024;
- → **Yougen Ge** / Board member / Representing the majority shareholder / Re-elected in 2021 for a term of office of two (2) years until 2023;
- → **Jingwan Wu** / Board member / Representing the majority shareholder / Elected in 2022 as new board member for a term of two (2) years until 2024;
- → **Grace Tang** / Board member / Independent / Elected in 2021 as new board member for a term of two (2) years until 2023;
- → **Marianne Elisabeth Johnsen** / Board member / Independent / Re-elected in 2021 for a term of office of two (2) years until 2023;
- → **Terje Andre Hanssen** / Board member / Employee representative / Elected for a term of office until the annual general meeting in 2024;
- → **Marianne Færøyvik** / Board member / Employee representative / Elected for a term of office until the annual general meeting in 2024 and;
- → **Thomas Eggan** / Board member / Employee representative / Elected for a term of office until the annual general meeting in 2024.

Anja-Isabel Dotzenrath did not seek re-election at the annual general meeting in 2022 and resigned from the board. Dotzenrath was replaced by Nathalie Brunelle. Jingwan Wu was elected new board member to fill the vacant position after Helge Aasen's resignation in 2021, following which the board comprised 10 members. In addition, Thomas Eggan has replaced Knut Sande as 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, four out of the current eight shareholder elected board members are independent of the company's majority shareholder. Further information on each of the board members is presented at www.elkem.com and information on their record of attendance at board meetings can be found in the board of directors' report on salary and other remuneration for leading personnel for 2022.

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 2022, the following board members owned shares in the company: Olivier Tillette de Clermont-Tonnerre (15,517 shares), Dag Jakob Opedal (40,000 shares), and Marianne Færøyvik (4,950 shares).

No deviations from the Code.

9. The work of the board of directors

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

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

The board of directors held seven board meetings in 2022. Two board members were absent from one meeting. Except for that, all board members attended all board meetings in 2022.

The instructions for the board of directors states how agreements with related parties shall be handled. 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. Agreements with related parties will be disclosed in the directors' annual report.

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

No deviations from the Code.

The audit committee

The board of directors has established an audit committee which is a working committee for the board of directors, preparing matters and acting in an advisory capacity. The audit committee is responsible for overseeing financial reporting and disclosure and assist 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. In 2022, the audit committee also assumed responsibility for preparatory work and supervision related to the board's management of sustainability and non-financial reporting, internal control over sustainability and non-financial reporting, and sustainability-related risk management.

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 comprised the following persons as of 31 December 2022:

→ **Dag Jakob Opedal** / Chair/ Independent

→ **Grace Tang** / Member / Independent

→ **Jingwan Wu** / Member / Representing the majority shareholder

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

The remuneration committee

The board of directors has appointed a remuneration committee which comprised the following persons as of 31 December 2022:

→ **Zhigang Hao** / Chairperson / Representing the majority shareholder

→ **Olivier Tillette de Clermont-Tonnerre** / Member / Representing the majority shareholder

→ **Marianne Elisabeth Johnsen** / Member / Independent

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

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

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

No deviations from the Code.

10. Risk management and internal control

It is ultimately the responsibility of the board of directors to ensure that the company has sound and appropriate internal control systems and risk management systems reflecting the extent and nature of the company's activities. Sound risk management is an important tool to create trust, ensure a good environment, health and safety standards and enhance value creation. Evaluation of climate related risks and opportunities have become an increasingly important part of Elkem's overall risk management processes. As part of this work Elkem has presented a global climate roadmap in 2021 and also reported on climate risks and opportunities according to Task Force on Climate-related Financial Disclosures (TCFD) reporting recommendations. The TCFD framework has been implemented as an integrated part of Elkem's yearly risk assessment.

Elkem complies with all laws and regulations that apply to the group's business activities. The group's code of conduct sets out the overall ethical guidelines, which apply to all Elkem employees, members of the board of directors as well as those acting on Elkem's behalf.
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. In 2022, Elkem has made an extensive review and update of its governing documents.

The board of directors conducts annual reviews of the company's most important areas of exposure to risk and such areas' internal control arrangements. A summary of the main risks is presented in the annual report. The focus on climate related risk has increased and is an integrated part of this assessment.

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

No deviations from the Code.

11. Remuneration of the board of directors

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

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

The board members, or companies associated with board members, have not been engaged in specific assignments for the company in addition to their appointments as members of the board of directors. The remunerations for the period from May 2022 until the annual general meeting in 2023 are as follows:

Board of directors:
→ Chair: NOK 819,000
→ Vice chair: NOK 614,250
→ Board members: NOK 409,500
→ Observers: NOK 204,750

Audit committee:
→ Leader: NOK 147,420
→ Member: NOK 98,280

Remuneration committee:
→ Leader: NOK 147,420
→ Members: NOK 98,280

The total compensation to members of the board of directors is disclosed in the board of directors' report on salary and other remuneration for leading personnel for 2022.

No deviations from the Code.

12. Remuneration of executive personnel

The board of directors prepares guidelines for the remuneration of executive management. These guidelines include the main principles for the company's remuneration policy and contributes to Elkem's commercial strategy, long-term interests and financial viability, which align the interests of the shareholders and the executive management. The guidelines are communicated to the annual general meeting and presented in a separate appendix to the agenda for the general meeting. A report on the salary and other remuneration to the executive management will be prepared in accordance with the rules of the Norwegian Public Companies Act and relevant regulations.

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. Such performance related remuneration is subject to an absolute limit.

No deviations from the Code.

13. Information and communications

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

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

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

In addition to the board of directors' dialogue with the company's shareholders at general meetings, the board of directors promotes suitable arrangements for shareholders to communicate with the company at other times. The board of directors have delegated this task to the IR team. Elkem has held regular investor meetings in connection with each of the quarterly presentations in 2022 and attended several investor conferences. In addition, Elkem arranged a Capital Markets Update in 2022 in connection with the company's results presentation for the third quarter. The IR team has conducted physical and electronic meetings with both domestic and international investors from for example Great Britain, United States, Germany, France and Switzerland. The plan is to arrange regular investor meetings and capital market updates 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 52.9% of the shares as of 31 December 2022. Elkem has not been subject to any takeover bids in 2022.

In the event of a takeover bid, the board of directors and executive management each have an individual responsibility to ensure that the company's shareholders are treated equally and that there are no unnecessary interruptions to the company's business activities. The board of directors has a particular responsibility in ensuring that the shareholders have sufficient information and time to assess the offer. In the event of a take-over process, the board of directors shall abide by the principles of the Code, and also ensure that the following take place:

→ the board of directors will not seek to hinder or obstruct any takeover offer for the company's operations or shares unless they have valid and particular reasons for doing so;

→ the board of directors shall not exercise mandates or pass any resolutions with the intention of obstructing the takeover offer unless this is approved by the general meeting following announcement of the offer;

→ the board of directors shall not undertake any actions intended to give shareholders or others an unreasonable advantage at the expense of other shareholders or the company;

→ the board of directors shall not enter into an agreement with any offeror that limits the company's ability to arrange other offers for the company's shares, unless it is self-evident that such an agreement is in the common interest of the company and its shareholders;

→ the board of directors and executive management shall not institute measures with the intention of protecting the personal interests of its members at the expense of the interests of the shareholders; and

→ the board of directors must be aware of the particular duty it has for ensuring that the values and interests of the shareholders are protected.

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

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

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

No deviations from the Code.

15. Auditor

The board of directors is responsible for ensuring that the board and the audit committee are provided with sufficient insight into the work of the auditor. In this regard, the board of directors ensured that the auditor submitted the main features of the plan for the audit of the company to the audit committee in 2022. Further, the board of directors invited the auditor to participate in the board meeting that dealt with the annual accounts. At these meetings, the auditor (i) reports on any material changes in the company's accounting principles and key aspects of the audit, (ii) comments on any material estimated accounting figures, and (iii) reports all material matters on which there has been disagreement between the auditor and the executive management of the company.

Once a year, the board of directors reviews the company's internal control procedures with the auditor, including weaknesses identified by the auditor and proposals for improvement. In this regard, a review of the company's internal control procedures with the auditor, including weaknesses identified by the auditor and proposals for improvement, was carried out by the board of directors in 2022.

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, 8 March 2023

Zhigang Hao
Chair of the Board

Dag Jakob Opedal
Vice chair

Olivier Tillette de Clermont-Tonnerre
Board member

Yougen Ge
Board member

Jingwan Wu
Board member

Grace Tang
Board member

Nathalie Brunelle
Board member

Marianne Elisabeth Johnsen
Board member

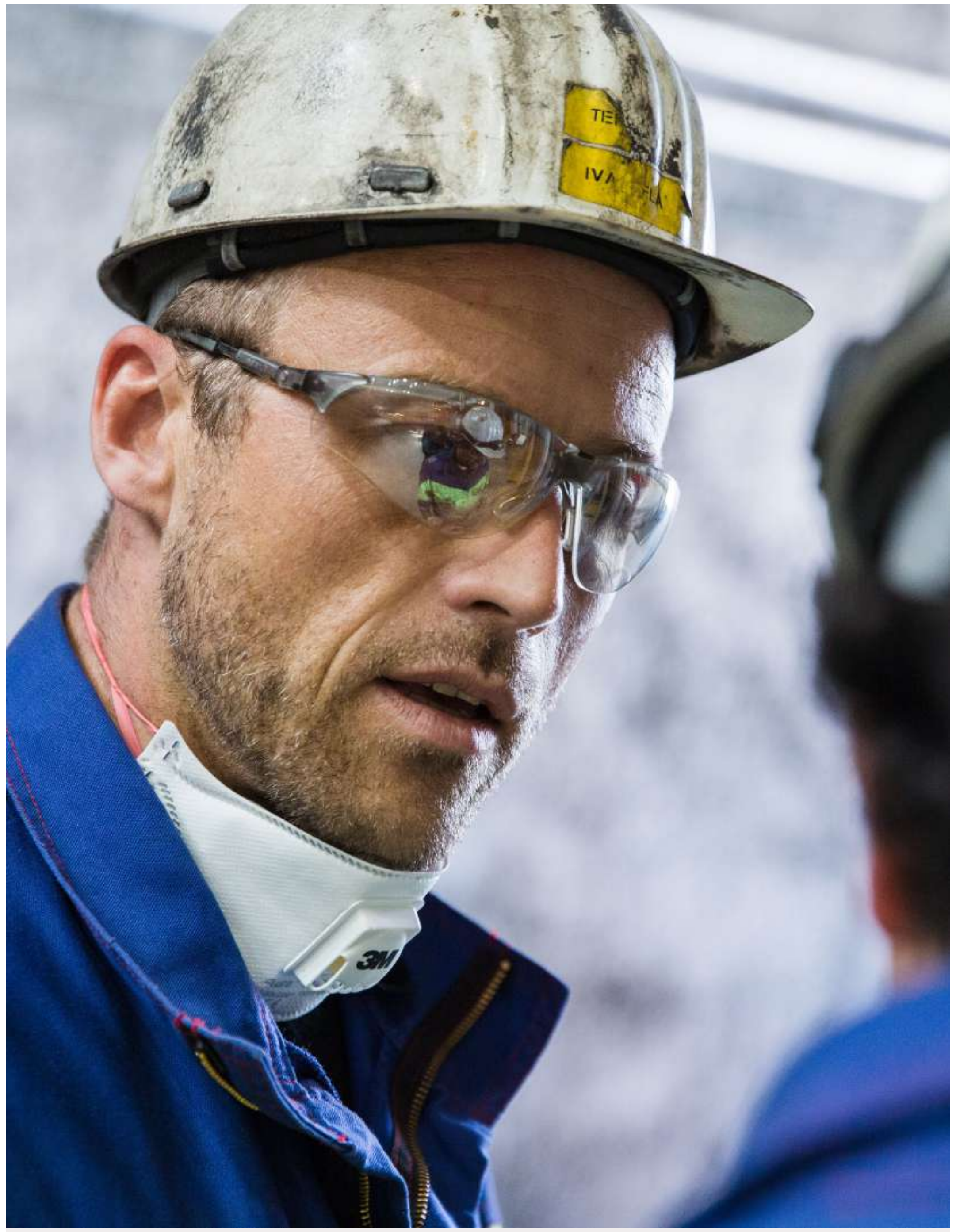
Terje Andre Hanssen
Board member

Marianne Færøyvik
Board member

Thomas Eggan
Board member

Helge Aasen,
CEO, Elkem ASA

Overview of main risk areas



>7,300 employees

worldwide presence

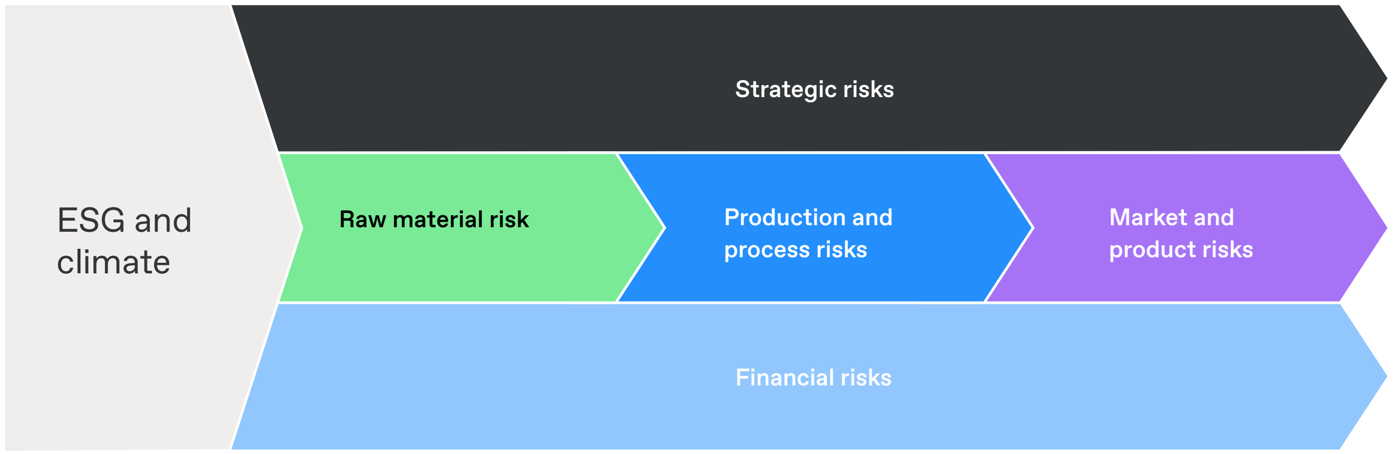
30 plants

Elkem's board and management have a strong focus on risk management to monitor the group's risk profile and to ensure that adequate risk management processes are in place. The board and management consider risk management to be a key part of Elkem's corporate governance structure and important to create trust and to enhance value creation.

Elkem carries out a yearly risk mapping process based on interviews with divisions and corporate staff functions. The objective is to identify the top five to ten risks for each division and corporate function. Each risk is evaluated based internal and external conditions and takes deemed likelihood, estimated financial impact, time horizon and mitigating activities into consideration. The individual risks are then organised into categories and aggregated on group level. The main purpose is to gain a thorough understanding of the group's risk profile and financial risk tolerance.

Risks are split into five main categories; strategic risks, financial risks, raw material risks, production and process risks, and market and product risks. The risk categories are structured according to Elkem's value chain.

Climate risk has become an increasingly important part of Elkem's overall risk management processes. Climate risks could for example affect Elkem's strategic positioning, raw material supply, end-markets, and financial performance. In 2021, Elkem implemented reporting on climate risks and opportunities according to Task Force on Climate-related Financial Disclosures' reporting recommendations (TCFD). In the risk assessment for 2022, climate risk has been treated as an integrated part of the risk mapping process. In addition, Elkem has made a study on physical climate risks based on Elkem's specific locations to gain an understanding of where Elkem is materially exposed. The results of this study are presented in Elkem's updated TCFD report for 2023.



Risk descriptions

1. Black Swan

"Black swan" describes an unpredicted event which can cause dramatic changes to economies and societies. Despite comprehensive risk management procedures, it is impossible to prepare for every scenario. Recent examples are Covid-19, the war in Ukraine and the energy crisis in Europe. "Black swans" demonstrate the need for general risk preparedness and the need for proactive, professional and agile reaction to unforeseen and severe incidents. It also shows the importance of generally robust financials and supply chains to enable companies to endure unexpected changes in market conditions. Elkem has a robust business model with a solid global footprint and well diversified end-markets. The financial position is also strong.

2. Market risk (prices and volumes)

Elkem's sales prices and sales volumes may vary depending on industry conditions and competitive environment. This constitutes one of the main risks affecting the group's financial performance. In commodity markets, the sales prices are generally impacted by supply and demand development, while specialties tend to have more stable pricing over the business cycle. Elkem's strategy is to increase the sales of specialised products, but the group is also attractively positioned in commodity markets based on strong cost positions. Elkem's integrated value chain provides flexibility to change production between product groups and between commodities and specialties. Combined with diversified end-markets and long-term customer relationships, this is expected to reduce the market risk exposure.

3. Sanctions and trade related restrictions

Sanctions and trade restrictions have increased over the past years. This could negatively impact Elkem's trade flows and access to raw materials and/or attractive end-markets. Any breach of sanctions could have severe consequences, for example on the group's financing arrangements or business activities. Elkem keeps tight monitoring of prevailing sanction lists and trade related restrictions to ensure compliance. This is to avoid that Elkem or third parties engage in business activities with sanctioned entities or individuals.

4. Regulatory frame-work conditions

Elkem has operations in many countries and could be exposed to changes in regulatory framework conditions. This could negatively affect the group's competitive position and market access. Examples of such regulatory and political framework conditions are; CO_2 emission schemes, other environmental or product-related requirements, changes in anti-dumping duties and export taxes, export control or sanctions, and regulations and availability of electric power. Elkem seeks to take a proactive approach to reduce these risks. In addition, the group's diverse geographical presence and integrated value chains in Europe and Asia could reduce the negative impact from various trade tensions and restrictions.

5. Performance and payback on capex projects

Elkem has a growth strategy based on organic growth and selected mergers and acquisitions (M&A) transactions. Large investment projects carry an inherent risk of delays, cost overruns, and underperformance. In addition, M&A transactions carry the risk that an acquired entity does not deliver the expected profit or synergies, or that due diligence processes have failed to identify potential claims or other obligations. Elkem seeks to mitigate such risks by diligent project management and thorough due diligence processes, comprising professional support from legal, financial, audit and industry expertise.

6. Health and safety

Elkem's working environment includes significant inherent risk of injuries or even fatalities, and there are risks of large fires and explosions in connection with high temperature smelting processes, molten metals, chemical processes, electrical equipment and other potentially hazardous incidents. The safety of our employees and contractors is Elkem's main priority. Elkem uses considerable resources to identify hazards and implement appropriate measures to avoid incidents and to reduce risk to an acceptable level, including safety instructions, training, physical protection and adherence to Elkem Business System (EBS) principles. Insurance and risk survey programmes are in place to mitigate risks and financial exposure.

7. Raw material access and supply chain

Global supply chains could be exposed to disruptions due to trade regulations and restrictions, pandemics, cyber-attacks, availability of transportation, and potential impact of climate change. In the past two years several incidents have caused disruptions in global transportation and supply chains, for example covid related interruptions worldwide, the war in Ukraine, low water levels in rivers and channels in Europe, lack of container capacity, shortages of semi-conductors and power disruptions. Elkem has thorough sales and planning processes, a diversified raw material sourcing strategy, and globally connected supply chains to mitigate risk exposure. Elkem's integrated value chain has managed well through recent challenges.

8. Environment and climate

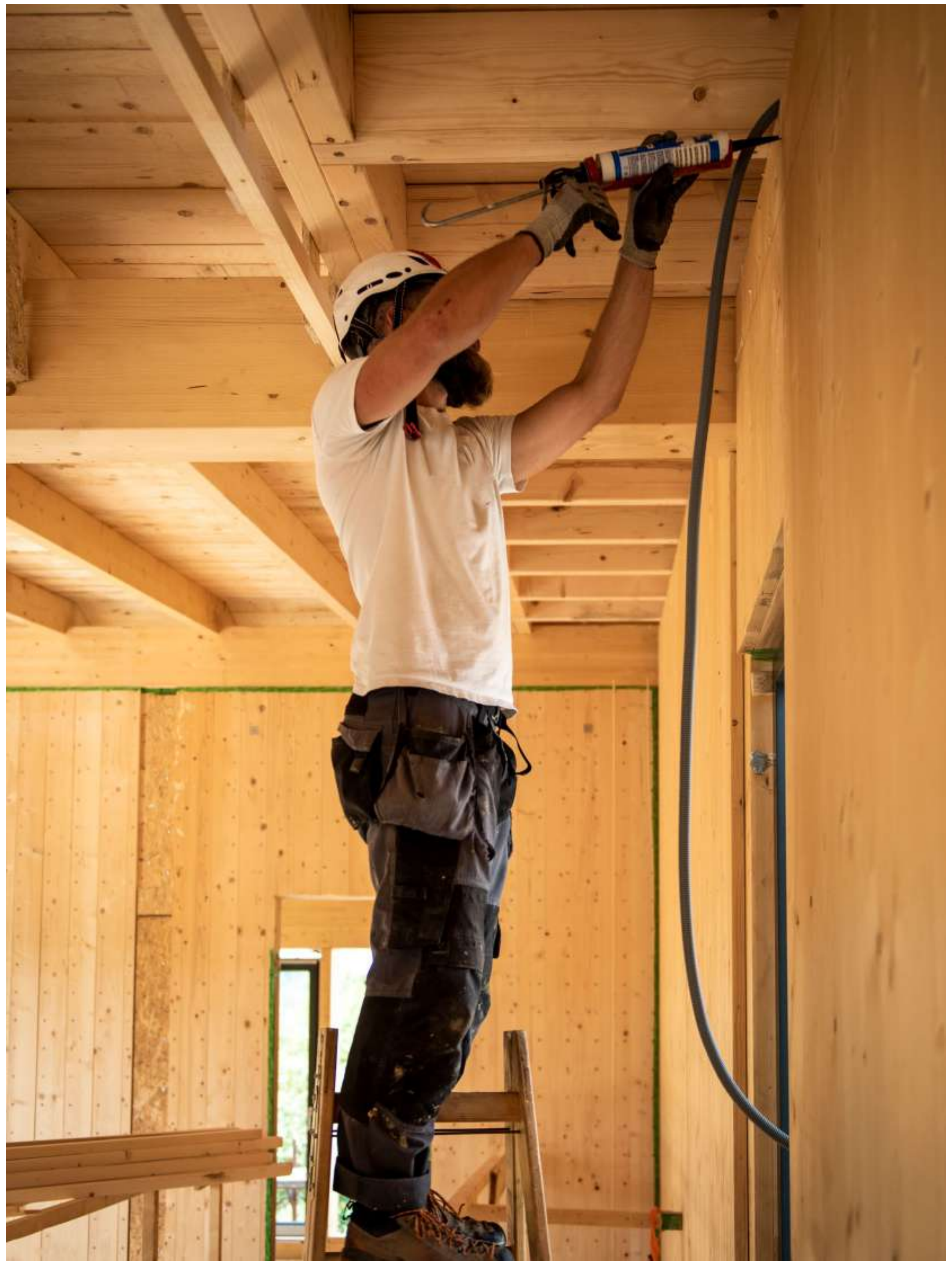
Elkem has global operations exposed to environmental regulations, and potential impact of climate change. Climate risks comprise both regulatory, transitional and physical risks, for example. extreme weather, drought, flooding, wind, and ocean rise. Many of Elkem's production facilities are located close to sea or river, or in close proximity to cities or local communities. In addition, Elkem's integrated supply chain depends on access to stable inbound and outbound transportation. Elkem has high attention to secure assets and avoid business interruptions and seeks to ensure a sustainable business model by reducing emissions and ensuring compliance with environmental regulations.

9. Cyber and IT risk

IT is used for virtually all business-related activities, including sales, production planning, procurement, maintenance, finance and accounting. An IT incident or cyber-attack could therefore cause severe disruptions to Elkem's operations. Good IT procedures with high focus on security, training of employees, up to date equipment, frequent software updates and segmentation of networks are the main actions to mitigate and prevent these risks. Elkem has a cyber insurance in place to mitigate negative financial impact.

10. Compliance and legal risks

Elkem has operations in many countries, of which some are in regions known for high risk related to for example corruption and human rights violations. This gives an inherent chance of unacceptable business behaviour either through corruption, breach of competition law, breach of sanctions, breach of human rights, or other unethical activities, either by employees or by business partners. There is also legal and litigation risks in connection with contracts and/or intellectual property. Elkem has a high focus on compliance and internal control and has strengthened its compliance function and internal control systems over the past years. Guidelines for ethical conduct, training of all employees and visible and accessible channel for reporting misconduct (whistle blower) are in place. Insurance cover is in place for directors and officers, employment practices liability and crime.



ESG report 2022

Reducing emissions towards net zero while growing supplies to the green transition

Elkem

Delivering your potential

ESG report content

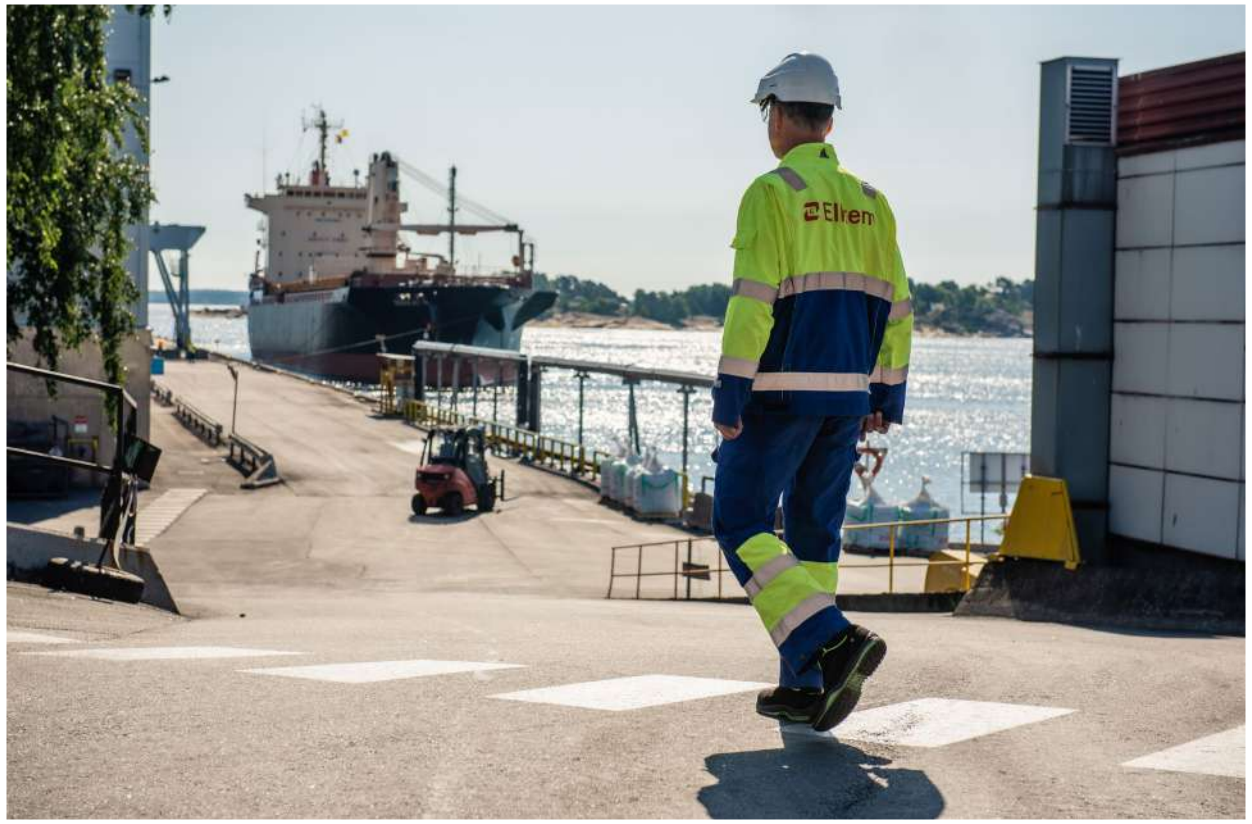
The ESG report contains Elkem's most important communication on material Environmental, Social and Governance topics. The report covers the key strategy of the company, how the company manages sustainability and climate change issues, and how we progress on each topic. In the 2022 ESG report you will find the following:

Operations:
30 plants world-wide and more than 7,300 employees

Operating income 2022:
45.9 billion NOK

Total scope 1+2+3 emissions 2022:
10.74 million tonnes

>80% of production based on renewable electricity



ESG highlights in 2022

- In 2022, Elkem launched an updated corporate strategy on dual-play growth and green leadership
- Elkem was awarded the platinum rating on sustainability transparency from EcoVadis, one of the world's largest and most trusted providers of sustainability ratings, ranking Elkem as top 1% performer
- Elkem was awarded double A- scores from CDP for efforts on Climate and Forests, and B score on Water security
- Elkem signed its first sustainability linked credit facilities agreement of EUR 1,000 million. The facilities agreement includes sustainability performance targets linked to health and safety and reduction of the group's product carbon footprint
- Elkem Silicones was declared 2022 R&D 100 Awards winner in Mechanical Materials category for safety and reliability for silicone solutions for electric vehicle thermal management
- The world's first carbon capture pilot for smelters was inaugurated in Rana, Norway, with main goal to verify the technology on real industrial gases from smelters and other process industries
- Elkem announced a partnership with Hydro and Altor to accelerate the growth of sustainable battery material provider Vianode
- Elkem commissioned two climate-friendly ships for North sea operations

PLATINUM 2022 ecovadis Sustainability Rating

CDP DISCLOSURE INSIGHT ACTION

Elkem's ESG agenda

Elkem's products are building blocks for the low-carbon society and critical for the green transition. Examples include renewable energy, energy storage, mobility solutions, infrastructure improvements, digitalisation, and healthcare. Our people and safe sustainable operations, conducted responsibly and with excellence, are the core of Elkem.

Our mission:
Advanced silicon-based materials shaping a better and more sustainable future, adding value to stakeholders globally

Our commitment:
To develop our business in accordance with the UN SDGs and Paris agreement

Our values:
Respect
Precision
Involvement
Continuous improvements

Sustainability foundation: Material topics
Elkem follows the principles, requirements, and guidelines of the GRI 2021 Standards to identify the material sustainability topics for the group.

Environmental
Climate action

- CO_2 and other GHG emission reductions, including energy management
- Biodiversity
- Local emissions to air
- Waste management and circularity
- Water management

Social
Safety first

- Health and safety on site
- Human rights, including labour rights

Governance
Responsible business partner

- Environmental and social due diligence in supply chain
- Supplying the green transition
- Product governance, including chemical safety
- Responsible economic practices

Sustainability reporting

About this report
The annual ESG report is part of Elkem's annual report, approved by the board. The company defines the organisational boundaries on an operational control basis. All the numbers in the report covers 100% of operations. The ESG report also functions as a stand-alone report. For more information on Elkem's business areas and strategy, see page 14 and onwards in the annual report. ↗

Reporting framework
Elkem reports in accordance with the Global Reporting Initiative (GRI) Standards 2021 and consider this report to be our Communication of Progress (COP) to the United Nations Global Compact (UNGC). Elkem discloses information through several reporting systems to increase transparency and ensure standardised reporting. The GRI index can be found online, and includes references to the World Economic Forum's stakeholder capitalism initiative to standardise sustainability metrics. ↗

Assurance
PwC has undertaken a limited assurance on the ESG reports alignment with the GRI Standard. Further information about the limited assurance can be found in the assurance statement. ↗

ESG transparency and reporting acknowledgements 2022

Ecovadis: Platinum
Top 1% out of more than 90,000 global companies, on sustainability transparency and action.

CDP: A-
Responding to all three scopes of the CDP for the first time in 2022, and recognised with A- on Climate and Forests, and a B score on Water security.

S&P Global CSA: Top 90 percentile
With a score of 53, Elkem is rated in the top 90 percentile in the chemical industry, in the S&P Global Corporate Sustainability Assessment for 2022. The rating focuses on both industry-specific and financially material topics for companies.

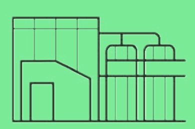
ESG 100: A
Top score for ESG reporting in 2022, in an assessment of top 100 listed companies on the Scandinavian stock exchanges, from Position Green. A is awarded for companies with excellent reporting in line with best practice, clear strategy, and quantifiable targets.

The Elkem climate roadmap

Elkem is committed to reduce emissions and to contribute in line with the Paris agreement

Elkem announced its global climate roadmap in 2021, which is closely linked to the corporate strategy of green leadership. ↗

The climate roadmap sets out the direction for how Elkem will contribute to limit global warming caused by climate change, and has three key pillars:

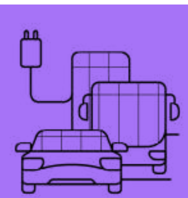


Reducing our emissions

Achieving fully climate neutral production throughout our value chain

By 2031: Reducing absolute emissions by 28% from 2020-2031 while growing the business – delivering 39% improvement in product footprint

By 2050: Achieving fully carbon neutral production (zero fossil emissions) globally



Supplying to the transition

Providing the advanced material solutions required to enable the green transition

Grow supplies of advanced materials to green markets such as better buildings, electric vehicles and renewable energy

Build new business in green markets such as battery materials, biomass and energy recovery

Enabling circular economies

Enabling more circular activities in our operations, products and markets

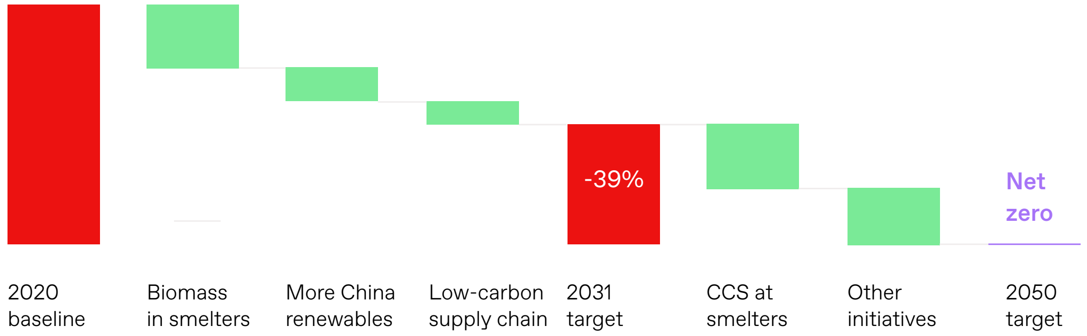
Increase recycling in our own operations

Increase recycling with our customers

Develop the eco-design of innovative products

During the last year, Elkem has been involved in a carbon capture project, testing new technology at our plant in Rana, Norway. This is part of the long-term ambition to achieve net zero emissions by 2050. The pilot for carbon capture is the first project of its kind within the silicon industry. ↗

Our roadmap to climate neutral products



Status – delivering on the roadmap

	Metric	2022	2021	2020
Total GHG emissions (CO_2e)	Mill tonnes	**10.74**	11.60	10.27
Scope 1	Mill tonnes	**2.42**	2.34	2.39
Scope 2	Mill tonnes	**0.94**	0.90	0.91
Scope 3	Mill tonnes	**7.38**	8.35	6.96
Product group carbon footprint*	CO_2e/kg	**6.9**	7.4	N/A

** CO_2 equivalents per kg of produced material*

The total GHG emissions went down by 7.5% in 2022, compared to 2021. Both scope 1 and 2 saw an increase of 3-4%. Elkem's scope 3 upstream emissions were reduced by 18%. The reduction was mainly explained by sourcing from lower carbon suppliers, in combination with purchasing fewer raw materials externally.

For a more detailed overview and explanation of the emissions development, see the CO_2 and GHG emissions chapter ↗

The Elkem climate roadmap

Supplying the green transition

The corporate strategy is to take green leadership, by being in the forefront of reducing emissions and focus on markets and products that are essential in the green transition.

Silicon metal is listed by the EU as a critical raw material that is economically and strategically important to the European market. These raw materials are essential for nearly all electronics, health care and green technologies and will be pillars for enabling the transition to a low carbon society, both in Europe and the rest of the world.

The demand for Elkem's products is driven by global megatrends such as sustainability and clean energy demand growth, such as solutions for the electrification of transportation, increased energy storage and batteries, reducing emissions and energy consumption, and the replacement of oil-based materials. Elkem aims to continue growing the supplies of advanced materials to global markets by 5-10% per year.

In the 2021 climate roadmap, Elkem launched an ambition to grow the supplies of advanced materials to the green transition markets by 5-10% per year. Elkem is currently working to define the KPIs, to be able to track this ambition towards 2031. In addition, the company has worked on understanding the green criterias of the EU Taxonomy that are relevant for Elkem. This will become mandatory reporting from 2023.

Elkem's statement on the EU Taxonomy for sustainable economic activities are available on page 156 in the annual report. ↗

Vianode is built upon technological advancements and decades of industrial experience in Elkem and was formally established in 2021. Vianode's range of synthetic graphite products offers unique performance characteristics and are produced with significantly lower CO_2 emissions than today's standard battery materials – supporting the ambitions of leading battery cell and automotive manufacturers. More information on Vianode. ↗

In 2022, approximately 45% of Elkem's revenue came from products that are EU Taxonomy eligible.

The Elkem climate roadmap

Circular economy

2022 was a milestone year for the development of Elkem's circular economy with a strong emphasis put on our current projects and the launch of new promising ones. Of note last year was also the consolidation of a global roadmap that has both the establishment of a common circular mindset and the development of our open innovation ecosystem on circular economy at its core.

Highlights from 2022

- Elkem developed a methodology, materialised by the "circular economy wheel" below, which we use to position our current and future products, processes and technologies. Placing eco- design at the heart of this wheel and as a preliminary step to a virtuous circular economy will enable us to better manage the end of life of our products.
- Elkem strongly believes that anyone, regardless of their position or field of expertise, can contribute to the development of a circular economy. In 2022, a global innovation contest was held internally, fuelling projects and building common understanding of circular economy. The four winning ideas, amongst more than a hundred, benefit from a strong sponsorship and recognition from the corporate management.

The success of this competition is not only acknowledged by the number of new projects, but also by the way people with different backgrounds got together to impact the future of the company.

- Elkem launched collaborative projects to develop our own network of competences and to develop new solutions faster fitting both with regulations and customer needs. These collaborative projects involve partners all along the value chain with the aim to make this ecosystem more circular, allowing us to produce goods and service in a sustainable way by limiting the excessive consumption of resources and the production of waste.

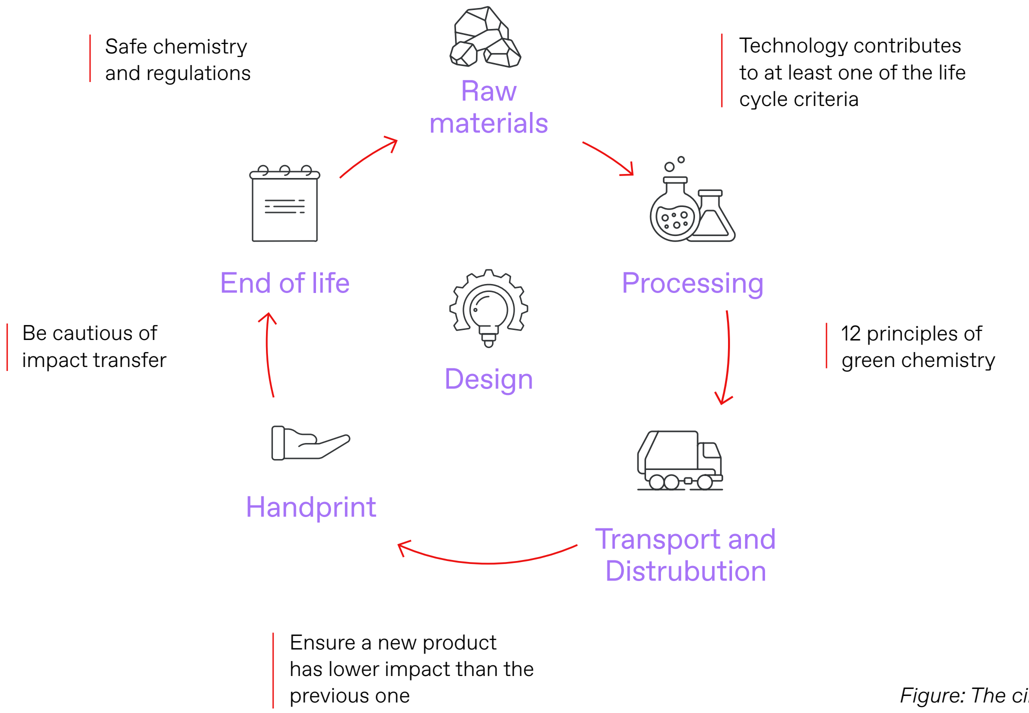


Figure: The circular economy wheel

ESG management

People and organisation

A strong and consistent company culture, fair treatment of all employees and a safe, inclusive and motivating working environment are the foundations for making Elkem an attractive employer for our current and future employees. Continuously developing the organisation to enable strategy implementation, as well as systematic competency development and performance management of each employee, are key to ensure successful and sustainable growth of the company.

Commitment

Elkem is committed to empowering people to become experts in their own areas of responsibility through involvement, respect, continuous improvement and precision.

Targets

- 100% of employees have an annual development discussion
- 100% of the mandatory training is completed by the assigned target group

Key events 2022

- Global employee engagement survey
- Turnover rate: 6%
- Employees that have had development discussions: 89%

Key risks

- × Ability to attract necessary resources – both the competencies and necessary capacity – in the remote locations of the Elkem plants
- × Lack of development opportunities and follow-up may result in demotivated employees and a high turnover rate
- × Restrictions on travelling due to the pandemic have made it challenging to exchange best practises and create good teamwork across entities

Key opportunities

- As an attractive employer and industry leader worldwide, Elkem can retain and attract highly skilled and motivated employees that support the shared strategic goals
- Global operations offer exciting development opportunities to all employees
- Further development of good leaders offers the opportunity to enhance employee performance globally

Our people are Elkem's most valuable asset. Elkem's human resource strategy, the way the company is organised and the continuous investment in developing our people are the vehicles to deliver on the business strategy. Focusing on leadership development at all levels in the organisation, strengthening the culture fundamentals and the Elkem Way, ensuring critical competencies where and when they are needed, as well as investing in the individual development of all employees are the main building blocks of the HR strategy.

Elkem offers a wide range of internal training, which is continuously evaluated and further developed. The increased use of digital channels enables faster and broader roll-out of competency development.

Leadership development

Elkem provides three global standard leadership development programmes targeting first level, mid-level and senior level leadership accordingly.

Our first level leadership programme, referred to as Elkem's Leadership Essentials program, targets middle management, team leaders, shift leaders, new leaders or any employees with personnel responsibility. It aims to create a one Elkem culture by developing a baseline of effective people leaders in alignment with our purpose, values and mission.

At the second tier, we offer a mid-level leadership programme, Elkem Leadership programme targeted to our high potentials and more senior leaders. The programme runs for one year and consists of five modules aiming to increase knowledge about Elkem through working in interdisciplinary team projects. Elkem's Leadership program also offers the participants individual coaching and evaluations. Candidates to this programme are nominated from Elkem worldwide and finally selected by the corporate management of Elkem.

At the third level of leadership, we provide Elkem Excellence Program. This programme is offered to the most senior level of leaders in Elkem, who have already concluded the Elkem Leadership program, leaders at division management level and leaders leading other leaders.

Competency development

All Elkem internal training offering is available for the employees on the company intranet Learn-pages. The information displays the available training offering to the different groups of employees ranging from the operators to the different groups of white collar employees. As part of the annual development discussion (DD) the individual development plans, including mandatory training, is discussed and reviewed with each employee.

The mandatory training categories include:

- Compliance
- HSE
- Intellectual Property
- Technical safety
- Leadership development
- IT security
- Elkem Onboarding Program (EOP)

We also offer a wide range of optional trainings in the following categories:

- Digital
- EBS
- Innovation
- IP
- Legal

We aim, through easy access and a wide availability of courses to serve and engage our employees to take charge of their own learnings and to continuously grow and develop.

Development discussion (DD)

Every employee shall know their targets and plan together with their leaders what support and resources they need to meet them, to develop further and perform well. All employees are expected to contribute to a performance culture that drives continuous improvement. It shall be safe for all employees to challenge the status quo to drive a culture of innovation. This requires that all employees receive regular constructive feedback on their performance and contribution to the working environment.

At Elkem, this is done through formal and informal channels, starting with the individual's job description and the DD, where individual annual targets are agreed upon, performance is discussed, and mutual feedback is given. This is done to support changing work priorities aligned with strategic goals. As part of the DD, the leader also receives feedback from the employee to enhance both individual performance and cooperation.

Elkem encourages employees to take on new challenges and responsibilities to develop themselves and to contribute to the company's culture of sharing and cross-divisional, -functional and -geographic learning. Elkem offers good conditions to support employees on such development steps if a change includes a relocation. Elkem's global target is for 100% of employees across all locations and levels to have an annual development discussion with their leader. In 2022 89% of all Elkem employees had their DD, the highest percentage in the past five years. We continue to work systematically towards our target of 100% and are pleased with the development in 2022.

People policy and survey
Elkem's global people policy establishes the principles for the people processes and the company's obligation to handle employment matters consistently and supporting the employees throughout their employment with Elkem. The people policy aims to cover key material issues for employees globally.

In 2022, Elkem conducted its first global employee engagement survey. The survey was well received by the employees and revealed a high level of engagement globally "above industry benchmarks". This allows the company to focus on maintaining the topics with good feedback from the organisation, and in the spirit of continuous improvement, establish good programmes for the areas the employees pointed to as improvement areas.

Elkem Business System (EBS) – our common culture
EBS is Elkem's business system and leadership philosophy, which embodies our common culture, language and provides working- and continuous improvement methods for all employees. EBS is a key to achieve operational excellence across the value chain. Building on our values; respect, involvement, precision, and continuous improvement, EBS is the foundation of Elkem's company culture. At the heart of EBS is the dedication to involve all employees in improvement work and Elkem takes great pride in empowering our employees as experts in their own responsibility areas. Elkem considers delegated and decentralised decision-making to be a strength and key element of its business culture. The EBS principle of empowering people is key to understanding Elkem's view on labour rights and employee involvement. Elkem seeks to achieve increased efficiency in the product value chain through the people value chain. Elkem employs a team-based structure with orderly working and wage conditions, providing a wide range of opportunities for personal development.

Developing a shared language and culture takes time. When Elkem establishes or acquires new entities, the priority is always to implement our HES and EBS standards and systems, regardless of the location or previous organisation of the site. Some Elkem sites are at the beginning of this journey, while other entities have come a long way.

EBS assessments to promote involvement and continuous improvement include:

- A corporate EBS team assesses all sites biannually through observations and discussions to evaluate the progression, involvement, and improvements and encourage further development.
- The assessment's topics are divided into three main parts: i) Daily operations related to work teams and daily management, 5S visual management and problem-solving, ii) systematic improvements related to flow, control, and capability and iii) sponsorship, strategy, learning and competence development.
- Across all levels, Elkem's leadership focuses on involvement, knowledge and information sharing and on the management's commitment to empowering their employees through continuous improvement and shared goals and tools.

During the last years, Elkem has expanded its presence globally, particularly in China. Elkem's previous experience from China shows that cultural and maturity differences have not prevented the implementation and development of EBS. We are continuously hiring and training new local employees and conducting assessments to find the gaps and improvement areas to further develop our organisation.

Flexibility and work-life balance
To reach Elkem's overarching goals, the company needs to develop an organisational culture based on participation, teamwork, and people empowerment. Elkem is committed to providing flexibility in working hours and -location in accordance with local laws and regulations. Such flexibility can be offered by the company at the employee's request, provided that it does not in any way prevent or hinder the employee in performing his/her job tasks. Across the whole company, working terms must allow employees to combine working and family life. Elkem recognises that a better work-life balance can improve employee motivation, performance, and productivity, and reduce stress. Therefore, the company wants to support employees to achieve a better balance between work and their other priorities.

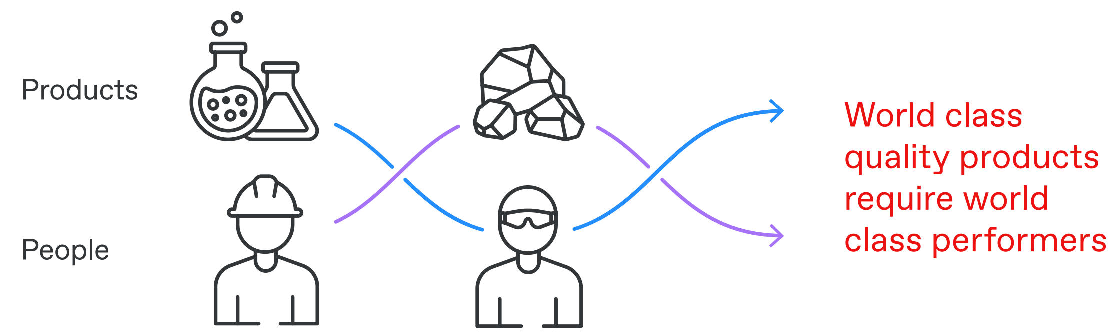


Figure: The double value chain

Turnover
Elkem strives to retain existing employees and attract new ones. The turnover rate indicates the attractiveness of Elkem as an employer and how well Elkem manages to keep its employees. The total turnover rate in the Elkem group was 6% in 2022, down from 8,4% in 2021. The female share of leavers was 27% and of new hires the same level. Elkem is working systematically to increase the female share, but that has proven to be challenging. In 2022, in Norway, the share of female applicants to all open positions was 24%.

Changes to the organisation
The required number of people and competencies in different areas of Elkem's business can both increase and decrease for various reasons. When it is necessary to reduce the workforce, the process shall always comply with relevant legislation and agreements. Furthermore, the management shall involve employees and their representatives early to run a transparent and constructive process, both for the employees who leave the company and those who remain. Therefore, change management is an essential part of leadership development activities in Elkem.

Contractors and temporary hires
All Elkem employees shall have a written employment contract or other written documentation of employment that complies with local legislation. This also applies to contractors and temporary hires. Elkem invests in people and thus aims to offer permanent employment and limit non-regular employment. However, during peak times, contracted and temporary work can be considered for time-limited projects or projects in need of specialised, non-core competencies. Elkem is committed to fair compensation and priority rights to potential permanent employment in such cases. Contractors are subject to the exact same HES requirements as our own employees, and all contractors receive full training and follow-up to ensure that they work in a safe and healthy environment. The number of contracted employees (non-Elkem employees working full-time for more than three months as a substitute for hired employees) at Elkem was 331 in 2022.

KPIs

	Metric	2022	2021	2020	Comment
Total employees	Number	**7 372**	7 074	6 856	
Europe	Number	**2 953**	2 898		
Asia	Number	**3 632**	3 433		
America	Number	**758**	716		
Africa	Number	**28**	27		
Turnover rate	%	**6%**	8%	6%	-2%
Female share of new hires	%	**26%**	27%	26%	
Female share of leavers	%	**27%**	23%	23%	+4%
Blue collar / operators	%	**59%**	55%	65%	
White collar / staff	%	**41%**	45%	35%	
Total contractors	Number	**331**	433	420	
Europe	Number	**125**	159	115	
Asia	Number	**171**	238	265	
America	Number	**35**	36	40	
Africa	Number	**0**	0	0	
Temporary hire rate (%) to permanent employment	%	**5%**	7%	6%	-2%
Part time workers rate (%) to permanent employment	%	**1%**	6%	3%	-5%
Development discussions	%	**89%**	78%	85%	+11%

The colour indicates a positive or negative development year on year.

ESG management

Sustainability and ESG governance

Elkem manages a complex value chain. All parts of the value chain, such as the supply of raw materials, access to highly competent employees, and the timely delivery of products to customers impact the ability to reach the company's strategic goals. The company strategy of dual-play growth and green leadership leans on a strong ESG (environmental, social and governance) governance.

There is an increased expectation of companies to manage their value chain in a responsible manner and to mitigate sustainability-related impacts through the value chain across environmental, social and governance aspects.

In particular, the world needs businesses to take responsibility to reduce their total carbon footprints to succeed in the transition towards a more green and just society, governed in an ethical way. Materials should be recyclable, long-lasting, and produced with low greenhouse gas (GHG) emissions. Materials should also be produced responsibly and ethically, with a precautionary approach to both the people and the environment. To achieve this, society needs more innovative and efficient solutions. Increasing demand for low-carbon technologies and products, such as solar panels, batteries and electric vehicles, is impacting and increasing demand for several of Elkem's product segments within silicones, silicon, and ferroalloys.

The board
ESG and sustainability are integrated into Elkem's overall business strategy, and the responsibility sits with the collective board. ESG related risks and opportunities are also part of board meeting agendas. The board follows up and reviews the group's ESG strategy on an annual basis as part of the regular strategy process. In addition, the board of directors receives information about the company's ESG performance and projects through regular reporting and board meetings.

36%
women in the board

50%
independent directors

3
employee representatives

In 2022, the board of directors assigned the responsibility for preparatory work related to sustainability and non-financial reporting to the audit committee. The audit committee prepares the board of directors' follow-up and review and internal control of the sustainability and non-financial reporting. The committee also supervises sustainability-related risk management and the company's sustainability ratings performance. The audit committee works to ensure that the board has good procedures and internal control over sustainability and non-financial reporting.

The board shall evaluate its performance, competence and expertise annually. As part of this, the board shall evaluate the composition and the way its members function, both individually and as a group. The board shall evaluate its performance and work, including agenda, topics, and preparations for board meetings. The board shall also evaluate its competence in relation to the existing and new objectives and requirements set out for its work.

Management and operational level
The Chief Financial Officer (CFO) is the most senior management position responsible for ESG related topics. The CFO is responsible for managing the ESG steering committee, the management body responsible for ESG, which consists of members from the corporate management. The ESG steering committee reports to the Chief Executive Officer (CEO). Elkem's business strategy and corporate governance policy are approved by the board of directors and provide the overall framework for the group's strategic direction and governance structure.

Governing documents
Elkem´s governing documents define the principles for how the group's business should be conducted. The foundation for Elkem´s corporate governing documents is the code of conduct and the Governance policy. The code of conduct provides a framework for what Elkem regards as responsible conduct. It sets clear ethical standards in critical areas and explains how Elkem representatives are expected to conduct themselves when acting on behalf of the company. The code of conduct is supported by several group policies, procedures, and supporting documents. Group policies are approved by the Compliance Committee. These provide directions for common objectives, commitments and behaviours, define the principles and commitments for the governing processes within Elkem, and allocate roles and responsibilities of the group's functions. The group governing documents contain requirements that are mandatory for all Elkem group companies and operational units, regardless of division and geography. To ensure that commitments for responsible business conduct are embedded in all business activities and relationships, all company governing documents must be consistent with the code of conduct.

Over the past year, Elkem has invested significant efforts in restructuring and improving the group governing documents and in making sure that they are easily available to all employees by publishing them in a common document library available on the Elkem intranet. A global information campaign towards all employees uses intranet articles, direct email and leadership webinars to ensure a baseline knowledge of the governing documents. Simultaneously, the owner of each policy prepares an implementation plan for their respective areas. These plans are tailored to specific target groups determined by roles and responsibilities.

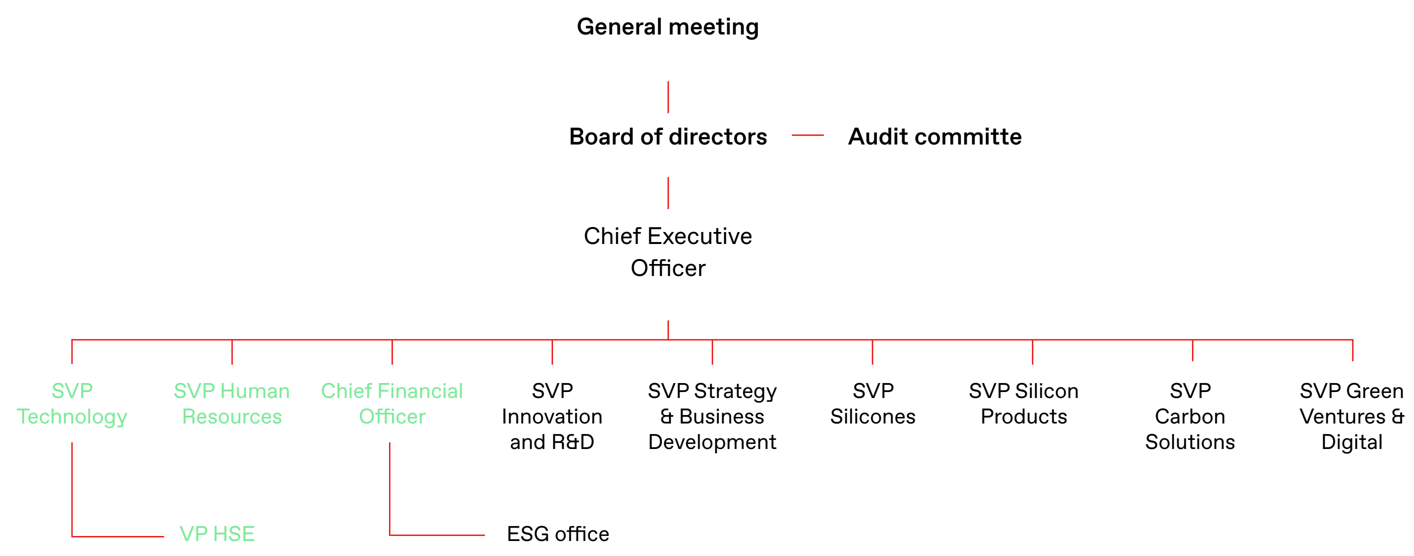
Several of Elkem's policies and procedures are available online under "Governing documents and tools". ↗

Elkem adheres to the principles of "the Norwegian Code of Practice for Corporate Governance" issued by the Norwegian Corporate Governance Board ("NUES" or the "Code"). The objective of this Code is to ensure that companies listed on regulated markets in Norway practice corporate governance that regulates the division of roles between shareholders, the board of directors and executive management more comprehensively than is required by legislation. Further information about our corporate governance can be found in the bord of directors' report on corporate governance in the annual report. ↗

Remuneration
The CEO and the corporate management have performance-based compensation based on predefined metrics. The metrics are defined according to the areas of responsibility. The performance-related short-term incentives (STI) are limited to 100% of the base salary for the CEO and 50% of the base salary for the corporate management.

The Company has the option of reclaiming, in full or in part, awarded short-term incentive (STI) remuneration in certain situations ("claw back"), including where incentive remuneration was awarded or paid out based on information subsequently proven to be incorrect. The clawback provision was implemented in 2022.

ESG and sustainability governance structure



* *Functions marked in green are members of the ESG steering committee*

The metrics for the CEO for 2022 include:

- Health, safety, and environmental performance with target of zero major incidents with high severity consequences.
- Zero substantiated misconduct cases with a potential of causing financial or reputational harm to the company.
- Define the roadmap of 39% reduction of the carbon footprint of main products within 2031, in line with the Elkem climate strategy and deliver on the 2022 targets.

The corporate management bonus for 2022 was linked to the same criteria as the CEO metrics, focusing on compliance and sustainability. Criteria also include the employees' completion of compliance training to drive and further develop good compliance culture and to avoid substantiated misconduct cases.

For more information about the remuneration management, please see the board of directors' report on salary and other remuneration for leading personnel for 2022.

The Elkem house

The Elkem house illustrates the building blocks of Elkem's business model. Our mission and values represent the foundation to support our working practices, our culture and how we work. Our mission, values, and working practices are interlinked and support our corporate strategy.

Risk management and materiality assessment

Risk management process

The board of directors has the ultimate responsibility for ensuring that Elkem has appropriate risk management systems that reflect the extent and nature of the group's activities and value chain impact. The board and management regard risk management as a key part of Elkem's corporate governance structure, which is important to create trust and to enhance value creation. This includes ESG and climate-related issues. Evaluating ESG and climate-related risks and opportunities has become an increasingly important part of Elkem's overall risk management processes. These factors impact strategy, financial conditions, and all aspects of Elkem's value chain, from raw materials to finished products.

Elkem conducts an annual risk mapping process based on interviews with divisions and corporate staff. The purpose is to thoroughly understand the group's risk profile. Each risk is evaluated based on internal and external conditions and takes into consideration the deemed likelihood, estimated financial impact, time horizon and possible mitigating activities. The financial impact is based on how a risk factor may impact Elkem's EBIT, cash flow and equity position. In addition, the frequency or likelihood for each risk is evaluated. A frequency of more than 5 years or a probability below 20% is defined as low, between 1-5 years or a probability of 20-60% is defined as medium and more than 1 per year or a probability of more than 60% defined as high.

ESG approach – continuous improvements

The main coordinator of ESG in the organisation is the ESG office. The ESG office reports to the ESG steering committee and collaborates closely with business units and divisions, to review and advise on relevant sustainability and ESG issues – to set targets and improve systematically. As part of the Elkem Business System (EBS), it is our philosophy and belief that what gets measured gets managed. An essential part of this work is to advise and improve key performance indicators that are reviewed by corporate management.

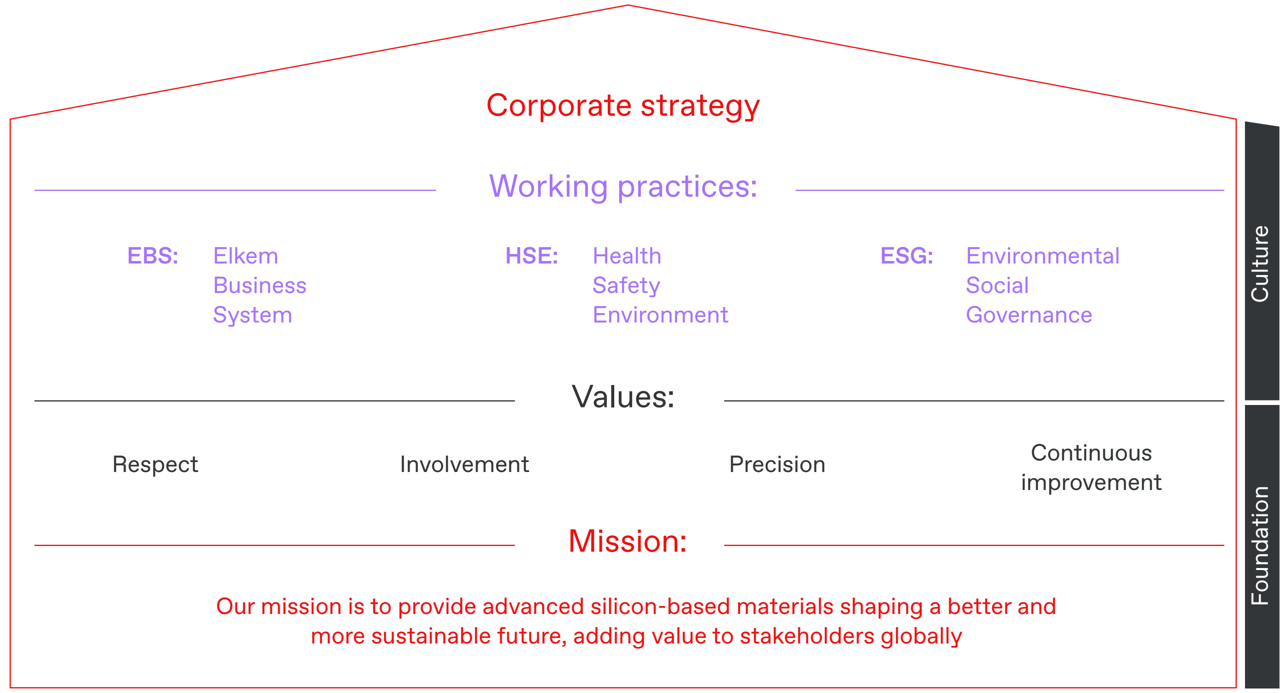


Figure: The Elkem house

Climate risk

The assessment of climate related risks and opportunities is an integrated part of Elkem's risk management processes. Elkem follows the framework from The Task Force on Climate-Related Financial Disclosures (TCFD) and includes an assessment of both transitional and physical climate risks.

The risk management processes considering climate risks are not only limited to substantive risks. Risks that today are perceived to have limited financial impact or frequency could increase going forward due to climate change. In particular, such risks include acute and chronic physical risks such as extreme weather events like flooding, storms, sandstorms and high temperatures. In the past, such events have not had substantial financial impact on the company, but Elkem is monitoring such effects to evaluate the possible impact on future raw material accessibility, transportation and pricing.

A complete risk overview can be found in the risk overview in the annual report. ↗ And an updated TCFD report for 2023 is available online. ↗

Materiality assessment changes

Elkem followed the principles, requirements and guidelines of the GRI 2021 Standards to identify the material topics for Elkem's ESG report 2022. To ensure best practice it has been necessary to conduct a new impact-based materiality assessment. In the new GRI framework impacts are defined as the sole parameter to assess materiality. The aim is to facilitate objective and balanced reporting.

The process of identifying Elkem's most significant impacts started with a mapping of all production locations across the three business divisions: Silicones, Silicon Products, and Carbon Solutions. Differences in the value chains between these divisions imply different potential impacts. Activities and business relationships for each business area were mapped out. This information was then used to establish Elkem's sustainability context on a local level, as well as on a global level. Guidance and input were provided by relevant stakeholders and experts. In addition, independent research on sectors and locations was used as the basis for the identification and ranking of impacts. The impacts were evaluated based on acute or potential impact, scale and scope of severity and likelihood.

Elkem aknowledges that there are inherent risks connected to its operational activities, due to the sector and geographical locations that the company operates within. The identification and assessment of potential impacts has been made based on general risks that are relevant to Elkem's operations. Elkem's approach and actions to limit the potential risks have not been taken into consideration.

The impact assessment resulted in the following material topics:

- CO_2 and other GHG emission reductions, including energy management
- Local emissions to air
- Biodiversity
- Water management
- Waste management and circularity
- Health and safety on site
- Human rights, including labour rights
- Environmental due diligence in the supply chain
- Social due diligence in the supply chain
- Responsible economic practices
- Product governance, including chemical safety
- Supplying the green transition

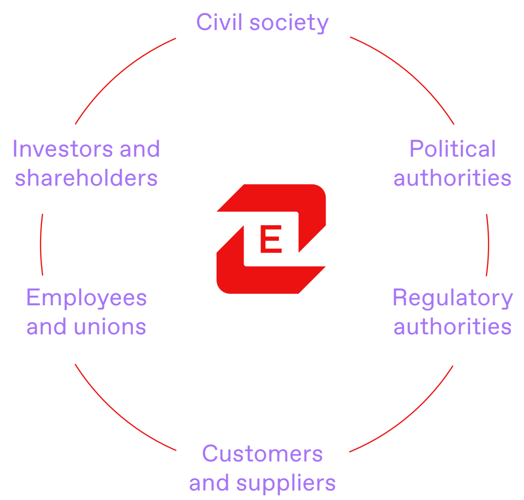


Figure: Key stakeholders

The positive and negative impacts comprised in the material topics are the ones that were deemed the most significant for Elkem's global operations and value chains. The main focus will be on impacts directly connected to Elkem's own activities, because Elkem can manage these directly. However, Elkem also acknowledges potential negative impacts throughout its value chains. Consequently, ''Social due diligence in value chain'' and ''Environmental due diligence in value chain'' were established as material topics in 2022.

More information on stakeholder issues and ways of dialogue, see this article on our website ↗

E

Environmental
Social
Governance

Environmental

Introduction

With a fully integrated value chain from raw materials and production of upstream silicon to downstream silicones, it is vital to manage the environmental footprint from cradle to grave. It is Elkem's target to minimise the negative environmental impact throughout the value chain.

Converting quartz to silicon is a high-temperature smelting process that consumes vast amounts of energy. The production process uses carbon sources like fossil coal, charcoal, and wood chips as a reductant in the chemical conversion, releasing emissions of CO_2, NO_x (Nitrogen Oxides), SO_2 (Sulphur Oxides) and dust.

Reducing our CO_2 emissions is of high priority and strategic importance. In addition, processing silicon into silicones involves substantial quantities of wastewater treated before discharge to remove residues such as Chemical Oxygen Depletion (COD) substances from the process. Reliable water management is becoming increasingly important, and water related challenges vary strongly across Elkem's value chain.

Moreover, the impact on nature and the management of biodiversity have become increasingly important issues for the process industry, as for the rest of the world. Although managing the impact on life on land and life under water is not a new area for Elkem, we are currently working to better understand how we influence the biodiversity threats.

Environmental issues are managed and reported to the corporate management monthly and managed through the HSE (Health, safety, and environment) management system. All Elkem units are required to develop and manage their own HSE management systems in line with the corporate standard.

All environmental impacts are identified and documented with measurements or calculations showing performance compared to governmental permits and/or internal improvement targets set by Elkem. Elkem considers waste streams to have value, either by reducing, recycling, or reusing and we work continuously to reduce waste across our operations.

Today, Elkem is a leader in understanding the complexity of producing carbon products, silicon, and silicones. The company's continued dedication to research and innovation makes our production even safer and more efficient.

The environmental topics material to Elkem are:

→ CO_2 and other GHG (Greenhouse Gas) emission reductions, incl. energy management
→ Local emissions to air
→ Biodiversity
→ Water management
→ Waste management and circularity

Key highlights

→ Answered all three CDP disclosures for the first time, securing two A-, Climate and Forests, and one B score, Water security
→ First time publishing a full scope 3 methodology report ↗
→ First sustainability linked loan agreement, with product group carbon footprint as one of two KPIs

Key KPI

	Metric	2022	2021	2020
Total CO_2 emissions: Scope 1 + scope 2 + scope 3	Mill tonnes	**10.74**	11.60	10.27
Biocarbon share	%	**20%**	22%	19%
Product group carbon footprint	CO_2e/kg product	**6.9**	7.4	N/A
Energy consumption from renewables	%	**81%**	84%	81%
Waste re-used, recycled, or diverted from landfill	%	**70%**	70%	67%
Water consumption	Megaliters	**27 439**	25 709	30 000

Environmental

CO_2 and other GHG emission reductions

Elkem is committed to taking a leading industry position in reducing fossil CO_2 emissions by increasing renewable carbon sources and developing innovative production processes. The total GHG emissions went down with 7.5% in 2022.

Key events 2022

- Published scope 3 methodology report
- Defined baseline for Elkem's product group carbon footprint (PGCF)
- Established sustainability-linked bank facilities agreement for EUR 1 000 million with targets linked to reduction of CO_2 emissions
- Included climate roadmap target into top management bonus scheme
- Commissioned a pilot plant in Canada to produce biogenic reduction materials
- Implemented a new sourcing strategy in China based on low carbon silicon metal for the silicones production

Targets

- Reduce absolute emissions in scope 1+2 by 28% by 2031
- Reduce the product group carbon footprint by 39% by 2031

Key risks

- × Carbon pricing and regulatory disharmony between countries and regions
- × Market demand for less carbon-intensive products
- × Restrictions on the use of biobased sources
- × Reputational risk with stakeholders if emissions are not reduced
- × Physical risk, in particular the risks related to heatwave, as well as risks related to extreme weather variability in the form of acute precipitation increases

Key opportunities

- Offer products with a low carbon footprint
- Resource efficiency
- New market access and growing green demand

A more comprehensive overview of the climate risks and opportunities can be found in the TCFD 2023 report. ↗

Key numbers 2022

Scope 1	Scope 2	Scope 3	Biocarbon share	Product group carbon footprint
2.42 million tonnes	941 656 tonnes	7.38 million tonnes	20%	6.9 kg CO_2 / kg produced

Commitment

Elkem's commitment is to develop the business in accordance with the Paris agreement, to limit global warming to well below 2°C and achieve the long-term commitment to be net-zero by 2050. Elkem will do so by reducing own emissions, growing its market share in the green transition, and enabling more circular solutions.

Policies

- The climate change commitment has its foundation in the climate roadmap and the HSE policy.

Elkem's corporate policies ↗

Elkem uses carbon sources as a reduction material in the production of silicon and ferrosilicon. Carbon sources such as coal, coke and biocarbon are key input factors in Elkem's production and result in CO_2 emissions. The smelters account for about 70% of Elkem's total scope 1 emissions. Elkem currently uses 20% biocarbon in the production to reduce fossil CO_2 emissions. As outlined in the climate roadmap, progress towards reducing emissions will be based on the increased use of biocarbon, the sourcing of materials with lower carbon footprints and changes in the power mix toward more renewables. Elkem is working on a detailed plan to implement these measures, including plant upgrades, biocarbon substitution, carbon capture and storage and sourcing strategy to realise our ambitions.

Elkem reports the company's scope 1, 2 and 3 emissions according to the GHG Protocol and defines the organisational boundaries on an operational control basis. All CO_2 emission numbers are CO_2 equivalents if not stated otherwise.

Scope 1

The scope 1 emissions in Elkem mainly come from the production processes, and account for about 95%. The remaining 5% are fuels and methane emissions.

Most of the direct CO_2 emissions come from the smelting processes (1.7 million tonnes CO_2e), where carbon (C) reacts with oxygen in quartz to produce silicon/ferrosilicon. GHG emissions are calculated based on third party certificates of carbon content in raw materials (coke and coal). CO_2 emissions from other sources, including heating and fuel, are calculated based on standard conversion factors in accordance with the EU Emissions Trading Systems (EU ETS) Guidelines.

The total scope 1 emissions were 2.42 million tonnes in 2022. Since 2017, Elkem has increased production using seven additional smelting furnaces: two in Norway, four in China and one in Paraguay. Except for the furnace in Paraguay, all these expansions have come from acquiring existing capacity. The furnace in Paraguay only uses biocarbon as a raw material reductant, making its operations (scope 1 + scope 2) close to carbon neutral.

The historical increase in CO_2 emissions is also connected to the acquisition of upstream silicone activities in China, which uses a coal-fired boiler to produce steam used in the production process. The increase from 2021 is due to volume effect.

Scope 2

Elkem's industrial processes are power-intensive, and electricity consumption is fundamental for operations. Scope 2 emissions are defined as indirect GHG emissions associated with the consumption of electricity, steam, heat, or cooling. The electricity emission factors used in the reporting are based on data provided by the International Energy Agency for 2020. These data are available on a national level only. Due to the large size of the power system in China and the considerable regional differences in CO_2 intensity and regional differences in the plans to decarbonise the power system, Elkem uses data for the regional emission intensity for China. The emission factors for China are based on data provided by an external consultant.

Elkem's scope 2 emission in 2022 was 941,656 tonnes, an increase from 901,059 tonnes in 2021. The increase is mainly due to increased production volumes in China, where the power mix has higher CO_2 emissions compared to other places Elkem operate.

Scope 3

Scope 3 is the term used to describe the indirect GHG emissions resulting from activities in the value chain, but outside of our operational control, according to the GHG protocol. There are 15 categories of scope 3 emissions. The full scope 3 emissions were reported for the first time in the 2021 report.

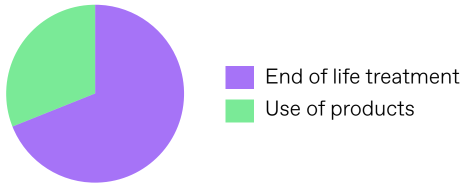
Environmental CO_2 and other GHG emission reductions

Elkem has expanded our reporting to ensure we capture the largest and most material indirect sources of GHG emissions in our value chain. The two largest categories identified are "purchased goods and services" and "end of life treatment". Scope 3 emissions were 7.38 million tonnes in 2022, a 12% reduction from 2021.

The split between the scope 3 categories

Scope 3 upstream

Scope 3 downstream



Biocarbon

As the use of carbon sources are essential to the production of silicon and ferrosilicon, it is critical to increase the share of biocarbon to reduce fossil CO_2 emissions. Based on current technology and availability of carbon sources, the total emissions will vary year by year, based on production volumes. To reduce the fossil CO_2 emissions, Elkem's main strategy is to replace fossil coal with biocarbon in our smelting operations. The target is to increase the biocarbon share at the smelters to 50% by 2031.

The biocarbon share of Elkem's CO_2 emissions was 20% in 2022, a small decrease from 2021. However, the runrate varies a lot (discarding Paraguay that run with more than 95% at all times), and at some of the smelters it was as high as 45%. Undersupply of biocarbon is a key challenge. Elkem will continue the work on finding sustainable and financially viable biocarbon sources. Each of the plants has developed a roadmap to reach the 2031-goal and will report on their progress. To secure sufficient supply, Elkem is developing new technologies for biocarbon production in Canada, based on residues from sawmills and not on virgin timber. Elkem is also actively involved in new technology development and industrial partnerships. It is a prerequisite for Elkem that renewable sources comply with our environmental and social requirements.

Elkem reported to the CDP Forest for the first time in 2022, and was rewarded with an A- score, highlighting the focus on developing sustainable sourcing of biocarbon and preventing deforestation.

LCAs

Life Cycle Assessments (LCAs) are being performed to quantify the environmental impact of our products. LCAs support Elkem in reducing its environmental footprint even further by providing an accurate overview of the environmental impact of the operations. Furthermore, these assessments increase product transparency to assist our customers in their sustainability transformation.

In 2022, Elkem conducted third party assessments of the environmental impact of the products produced at some of the major plants. These assessments have been undertaken on a cradle to gate basis, i.e. covering the manufacturing process of raw materials until the products reach our plant's gates. Elkem will continue to perform LCAs on additional major product groups in 2023.

Product group carbon footprint (PGCF)

Elkem has a target of reducing the absolute CO_2 emissions by 28% by 2031 (scope 1+2), despite expecting its business volumes to rise in the same period due to its strong product fit with the green transition. Accordingly, the company has set a target of reducing the carbon footprint of its products, defined as reducing the Product Group Carbon Footprint (PGCF) by 39% by 2031. Although the absolute CO_2 reduction is imperative, the relative reduction in Product Group Carbon Footprint is also relevant in assessing the group's performance.

Elkem has defined two main product categories in the carbon footprint reduction target, representing Elkem's main product segments with 93 % of total operating income in 2021 (the baseline year). The scope of the PGCF includes i) upstream production of silicones (i.e. silox) and ii) tapped silicon and ferrosilicon metal, defined as CO_2 e (scope 1+2+3 to gate) per kilogram of product produced.

Silicon produced by Elkem in Europe has a low CO_2 footprint compared to silicon delivered by other producers, mainly due to:

- → Renewable hydro-power electricity.
- → The use of bio-based reductants.
- → Good operational performance with high yields, efficient capacity utilisation and limited waste/off-spec volumes.

The baseline year of the PGCF target has been set to 2021. Silicones and Silicon Products business areas are relatively similar in terms of volume and operating income and the average PGCF is thus calculated as the arithmetic average of the two.

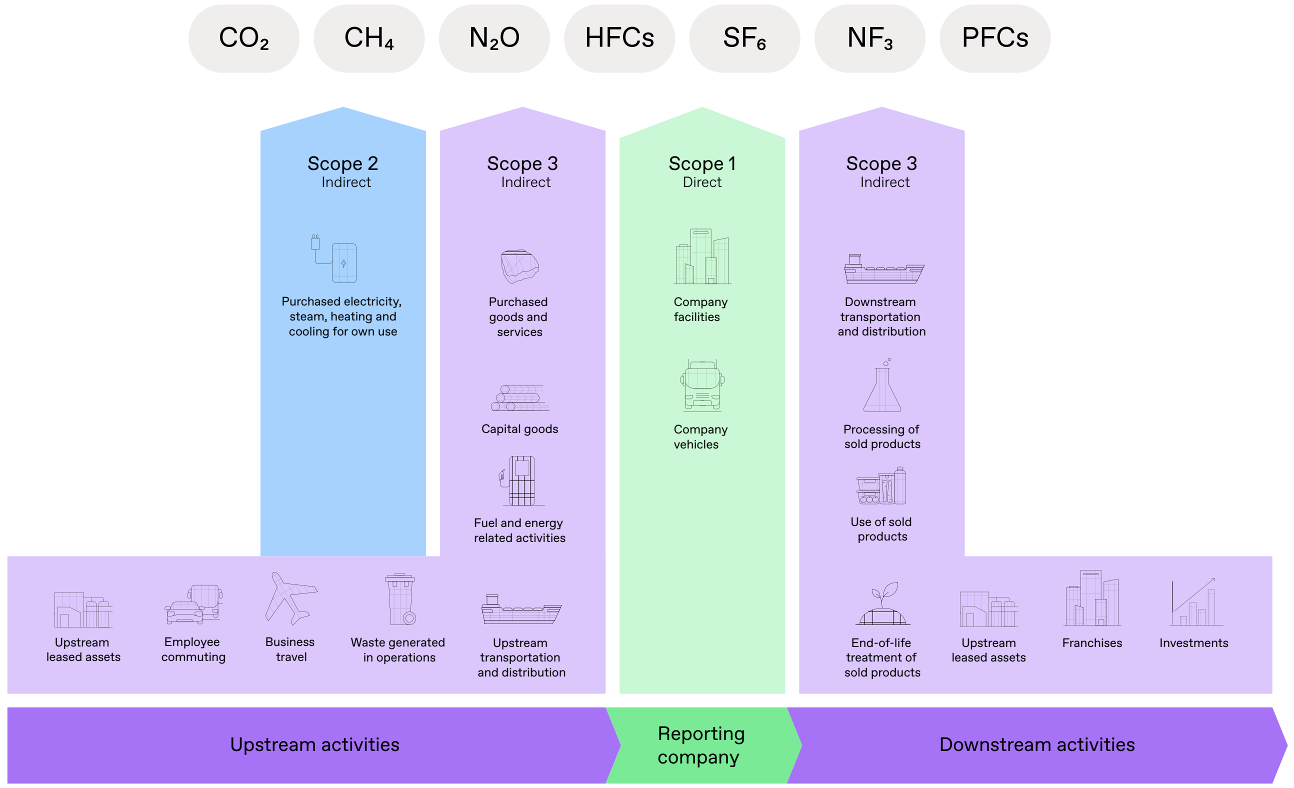


Figure: GHG scope definition

KPIs

Product group	Weight	2022	2021 (baseline year)
Avg. silicones PGCF	50%	**8.8**	10.0 kg CO_2e/kg
Avg, silicon alloys PGCF	50%	**5.0**	4.9 kg CO_2e/kg
Elkem average PGCF	100%	**6.9**	7.4 kg CO_2e/kg

	Metric	2022	2021	2020	Comment
Scope 1 – direct emissions	Mill tonnes	**2.42**	2.34	2.39	+3%
Scope 2 – Indirect emissions, electricity use, location based	Mill tonnes	**0.94**	0.90	0.91	+5%
Scope 2 – Indirect emissions, electricity use, market based	Mill tonnes	**2.64**	2.77	2.64	-5%
Scope 3 – indirect emissions, total	Mill tonnes	**7.38**	8.35	6.95	-12%
Upstream	Mill tonnes	**4.06**	4.92	3.72	-18%
Downstream	Mill tonnes	**3.33**	3.43	3.23	-3%
Biocarbon share	%	**20%**	22%	19%	-2%

All numbers in the above table are CO_2 equivalents.

The colour indicates a positive or negative development year on year.

Environmental

Energy management

Energy efficiency and sustainable sourcing of energy is of utmost importance to ensure security of supply, while at the same time reducing Elkem's global greenhouse gas footprint.

Key events 2022

- → Electricity consumption based on renewable energy: 81%
- → Approval and project start of the Phoenix project in China that will give a substantial reduction in energy intensity for the production of silicones

Targets

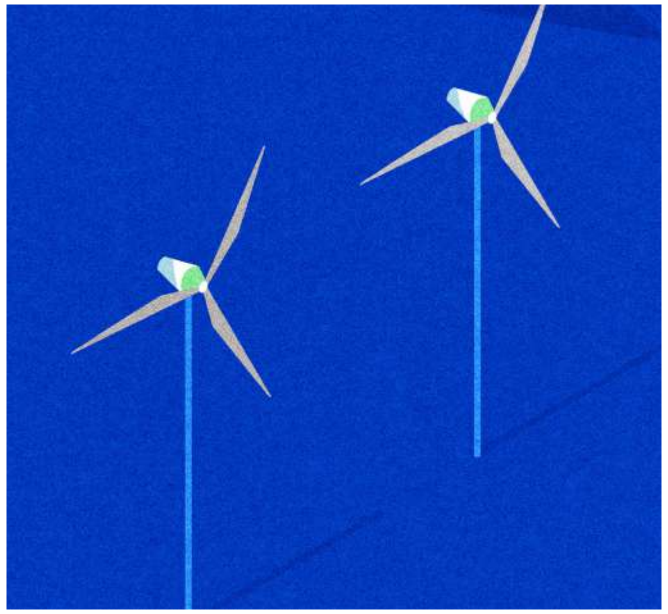
- → Energy recovery increase year on year
- → Energy intensity improvements on main products
- → Improved energy efficiency in facilities and equipment

Key risks

- × Changing regulatory framework, permits and requirements
- × Volatility of energy prices

Key opportunities

- → High percentage (more than 80%) of renewable energy use
- → Public grants for implementation of some energy efficiency measures
- → Continued roll out of renewable energy in China and Europe



Commitment

Contributing to the green transition by providing products with low carbon footprint, achieved by reducing energy consumption and increasing share of renewable power.

Policies

Elkem uses an Energy management system at all energy intensive sites.

Elkem's corporate policies ↗

In 2022, we witnessed events that indirectly and directly may impact Elkem's business and the energy supply to the production.

In EU; The war in Ukraine combined with several other factors led to a constrained energy supply situation. Elkem naturally takes the responsibility to reduce the energy intensity, in line with our previous engagements.

- → The French government responded to the situation by launching a plan to reduce the energy consumption of France by 10% within 2024. For the chemical industry this implies intensifying the work on energy efficiency. In Elkem France, the major energy consuming site, Elkem Roussillon, has ISO 50001 energy management certification since 2016 and has considerably reduced its energy intensity over the years. The efforts at all our French sites are now being intensified.
- → Elkem's operations in other EU countries are considerably less energy intensive, but are also increasing the efforts to reduce energy consumption. For instance, the Elkem site in Lübeck is ISO 50001 certified.

In China: The Chinese government launched its 14th five-year plan for the period 2021-2025 with a target of reducing energy intensity (energy consumption per GDO) by 13.5% by 2025 as compared to 2020. This translates into requirements for Elkem's Chinese production sites to reduce their energy intensity correspondingly.

Parts of Elkem's value chain are highly energy intensive, with silicon, ferrosilicon and foundry alloys being produced in high temperature electric arc furnaces. Elkem consumes around 6.5 TWh of electricity per year, and in 2022 about 81% of this electricity was produced from renewable sources. As the percentage is already very high Elkem does not have quantitative targets to further increase it. Elkem does however expect the availability of renewable energy in China to increase substantially in the coming years, which will enable the company to move more of our current Chinese power base to renewable solutions.

Elkem's three main targets within energy are
a. improving the energy efficiency of existing facilities and equipment,
b. reducing the energy intensity of main products, and
c. increasing energy recovery from processes that generate surplus heat.

Elkem was an industrial pioneer in the utilisation of waste heat, with the first energy recovery system on a silicon 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.

Elkem's commitment to improving our energy footprint is part of our general commitment to minimise the environmental footprint, as stated in the Elkem General policy. The HSE management system requires all units to implement energy management and to report on consumption, recycling and deviations while working actively towards our targets. At the corporate level Elkem also has an environmental manager and a senior corporate energy specialist coordinating improvement efforts.

Environmental certification is part of Elkem's efforts within energy management. All applicable sites are ISO14001 certified either individually or with umbrella certification, and it has been decided to initiate energy management ISO50001 certification at five plants in 2023. All environmental deviations and environmental indicators including those that are energy related are registered and followed up in the company's reporting and deviation management system Synergi.

Energy consumption

Total gross electricity consumption in Elkem in 2022 was 6,542 GWh, the same level as 2021. Most of this change is related to increased production. About 80% of the total gross electricity consumption is based on renewable power production. Except for one smelter in China, all smelting furnaces in Elkem run on renewable electrical energy. In addition to electrical energy, Elkem also consumes approximately 1.4 TWh of other types of energy for internal vehicle operation and heating/cooling of facilities and processes. Most of this is fossil-based energy.

Elkem does not have an overall target to reduce its total energy consumption, due to the growth strategy focused on increasing the production and availability of materials that are essential for the green transition. Elkem's targets therefore focus on using our energy base as efficiently as possible and thereby reducing the energy intensity of the products.

Energy recovery

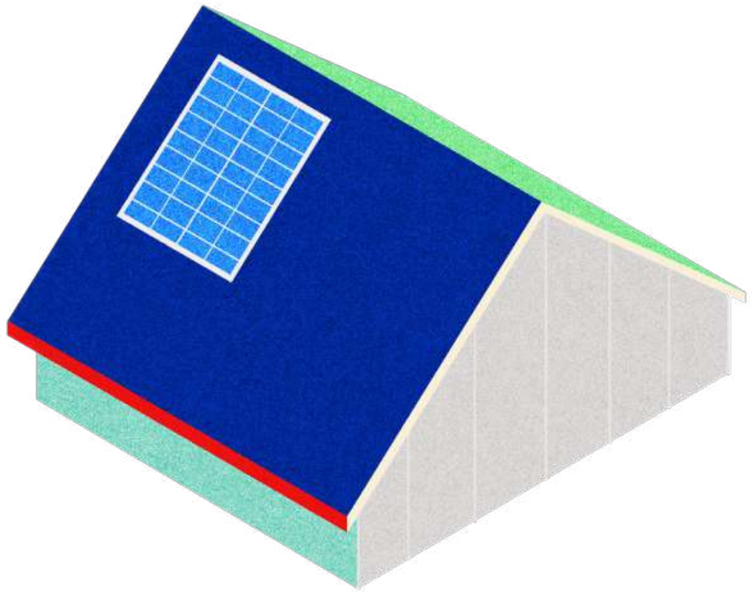
Elkem has a long-term strategy to increase energy recovery annually as part of its climate programme. Most of Elkem's major production sites have production processes that generate surplus heat with high enough temperatures to be recovered. This heat can be used to generate new electricity for the grid, as well as steam or hot water for internal or external use in production or as district heating. The potential for energy recovery has been mapped at all applicable sites and energy recovery has already been implemented, including large offgas boilers at four smelters, generating new electricity and steam. The latest addition came online at the Elkem Salten plant in 2021 increasing the total recovery capacity by 270 GWh annually of electrical energy, equal to the consumption of more than 15,000 Norwegian households.

Globally, a total of 892 GWh of heat and electricity were recovered from Elkem's plants in 2022, equal to about 55,000 Norwegian households' annual electricity consumption. This represents 11% of total energy consumption, a decrease from 13% in 2021, due to lower production at some major facilities equipped with energy recovery.

Energy efficiency

As part of their energy management efforts, Elkem sites are required to have updated energy inventories showing specific consumption and the potential for improving efficiency, thereby reducing consumption and cost. One example of this is replacing old, inefficient electrical motors with new efficient motors with variable frequency drives.

Other examples of important projects to improve energy efficiency can be found at Elkem Xinghuo where old inefficient coal boilers used to generate steam for the production process are being replaced with new co-generation technology that produce both steam and electricity with a substantially lower consumption of coal. The second project is a major expansion of silox capacity with significantly lower energy intensity.



KPIs

	Metric	2022	2021	2020	Comment	
Energy consumption – electricity	GWh	**6 542**	6 536	6 399	0%	
Consumption of purchased or acquired electricity, renewable	GWh	**5 397**	5 488	5 153	-2%	Driven by reduced consumption in Norway
Consumption of purchased or acquired electricity, non-renewable	GWh	**1 144**	1 047	1 246	+9%	Driven by increased consumption in China
Renewable share of electricity consumption	%	**81%**	84%	81%	-3%	
Energy recovery	GWh	**892**	909	711	-2%	Due to reduced production at facilities equipped with energy recovery
Energy recovery of total consumption	%	**11%**	13%	10%	-2%	Driven by the inclusion of Xinghuo coal consumption in the total energy consumption
Consumption of fuel (excluding feedstock) non-renewable	GWh	**1 438**	44	0		Including for 2022 Xinghuo coal consumption in the reporting scope
Consumption of fuel (excluding feedstock) renewable	MWh	**0**	0	0		
Consumption of purchased or acquired heat	MWh	**0**	0	0		
Consumption of purchased or required steam, renewable	MWh	**0**	0	0		
Consumption of purchased or required steam, non-renewable	MWh	**53**	59	54	-9%	
Total energy consumption	GWh	**8 033**	7 023	6 773	+14%	Driven by the inclusion of Xinghuo coal consumption in the reporting scope

The colour indicates a positive or negative development year on year.

Environmental

Biodiversity

Elkem's value chain includes numerous process flows, including mining, high-temperature calcining, high-temperature smelting processes, and chemical production. Mining and chemical processing are activities that could have significant impact on biodiversity.

Key events 2022

- Responded to the CDP Forest for the first time in 2022, focusing on deforestation. Score: A-
- Established a cross-divisional biodiversity mapping project, to increasingly understand the biodiversity impact of the company

Erimsa quartz mines wins environmental award ↗

Elkem defines biodiversity as the variability among living organisms from all sources including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems, in line with the recommendations from newly established Taskforce on Nature-related Financial Disclosures (TNFD). Biodiversity is an integrated part of the group's environmental management system, and closely linked to other sustainability impacts followed up by VP HSE.

It is vital for Elkem to uphold our responsibility for limiting our environmental impact from our operations and Elkem supports the conservation of biodiversity and promotes sustainable management practices. Elkem is committed to preserving biodiversity and ecosystems around our facilities. The commitment is outlined in Elkem's HSE policy, which is approved by the compliance committee.

Elkem recognises the importance of considering relevant environmental aspects, including consideration of water quality, water use, soil conditions, habitats, vegetation, and the physical stability of landforms and decommissioned structures.

Areas of particular exposure to Elkem

Mining

Mining is associated to relatively high biodiversity-related risks, connected to water use and terrestrial ecosystem use. Additionally, there are biodiversity-related risks connected to GHG emissions, non-GHG air pollutants, water pollutants, soil pollutants and solid waste.

Elkem solely mines quartz, that has less stress on the ecosystem compared to other forms of mining. Given that quartz is a common mineral, Elkem can source raw material from non-protected areas. Elkem's mining activities are strictly coordinated with the national mining authorities. Elkem makes environmental risk and impact assessments part of the mandatory steps when applying for mining permits, including consultation with biodiversity experts and local stakeholders.

During mining projects, emissions to water and air are monitored, as well as the impact on soil, vegetation, and the landscape. All activities are audited by the national mining authorities. Elkem also prioritises mineral side streams utilisation to reduce the impact of the mining process. As a mitigation measure, annual provisions are made, earmarked for the restoration of the mine after the activities are ended.

Commitment

Elkem is committed to preserving biodiversity and ecosystems around our facilities, including water quality, water use, soil conditions, habitats, vegetation, deforestation challenges and the physical stability of landforms and decommissioned structures.

Elkem is committed to implement locally driven biodiversity activities at plant level based on the principles of avoid, reduce, restore, and regenerate and transform.

Policies

HSE policy

All policies are available on Governing documents and tools ↗

Elkem is a member of IMA-Europe (Industrial Minerals Association). Together with several other European companies, the organisation enables conditions for positive change for biodiversity.

Biocarbon

Elkem's smelters use a combination of quartz, a carbon source and electricity to produce silicon and ferrosilicon. Elkem's ambition is to increase the renewable share of the carbon source, by replacing fossil coal with biocarbon. The increased need for biocarbon requires the company to ensure that the biomass (i.e. wood chips and charcoal) are sourced from sustainable forestry. Elkem is committed to minimising the impact of our biocarbon strategy for existing forestry and does not accept deforestation in our supply chain. Only sustainably and legally produced biomass shall be used in Elkem's production.

Elkem is committed to sustainable and ethical raw material sourcing in accordance with internationally accepted principles and standards. Ethical and sustainable biocarbon sourcing is based on three main principles:

- Acceptable wood resources for the production of biocarbon.
- Acceptable working conditions and respect for basic human rights during the production and logistics process.
- Zero tolerance for corruption and legal non-compliance.

Chemicals

The speciality chemicals industry is related to high biodiversity risk connected to water use, terrestrial ecosystem use, GHG emissions, non-GHG air pollutants, water pollutants, soil pollutants and solid waste.

Elkem uses chemical compounds in the production process of silicones. Solid waste, non-GHG air pollutants, water use, and water pollutants are closely monitored to reduce impacts on biodiversity.

Elkem's chemical processing activities are strictly coordinated with the national and local authorities. Elkem conducts assessments of biodiversity risks when deciding on a new plant for chemical processing.

Elkem collaborates with local governments and experts to reduce impacts on biodiversity. Elkem's Silicones division is a member of the Responsible Care Global Charter which is the global chemical industry's unifying commitment to the safe management of chemicals throughout their life cycle, while promoting their role in improving quality of life and contributing to sustainable development.

Water represents a critical input in many of Elkem's main production processes and is covered in more depth in the Water management chapter on page 110. ↗

KPIs

KPIs will be evaluated in the biodiversity mapping project in 2023.

Environmental

Water management

Water represents a critical input in many of Elkem's main production processes. Elkem is also indirectly dependent on water as more than 80% of its electricity is hydropower. It is therefore important to ensure that our water footprint is sustainable. Water related challenges vary strongly across Elkem's value chain and are mainly centred around preventing hazardous discharge.

Key events 2022

→ Water withdrawals in water stressed areas in 2022 were reduced by 160,000 m^3 or 23% compared to 2020 (base year)

→ Water intensity related to silicone production have increased from 87,3 to 87,9 litres per tonne or 0.7% in 2022 compared to 2020 (base year)

→ CDP Water: B, up from B- in 2021

Targets

→ 20% reduction of water withdrawals in water stressed areas by 2031 from a 2020 base year. The target covers the following Elkem plants: Yongdeng (China), Elkem Carbon China, Ferroveld (South Africa) , Elkem Foundry China, Nagpur (India)

→ 12% reduction per unit of produced silicones by 2031 from a 2020 base year. Production of silicones accounts for 90% of Elkem's total water consumption

Key risks

× Water availability
× Water quality (contamination and discharge)
× Water-related regulatory framework and permits
× Stakeholder conflict
× Biodiversity and ecosystems

Key opportunities

→ Strong environmental management systems
→ Improvements of water handling, particularly the production expansion project at the Xinghou plant in China

Water withdrawal in water stressed areas is a burden both to the local societies and the environment at Elkem Yongdeng (China), Elkem Carbon China, Ferroveld (South Africa), Elkem Foundry China, Nagpur (India).

Water consumption related to silicone production primarily affect the environment due to water discharges from the production sites (COD and Cu). Silicone production accounts for 90% of Elkem's total water consumption.

Water consumption and scarcity

Elkem acknowledges the importance of stewarding water as a shared resource. Thus, we have implemented programmes to strengthen corporate water management, including monitoring of water withdrawal, consumption, and discharge.

The primary utilisation of freshwater is split into four areas:

→ Water as a raw material for production.
→ Water used to cool production equipment and products.
→ Water used for cleaning.
→ Water used for emergency preparedness.

The first two represent the majority of all water usage and require good quality to avoid product contamination, equipment corrosion and clogging, and contamination of water infrastructure.

Water consumption (discharge and withdrawals) are monitored depending on availability and source and reported to corporate every quarter. Some water withdrawals are measured directly with in-line water meters for continuous measurement, while others are calculated by capacity reflecting actual operational time. Figures on water withdrawals in areas with water scarcity are generally controlled by third parties as water is purchased by an external supplier.

Discharge volumes of process water are reported quarterly to corporate management. Discharge of cooling water, returned to the source of extraction at similar quality as the raw water extracted, is not monitored directly as the volume and quality equals withdrawn water. The cooling water is only subject to heat exchange and most of the cooling systems are closed avoiding extensive evaporation. Loss of cooling water in open cooling towers is not measured.

Many of Elkem's production sites are subject to regulations requiring permits for discharge to water. Specific parameters are included in each plant's permit and reported annually as a minimum. A total of 17 water discharge parameters are also measured or calculated and reported quarterly to corporate from applicable plants.

Almost all of Elkem's production units are located in areas with ample access to water and no significant water stress issues. This is not only important for our production processes, but also for our electricity, which is mainly based on hydropower. A small number of sites are located in areas with long-term or periodic water scarcity (north-east China, South Africa, India), but not water stress. In these areas, Elkem's water withdrawals are low due to the nature of the actual production. Water management measures have been implemented in all areas including systematic risk assessments (including those done in connection with TCFD), and measures to limit withdrawal.

All sites have readily available potable water free of charge and unlimited for all employees and contractors working on site. Sanitary facilities, including toilets and hand/face washing facilities, are also available across all sites. In addition, showers and changing rooms are available across all sites where employees need to shower after work. Working uniforms for this type of work are also provided and cleaned by the company free of charge.

Environmental Water management

Indirect use in the value chain outside of Elkem has not yet been fully evaluated except discussions around water availability for hydroelectric power that is deemed critical as an energy source for most of Elkem's smelters.

Water management

Most water consumption issues represent low risk as production sites with high consumption are in areas with ample water supply, but the environmental issues connected to water discharge are more critical. Most of our major production sites are located close to large bodies of water (both fresh and saltwater basins) where uncontrolled discharge could have lasting negative environmental impact. Therefore, water management is also focused on fully understanding the environmental effect of all water discharges in connection with our production and ensuring that systems are in place for effective water monitoring and treatment to ensure compliance with public discharge permits and improvement targets to reduce discharge of harmful substances.

Enablers to meet these strategic targets, specifically for water-related issues, are:

- → Substitution of raw materials.
- → Good housekeeping practices.
- → Development of new processes and production technology.
- → An advanced control programme, including environmental monitoring.
- → Wastewater treatment and reduction by recycling or reuse.
- → Transparency (CDP Water).

Discharge to water and water treatment

Many of Elkem's production sites are subject to permits for water discharge . Specific parameters are included in each plant's permit and reported anually as a minimum. A total of 17 water discharge parameters are measured or calculated and reported quarterly to corporate HSE from applicable plants.

The three most critical discharges to water are organic substances that can affect oxygen concentration in water (Chemical Oxygen Demand), Silicone Cyclics (D4, D5 and D6) and Polycyclic aromatic hydrocarbon (PAH). The two first are an inherent part of upstream and intermediate silicones production while the third is found in the carbon paste production.

Chemical oxygen demand (COD) indicates the amount of oxygen consumed by reactions in a measured solution, which is used to quantify the number of organics in the water. The potential impact of higher COD levels in water is related to reduced levels of dissolved oxygen (DO). A reduction of DO can lead to anaerobic conditions, which is harmful to fish and biota. Therefore, compliance is ensured through extensive monitoring to minimize the generation of organic waste in production processes, infrastructure maintenance to prevent leakage from production units and pipelines and optimal operations of on-site water treatment to ensure purification before discharge.

D4, D5 and D6 are important intermediates in the production of Silicones and have been defined in the EU as Substances of Very High Concern (SVHC). D4 is categorised as Persistent, Bioaccumulative and Toxic (PBT) and D5 and D6 are categorised as very Persistent, very Bioaccumulative (vPvB) substances. Internal spills may cause adverse environmental effects if they enter sewage systems that cannot treat and remove D4/ D5 residues, but the main concern is not in our own production. The main concern is residual amounts that may remain in our customer's consumer wash-off products and enter sewage systems during final use. This may adversely affect the marine environments because of low biodegradability and the risk of bioaccumulation. The compounds are, however, easily degraded by photooxidation.

Elkem's strategy to reduce the risk of harm with D4/ D5/D6 is threefold. The first part involves a high focus on process control and on avoiding spills and leakages in our own production processes. The second part is dedicated R&D efforts together with our customers to reduce residual D4/ D5/D6 in their products. The third part includes substantial investments in China, both in upstream and downstream production, to replace cyclic materials such as D4, D5, and D6 with linear materials.

PAH discharges originate when coal-tar pitch is used as a binder in the production of carbon products including smelting furnace electrodes which is one of the main products in Elkem Carbon Solutions. PAH is typically bound to particles and not easily biologically available, but it is still strictly regulated as it is defined as SVHC by the EU.

PAHs have moderate to high acute toxicity to aquatic life and birds and can have adverse long-term effects including tumours, reproduction, development, and immunity. Compliance with discharge permits is ensured through process control and extensive water treatment on-site to limit the amount of PAH in discharges to water. Elkem has also invested substantial funds in R&D activities and holds a leading position in the development of alternative binders without PAH.

There were no significant D4/D5 or PAH spills in 2022.

KPIs

	Metric	2022	2021	2020
Withdrawal				
Total freshwater withdrawal	Megaliters	**89 587**	85 654	86 900
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Megaliters	**46 509**	46 698	46 644
Groundwater – renewable	Megaliters	**452**	581	613
Third party sources	Megaliters	**42 716**	38 391	39 913
Discharge				
Discharge of cooling water	Megaliters	**54 542**	52 925	59 000
Discharge of process water	Megaliters	**7 605**	7 020	16 500
Fresh surface water	Megaliters	**4 489**	4 936	5 000
Brackish surface water/seawater	Megaliters	**56 437**	54 883	43 000
Third-party destinations	Megaliters	**1 210**	1 260	1 100
COD flow	Thousand kg	**183**	202	263
Total water discharge	Megaliters	**62 145**	59 945	75 500
Total water consumption	Megaliters	**27 439**	25 709	30 000

Environmental

Waste management and circularity

Elkem's business system builds on a zero-waste philosophy focusing on the reduction of all kinds of waste throughout the value chain with a high focus on the efficient utilisation of all resources, reduction of waste generation and on reuse, recycling, or sales of residual waste.

Targets

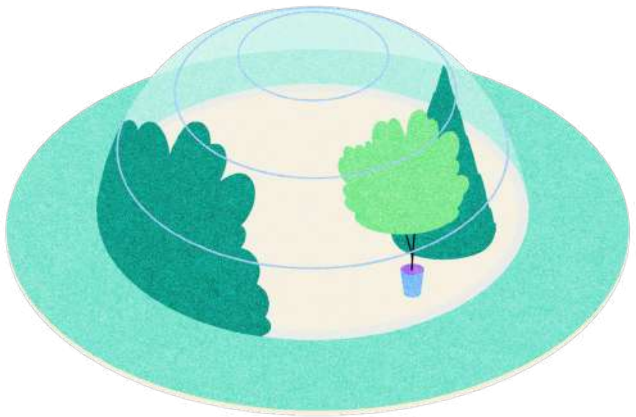
- → Hazardous waste to landfill: Reduction of 10%
- → Waste to disposal: Reduction of 10%
- → Waste recycled: Increase by 10%

Key risks

- × Cost risk: Increased cost of hazardous waste handling storage and disposal with tightening local legislation
- × Restrictions in use of bio-based sources

Key opportunities

- → Cost / profit opportunity with less raw material cost and more sellable products
- → Climate opportunity with less raw material transportation and increased circularity



Commitment

All physical waste streams have value and it is our goal to realise that value and avoid disposal or destruction, enabling circular economies in our operations and with partners.

Policies

- → HSE policy

Elkem's corporate policies ↗

Elkem's value chain includes numerous process flows, including mining, high-temperature calcining, high temperature smelting, and chemical processing.

Major waste streams from our process flows are:

- → Tailings and off-spec materials from mining activities.
- → Degraded and off-spec raw materials from calcining and smelting.
- → Spent synthesis mass, filtration cakes and spent solvents from chemical processing.
- → Dust and sludges from air and water treatment facilities.
- → Dirty packaging.

Management and utilisation:

Several processes have been put in place to reduce waste. The focus is mainly on process improvements to:

- → Reduce waste generation.
- → Reuse and recycle (spent mass neutralisation and packaging).
- → Incineration with and without energy recovery.

Any residual waste left after other efforts is disposed of in accordance with local regulations, including limited landfilling in approved landfills. Over 70% of processed waste generated in 2022 was either reused or recycled.

The value chain for Elkem's products consists of four main types of production, each with specific potential waste streams:

Quartz is found both as rock formations in mountain seams and as stones in prehistoric riverbeds. The extraction process includes the use of explosives for mountain seam extraction or diggers to remove topsoil for riverbed extraction. Quartz is then further processed with washing, crushing and sizing. No hazardous chemicals are used in the process. Main waste streams from the process are tailings from the extraction or washing and off-spec qualities or sizes from crushing and sizing. Most of the waste streams are utilised to restore open-pit mines or sold as by-products (sands and gravels to the construction industry), while some are landfilled in connection with the restoration of mining sites. Elkem is also developing alternative usages for sands in agriculture and sports.

Waste in connection with shipment: It is usually in bulk with no specific packaging.

Hazard classification: As quartz is a naturally occurring mineral there are no hazardous wastes in the process.

Carbon production consists of high-temperature treatment of anthracite and petroleum coke. The mixing of these with binders creates different types of paste used for electrodes, fill materials and additives in the metallurgical smelting industry. Major waste streams are degraded raw materials and off-spec production. Most of this can be reprocessed safely back into new batches of product. The remaining waste is delivered to approved suppliers for hazardous waste treatment. New, non-hazardous (green) binders are under development to reduce the use of high temperature coal tar pitch (CTPht).

Waste in connection with shipment: The primary raw materials are received in bulk, eliminating packaging. Finished products are delivered to customers in big bags or on pallets, giving customers a potential source of waste. However, the packaging materials are of good enough quality and can be reused multiple times.

Hazard classification: Degraded raw materials and off-spec production can contain binders consisting of CTPHT which is listed as a substance of very high concern.

Environmental Waste management and circularity

Silicon smelting consists of a high-temperature chemical reaction that transforms quartz and carbon (coal, charcoal, or wood chips) into silicon. In addition, alloying, crushing and sizing operations are used to tailor the product to customer needs in the electronics, foundry and chemical industries.

Major waste streams are degraded raw materials, slag from smelting, particles in off-gas emissions and fines generated during crushing and sizing operations. In the early 1970s, Elkem pioneered off-gas capture and utilisation by developing necessary bag filter technology to capture off-gas from smelting furnaces and other technologies to turn it into a valuable product used in hundreds of products today. This technology turns over 150,000 tonnes of waste into products every year.

The other waste streams have historically been sold as low-value off-grade products or landfilled on site. Teams of dedicated professionals have worked on increasing the utilisation of these streams for many years now, treating them as valuable raw materials that can either be reintroduced to Elkem's different production processes or sold as value-added products to customers. As a result of this work, Elkem harvests more than 100,000 tonnes of process products every year, reducing costs at our plants and generating new solutions for our customers.

Waste in connection with shipment: Except for charcoal, which is supplied in big bags, and alloying materials, which are often shipped in smaller containers, most raw materials are supplied in bulk, reducing the need for packaging. Finished products are also shipped either in bulk or in big bags on pallets that can be reused.

Hazard classification: None of the major waste streams are defined as hazardous. Some alloying materials and chemicals used to process silicon after smelting are hazardous, but do not represent major waste streams. These are always delivered to certified third party suppliers for disposal.

Silicone formulation consists of many different chemical processes and reactions that result in specialty products closely tailored to customer needs. A number of different waste streams, both hazardous and non-hazardous are generated throughout and between the different production processes. Main waste streams include acid water, used solvents, hydrolysis by-products, sludge, and waste masses. Waste reduction is included in the discussion on annual objectives and improvement plans conducted by the production teams and our research and innovation departments.

Waste in connection with shipment: Substantial amounts of packaging is needed for raw materials, intermediate and finished products. Waste reduction efforts focus on reuse (IBCs, pallets, and drums) and recycling.

Hazard classification: A large part of the waste generated during the production processes is hazardous waste. All hazardous waste is either treated on-site (incineration, neutralisation, reuse) or sent to certified service providers for destruction.

Generic waste streams: Elkem also has generic waste streams such as used oil from vehicles and equipment, and packaging materials from sourced goods. Each site has dedicated systems to sort waste on site and deliver waste to approved service providers that will recycle or re-use it whenever possible.

KPIs

	Metric	2022	2021	2020	Comment	
Total waste generated	**Tonnes**	**462 745**	**397 247**	**356 156**	16%	**
Non-hazardous waste to landfill	Tonnes	**45 273**	58 465	48 077	-23 %	**
Hazardous waste to landfill	Tonnes	**6 301**	5 200	6 031	21%	**
Non-hazardous waste to destruction	Tonnes	**2 485**	15 660	2 399	-84 %	**
Hazardous waste to destruction	Tonnes	**67 166**	38 791	62 004	73%	**
Total waste directed to disposal	**Tonnes**	**121 225**	**118 116**	**118 544**	**3%**	**Approx. 30% of total waste generated**
Byproducts to recycling/sale ex. microsilica	Tonnes	**129 318**	137 998	94 690	-6%	**
Oils and chemicals to recycling	Tonnes	**9 398**	69	1 945		**
Scrap, packaging, etc. to recycling	Tonnes	**65 386**	4 491	4 687		**
Microsilica	Tonnes	**137 418**	136 573	136 322	1%	
Total waste diverted from disposal (reused or recycled)	**Tonnes**	**341 520**	**279 131**	**237 645**	22%	Approx. 70% of total waste generated
Mining activities*	Tonnes	**354 456**	**320 687**	**308 263**	11%	Tailings and crushing residue (natural rock without chemical processing) from mining.

**All of the waste in the mining activities was returned to the mining sites for further use in mining activities or as part of our programme to refurbish mining site for return to farming or to their natural state.*

*** The major changes in number is due to changes in classification as the reporting structure in Elkem is improving. We continue to work internally to improve the quality of the data.*

Environmental

Local emissions to air

Local emissions to air are inherent to many of Elkem's main production processses and are therefore deamed material to the company. As local emissions to air, such as NO_x, SO_2 and dust, affect air quality, measures to control and reduce the emissions are therefore priority areas of improvement.

Targets

→ Dust: 30% reduction by 2025 baseline year 2015 (1,970 tonnes)

Key risks

× Increased levels of sulphur (S) in available raw materials
× Increased emissions due to volume expansions

Key opportunities

→ Reduction of dust, NO_x and SO_2 by substitution of old boilers at Xinghou with efficient Co-Gen Technology (2024)
→ New emission abatement at Elkem Carbon China (2022) will significantly reduce both dust and SO_2 emissions
→ Elkem biocarbon strategy will reduce SO_2 emissions by approx. 2,000 tonnes per year towards 2030

KPIs

	Metric	2022	2021	2020	Comment
Dust	Thousand tonnes	**1 204**	1 379	1 270	-13%
SO_2	Thousand tonnes	**7 229**	7 280	6 880	
NO_x	Thousand tonnes	**6 519**	8 932	6 610	-27%

The colour indicates a positive or negative development year on year.

Commitment

Elkem is committed to a zero-harm, ie. ambient air quality well below applicable standards.

Policies

→ HSE policy

Elkem's corporate policies ↗

Local emissions to air are are closely monitored to ensure compliance with public permits. A total of 17 parameters concerning emission to air are reported by applicable sites quarterly to corporate HSE. Variations in the emission are mainly tied to changes in production volume as they are inherent to the production process, but they can also be affected by the quality of raw materials, the process control and investment in filter or scrubber systems. These emissions are regulated in public permits.

Emissions from SO_2 were stable in 2022 compared to 2021. Both dust and NO_x emissions were reduced in 2022, compared to 2021.

NO_x

Nitrogen oxides (NO_x) are generated in Elkem's high temperature smelting and calcining processes and can be harmful to ecosystems and vegetation, as well as human health. Elkem has successfully invested substantial funds in R&D and furnace upgrade to reduce NO_x emission from Silicon smelting furnaces and will continue to do so going forward. The 2022 NO_x emissions numbers show a significant reduction compared to 2021 (-27%). This was both related to volume effects from the temporary shut down of furnaces in 2022 and effects of low-NO_x furnace design at several silicon smelters.

More than 80% of reported NO_x emissions are based on online monitoring and reporting. The approximately 20% remaining is based on industrial emission factors.

SO_2

Sulphur dioxide (SO_2) is generated when using carbon materials in the smelting process and when calcining coal and coke in the carbon products process. SO_2 emissions can have a negative effect on both plant and animal life, as well as human health. SO_2 emissions can be reduced through the use of carbon materials with low sulfur content, or by off-gas treatment. The SO_2 emissions in 2022 were at the same level as 2021. An slight increase in sulphur content in raw materials have been mitigated by temporary shut down of several silicon furnaces in 2021.

A majority of the reported SO_2 emissions are based on mass balance, i.e. analysis of sulfur in raw materials. A few plants have digital monitoring.

Target: Reduction of 3,000 tonnes of SO_2 emissions.

Dust

Dust is a major challenge in the production of both silicon and carbon products. It is not only a pollutant to the external environment, but also a working environment health challenge. For both areas the main focus is to reduce the generation of dust in different production processes and increase the collection and filtering of dust that is generated so it does not escape out into the working environment. Extremely high temperatures and ultra-fine particles that disperse very quickly make it especially difficult to capture dust generated in some of the production processes. Elkem allocates significant resources to combat dust and has a longterm ambition of reducing levels of dust in the working environment to levels where exposure is acceptable without the use of respiratory protection. For external emissions of the dust the goal is a reduction of dust emissions by 30% by 2025 compared to 2015.

Target: 30% reduction by 2025, baseline year 2015. The dust emissions in 2015 was 1,970 tonnes. In 2022, the dust emissions where almost 40% down from 2015.

Dust emission calculations are based on multiple quantification strategies, including continuous monitoring in stacks, estimates on fugitive emissions and third party control.

S

Environmental
Social
Governance

Social

Introduction

Safe operations for all people at our sites are always our first priority. Elkem believes that all incidents can and should be prevented and a zero-harm philosophy guides our everyday work. To be able to deliver on this ambition, a skilled, engaged and diverse workforce is the key. This also represents the foundation to maintain our continued success and achieve strategic priorities.

Elkem's strategy of growth and green leadership is built on operational excellence and continuous improvements. Our employees are the single most important factor for success. Elkem's global team of more than 7,300 people have a shared commitment to our stakeholders: To deliver our and your potential.

Our employees are Elkem's most valuable resource. Therefore, Elkem takes responsibility for all activities on Elkem's properties and is committed to ensuring that employees and contractors working on Elkem sites can do so without suffering any harm. Elkem is also committed to influence its suppliers and business partners to have the same focus on health and safety.

Unfortunately, Elkem experienced two fatalities in 2022, one in India and one in China. The investigations showed that necessary safety measures were not followed, showing that the health and safety work can never lose focus. For more information see the HSE chapter. ↗

After several years of Covid-19 pandemic hardship, the organisation has continued to manage the impacts at local levels in 2022, where necessary. Travel restrictions have been partly lifted, making it possible for the HSE audits and -training to get back to the pre-pandemic level.

In addition, it is important that individual involvement is promoted. As part of our commitment to a safe work environment, Elkem also considers the protection and promotion of human rights, workers' rights, decent living wages, and equal opportunities as being vital to Elkem's operations. At Elkem, we believe a sustainable future depends on our ability to reduce disparities and create social prosperity. Elkem is committed to build a culture based on equality and respect for cultural differences.

Elkem has engaged external subject matter experts to conduct a human rights impact assessment, covering the company's overall risk exposure, as well as taking deep dives on selected countries and operations. The final report contains findings and recommendations that will guide Elkem's priorities for strengthening the human rights program going forward.

The social topics material to Elkem are:

- → Health and safety on site
- → Human rights, including labour rights

In addition to the material topics, Elkem outlines its commitment and work on diversity, equality and inclusion (DEI) in the ESG report as part of the stakeholder expectations. Pursuant to Norwegian legislation requirements, Elkem makes available the annual Activity and reporting duty-report. ↗

Key highlights in 2022

- → Elkem's first global employee engagement survey was conducted
- → Human rights impact assessment carried out
- → Review of all HR policies & procedures in light of DEI
- → Developed 360 inclusive leadership feedback assessment tool
- → New upgraded HSE training programme FORUS developed

Key KPI

	2022	2021	2020
Total recordable injury rate	**3.2**	3.7	2.2
Reported confirmed cases of child or forced labour	**0**	0	0
Employees covered by collective bargaining agreements	**40%**	39%	N/A
Female share	**25%**	25%	25%

8 DECENT WORK AND ECONOMIC GROWTH

Social

Health and safety on site

A robust health and safety culture is the essence of our licence to operate. Elkem's Health, Safety and Environment (HSE) efforts are based on a zero-harm philosophy and our HSE management system is implemented to work systematically towards this goal. Total recordable injury rate decreased in 2022, but there were several high-consequence injuries.

Commitment

Elkem is committed to providing a 100% safe workplace with zero harm and zero injuries. Our commitment to HSE covers all employees and contractors.

Policies

→ Code of conduct
→ HSE policy

Elkem's corporate policies ↗

Health and safety management

Elkem's production activities involve inherent dangers, exposures and emissions that may cause substantial harm as operations include high temperature smelting (>2,000°C) and advanced processing of hazardous chemicals. A zero-harm philosophy and an organisation that is fully committed to giving first priority to the health and safety of employees and contractors working on site is paramount to our success and our licence to operate. Even though Elkem bears the full responsibility for ensuring a safe and healthy workplace, the company also expects its employees and contractors working on Elkem property to be fully committed to a safe and healthy workplace and to do their part in achieving this.

To safeguard the line management's ability to fulfil this responsibility, each site has an HSE organisation based on the size of the organisation and the level of risk. Elkem's corporate Vice President for HSE is responsible for Elkem's HSE management system. Compliance with the system is internally audited on a routine basis at the site by corporate and divisional resources. The internal corporate HSE audit programme aims to audit all production sites a minimum of every other year. There were 22 audits in 2022 and there are 20 audits planned for 2023. With the implementation of the safety management system FORUS, each site starts with internal self-assessments, followed up with divisional and corporate audits.

Elkem works continuously to provide the employees and contractors with the right skills and tools to understand and deal with any risks they may face in our workplace. Elkem has developed comprehensive systems for risk management that are applicable across all Elkem sites worldwide.

We show our commitment by:

→ Having clearly defined responsibilities and accepting accountability for health and safety at all levels of the organisation.
→ Always prioritising individual health and safety when making decisions.
→ Setting ambitious goals and striving for continuous improvement in health and safety.
→ Using the same HSE systems, tools, methods, and having the same expectations to HSE performance wherever Elkem operates worldwide.

Elkem has a strict reporting regime for injuries and requires all injuries to be reported, investigated, and mitigated, independently of severity. Overall, the total number of injuries went down in 2022, with most being low-consequence injuries. Unfortunately, Elkem experienced one subcontractor fatality in India and one subcontractor fatality in China. The investigations showed that necessary safety measures were not followed. In addition, there was one high consequence injury among our employees, up from zero in 2021. This just shows that the health and safety work can never lose focus, for all working at Elkem's facilities.

The total recordable injury rate went down from 3.7 to 3.2 and the lost workday rate was 0.9, down from 1.5 in 2021.

All recordable injuries and high-potential incidents are fully investigated and measures are implemented to prevent similar incidents from happening in the future. Detailed information is also shared with other sites to ensure implementation of learnings from the incidents at all applicable Elkem sites.

HSE management system and auditing

Elkem has for many years used a comprehensive in-house developed corporate HSE management system called FOKUS (from the Norwegian word for "focus", implying the need for significant attention on the organisation's HSE issues) that applies to all sites and activities worldwide. The system is built around recognised international standards for HSE management and covers relevant HSE topics identified by extensive risk assessment at all sites. It has been decided to implement a new safety system built around the ISRS system of safety management with the name of FORUS. The system name is derived from the goal to be a leader (Forerunner System) in safety. The basis of the system continues to be risk-based. It consists of a manual, safety procedures and protocols as well as a full auditing system. The system's requirements and provisions cover all Elkem employees and all contractors working on Elkem property. In addition, suppliers of raw materials and goods are asked to comply with basic HSE rules and regulations as part of contractual purchasing agreements. Elkem's HSE management system defines HSE as a line management responsibility where managers at all levels of the organisation are accountable for the HSE performance in their organisations and locations.

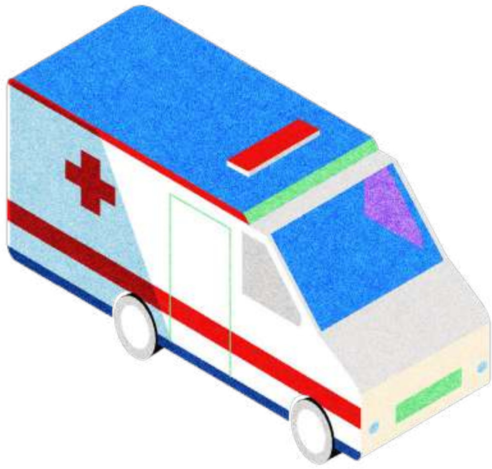
Incidents management

General requirements for recording, notification and classification of injuries and incidents are based on criteria from US OSHA, which are relevant for Elkem's type of industry. Elkem has a comprehensive digital incident management system and expects all employees to report any injuries, incidents, unsafe conditions, deviations, and non-compliances. All reports are subject to investigation, mitigation sharing and, where appropriate, for learning and improvement. Serious incidents are subject to comprehensive root cause analysis. Recordable injuries and high-risk incidents are presented for corporate management on a weekly basis for discussion.

In addition to reporting, incident management also includes emergency preparedness. All sites have emergency plans and emergency resources tailored to their level of risk. This varies from simple first aid and fire extinguishing equipment, to fully equipped in-house emergency response teams.

Covid-19 management

After several years of Covid-19 pandemic hardship, the organisation has continued to manage the impacts at local levels where necessary in 2022. Travel restrictions have been lifted in most countries, making it possible for Elkem's HSE audits and training to get back to the level before the pandemic. However, China has continued with a strict policy regarding Covid-19 and travelling to China remains problematic. Hence, the local teams have taken on more of the role of auditing and training.



Social Health and safety on site

Health and safety training

Elkem employees receive comprehensive documented HSE training to ensure a complete understanding of hazards in the workplace and how they can avoid harm during daily operations. Training activities include:

- → Basic training in Elkem's HSE management system FORUS mandatory for all employees.
- → Specific work-related training for each work operation and each tool employees are required to use to ensure they have necessary competence to do the job in a safe and health manner.
- → Awareness training to ensure each employee understands how their personal behaviour can affect the health and safety of themselves and others.
- → Training needs and completed training activities are reviewed annually through development discussions with each employee and documented at the site level.

Contractor health and safety on site

Elkem's zero-harm philosophy applies also to all contractors working on site and contractors are subject to the same health and safety requirements as Elkem employees when working on Elkem property. Contractor companies are screened before being contracted, and contractor employees receive specific HSE training from Elkem before they are allowed to work at Elkem plants. The two fatalities in 2022 shows the need to keep training all own employees and contracted employees.

For more comprehensive information ↗

KPIs

Employees

Work-related injuries	Metric	2022	2021	2020	Comment
Fatalities	Absolute numbers Rate	**0** **0**	0 0	0 0	No change
High-consequence work-related injuries	Absolute no. Rate	**1** **0.1**	0 0	1 0.1	Number up 100%
Lost workday injuries	Absolute no. Rate	**13** **0.9**	21 1.5	10 0.8	Number down by 38%
Other recordable injuries	Absolute no. Rate	**31** **2.2**	30 2.2	19 1.5	Number up by 3%
Total recordable injuries	Absolute no. Rate	**44** **3.2**	51 3.7	29 2.2	Number down by 14%
Hours worked	Number	**13 936 109**	13 706 429	13 097 248	Up 2%

Contractors

Work-related injuries	Metric	2022	2021	2020	Comment
Fatalities	Absolute numbers Rate	**2** **0.3**	0 0	0 0	Number up by 200%
High-consequence work-related injuries	Absolute no. Rate	**2** **0.3**	0 0	0 0	Number up by 200%
Lost workday injuries	Absolute no. Rate	**14** **2.4**	7 1.5	6 2.2	Number up by 100%
Other recordable injuries	Absolute no. Rate	**8** **1.4**	10 2.1	7 2.5	Number down by 14%
Total recordable injuries	Absolute no. Rate	**22** **3.8**	17 3.5	13 4.7	Number up by 29%
Hours worked	Number	**5 722 932**	4 797 159	2 761 047	Up 20%

The colour indicates a positive or negative development year on year.

Social

Human rights, including labour rights

Elkem promotes decent working conditions and respect for human rights in our operations and value chains. There is a growing general acceptance of business' duty to respect human rights.

Key events 2022

- Conducted a company-wide human rights risk- and impact assessment with support from external experts
- Formalised functional ownership of human rights with Corporate Compliance
- Integrated human rights considerations into several group governing documents

Targets

- Improve performance in accordance with human rights action plan
- Make human rights eLearning mandatory for key employee target groups
- Further strengthen framework for human rights due diligence in the supply chain

Key risks

The areas where Elkem's operations, activities and value chain pose the highest risk to people are identified as:

- × Risk of unsafe, hazardous work environment and safety concerns related to Elkem's own production and processes or our supply chain
- × Risk of unfavorable working conditions (specifically working hours, wage and overtime payment) among Elkem's suppliers
- × Risk of forced or involuntary labour occurring in Elkem's supply chain
- × Risk of negatively impacting the living conditions and livelihoods of the local community through Elkem's own production and processes or our supply chain

The chapters Human rights Responsible value chain management, and Responsible economic practices have been developed to comply with the legal requirements as stated in the Norwegian Transparency Act 2021 and the UK Modern Slavery Act 2015.

Commitment

Elkem is committed to the UN Declaration and International Conventions on Human Rights, the OECD Guidelines for Multinational Enterprises, the ILO Declaration on Fundamental Principles and Rights at Work, ILO's core conventions and relevant local legislations in the countries where we operate. We follow the United Nations Guiding Principles on Business and Human Rights.

Policies

- Code of conduct
- Code of conduct for business partners
- Human rights program
- People policy

Elkem's corporate policies ↗

The group is fully committed to avoiding complicity in human rights abuses, and to respect, protect and promote human rights throughout our operations. Our commitment is expressed in our code of conduct, which is approved by the board of directors. The commitments and how we operationalise them are further elaborated on in our Human rights program. Both documents were updated in 2022 and apply to all employees (including temporary personnel) and directors in Elkem ASA and subsidiaries, corporate affiliates, and joint ventures that are majority owned or controlled by Elkem (individually and collectively). Our expectations to suppliers, distributors, agents, traders/resellers and joint venture partners are codified in our code of conduct for business partners.

As an international company, Elkem operates in a global market, both as a producer of materials and products and as a buyer of commodities and services. It is important to acknowledge that this global footprint puts us at risk of being complicit in human rights violations. We have a long history of encouraging and ensuring employee representation, and we have demonstrated a strong HSE focus in all our operations. However, we also have a wide-ranging, multi-tiered supply chain where it is difficult to achieve full transparency on labour conditions. In addition, we operate in countries where human rights are under pressure.

There has been a rise in countries considering and passing human rights laws that regulate business activities. New laws took effect in for example Norway, the United States and the Netherlands in 2022, and further legislative developments are expected in 2023-2024.

While we as a company cannot resolve all human rights issues in isolation, we have a responsibility to identify human rights risks in our value chains and mitigate them to the best of our ability. We are continuously taking steps to strengthen our human rights framework.

Human rights

Human rights risks are present across the company's activities, operations and functions, and human rights considerations must therefore be an integrated part of multiple processes. In 2022 we revised our governing documents and developed the Human rights program. ↗ This describes how Elkem operationalises its commitment to respect and support internationally recognised human rights, and references the most relevant policies, procedures and other resources that support the implementation of the human rights program. In parallel, internal subject matter experts have reviewed governing documents for functions such as HR and supply chain to ensure our group policies and procedures integrate a human rights risk assessment and mitigation efforts in core operations.

Elkem recognises that respecting human rights begins with understanding what human rights are and how our business activities may impact them. An eLearning course is available to all Elkem employees and will be made mandatory for relevant groups of employees in 2023.

As we grow and enter new and challenging markets, we see the need to take a more systematic approach to our human rights strategy. In 2022, we conducted a company-wide human rights risk- and impact assessment with support from external experts. An action plan will be developed in 2023 based on the findings and recommendations. Progress on the action plan will be reported to the ESG steering committee.

Labour rights

Elkem acknowledges all employees' right to form and join trade unions of their own choice. We have a long and strong tradition of including and involving employees and their unions and believe this improves our decision-making processes.

Social Human rights, including labour rights

It is important in Elkem to have a good, regular and constructive dialogue between the employees and the management. Elkem recognises and respects the freedom of association and the right to collective bargaining in accordance with local, national legislation and practices. In countries where the local laws, practice or traditions do not support this, Elkem encourage channels and arenas where the employees are informed about the company's status and allowed to get information, raise concerns, and influence decisions affecting them.

2022 Human rights impact assessment:

As we grow and enter new and challenging markets, we see the need to take a more systematic approach to our human rights strategy. In 2022, we conducted a company-wide human rights risk and impact assessment. The assessment was supported by external experts employing methodology based on OECD due diligence guidance for responsible business conduct, focusing on risk to people. The assessment combined desktop research into country-, sector- and company specific risks with a review of Elkem's current human rights risk management framework and interviews with key internal stakeholders across Elkem's global locations and business areas. Deep-dives were conducted into certain locations selected on the basis of size and nature of Elkem's operations and inherent country risk.

The purpose of this assessment was to identify, assess, and prioritise existing and emerging human rights risks for Elkem, and make recommendations for further risk-mitigating actions and improvements to how we manage human rights risks. The results of the assessment serve as the starting point for improved human rights management in Elkem in accordance with our commitments and regulatory requirements. An action plan will be developed in 2023 based on the findings and recommendations. Progress on the action plan will be reported to the ESG steering committee.

Collective bargaining agreements:

In 2022, 40% of all Elkem employees globally were covered by collective bargaining agreements. In Norway and most other countries where Elkem operates, the collective agreements are generalised. The generalisation of a collective agreement means that all employees who work in a profession or business that falls under the scope of the generalised collective agreement have, as a minimum, a claim to the pay and working conditions that appear in the collective agreement that has been generalised. The purpose of the generalisation is to ensure that all workers receive pay and working conditions that are equal and fair and protect for example foreign workers against unreasonable or unacceptable pay and working conditions.

The level of trade union coverage 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. At sites where there are no formalised labour unions, local management is encouraged to set up channels and arenas for collaboration where employees are informed about the company's status and allowed to raise concerns and influence decisions that affect them. The EBS tools and culture supports this as involvement in decisions is part of the management system.

Elkem complies with local statutory requirements regarding freedom of association in all countries where we are present. Pursuant to the Norwegian Companies Act provisions, employees have three representatives and two observers on the board of Elkem ASA. Elkem also has a European Works Council (EWC), which is in accordance with the European Union Directive 2009/38/EC. The meetings take place annually.

For employees who are not members of trade unions and in countries where collective bargaining agreements are in place, Elkem determines their working conditions and terms of employment based on the collective bargaining agreements that cover the organised employees in order to ensure equality. In countries and for groups of employees who are not covered by collective bargaining agreements, the local HR-function is always involved in determining the working conditions and terms of employment to ensure fair and equal treatment of all employees. The HR-function together with the local line management are responsible for full compliance with local laws to ensure the labour rights.

Working hours shall be in accordance with local law or agreements. Where the operation of the business makes it necessary to deviate from this, measures shall be taken to secure sufficient time for rest between each working period, and the actual working hours shall be in line with the intentions above.

Employees are entitled to medical treatment covered by the company in the event of sickness or injury resulting directly from their work at Elkem. In the event of work-related disablement or death, employees or their surviving immediate family member(s) will receive insurance payments and/or pension. In addition, employees shall be protected from being dismissed due to pregnancy or responsibility for new-born children, consistent with local customs and laws.

Child and forced labour

Elkem strongly condemns human trafficking as a breach of fundamental human rights. Employment in Elkem shall always be on a voluntary basis and without any form of threats, force, or unlawful recruitment.

Elkem has operations in parts of the world where there is a risk of child labour and forced labour, such as parts of Asia, South America, and Africa. We take this risk seriously, and we will not tolerate the use of child or forced labour in any of our operations and facilities. We expect the suppliers and contractors with whom we do business to uphold the same standards. Our expectations are codified in our code of conduct for business partners, which was updated in 2022 to include clearer language on respect for human- and labour rights including prohibition on forced or involuntary labour. More information about our sustainable supplier management practices can be found in the supply chain management chapter on page 148. ↗

There were no confirmed incidents of child or forced labour in Elkem in 2022.

The people policy and the code of conduct for business partners protects the rights of the employees and the stakeholders that are specifically vulnerable to our activities. The age limit for working in Elkem is 18 years. There are two exceptions to this; i). vacation substitutes and vocational students, where the age limit is 16 years, are only allowed to do light and simple work that is deemed safe and does not conflict with school participation, and ii). apprenticeships or other programmes are accepted for children under 16, but only if this enhances the child's education.

Some supplier production sites or some of our own plants are considered high-risk work only allowed to be performed by trained and qualified people. Several measures are in place to ensure compliance with these procedures and our human rights policy. Elkem has strict routines to ensure that all official permits and registrations are in accordance with local law, and that all employees have written employment contracts or other documentation in line with local legal requirements, insurance coverage and correct tax payments. HSE audits are regularly conducted at all plants, with specific focus on these topics for plants in high-risk areas. All Elkem work procedures and HSE rules and training requirements apply for own employees as well as contractors. All incident reporting and follow-up also includes contractors.

Grievance mechanism

Elkem's grievance mechanism, accessible from the company website, is targeted towards stakeholders who have feedback or concerns related to our plants, projects, or other business activities worldwide. Concerns received through the grievance mechanism are confidentially handled and coordinated by the ESG Office, together with the relevant parts in the organisation. The aim of the dialogue with the complainer is to resolve and/or clarify the concern.

Elkem has also established a secure speak up channel which is available to internal and external parties. More information can be found in the chapter on Responsible economic practices, on page 140. ↗

KPIs

	Metric	2022	2021	2020	Comment
Employees covered by collective bargaining agreements	%	**40%**	39%	64%	
Human rights impact assessment	Status	**Completed**	Decided	N/A	
Reported confirmed cases of child or forced labour	Number	**0**	0	0	
Number of cases reported through the grievance mechanism		**6**	2	N/A	All cases reported were resolved

Social

Diversity, equality and inclusion (DEI)

At Elkem, we believe that our people are our most valuable asset. The collective sum of the individual differences, not only represents a significant part of our culture, but also our reputation and achievements. By embracing equal opportunities, and a diverse and inclusive company culture, Elkem aims to increase our customer centricity, cultural awareness, compliance and innovation.

Key events 2022

- Global employee engagement survey
- Conducted DEI workshop in the corporate management team
- Review of all HR policies and procedures to actively support DEI
- Developed inclusive leadership assessment tool

Targets

- DEI awareness training for the senior leadership in the company
- Develop and incorporate value-based competencies and behaviours in HR processes & procedures
- Work with senior leadership to adopt and role-model the values-based behaviors
- Develop & implement DEI training for recruitment, promotion and talent management purposes

Key risks

× Legal challenges as a result of non-compliance
× Poor attraction and retention of top talent
× Impact of low inclusion on ability to deliver continuous improvement and innovation

Key opportunities

- Attract, retain and engage diverse talent
- Tap into diverse perspectives, leading to better continuous improvement and innovation
- DEI delivers a positive impact on performance

Commitment

Elkem is committed to actively participating in, supporting and sponsoring programmes that increase diversity and promote inclusion and equality.

Policies

- Code of conduct
- Speak up policy
- People policy

Elkem's corporate policies ↗

In 2022, Elkem worked on several DEI intiatives including corporate management DEI workshop, the deployment of Elkem's first ever global employee engagement survey, design and deployment of a new Leadership Essentials program, development of an inclusive leadership 360 feedback assessment, and a review of all HR policies, procedures and processes to actively support DEI.

Cultural diversity

Overall, Elkem has good multi-cultural spread in the organisation. This is measured by the distribution of employees that belong to nationalities outside the country in which they work. In Norway, Elkem has 36 different nationalities represented in the workforce. In France, 15 and in the US, 9 nationalities. In several smaller entities in Europe and South America there are also 5 or more different nationalities represented. Moving forward, the company will continue to assess the diversity needs and to attract cultural diversity in its operations. In total in Elkem there are employees of 65 different nationalities. The largest groups are Chinese, Norwegian, French, American, Icelandic and Spanish.

Age diversity

16% of the total workforce is under the age of 30, 56% between 30 and 50 years of age and 28% above 50. Among the management, 59% of the leaders are in the 30-50 years category. We follow up the age structure of our workforce and we work systematically to further develop, maintain and transfer knowledge and critical competencies from senior to more junior employees.

Gender diversity

The gender diversity is very stable in Elkem, with the proportion of female to male employees being 25% to 75%. In the management teams (corporate, division and plants) the female share is 30% globally and among all leaders who have personnel responsibility 23%. Moving forward, we continue our efforts to increase female share through our recruitment, retention and promotion processes.

We believe that a diverse, equitable and inclusive workplace, that mirrors the markets we serve, is a strategic business priority, and critical to our success. The diverse perspectives and experiences of our employees are essential to our ability to achieve excellence in research, innovation and continous learning. We also understand that to foster such a climate, requires a sustained and long-term commitment to DEI, and acknowledge that sometimes engaging in diversity is also challenging. With this in mind, our future focus will be to strengthen the awareness about DEI in Elkem, as well as further develop our company culture by reinforcing core behaviors in line with the Elkem values.

Leadership

We believe that the commitment and accountability of our leaders are of utmost importance. The way our leaders communicate and interact with their teams, what they communicate and emphasise, their vision for the future, what they celebrate and recognise, what they expect, how they make their decisions, the extent to which they are trusted and the beliefs and perceptions that they reinforce are all critical in impacting a diverse and inclusive culture in the workplace. Our leadership development programmes focus on developing and equipping Elkem's leaders with the people skills needed to engage and empower their employees to perform at their best. The golden thread of DEI has been deliberately interwoven into the programmes, in modules and topics such as: Inclusive leadership, unconscious bias, psychological safety, managing self and managing teams.

Social Diversity, equality and inclusion (DEI)

Mission, vision, values, and behaviours

Our culture based on the Elkem Business System (EBS) is our character and the personality of our organisation. It's what makes our business unique and is the sum of the purpose, mission, values and behaviours. At Elkem, all employees are expected to act in accordance with and role model our values of: respect, involvement, precision, and continuous improvement. We strive to collaborate and work well together, independent of our diversity dimensions, by building trust through transparency, open and direct communication and willingness to listen, that enable us to collaborate productively and be open to new perspectives.

Policies, procedures and supplementary material

In an effort to work more strategically with DEI, we have taken a more holistic approach, beginning with analyzing the systems, processes and procedures we currently have in place, through a DEI lens. We reviewed and re-designed our HR People policies, procedures, and supplementary material in light of our DEI policies, ensuring equal opportunities for all, as well as committing to equity as a company. Our focus has been on sustaining wellbeing, flexibility and fairness in the workplace.

The way ahead

As we move forward in our DEI journey, we will focus on the following initiatives in 2023:

- Culture – increase the awareness of DEI and develop value-based competencies.
- Recruitment – of diverse candidates.
- Succession planning and promotions – actively support DEI in processes and procedures.
- Branding – to create Elkem's DEI identity and promote and show our commitment.

Board of directors and management

Elkem's board of directors consists of 11 members from China, France and Norway. Three out of eight shareholder elected board members are women, per the Norwegian Public Limited Liability Companies Act. Furthermore, one out of the three employee elected representatives, is female. The female share of the board is 36%. One of the eleven board members are in the age group 30-50 years old. The rest of the members are 51 years or older.
The corporate management team of Elkem consists of ten people from China, France, Norway and Brazil. The management team consists of nine men and one woman. One of the members is in the age group of 30 to 50 years old and the rest are 51 years or older, unchanged from 2021. The female share in the management teams in general is 30%, whereas the overall female share in the company is 26%. There are differences within the organisation – in some units female leaders account for over 50% of the site management whilst at other locations, there are no women in the management team.

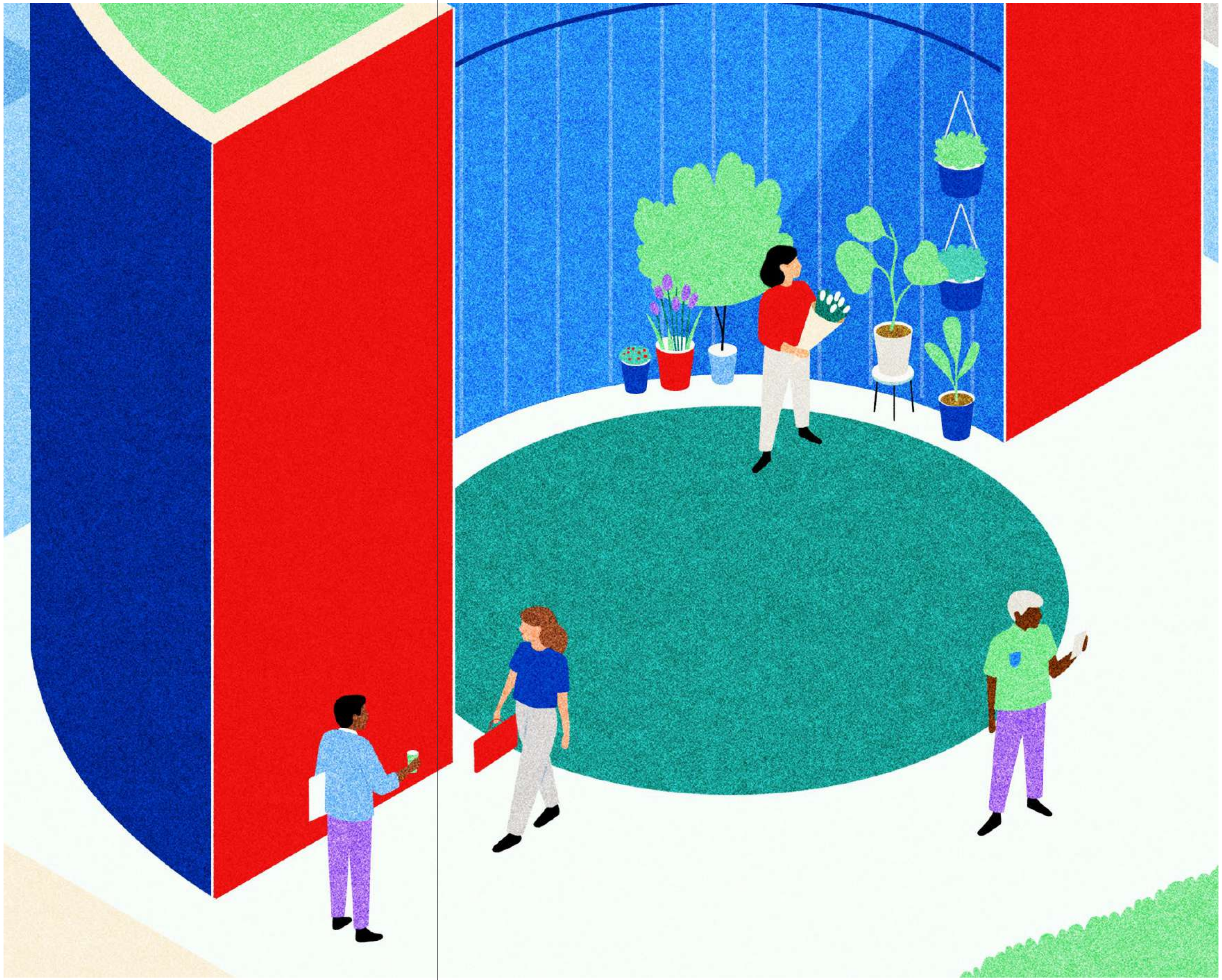
For more information on our current activities and action plans please see the 2022 Activity and reporting duty report (ARP). ↗

KPIs

	Metric	2022	2021	2020	Comment
Female share					
Female share in company	%	**25%**	25%	25%	
Female share in management	%	**30%**	30%	24%	
Female share in leadership programme	%	**36%**	N/A	19%	
Female leaders overall, with personell responsibility	%	**22%**	24%	25%	Downwards trend
Female share in trainee programme	%	**38%**	43%	58%	-5%
Female share of part time workers	%	**31%**	45%	60%	-14%
Female share of temporary employees	%	**25%**	29%	18%	-4%
Female share white collar	%	**35%**	36%	34%	
Female share blue collar	%	**17%**	17%	21%	
Parental leave – average women (Norway only)	Weeks	**38.3**	38	38.7	
Parental leave – average men (Norway only)	Weeks	**17.5**	16	18.5	
Age distribution, employees					
< 30 years	%	**16%**	16%	14%	
30-50 years	%	**56%**	56%	60%	
>50 years	%	**28%**	28%	26%	
Age distribution, management teams					
< 30 years	%	**3%**	6%	3%	
30-50 years	%	**59%**	60%	64%	
>50 years	%	**38%**	34%	33%	+4%
Salary: CEO to median employee (NOR) wage	Ratio	**10:1**	7:1	11:1	

The colour indicates a positive or negative development year on year.

G



Environmental
Social
Governance

Governance

Introduction

Elkem believes that companies that act responsibly and create value by ensuring production with the lowest possible environmental impact will be successful in the long term. Sustainability is central to Elkem's business strategy, and the company works proactively to ensure integrity and responsibility in all operations.

Elkem's operations affect several stakeholder groups, such as employees, customers, suppliers, and local communities. Elkem works proactively to ensure safe and healthy working conditions and high integrity towards all stakeholder groups. We consider trust and partnerships key to our success and long-term value creation. Elkem has implemented policies, procedures and training to ensure a strong compliance culture across the group to ensure good corporate governance. For a complete overview of the governance structure and how the company's sustainability and ESG work is organised, please see ESG management: Sustainability and ESG governance chapter.

Elkem is committed to developing its business in accordance with the UN Sustainable Development Goals and the Paris agreement. As a signatory of the United Nations Global Compact, Elkem aims to ensure that the business is aligned with the ten UN Global Compact principles.

Elkem seeks to obtain a satisfactory regulatory framework for all its operations, and are committed to do so in accordance with our code of conduct, with complete transparency and no hidden agendas. Therefore, we participate in relevant industry organisations and take lobby positions when needed. A full list of the organisations Elkem participates in can be found under "membership organisations overview" here. ↗

A selection of Elkem's governing tools and policies are available online. ↗

The governance topics material to Elkem are

- → Environmental due diligence in the supply chain
- → Social due diligence in the supply chain
- → Responsible economic practices
- → Product governance, including chemical safety
- → Supplying the green transition

Key highlights in 2022

Update of group governing documents
During the past year, Elkem has invested significant efforts in restructuring and improving the group governing documents and making sure that they are easily available to all employees by publishing them in a common document library available on the intranet.

Launch of revised code of conduct
The code of conduct has been revised and updated in 2022, with several new chapters and more information on existing topics. It has also been translated and is now available online in nine languages: English, Chinese, French, Icelandic, Japanese, Korean, Norwegian, Portuguese, and Spanish.

Strengthened internal control function
Established new role; Corporate internal control manager. The function will support the implementation and monitoring of requirements codified in the group governing documents, enabling Elkem to address weaknesses and ensure continuous improvement.

Mapping physical climate-related risks
Conducted a project to improve the understanding of acute and chronical physical climate-risks to the company.

Human rights due diligence in supply chain
In 2022, Elkem has laid the foundations for systematic social due diligence in the supply chain by conducting a company-wide human rights impact assessment.

Key KPIs

	Metric	2022	2021	2020
New raw material suppliers subjected to assessment and pre-qualification	Number	**100%**	92%	100%
Compliance training	Minutes / employee	**31**	28	54
Employees with signed code of conduct	%	**94%**	96%	98%
Number of significant fines due to non-compliance with law or environmental deviations	Number	**0**	0	0

Governance

Responsible economic practices

Elkem considers good corporate governance to be a prerequisite for value creation and trustworthiness. The regulatory requirements and stakeholder expectations for establishing effective compliance programmes are continuously increasing and require organisations to have adequate cultures and procedures in place to ensure responsible economic practices and prevent non-compliance, misconduct, corruption and fraud.

Key events 2022

- In 2021, Elkem set the target to strengthen its compliance capacity in China and France. In 2022, the company strengthened both its compliance and internal control functions, adding resources in China, France, and Norway with specialist competence in data protection, internal audit and internal control.

  These organisational improvements enabled us to reach our goal of developing a new set of group policies, procedures, and internal controls. All group governing documents were revised in 2022, forming the basis for systematic implementation, monitoring and reporting of key requirements and associated controls.

- Within the compliance area, new procedures for high-risk processes such as conflicts of interest, gifts and hospitality, sponsoring and donations, and third-party risk management were developed to provide better guidance to employees and leaders. New supporting tools improve transparency and traceability.

Target

- Finalise and implement a robust sanctions compliance programme
- Develop and start implementing a robust data protection compliance programme
- Develop methodology for holistic compliance risk assessment

Key risks

- High risk markets
- High value investments
- Government interactions
- Licenses and permits
- Business partner

Key opportunities

- Empower employees and partners through targeted training and awareness activities
- Reduce financial and reputational risk through effective compliance program implementation
- Build stakeholder trust through transparent disclosure of compliance performance

Commitment

Elkem bases its activities on the principles of honesty and respect for other people. We will meet the same ethical standards, respecting the laws, cultures, dignity, and rights of individuals everywhere we operate. We have a zero-tolerance policy towards any form of corruption and conduct in our business in accordance with applicable anti-money laundering and antitrust laws.

Policies

- Code of conduct
- Code of conduct for business partners
- Compliance policy
- Speak up and investigation procedure
- Anti-corruption compliance program
- Conflict of interest procedure
- Gifts and hospitality procedure
- Sponsoring and donations procedure
- Third-party risk management procedure
- GDPR compliance policy
- Competition law procedure

Elkem's corporate policies ↗

Compliance training

Elkem is committed to providing relevant and engaging compliance training. Elkem made significant enhancements to the 2021-2022 online training programme, launching new ethics, anti-bribery and corruption and antitrust modules. The training programme is available in multiple languages and is mandatory for all employees within the defined target groups.

Anti-competitive practices

Elkem is committed to avoid anti-competitive practices across all operations. The competition law procedure outlines what behaviour is considered acceptable or not and was updated in 2022. Elkem conducts anti-competitive practice risk assessments to identify high-risk jurisdictions and employee groups that are most exposed to anti-competitive practices. In addition, Elkem provides both general eLearning and targeted trainings for competition law compliance and makes ad hoc assessments to identify red flags and mitigate any gaps.

Anti-bribery and corruption

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

Elkem takes a risk-based approach to its compliance work and risk assessments provide important information to maintain and further develop our anti-bribery and corruption programme. Our risk-based approach is applied to all we do, that is to say when entering new markets and introducing new products. Our anti-corruption compliance programme was updated in 2022 and can be found on Elkem's website. ↗

Working with business partners

We know that bribery cases, human rights breaches, environmental disasters and scandals often involve business partners, such as agents, consultants, suppliers, joint venture partners and distributors. It is important for Elkem to work with business partners of high ethical integrity. In 2021, Elkem introduced a new screening tool to facilitate better vetting and continuous monitoring of business partners against sanction lists. In 2022, the tool was integrated with our customer relationship management platform to enable efficient screening and monitoring of new and existing customers. Going forward, data from the tool will be used to enable risk based due diligence, audit target identification and monitoring of business partners throughout their lifecycle.

The code of conduct for business partners forms part of contracts and agreements with Elkem's business partners and was updated in 2022 to include clearer requirements on issues such as sanctions compliance, human rights and Elkem's speak up channel.

Speak up / Whistleblowing

Elkem encourages all employees and external parties to report possible dishonest or illegal conduct without carrying the risk of adverse reactions. Elkem has established a secure speak up channel which can be used to report misconduct and non-compliance with Elkem's

Governance Responsible economic practices

code of conduct. The speak up channel is available to all employees and external stakeholders. It allows for anonymous reporting via web or telephone in all Elkem languages with clear guidance on how to report concerns. Elkem has also developed a procedure to escalate severe matters to the management level, the audit committee and the external auditor to ensure that issues of concern reach top management.

The speak up channel and the speak up policy are available and communicated through Elkem's intranet site and corporate website. The channel and policy are also promoted during employee training and are accessible via physical posters and handouts at plants and offices. Misconduct reports are handled by Corporate Compliance and in accordance with applicable legislation on misconduct reporting. Elkem has zero tolerance for retaliation against those who report a concern and will sanction those who retaliate.

Tax strategy

Elkem is fully committed to complying with tax laws in each jurisdiction in which we operate. Our approach to tax is based on transparency and we cooperate with tax authorities to ensure full compliance and it is based on the business ethics outlined in the code of conduct.

Our objective is to comply with all relevant laws, rules, regulations, reporting and disclosure requirements in all countries in which the group operates. Elkem has a low risk tolerance in matters concerning tax. Where tax law is unclear or subject to interpretation, our tax position will always be conservative. Hence, we will not pursue any form of aggressive tax planning arrangements, but only engage in tax planning activities that support our business and reflect commercial and economic activity.

The tax approach in Elkem is anchored with the board of directors on an annual basis. The group tax function is organised under and reports regularly to the CFO. The group tax function is responsible for tax governance and tax management in the group and works closely with other functions in order to ensure that risks are identified and mitigated at entity level. Group tax sets the governing procedures related to tax which the units in our group must follow. Tax compliance is always a responsibility of the local units.

The tax strategy shares the same approach to risk as Elkem's overall strategy and there will be continuous reviews to ensure that the level of tax risk is in line with Elkem's overall risk appetite.

Elkem's primary tax risk is that of not being compliant with applicable tax laws and regulations and therefore not paying the correct amount of tax. Elkem manages this risk by operating effective tax governance and ensuring tax decisions are made by senior staff with appropriate skills and experience. In addition, Elkem uses third party advisors where necessary to ensure compliance with applicable laws and regulations.

Group tax has procedures in place to identify, measure, manage, monitor and report on tax risks. Tax risk is managed in line with Elkem's internal control framework where identified risks are being assessed and appropriate mitigating actions are being established.

We seek an open and transparent relationship with all of the tax authorities we deal with. Our dealings shall be undertaken in a consistent, timely and professional fashion and we are committed to providing tax authorities with any information they should require in order to comply with tax laws and regulations.

In line with Elkem's goal of transparency we will report the country-by-country information for the Elkem group, meaning Elkem ASA and all directly or indirectly controlled subsidiaries, joint ventures and permanent establishments where Elkem holds an ownership of more than 50%.

Non-compliance

There were no significant instances of non-compliance with laws and regulations during 2022 that resulted in significant fines or non-monetary sanctions. Elkem defines significance by environmental deviations, long- and short-term damage on the environment, production stops and economic impact. In 2021, Elkem received an environmental fine of CNY 122,000 at the Chinese plant Yongdeng, due to lack of dust gathering systems. The plant was upgraded accordingly.

An overview of country-by-country reporting on tax can be found in online ↗

KPIs

	Metric	2022	2021	2020
Average minutes of compliance training per employee*	Minutes / employee	**31**	28	54
Total number and nature of misconduct reports	Number	**14** → **Corruption and fraud: 6** → **Conflicts of interest: 3** → **Inappropriate workplace behaviour and harassment: 4** → **Privacy violation: 1**	13 → Company / professional code violation: 1 → HSE violation: 1 → Corruption and fraud: 1 → Human rights violation: 1 → Conflicts of interest: 1 → Inappropriate workplace behaviour: 7 → Sanctions violation: 1	11 → Corruption and fraud: 11
Number of confirmed cases of corruption** and fraud	Number	**5**	0	3
Number of confirmed incidents in which employees were dismissed or disciplined for corruption**	Number	**2**	0	2
Public legal cases regarding corruption** brought against the organisation or its employees	Number	**0**	0	0
Confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption**	Number	**5**	0	0
Employees with confirmed commitment to the code of conduct	%	**94%**	96%	98%

**2022 training included eLearning courses concerning ethics and Elkem's code of conduct, anti-bribery, and corruption, and antitrust. The courses were distributed to different risk-based target groups.*

*** In this context, corruption is defined as in GRI 205 and includes practices such as bribery, facilitation payments, fraud, extortion, collusion, and money laundering; the offer or receipt of gifts, loans, fees, rewards, or other advantages as an inducement to do something that is dishonest, illegal, or represents a breach of trust. It can also include practices such as embezzlement, trading in influence, abuse of function, illicit enrichment, concealment, and obstructing justice.*

Governance

Product governance including chemical safety

Elkem is in a unique position in covering the entire value chain from quartz as a raw material via metallurgical silicon to specialty silicones. Hence, all aspects of product stewardship apply to the various production steps.

Product governance hierarchy in Elkem

Product governance	Policies and management responsibilities
Product stewardship	Regulations and standards, product safety (PS), advocacy, life cycle analyses
Product compliance	Safety Data Sheets, Compliance certificates, REACH, product registrations, emission permits

There are a number of rules and regulations to comply with for products that Elkem manufactures and markets, such as safety data sheets, transport regulations, REACH registrations, etc. Ensuring that a product fulfils all legal requirements can be described as *product compliance*.

One level above product compliance is *product stewardship*. Elkem defines product stewardship as an integrated business process for managing and minimising the health, safety, environmental and regulatory risks of a product's life in the best interest of society.

One level above product stewardship is *product governance.*

Product governance defines the overall policies for Elkem's products and covers topics such as ethical obligations, animal testing policy, policy on emerging technologies, sustainability of raw material sourcing, biodiversity policy, and targets for the reduction of CO_2 emissions.

In this chapter you will find some key aspects of product governance in Elkem.

Renewable raw materials and biobased products

Biocarbon is a strategic raw material for the sustainable production of Elkem's silicon and ferrosilicon products and include wood chips, charcoal and biocarbon agglomerates. Elkem is committed to sustainable and ethical raw material sourcing in accordance with internationally accepted principles and standards, such as FSC (Forest Stewardship Council) and PEFC (Programme for the Endorsement of Forest Certification). Elkem's sourcing contracts, as well as Elkem's corporate standards, comply with the highest level of sustainability and responsible sourcing of natural raw materials.

Mining activities and biodiversity

Elkem has a strong commitment to exclude protected areas from its mining activities. Elkem's mining activities are rigorously coordinated with the national mining authorities. Since quartz is a common mineral and not of environmental concern, Elkem is able to source its raw material solely from non-protected areas.

Commitment

Proactive management of the use of chemicals and the protection of the environment and the human health are fundamental pre-requisites for conducting Elkem's business and securing our license to operate.

Policies

Elkem's corporate policies ↗

Elkem makes environmental risk and impact assessments as part of the mandatory steps when applying for mining permits, including the consultation with biodiversity experts. During mining operations, emissions to water and air are monitored, as well as the impact on soil, vegetation, and the landscape. All activities are audited by the respective national mining authorities. As a mitigation measure, annual provisions are made, earmarked for the restoration of the mine after end of activity. Elkem has received awards in Spain for sustainable development and good environmental practices of its quartz mining activities. As a member of IMA-Europe (Industrial Minerals Association), Elkem commits to the mining industry's sustainability charter: Biodiversity and Environment | IMA Europe.

Elkem is committed to responsible sourcing of minerals, to avoid any possible conflict with human rights abuses or environmental degradation. Read our conflict mineral statement here. ↗

Transport safety

The transport of hazardous goods is heavily regulated internationally, such as through UN Transport Regulations or the International Maritime Organization (IMO). These result in a number of standards for packed material (IMDG), transport of solid bulk cargoes (IMSBC) and transport of liquids in bulk (IBC).

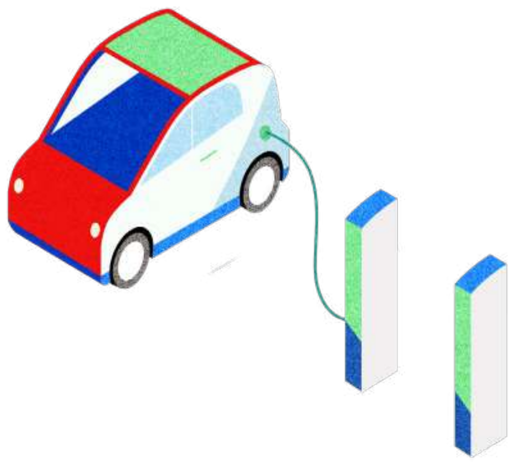
All transport is provided by professional transport companies that follow these standards and regulations.

At the plant sites, transport of hazardous goods by truck occurs, and strict procedures have been implemented for each hazardous substance to ensure the safe transport, including loading, unloading and handling.

Checklists covering the condition of the vehicles and equipment, as well as speed and alcohol control, are standard routines at plant sites. All plants are ISPS ports (International Ship and Port facility Security) with restricted access. All personnel must undergo safety training, and transport companies participate in safety drills with the plant's own fire brigade.

Hazardous substances management

It is Elkem's policy to assess safer alternatives for hazardous substances of concern and to promote its substitution and reduction. The company reviews the options to mitigate identified risks, including possible substitution, phasing-out any substance posing an unacceptable risk to human health and/or the environment or limiting the exposure of the SVHC substance if substitution is deemed not possible. The assessment of alternative solutions for hazardous chemicals is practised in all Elkem laboratories and plants.



Governance Product governance including chemical safety

The main hazardous substances of concern used in Elkem's operations are:

- In carbon products: High temperature coal tar pitch (CAS no. 65996-93-2) is used as an intermediate in the production of Söderberg electrode paste.
- In silicones: D4, D5, D6 are key intermediates in the production of silicones-based polymers that are classified as Substances of Very High Concern (SVHC). They are used under strict conditions in a limited number of products and closely controlled throughout the production, storage, and shipping processes. While substitution is not possible, production processes are constantly improved to reduce the residual amount in the downstream products.
- In silicon products and ferroalloys: These are made from natural raw materials such as quartz, coal, and iron oxide that often contain trace amounts of heavy metals. Cadmium and lead are listed as SVHC but their concentrations in Elkem's products are far below the generic threshold limit value of 0.1 % w/w and do not trigger regulatory action.

The European chemicals legislation REACH requires suppliers of articles (manufacturers or importers) to inform their European downstream users about the presence of substances of very high concern (SVHC) when their concentration exceeds 0.1% (w/w). Elkem regularly monitors its product portfolio for SVHC substances that are subject to existing or future regulatory restrictions or that are associated with particular concerns. The management plans are reviewed regularly, defining the specific risks associated with each identified SVHC substance. Elkem reviews all possible options to mitigate identified risks, including possible substitution where possible, phasing-out any substance posing an unacceptable risk to human health and/or the environment or limiting the exposure of the SVHC substance if substitution is not deemed feasible.

In addition to complying with all chemical production regulations, the Silicones division is a signatory of the Responsible Care Global Charter of the International Council of Chemical Associations (ICCA). Through Responsible Care, Elkem commits to improving performance, engaging with stakeholders to understand their concerns about industry operations and products and extending the Responsible Care ethic throughout the value chain.

The key principles of the charter is:

- Promoting transparency to build trust with stakeholders.
- Safeguarding people and the environment by continuously improving environmental, health and safety performance.
- Driving continuous improvement in chemical product safety and stewardship throughout the supply chain.

- Strengthening chemicals management systems by participating in the development and implementation of lifecycle-oriented, sound-science and risk-based chemical safety legislation and best practices.

Product safety programme

The safety of Elkem's products is ensured by two main pillars, a) the chemical safety assessment through the different operative chemicals legislation and b) the mandatory safety data sheets (SDS) that work as a hazard communication tool to ensure a safe and informed handling of the products by the company's customers and own employees. The product stewardship team gathers expertise on key end-markets the company is working with. Being involved from the very first stage of product development is critical to make sure the correct regulatory context is included.

Elkem's management commits to a zero-harm policy. This includes detailed standard operating procedures (SOP), the duty to familiarise oneself with relevant safety data sheets and safe job analyses. Specific databases (Inosa) store the formal requirements and make them traceable. Incident investigation and corrective actions are part of the corporate HSE standard and supported by a dedicated software tool (Synergi). Auditing is an import process in Elkem's safety programme and includes both auditing of Elkem's suppliers and contractors, as well as internal audits and audits by our customers. This is part of Elkem's ISO 9001 and ISO 14001 certifications.

Chemical safety

Compliance with chemical product regulations include product registrations, product authorisations, safety data sheets and product labels. There are also industry specific regulations that Elkem complies with, for example for products that are in contact with food and water (packaging) or health care (band aid/wound care).

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

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

Elkem is involved in regional and international trade associations that help us understand and anticipate new regulations and standards that may impact Elkem's industry or that of its customers.

Key events in 2022 for chemical safety:

- As signatories of the CEFIC improvement plan, Elkem Silicones is proactively reviewing its REACH dossiers, with the task planned to be completed by 2027.
- Elkem Silicones is actively working on its REACH-Turkey (KKDIK regulation) obligations to meet the registration deadline of 31/12/2023.
- Elkem Silicones is actively working to meet the EU Poison Center Notifications (PCN) requirements for industrial uses by the end of 2023.
- Elkem Silicones completed its content review of EU Safety Data Sheets (> 2500 products) in 2022
- Supported over 2000 non-standard customer requests in 2022 needing strong PSRA support.

Animal testing policy

Elkem commits to refrain from animal testing, except where legally required. All necessary toxicology studies on vertebrate animals, conducted by Elkem Silicones, are validated and coordinated centrally via an Elkem toxicologist. Central coordination ensures that the product stewardship team is aware of all existing and relevant data, supporting product safety and covering global regulatory needs. All studies are compliant with European cosmetic regulations.

Policy on emerging technologies

Elkem is aware of risks and controversies associated with the use of emerging technologies. Elkem does not use GMO (genetically modified organisms) and has no research activities within stem cells or genetic engineering.

Elkem does however utilise nanoforms of existing products because they are key enablers for sustainable constructions (Elkem Microsilica®) and for battery technology (silicon). Elkem is committed to assess risks related to the use of nanoparticles, and to implement measures to reduce potential exposure, as it is required by national occupational hygiene legislation. Furthermore, nanoforms require a specific chemical safety assessment under the European REACH legislation to ensure their safe use.

Elkem follows an internal procedure for the assessment of new products (incl. nanoforms) through the corporate product stewardship team.

There were no material incidents of non-compliance concerning the health and safety impacts of products and services, to Elkem's knowledge.

Governance

Responsible value chain management

Responsible sourcing is a strategic priority for Elkem. Elkem's total global procurement spend is approximately NOK 25 billion per year, covering supplies of raw materials, energy, goods, services, and logistics. The active supply base consists of about 18,000 suppliers globally. The number of raw material suppliers is relatively low, while the number of suppliers of other goods and services is high.

Target

→ All new raw material suppliers subject to assessment and pre-qualification screening
→ All new suppliers of raw material subject to supplier audit
→ All new suppliers to sign Elkem's code of conduct for business partners

Responsible sourcing and the supply chain

As one of the world's leading suppliers of silicon-based advanced materials with operations throughout the value chain from quartz to specialty silicones, Elkem continuously strives to improve the way we source our supplies. The procurement organisation is responsible for raw material supply, logistic services, goods, and services required for Elkem's operations. Elkem's procurement organisation is decentralised, with procurement functions both at the corporate, divisional and plant level. We further differentiate between procurement of major raw materials, and procurement of indirect materials. Suppliers of major raw materials are always considered critical suppliers, and suppliers of indirect materials may be considered critical. The corporate supply chain has the overall global responsibility for developing and maintaining Elkem's procurement and logistics strategy, as well as Elkem's global procurement policies and procedures.

Elkem has policies and procedures in place to ensure and govern responsible sourcing. This includes:

→ Procurement policy, outlining Elkem's procedures for prequalification and management of suppliers.
→ Policy for sourcing of biocarbon, outlining Elkem's commitment to sustainable forest management and the requirements for procuring bio-based reductants in Elkem.

Contracts with suppliers ensure that risk assessments and audits can be conducted both prior to pre-qualification and at any stage of the supplier contract. Elkem has a code of conduct for business partners, which is included in all procurement contracts. The business partner code sets out Elkem's expectations to suppliers with regards to ethics, labour rights and social and environmental issues.

Supplier due diligence and screening

The procurement function is responsible for carrying out pre-qualification and risk assessments of suppliers, based on corporate requirements within environment, health and safety, social responsibility, anti-corruption and compliance with laws and regulations. All new suppliers of raw materials are screened against environmental and social criteria. For high-risk suppliers, additional due diligence assessments are performed, such as integrity due diligence.

We are continuously investing in technology to support and improve upon these processes. In 2021 a new contract lifecycle management (CLM) system went live. In 2022, Elkem conducted a pilot to test a third-party risk management tool. In 2023, Elkem plans to implement a new supplier relationship management system. The new system will enable a more unified process for screening and vetting of suppliers across all divisions and jurisdictions, tracking and monitoring suppliers' compliance throughout the contract lifecycle, as well as identifying and managing supplier risk. The learnings captured from the pilot will be used to design the process flow for supplier prequalification.

Supplier due diligence and screening under the pandemic

Historically, Elkem has done 100% audits on their new raw material suppliers. Due to the limitations given by the pandemic, we have we not been able to keep this level in 2022 on an overall basis. The target is to get back on a high level when the restrictions in all regions are lifted.

Responsible supply chain management

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 demonstrate 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 addressed with 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.

KPIs

	Metric	2022	2021	2020	Comment
Share of new raw materials suppliers subjected to assessment and pre-qualification screening	%	**100%**	92%	100%	+8%
Share of new raw material suppliers subjected to supplier audit	%		19%	>90%	The last two years, it has been hard to conduct audits due to Covid-19
Adverse human rights concerns in supply chain reported	Number	**0**	1	0	

The colour indicates a positive or negative development year on year.

Elkem's impact and contribution to the 2030 Agenda for Sustainable Development

Our mission:
Advanced silicon-based materials shaping a better and more sustainable future, adding value to stakeholders globally.

As a signatory to the UN Global Compact, Elkem supports the 2030 Agenda and is committed to develop our business in accordance with the framework. The UN Sustainable Development Goals (SDGs) were established in 2015 by the United Nations (UN) to build a more sustainable and equal world by 2030. The 2030 Agenda acknowledges that the 17 goals cannot be reached without the active support of businesses worldwide. It calls on companies to use innovation, technology, and creativity to address developmental challenges and opportunities.

Elkem connected the UN SDGs to the materiality assessment for the first time in 2020 and linked the materiality to how the company impacts and is impacted by the 2030 Agenda. The updated materiality assessment for 2022, in line with GRI standards 2021, builds on this analysis. Although we understand that all goals are interlinked, Elkem has identified three SDGs that are most material and where we can contribute the most. Below is an explanation on how we impact and are impacted by the SDGs.

How Elkem supports the SDGs ↗

SDG	Impact analysis	Prioritised SDG sub-targets Elkem reports on	2021	2022
8 DECENT WORK AND ECONOMIC GROWTH	Elkem's highest priority is to create a safe and zero harm workplace. We work tirelessly in the whole organisation to make sure that all people leave our sites as healthy as they arrived, creating a safe and secure working environment. In addition, we continuously work to protect our workers' labour and human rights and promote a harassment-free working environment. Elkem is committed to doing business according to the UN Guiding Principles on Business and Human Rights.	Target 8.7: Take immediate and effective measures to secure the prohibition and elimination of the worst forms of child labour eradicate forced labour, and by 2025 end child labour in all its forms including recruitment and use of child soldiers.	No reported events of child and forced labour in Elkem One reported concern in supply chain	No reported events of child and forced labour in Elkem
	Our impact: Elkem must provide a secure and safe workday for all employees and contractors. We are aware and have experienced that working at our facilities may lead to health and safety risks. It is Elkem's obligation to provide safe jobs and make sure that the employees have decent and liveable wages and a flexible work-life balance situation. When a serious accident happens, a full investigation takes place to make sure that all causes are uncovered and that it will not happen again. In addition, we influence the supply chain through our partnerships to make sure that our suppliers and customers also take up this responsibility. Our most important tool is the code of conduct for business partners. On site, contractors get HSE training aligned with what the employees of the company has. Impacted by: As we grow and enter new and challenging markets, we see the need to take a more systematic approach to our human rights strategy. Elkem operates in several countries which are at risk of child labour and forced labour. Elkem does not tolerate any use of children or forced labour in any of our operations or facilities. We expect the same from our suppliers and others we do business with. While Elkem as a company cannot resolve all such issues in isolation, we have a responsibility to identify human rights risks in our value chains and to mitigate them to the best of our ability.	Target 8.8: Protect labour rights and promote safe and secure working environments for all workers.	No reported high severity injury Injury rate: 3.7, up from 2.3 in 2020 Introduced human rights e-learning Employees covered by collective bargaining agreements: 39%	One sub-contractor fatality in India. One subcontractor fatality in China Injury rate: 3.2, down from 3.7 in 2021 Human rights impact assessment conducted Employees covered by collective bargaining agreements: 40%

SDG	Impact analysis	Prioritised SDG sub-targets Elkem reports on	2021	2022
13 CLIMATE ACTION	Climate change mitigation exposes Elkem to several challenges and opportunities. Climate change response and the transitioning to more sustainable solutions will impact our business and financial conditions as we move forward. Elkem has published an updated TCFD report in March 2023, with improved scenario and financial impact assessment. The full report is available here. ↗ Our impact: Greenhouse gas (GHG) emissions (CO_2) are inherent to the process of the silicon, ferrosilicon, and silicones production. Therefore, the industrial process and the whole value chain (scope 1, scope 2 and scope 3) are part of the climate change challenge. We acknowledge that our climate work is a continuous process. Elkem understands that the company must reduce the CO_2 emissions in line with the Paris agreement. Meanwhile, we aim to contribute positively by providing materials and solutions that are beneficial to combating climate change. Products needed in the low carbon society include the materials that Elkem provide, so it is the company's responsibility to deliver these products with a low carbon footprint. Impacted by: Climate change affects Elkem in different ways, like technology development, market adaption, reputation, and regulatory limitations. One example is regulatory mechanisms like emission trading schemes. For example, changes in ETS regulations may cause a reduction of allowances and higher prices. This will increase Elkem's direct costs which is a current risk in our operations. Therefore, reducing GHG emissions from production is a strategic goal. In addition, Elkem is monitoring how physical, chronic, and acute climate change effects could affect our locations and business.	Target 13.1: Strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries.	Scope 1: 2.34 mill. tonnes Scope 2: 901 000 tonnes Scope 3: 8.35 mill. tonnes Biocarbon share: 22% Energy recovery rate: 14% Increased ambitions announced in the climate roadmap CDP Climate change: A-, showing leadership in disclosure and transparency	Scope 1: 2.42 million tonnes Scope 2: 942 000 tonnes Scope 3: 7.38 mill. tonnes Biocarbon share: 20% Energy recovery rate: 11% Carbon group footprint: 6.9 kg CO_2 / kg produced CDP Climate: A- CDP Forests: A-

SDG	Impact analysis	Prioritised SDG sub-targets Elkem reports on	2021	2022
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	An improved understanding of the environmental and social impacts of products and services is key to ensure sustainable value chain for the future. Therefore, strong environmental management of chemical safety, air, and water emissions, and minimising the environmental footprint are key priorities. Our impact: Our products and production have an environmental footprint throughout the value chain. Elimination of waste is one of the key strategies for successful operations. Our health, safety, and environment (HSE) policy covers actions on energy and resource utilisation, environmental impact through emissions to air and discharge to water and waste reduction and waste management. Our goal is to reduce the waste generation by good process control. Circularity is becoming more and more critical throughout our value chain. Elkem is working with customers and researchers across the topics of reduce, reuse and recycle. For example, increase the use of recycled raw materials in our operations by collecting them, reintroducing them, and valuing by-products (such as Elkem Microsilica ®). By joining forces with our customers, we aim to increase the collection of waste to recycle them chemically or mechanically. Impacted by: There is an increased focus on environmental and climate-friendly production from society, employees, and investors. In addition, operations are subject to environmental permits and the risk of stricter permits from governments and/or other policy changes require our attention to ensure compliance and successful transition to a society with lower carbon and environmental footprint.	Target 12.4: By 2020, achieve environmentally sound management of chemicals and all waste throughout their life cycle, in accordance with agreed international framework and significantly reduce their release to air, water and soil to minimise their adverse impact on human health and the environment.	Have fully implemented environment management system in the organisation, with digital, quarterly reporting Total waste generated: 397,247 tonnes No significant spills of D4/D5 CDP Water: B-	Update on environmental management system Total waste generated: 462,745 tonnes No significant spills of D4/D5 CDP Water: B
		Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.	Total waste diverted from disposal: 276,483 tonnes Share of process waste that was reused or recycled: 70%	Total waste diverted from disposal: 341,520 tonnes Share of process waste that was reused or recycled: 70%

To the Board of Directors of Elkem ASA

Independent statement regarding Elkem's sustainability reporting

We have examined whether Elkem ASA has prepared a GRI Index for 2022 and measurements and reporting of key performance indicators for sustainability (sustainability reporting) for the year ending 31 December 2022. Our assurance engagement was conducted to obtain limited assurance.

- Elkem's GRI Index for 2022 is an overview of which sustainability topics Elkem considers material to its business and which key performance indicators Elkem uses to measure and report its sustainability performance, together with a reference to where material sustainability information is reported. Elkem's GRI Index for 2022 is available at https://www.elkem.com/sustainability/policies-and-statements/policies-and-reports/. We have examined whether Elkem has developed a GRI Index for 2022 and whether mandatory disclosures are presented according to the Standards published by the Global Reporting Initiative (www.globalreporting.org/standards) (criteria).

- Elkem has defined key performance indicators for sustainability in their ESG report for 2022. The measurement of the indicators is determined by topic-specific disclosure requirements from GRI or own disclosures as specified by Elkem and explained in the ESG report (criteria). "Supplying the green transition" is based on the criteria as defined in EU Taxonomy. For the following KPIs we have examined the basis for 2022 and examined whether the KPIs are calculated, estimated and reported in accordance with the criteria:
  - "CO2 and other GHG emission reductions, incl. energy management " (see KPIs presented on page 103 and 107)
  - "Local emissions to air" (see KPIs presented on page 118)
  - "Water management" (see KPIs presented on page 113)
  - "Waste management and circularity" (see KPIs presented on page 117)
  - "Health and safety on site" (see KPIs presented on page 127)
  - "Environmental due diligence in the supply chain" (see first KPI presented on page 149)
  - "Social due diligence in the supply chain" (see first KPI presented on page 149)
  - "Responsible economic practices, including anti-corruption and tax strategy" (see first four KPIs presented on page 143)
  - "Supplying the green transition" (see KPIs presented on page 159)

  In addition, as part of the key performance indicators in this statement we have examined the indicator product group carbon footprint (PGCF) for 2021 (page 103).

Management's responsibility

Management is responsible for Elkem's sustainability reporting and for ensuring that it is prepared in accordance with the criteria described above. Their responsibility includes designing, implementing and maintaining internal controls that ensure the development and reporting of the GRI Index and key performance indicators for sustainability.

Our independence and quality control

We are independent of the company in accordance with the law and regulations and the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code), and we have fulfilled our ethical obligations in accordance with these requirements. We use ISQM 1 - Quality management for firms that perform audits or reviews of financial statements, or other assurance or related services engagements and maintain a comprehensive system of quality control including documented guidelines and procedures regarding compliance with ethical requirements,

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professional standards and applicable legal and regulatory claim.

Auditor's responsibilities

Our responsibility is to express a limited assurance conclusion on Elkem's sustainability reporting based on the procedures we have performed and the evidence we have obtained. We conducted our work in accordance with the Standard on Assurance Engagements ISAE 3000: "Assurance engagements other than audits or review of historical financial information". A limited assurance engagement in accordance with ISAE 3000 involves assessing the suitability in the circumstances of management's use of the criteria as the basis for the preparation of the sustainability reporting, assessing the risks of material misstatement of the sustainability reporting whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the sustainability reporting. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgement and, among others, included an assessment of whether the criteria used are appropriate, as well as an assessment of the overall presentation of the sustainability reporting. Our procedures also included meetings with representatives from Elkem who are responsible for the material sustainability topics covered by the sustainability reporting; review of internal control and routines for reporting key performance indicators for sustainability; obtaining and reviewing relevant information that supports the preparation of key performance indicators for sustainability; assessment of completeness and accuracy of the sustainability reporting; and controlling the calculations of key performance indicators for sustainability based on an assessment of the risk of error.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether the sustainability reporting has been prepared, in all material respects, in accordance with the criteria.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that

- Elkem's GRI Index for 2022 is not, in all material respects, developed and presented in accordance with the requirements of the Standards published by The Global Reporting Initiative;

- Elkem's key performance indicators are not, in all material aspects, developed, measured and reported in accordance with the definitions and explanations provided in relation to the key performance indicators.

Oslo, 8 March 2023
PricewaterhouseCoopers AS

Anders Ellefsen

Anders Ellefsen
State authorized public accountant (Norway)

(2)

Taxonomy report

Statement on the EU Taxonomy for sustainable economic activities

The EU Taxonomy is a classification system that is part of the European Union's policy measures to reach the EU's Green deal, which was launched in 2019. The EU Taxonomy classifies environmental performance of economic activities across a wide range of industries and sets technical requirements that corporate activities must meet in order to be considered sustainable.

Purpose

The main purpose of the EU Taxonomy regulation is to help investors and companies in making informed investment decisions on environmentally sustainable economic activities. It establishes criteria for determining whether an economic activity qualifies as environmentally sustainable.

For the purpose of the EU Taxonomy Regulation, the following are defined as environmental objectives:

- → Climate change mitigation.
- → Climate change adaptation.
- → The sustainable use and protection of water and marine resources.
- → The transition to a circular economy.
- → Pollution prevention and control.
- → The protection and restoration of biodiversity and ecosystems.

Scope

The EU Taxonomy climate and reporting delegated acts were published in June and July 2021, respectively, while the first mandatory year of reporting for non-financial companies in Norway will apply from January 2024, for the fiscal year 2023. Elkem is in scope of the EU Taxonomy regulation, on the basis that the regulation covers large, listed companies with more than 500 employees. Although the EU Taxonomy has not entered into force in Norwegian law as of end year 2022, Elkem provides voluntary disclosures on the financial year of 2022 based on expected interest and knowledge of the reporting requirements.

As preparation to the mandatory taxonomy report in 2024 for the fiscal year 2023, Elkem has decided in this report to disclose the share of its eligible economic activities against the taxonomy. Hence, this report does not include alignment figures of eligible economic activities and Elkem will continue to assess the technical screening criteria for these activities in 2023, in order to report on these figures in 2024.

EU has prioritised the economic activities that can make the most relevant contribution to EU's climate and energy targets. Prioritised activities are subject to technical screening criteria set out in the taxonomy delegated acts. Given the current status of the regulatory process, silicones are within the scope of EU Taxonomy eligible activities, as silicones fall within the definition of Manufacture of Plastics in Primary form.

Silicon and ferrosilicon activities are currently not defined with specific criteria in the EU Taxonomy. Elkem has therefore undertaken the assessment based on available information and guidance. Changes to the factual circumstances as well as the regulatory landscape, may lead to a different assessment of our economic activities under the Taxonomy Regulation in the future.

The three stages of the EU Taxonomy

There are three stages that all activities need to pass in order to be considered for the EU Taxonomy. First, the activity must substantially contribute to at least one of the six environmental objectives as defined in the Regulation. What qualifies as significant is defined within the technical criteria of the Regulation. The second stage is that the activity must not do any significant harm to the other defined environmental objectives. The third stage is that the company behind the economic activity must comply with a set of minimum social safeguards.

Identified taxonomy-eligible activities for Elkem

A taxonomy-eligible economic activity means an activity that is defined in the Delegated Act (EU) 2021/2139, supplementing the Taxonomy Regulation, irrespective of whether that economic activity meets any or all of the technical screening criteria.

Taxonomy-eligible activities to be disclosed for FY2022 only refer to the environmental objectives of climate change mitigation and climate change adaptation. A Delegated Act for the remaining four environmental objectives has not been published, and thus, is not yet effective. A Taxonomy non-eligible economic activity is any activity that is not covered by the Taxonomy to date.

Elkem has identified the following economic activities as being taxonomy-eligible under the first two environmental objectives:

- 3.1 Manufacture of renewable energy technologies.
- 3.4 Manufacture of batteries.
- 3.5 Manufacture of energy efficiency equipment for buildings.
- 3.6 Manufacture of other low carbon technologies.
- 3.17 Manufacture of plastics in primary form.

Manufacture of renewable energy technologies with highly specialised applications can be defined as eligible under the EU Taxonomy. Ferrosilicon and foundry alloys are highly specialised products for wind power equipment and therefore comply with the taxonomy definition for this activity. Silicones is also a highly necessary product to secure long maturity for solar panels and is therefore defined as eligible.

Manufacture of batteries is defined as activities that explicitly includes manufacturing of respective components for batteries, such as battery cells, casings, and electronic components. Silicon and silicone products used in batteries have been evaluated as a key component in the battery pack.

Manufacture of energy efficiency equipment for buildings are insulation products and their key components for application in buildings. Elkem has evaluated that the silicones products that are used in energy efficiency equipment serve as an important insulator component in buildings, and is therefore eligible within this category.

Manufacture of other low carbon technologies that aim to substantially reduce GHG emissions in use, can qualify under this category. Microsilica has significant and direct low carbon impact, such as reduced use of cement and longevity, when used in cement, compared to conventional cement production.

Manufacture of plastics in primary form is an eligible activity under the EU Taxonomy. Although silicones are not defined within the general terms of plastics (from oil), this activity gathers all Elkem's silicones products that have generic applications. The description of this economic activity in the Taxonomy refers to NACE code C20.16, which includes silicones.

Silicones are used in several products that are critical to the green transition. This includes products for more energy efficient technologies, where silicones bring unmatched performances. Studies show that for every ton of CO_2 emitted from silicones production and end-of-life disposal, the use of silicones allows for 9 times greater GHG emissions savings.

Measuring the activity and performance

Turnover: The turnover KPI is calculated as the part of net turnover associated with Taxonomy eligible activities divided by the total net turnover. The total net turnover equals the external revenue, ref note 7 in the consolidated financial statements.

Revenue associated with eligible activities

Elkem's total revenue from the sale of products and services

Capital expenditures: The CapEx KPI is defined as the CapEx related to assets or developments associated with Taxonomy eligible activities divided by total CapEx as defined in IFRS standards IAS 16, IAS 36 and IFRS 16, and can be found as "additions" in note 15, 16 and 17 in the consolidated financial statements. CapEx related to a plan to expand Taxonomy-eligible activities has been evaluated not to be relevant expenditures to Elkem in the case of eligibility reporting. CapEx related to the purchase of output from Taxonomy-eligible economic activities and individual measures has also so far been excluded from the CapEx numerator due to low economic materiality of these expenditures.

Given the nature of Elkem's production processes, CapEx projects impacts both eligible and non-eligible activities. Since Silicones is defined as eligible, we have used the revenue split of Silicones division as a proxy for the allocation of CapEx from the silicones activities. For other eligible activities we have used the total revenue split as proxy.

Operating expenses: The OpEx KPI is defined as operational expenses related to Taxonomy eligible assets or processes divided by the direct non-capitalised cost related to research and development and any other direct expenses relating to the day-to-day maintenance of fixed assets. OpEx related to a CapEx plan to expand taxonomy-eligible activities has been evaluated not to be relevant expenses to Elkem in the case of eligibility reporting. OpEx related to the purchase of output from Taxonomy-eligible economic activities and individual measures has also so far been excluded from the OpEx numerator due to low economic materiality of these expenses.

Other operating expenses directly linked to activities with turnover and activities related to selling, general, and administration are not considered as applicable for the calculation of the OpEx KPI.

Given the nature of Elkem's production processes, OpEx projects impacts both eligible and non-eligible activities. We have therefore used the total revenue split of the eligible activities as a proxy for the allocation of OpEx to these activities.

The total operating expenditures included in the OpEx KPI are expenses coming from following functions:

- → Research and development
- → Building renovation measures
- → Short-term leases
- → Maintenance and repair

Research and development costs cover MNOK 526, related to employee benefits.

Building renovation measures are currently of limited relevance to Elkem, as there is no ongoing significant project related to this subject

Short term leases cover MNOK 70, described in note 16.

Maintenance and repair expenses include Elkem`s maintenance and repair cost not qualifying for capitalization as part of the relevant asset. Repair and maintenance activities consist of MNOK 1 344.

Assessment of Taxonomy-eligibility table

Estimated EU Taxonomy-eligible economic activities in Elkem´s Revenue, CapEx and OpEx in 2022.

NOK millions, except percentages		Turnover		CapEx		OpEx	
Economic activities		Absolute	%	Absolute	%	Absolute	%
3.17	Manufacture of plastics in primary form	17 229	38%	3 025	66%	708	38%
3.1	Manufacture of renewable energy technologies	791	2%	93	2%	33	2%
3.4	Manufacture of batteries	1471	3%	176	4%	61	3%
3.5	Manufacture of energy efficiency equipment for buildings	381	1%	67	1%	16	1%
3.6	Manufacture of other low carbon technologies	548	1%	10	0%	23	1%
Total taxonomy-eligible activities		20 421	45%	3 371	73%	879	45%
Total taxonomy non-eligible activities		24 642		1 239		1 060	
Total		45 063		4 609		1 939	

Financial Statements 2022

Contents

Consolidated statement of profit or loss

Amounts in NOK million	Note	**2022**	2021 Restated [1]
1 January - 31 December			
Revenue	7	**45 018**	33 083
Other operating income	7	**746**	586
Share of profit (loss) from equity accounted investments	5	**135**	49
Total operating income	6	**45 898**	33 717
Raw materials and energy for production		**(21 976)**	(15 985)
Employee benefit expenses	9	**(4 918)**	(4 530)
Other operating expenses	11	**(6 714)**	(5 536)
Amortisation and depreciation	15, 16, 17	**(1 999)**	(1 816)
Impairment losses	15, 16, 17	**(28)**	(76)
Operating profit (loss) before other items		**10 263**	5 775
Other items	12	**2 151**	10
Operating profit (loss)		**12 414**	5 785
Share of profit (loss) from equity accounted financial investments	5	**(17)**	37
Finance income	13	**67**	40
Foreign exchange gains (losses)	13	**85**	241
Finance expenses	13, 16	**(313)**	(276)
Profit (loss) before income tax		**12 236**	5 827
Income tax (expense) benefit	14	**(2 594)**	(1 163)
Profit (loss) for the year		**9 642**	4 664
Attributable to:		**80**	36
Non-controlling interests' share of profit (loss)		**9 561**	4 628
Owners of the parent's share of profit (loss)			
Earnings per share in NOK:			
Basic	30	**15.09**	7.49
Diluted	30	**15.04**	7.44

[1] *See note 34 Change in presentation*

Consolidated statement of comprehensive income

Amounts in NOK million	Note	**2022**	2021 Restated [1]
1 January - 31 December			
Profit (loss) for the year		**9 642**	4 664
Remeasurement of defined benefit pension plans	9	**146**	69
Tax effects on remeasurement of defined benefit pension plans	14	**(33)**	(10)
Change in fair value of equity instruments		**(4)**	3
Total items that will not be reclassified to profit or loss		**109**	62
Currency translation differences		**765**	358
Hedging of net investment in foreign operations		**(142)**	130
Tax effects hedging of net investment in foreign operations	14	**31**	(29)
Cash flow hedges	26	**992**	979
Tax effects on cash flow hedges	14	**(218)**	(215)
Share of other comprehensive income (loss) from equity accounted companies	5	**15**	13
Total items that may be reclassified to profit or loss in subsequent periods		**1 443**	1 236
Share of other comprehensive income (loss) from equity accounted companies		**13**	-
Cash flow hedges	26	**(424)**	(282)
Tax effects on cash flow hedges	14	**93**	62
Total reclassification adjustments for the period		**(317)**	(220)
Other comprehensive income (loss) for the year, net of tax		**1 234**	1 078
Total comprehensive income for the year		**10 876**	5 742
Attributable to:			
Non-controlling interests' share of comprehensive income		**86**	36
Owners of the parent's share of comprehensive income		**10 790**	5 706
Total comprehensive income for the year		**10 876**	5 742

Consolidated statement of financial position

Amounts in NOK million	Note	31.12.2022	31.12.2021
Assets			
Property, plant and equipment	15, 19	**19 520**	15 722
Right-of-use assets	16, 19	**779**	1 017
Other intangible assets	17, 19	**1 385**	1 602
Goodwill	18, 19	**984**	941
Deferred tax assets	14	**151**	48
Equity accounted investments	5	**1 039**	241
Derivatives	25, 26	**1 562**	304
Other assets	22	**716**	478
Total non-current assets		**26 136**	20 353
Inventories	20	**10 325**	7 716
Trade receivables	21	**4 248**	4 297
Derivatives	25, 26	**711**	283
Other assets	22	**1 698**	1 551
Restricted deposits	23	**408**	609
Cash and cash equivalents	23	**9 255**	7 040
Total current assets		**26 645**	21 497
Total assets		**52 781**	41 850
Equity and liabilities			
Paid-in capital	29	**6 228**	8 097
Retained earnings		**22 412**	11 692
Non-controlling interests		**134**	86
Total equity		**28 773**	19 874
Interest-bearing liabilities	16, 23	**10 331**	8 409
Deferred tax liabilities	14	**1 123**	505
Employee benefit obligations	9	**489**	611
Derivatives	25, 26	**-**	18
Provisions and other liabilities	24	**232**	182
Total non-current liabilities		**12 175**	9 724
Trade payables		**5 335**	4 614
Income tax payables		**1 903**	914
Interest-bearing liabilities	16, 23	**204**	1 972
Bills payable	23	**1 742**	2 096
Employee benefit obligations	9	**994**	976
Derivatives	25, 26	**109**	23
Provisions and other liabilities	24	**1 545**	1 657
Total current liabilities		**11 832**	12 252
Total equity and liabilities		**52 781**	41 850

Oslo, 8 March 2023

Zhigang Hao
Chair

Dag Jakob Opedal
Vice chair

Olivier Tillette de Clermont-Tonnerre
Board member

Yougen Ge
Board member

Jingwan Wu
Board member

Grace Tang
Board member

Marianne Elisabeth Johnsen
Board member

Nathalie Brunelle
Board member

Thomas Eggan
Board member

Terje Andre Hanssen
Board member

Marianne Færøyvik
Board member

Helge Aasen
CEO

Consolidated statement of cash flows

Amounts in NOK million	Note	2022	2021
Operating profit (loss)		**12 414**	5 785
Amortisation, depreciation and impairment losses	15, 16, 17	**2 027**	1 892
Changes in working capital	31	**(1 583)**	(2 020)
Equity accounted investments	5	**(108)**	(15)
Changes in fair value of derivatives		**(1 139)**	(9)
Changes in provisions, bills receivable and other		**(539)**	(88)
(Gains) losses on disposal of subsidiaries	12	**(159)**	-
Interest payments received		**66**	34
Interest payments made		**(319)**	(242)
Income taxes paid		**(1 345)**	(423)
Total cash flow from operating activities		**9 314**	4 913
Investments in property, plant and equipment and intangible assets	15, 17	**(4 213)**	(3 266)
Received investment grants	8	**156**	138
Proceeds from sale of property, plant and equipment	15, 17	**70**	31
Acquisition of subsidiaries, net of cash acquired	4	**(108)**	-
Disposal of subsidiaries, net of cash	4	**151**	-
Payment of contingent consideration related to acquisitions (IFRS 3)	24, 31	**(176)**	(78)
Acquisition of and capital contribution to joint ventures	5	**(292)**	-
Other investments / sales		**9**	(10)
Total cash flow from investing activities		**(4 404)**	(3 185)
Dividends paid to non-controlling interests		**(38)**	(58)
Dividends paid to owners of the parent		**(1 900)**	(96)
Capital increase	29	**-**	1 900
Net sale (purchase) of treasury shares	29	**(38)**	(278)
Net changes in bills payable and restricted deposits	23	**(218)**	709
Payment of lease liabilities	16, 23	**(116)**	(118)
New interest-bearing loans and borrowings	23	**6 648**	3 177
Payment of interest-bearing loans and borrowings	23	**(7 237)**	(3 180)
Total cash flow from financing activities		**(2 899)**	2 056
Change in cash and cash equivalents		**2 011**	3 784
Currency translation differences		**205**	101
Cash and cash equivalents opening balance		**7 040**	3 154
Cash and cash equivalents closing balance	23	**9 255**	7 040

Consolidated statement of changes in equity

2022

Amounts in NOK million	Share capital	Other paid-in capital	**Total paid-in capital**	Foreign currency translation reserve	Cash flow hedge reserve	Other retained earnings	**Total retained earnings**	**Total owners share**	Non-controlling interest	**Total**
Closing balance 31 December 2021	3 197	4 899	**8 097**	1 266	355	10 071	**11 692**	**19 789**	86	**19 874**
Changes in accounting policy (note 2)	-	-	**-**	-	-	(24)	**(24)**	**(24)**	-	**(24)**
Opening balance 1 January 2022	3 197	4 899	**8 097**	1 266	355	10 047	**11 668**	**19 764**	86	**19 850**
Profit (loss) for the year	-	-	**-**	-	-	9 561	**9 561**	**9 561**	80	**9 642**
Other comprehensive income for the year	-	-	**-**	661	444	124	**1 228**	**1 228**	6	**1 234**
Total comprehensive income for the year	-	-	**-**	661	444	9 685	**10 790**	**10 790**	86	**10 876**
Share-based payments (note 10)	-	24	**24**	-	-	-	**-**	**24**	-	**24**
Capital increase (note 29)	-	-	**-**	-	-	-	**-**	**-**	-	**-**
Net movement treasury shares (note 29)	-	7	**7**	-	-	(46)	**(46)**	**(38)**	-	**(38)**
Dividends to equity holders (note 28)	-	(1 900)	**(1 900)**	-	-	-	**-**	**(1 900)**	(38)	**(1 938)**
Closing balance	3 197	3 030	**6 228**	1 927	798	19 686	**22 412**	**28 639**	134	**28 773**

2021

Amounts in NOK million	Share capital	Other paid-in capital	**Total paid-in capital**	Foreign currency translation reserve	Cash flow hedge reserve	Other retained earnings	**Total retained earnings**	**Total owners share**	Non-controlling interest	**Total**
Opening balance	2 907	3 389	**6 296**	806	(189)	5 615	**6 232**	**12 527**	108	**12 635**
Profit (loss) for the year	-	-	**-**	-	-	4 628	**4 628**	**4 628**	36	**4 664**
Other comprehensive income for the year	-	-	**-**	460	544	75	**1 079**	**1 079**	(0)	**1 078**
Total comprehensive income for the year	-	-	**-**	460	544	4 703	**5 706**	**5 706**	36	**5 742**
Share-based payments (note 10)	-	28	**28**	-	-	-	**-**	**28**	-	**28**
Capital increase (note 29)	291	1 610	**1 900**	-	-	-	**-**	**1 900**	-	**1 900**
Net movement treasury shares (note 29)	-	(32)	**(32)**	-	-	(246)	**(246)**	**(278)**	-	**(278)**
Dividends to equity holders (note 28)	-	(96)	**(96)**	-	-	-	**-**	**(96)**	(58)	**(154)**
Closing balance	3 197	4 899	**8 097**	1 266	355	10 071	**11 692**	**19 789**	86	**19 874**

Notes to the consolidated financial statements

1. General information

Elkem ASA is a limited liability company located in Norway and whose shares are publicly traded on Oslo Børs. Elkem ASA is owned 52.9% by Bluestar Elkem International Co. Ltd S.A., Luxembourg, which is under the control of Sinochem Holdings Co., Ltd (Sinochem), a company registered and domiciled in China.

Elkem is one of the world's leading providers of advanced material solutions shaping a better and more sustainable future. The company develops silicones, silicon products and carbon solutions by combining natural raw materials, renewable energy and human ingenuity. Elkem helps its customers create and improve essential innovations like electric mobility, digital communications, health and personal care as well as smarter and more sustainable cities. With a strong track record since 1904, its global team of more than 7,000 people has a joint commitment to stakeholders: Delivering your potential. In 2022, Elkem achieved an operating income of NOK 45,898 million.

The consolidated financial statements for Elkem ASA (hereafter Elkem/the group), including notes, for the year 2022 were authorised for issue by the Board of Directors of Elkem ASA on 8 March 2023.

2. Basis for preparing the consolidated financial statements

Compliance
The consolidated financial statements are prepared and in accordance with International Financial Reporting Standards (IFRS) as endorsed by the European Union (EU) and effective at 31 December 2022. All accounting policies are used consistently by all subsidiaries in the consolidated financial statement. Relevant financial reporting principles are described in each note to the consolidated financial statements.

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

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

In text, the current year's figures are presented outside parentheses, followed by the comparative figures presented in parentheses.

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

Foreign currency translation
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 to each entity's functional currency using the closing rate at the end of the reporting period, and any gains (losses) are reported in the statement of profit or loss. Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rate at the date when the fair value was measured. Currency gains (losses) related to operating activities, i.e. receivables, payables, bank accounts for operating purposes including current intragroup balances, are recognised as a part of other items. Currency effects recognised in finance income and expenses are only related to financing activities such as loans, lease liabilities, long-term placements and dividends.

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

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

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

- → Assets and liabilities are translated using the exchange rate at the end of the reporting period
- → Income and expenses are translated using an average exchange rate per month
- → Equity transactions, except for profit or loss for the period, are translated using the transaction date rates

All resulting exchange differences are booked as a separate component in other comprehensive income (OCI)

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

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.

Dividend to shareholders
Dividend is recognised as a liability when the shareholders' right to payment is established, which is when the dividend is approved by the General Meeting.

Changes in accounting policies and correction of material errors
Changes in accounting policies and correction of material errors are recognised retrospectively by restating the comparative amounts for the prior period presented, including the opening balance of the prior year.

Changes in accounting policy
The IFRS Interpretations Committee (IFRIC) published an agenda decision in April 2021 "Configuration or Customisation Costs in a Cloud Computing Arrangement (IAS 38 Intangible Assets)", confirming that a cloud computing customer should expense the costs of configuring or customising a supplier's application software in a Software as a Service arrangement. From 1.1.2022 Elkem has applied this policy for costs related to the implementation of cloud computing. Following the accounting policy change NOK 24 million was adjusted towards opening balance of equity in second quarter of 2022. Due to materiality comparable figures are not restated.

Change in presentation
Presentation of realised hedge ineffectiveness is changed from raw materials and energy for production to other items in the statement of profit and loss. The change is done to present realised effects together with unrealised effects from ineffectiveness. The impact from realised ineffectiveness has not been material in previous years. Comparable figures are restated. See note 34 Changes in accounting policies.

New and revised standards - adopted
New or revised accounting standards and interpretations implemented as of 1 January 2022 are among others Onerous Contracts – Costs of Fulfilling a Contract (Amendments to IAS 37) and Proceeds before Intended Use (Amendments to IAS 16 Property, plant and equipment). The new or revised accounting standards and interpretations do not represent a significant impact to Elkem's accounting policies.

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

3. Accounting estimates

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

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

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed in the different notes.

Information about judgements, assumptions and estimation uncertainties at 31 December 2022 that have the most significant effects on the amounts recognised in the financial statements is included in the following notes:

- → Note 14 Taxes
- → Note 15 Property, plant and equipment
- → Note 19 Impairment assessment
- → Note 24 Provisions and other liabilities
- → Note 25 Financial assets and liabilities

4. Composition of the group

Principle

Consolidation

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

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

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

Business combinations

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

Elkem's contingent consideration is classified as a financial liability and measured at fair value at the acquisition date. The liability is subsequently measured at fair value at each reporting date, with changes recognised in other items in the statement of profit or loss. Acquisition-related costs are expensed as incurred.

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

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

Business combinations under common control

Business combinations involving entities under common control are accounted for on a historical cost basis. This means applying book value accounting, which is applied in the following manner:

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

Judgements and estimates

Business combinations

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

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

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

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

Company	Functional currency	Country of incorporation	31.12.2022 Equity interests	31.12.2021 Equity interests	Owner
Elkania DA (Joint operation)	NOK	Norway	50 %	50 %	Elkem ASA
Elkem (Thailand) Co., Ltd.	THB	Thailand	100 %	100 %	Elkem ASA
Elkem Carbon (China) Co., Ltd.	CNY	China	100 %	100 %	Elkem Carbon Singapore Pte. Ltd.
Elkem Carbon AS	NOK	Norway	100 %	100 %	Elkem ASA
Elkem Carbon Malaysia Sdn. Bhd.	MYR	Malaysia	100 %	100 %	Elkem Carbon AS
Elkem Carbon Singapore Pte. Ltd.	SGD	Singapore	100 %	100 %	Elkem Carbon AS
Elkem Chartering Holding AS	NOK	Norway	80 %	80 %	Elkem ASA
Elkem Digital Office AS	NOK	Norway	100 %	100 %	Elkem ASA
Elkem Distribution Center B.V.	EUR	Netherlands	100 %	100 %	Elkem ASA
Elkem Dronfield Ltd.	GBP	United Kingdom	100 %	100 %	Elkem UK Holdings Ltd.
Elkem Egypt for Industry, Contracting & Trading S.A.E.	USD	Egypt	100 %	100 %	Elkem International AS
Elkem Ferroveld JV (Joint operation)	ZAR	South Africa	50 %	50 %	Elkem Carbon AS
Elkem Foundry (China) Co., Ltd.	CNY	China	100 %	100 %	Elkem ASA
Elkem GmbH	EUR	Germany	100 %	100 %	Elkem ASA
Elkem Iberia S.L.U	EUR	Spain	100 %	100 %	Elkem ASA
Elkem International AS	NOK	Norway	100 %	100 %	Elkem ASA
Elkem International Trade (Shanghai) Co., Ltd.	CNY	China	100 %	100 %	Elkem International AS
Elkem Ísland ehf.	NOK	Iceland	100 %	100 %	Elkem ASA
Elkem Japan K.K.	JPY	Japan	100 %	100 %	Elkem ASA
Elkem Korea Co., Ltd.	KRW	Republic of Korea	100 %	100 %	Elkem ASA
Elkem Ltd.	GBP	United Kingdom	100 %	100 %	Elkem UK Holdings Ltd.
Elkem Madencilik Metalurji Sanayi Ve Ticaret Ltd. STI	EUR	Turkey	100 %	100 %	Elkem International AS
Elkem Materials, Inc.	USD	USA	100 %	100 %	NEH LLC
Elkem Materials Delaware, Inc.	USD	USA	100 %	100 %	Elkem Materials, Inc.
Elkem Materials Processing (Tianjin) Co., Ltd.	CNY	China	100 %	100 %	Elkem ASA
Elkem Materials Processing Services BV	EUR	Netherlands	100 %	100 %	Elkem ASA
Elkem Materials South America Ltda.	BRL	Brazil	100 %	100 %	Elkem Materials, Inc.
Elkem Metal Canada Inc.	CAD	Canada	100 %	100 %	Elkem ASA
Elkem Milling Services GmbH	EUR	Germany	100 %	100 %	Elkem ASA
Elkem Nordic A.S.	DKK	Denmark	100 %	100 %	Elkem ASA
Elkem Oilfield Chemicals FZCO Ltd.	AED	UAE	51 %	51 %	Elkem ASA
Elkem Paraguay S.A.	USD	Paraguay	100 %	100 %	Elkem ASA [3]
Elkem Participaçôes Indústria e Comércio Limitada	BRL	Brazil	100 %	100 %	Elkem Carbon AS
Elkem Processing Services S.A. [1]	EUR	Belgium	100 %	-	Elkem ASA
Elkem S.à r.l.	EUR	France	100 %	100 %	Elkem ASA
Elkem S.r.l.	EUR	Italy	100 %	100 %	Elkem ASA

Company	Functional currency	Country of incorporation	31.12.2022 Equity interest	31.12.2021 Equity interest	Owner
Elkem Silicon Materials (Lanzhou) Co., Ltd.	CNY	China	100 %	100 %	Elkem ASA
Elkem Silicon Product Development 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 UK Holdings Ltd.
Elkem Silicones Brasil Ltda.	BRL	Brazil	100 %	100 %	Elkem ASA
Elkem Silicones Canada Corp.	CAD	Canada	100 %	100 %	Elkem ASA
Elkem Silicones Czech Republic, s.r.o.	CZK	Czech Republic	100 %	100 %	Elkem ASA
Elkem Silicones Finland OY	EUR	Finland	100 %	100 %	Elkem ASA
Elkem Silicones France SAS	EUR	France	100 %	100 %	Elkem ASA
Elkem Silicones Germany GmbH	EUR	Germany	100 %	100 %	Elkem ASA
Elkem Silicones Guangdong Co., Ltd.	CNY	China	100 %	100 %	Elkem ASA
Elkem Silicones Hong Kong Co., Ltd.	HKD	Hong Kong	100 %	100 %	Elkem ASA
Elkem Silicones Korea Co., Ltd.	KRW	Republic of Korea	100 %	100 %	Elkem ASA
Elkem Silicones Material Zhongshan Co., Ltd.	CNY	China	100 %	100 %	Elkem Silicones Guangdong Co., Ltd.
Elkem Silicones México S. De R.L. De C.V.	MXN	Mexico	100 %	100 %	Elkem ASA
Elkem Silicones Poland sp. z o.o.	PLN	Poland	100 %	100 %	Elkem ASA
Elkem Silicones Scandinavia AS	NOK	Norway	100 %	100 %	Elkem ASA
Elkem Silicones Services S.à r.l.	EUR	France	100 %	100 %	Elkem ASA
Elkem Silicones Shanghai Co., Ltd.	CNY	China	100 %	100 %	Elkem ASA
Elkem Silicones USA Corp.	USD	USA	100 %	100 %	Elkem ASA
Elkem Siliconi Italia S.r.l.	EUR	Italy	100 %	100 %	Elkem ASA
Elkem Singapore Materials Pte. Ltd.	SGD	Singapore	100 %	100 %	Elkem ASA
Elkem South Asia Private Limited	INR	India	100 %	100 %	Elkem ASA
Elkem UK Holdings Ltd.	GBP	United Kingdom	100 %	100 %	Elkem ASA
Elkem Uruguay S.A.	USD	Uruguay	100 %	100 %	Elkem ASA
Euro Nordic Logistics BV	EUR	Netherlands	80 %	80 %	Elkem Chartering Holding AS
Euro Nordic Netherlands BV	EUR	Netherlands	80 %	80 %	Euro Nordic Logistics BV
Explotación de Rocas Industriales y Minerales S.A. (ERIMSA)	EUR	Spain	100 %	100 %	Elkem ASA
Iniconce, S.L.	EUR	Spain	100 %	100 %	Explotación de Rocas Industriales y Minerales S.A.
Jiangxi Bluestar Xinghuo Silicones Co., Ltd.	CNY	China	100 %	100 %	Elkem ASA
NEH LLC	USD	USA	100 %	100 %	Elkem ASA
NorenoComercial Importada e Exportadora Limitada	BRL	Brazil	100 %	100 %	Elkem Participaçôes Indústria e Comércio Limitada
Norsil, S.A.	EUR	Spain	100 %	100 %	Iniconce, S.L
Tifwer Trade S.A.	USD	Uruguay	100 %	100 %	Elkem Uruguay S.A.
Vianode AS [2]	NOK	Norway	-	100 %	Elkem ASA

[1] Previously KeyVest Belgium S.A.
[2] See Loss of control.
[3] Elkem ASA owns 79% and Elkem Uruguay S.A owns 21%

Changes in composition of the group in 2022, business combinations
31 January 2022 Elkem increased its ownership in Salten Energigjenvinning AS (SEAS) from 50% to 100% by acquisition from Kvitebjørn Energi AS. Salten Energigjenvinning AS operates the Elkem Salten energy recovery plant. The investment in the energy recovery plant further strengthens Elkem's efforts to ensure environmentally friendly silicon and ferrosilicon production with the lowest possible emissions and lowest possible use of resources. Salten Energigjenvinning AS was merged with Elkem ASA in 2022 and is presented within the Silicon products operating segment.

The energy recovery plant has been built in partnership between Elkem and Kvitebjørn Energi. The total investment in the energy recovery plant has amounted to around NOK 1,180 million, financed through a NOK 350 million grant from Enova, external debt and some equity. The book value of Elkem's 50% equity accounted joint venture was NOK 47 million at 31 January 2022. The difference between the fair value and the book value of the 50% share results in a fair value gain of NOK 75 million. This gain is partially offset by a loss on pre-existing relationships of NOK 58 million related to delivery of heat from Elkem ASA to Salten Energigjenvinning AS and a loss of NOK 13 million related to the cash flow hedge reserve from an interest rate hedge in SEAS which has been reclassified from other comprehensive income to other items in profit and loss as a result of the transaction (see note 12 Other items). If the company had been part of the group from 1 January 2022 revenue would have increased with NOK 1 million and profit after tax would have decreased with NOK 6 million.

20 June 2022 Elkem acquired Elkem Processing Services S.A (formerly KeyVest Belgium S.A), a specialist company in the sourcing of materials and production of metal powders to the refractory industry and other segments including advanced ceramics. With the acquisition of Elkem Processing Services S.A Elkem will enable further growth by providing additional specialised products to our current customers, improve service level and processing capabilities and grow in adjacent segments. The acquisition will expand Elkem's product portfolio and create a platform for further growth. The production facility and related inventory amounts to around NOK 30 million. After the acquisition date revenues of NOK 37 million and profit after tax of NOK 1 million from the company has been included in consolidated statement of comprehensive income. If the company had been part of the group from 1 January 2022 revenue and profit after tax would have increased with NOK 96 million and NOK 16 million respectively, including a NOK 5 million gain from bargain purchase. Elkem Processing Services S.A is presented within the Silicon Products operating segment.

Net cash outflow	2022
Cash transferred on acquisition	(156)
Cash and cash equivalents of the acquiree	48
Acquisition of subsidiaries, net of cash acquired	**(108)**

The table below summarise the total consideration and the provisional amounts recognised for assets acquired and liabilities assumed after the business combination:

Consideration	2022
Cash transferred on acquisition	156
Fair value of 50% pre-transaction ownership in SEAS	122
Total consideration	**278**

Assets acquired and liabilities assumed

Amounts in NOK million	Carrying amount	Excess value	Fair value
Property, plant and equipment	823	119	942
Other intangible assets	0	6	6
Deferred tax assets	7	-	7
Inventories	29	-	29
Trade receivables	10	-	10
Other assets, current	13	-	13
Cash and cash equivalents	48	-	48
Deferred tax liabilities	-	(28)	(28)
Interest-bearing liabilities, non-current	(650)	-	(650)
Derivatives, non-current	(87)	-	(87)
Trade payables	(7)	-	(7)
Income tax payables	(3)	-	(3)
Interest-bearing liabilities, current	(10)	-	(10)
Provisions and other liabilities, current	(46)	-	(46)
Total identifiable net assets	**128**	**97**	**225**
Loss on pre-existing relationship	-	-	58
Gain on bargain purchase [1]	-	-	(5)
Total recognised	**128**	**97**	**278**

[1] After the transaction process started, KeyVest delivered better than expected results. This was not fully reflected in the final purchase price, resulting in a bargain purchase.

Acquisition-related costs of NOK 2 million is recognised in other items in the statement of profit or loss in 2022.

Loss of control
6 April 2022 Elkem, Hydro and Altor (Altor Fund V) announced a partnership with the intention to accelerate the growth of Elkem ASA's subsidiary Vianode AS, a producer of sustainable battery materials. The final regulatory approvals for the transaction were received on the 14 September 2022 upon which Elkem lost of control of Vianode. Elkem has recognised a gain of NOK 150 million in the third quarter resulting from the loss of control. The entire gain is attributable to the fair value measurement of Elkem's retained investment in Vianode. Following the transaction Elkem will classify the remaining investment as a joint venture and measure the investment using the equity method of accounting.

The value of the investment on initial recognition was NOK 576 million including the first tranche of capital injection on loss of control, NOK 134 million. Vianode had a negative overdraft position at the transaction date resulted in a positive cash effect for the group on disposal of NOK 151 million.

Net cash inflow	2022
Cash received on disposal	-
Cash and cash equivalents of the subsidiaries	151
Disposal of subsidiaries, net of cash	**151**

Changes in composition of the group in 2021, business combination
No business combinations took place in 2021.

5. Equity accounted investments and joint operations

Principle

Joint arrangements

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

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

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

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

Investments 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. Investments 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. In cases where an associates' loss or other comprehensive income exceed the initially recognised cost the carrying amount is presented to reflect Elkem's liability to finance the associate only to the extent that Elkem has an obligation to fund the investees operations. Any liability to finance an associate is presented either as part of provisions and other liabilities, current, or netted against Elkem's receivables towards the associate. The group's investments in associates includes goodwill identified on acquisition.

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

Share of profit from investments in associates and joint ventures

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

Elkem has interests in the following joint arrangements and associates

Name of entity	Business office	Country	Principal actvities	Classification	**% equity interests 2022**	% equity interests 2021
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 %
North Sea Container Line AS	Haugesund	Norway	Shipping services	Joint venture	**50 %**	50 %
North-Sea Management AS	Haugesund	Norway	Shipping services	Joint venture	**50 %**	50 %
Salten Energigjenvinning AS	Oslo	Norway	Energy production	Joint venture	**-**	50 %
Klafi EHF	Grundartangi, Akranes	Iceland	Transportation / harbour services	Joint venture	**50 %**	50 %
Weldermate AS	Oslo	Norway	Robot welding systems	Joint venture	**50 %**	50 %
Vianode AS	Oslo	Norway	Battery materials	Joint venture	**40 %**	-
Jiangxi Guoxing Intelligence Energy Co. Ltd	Yangjialing	China	Energy production	Joint venture	**35 %**	-
Euro Partnership BV	Moerdijk	Netherlands	Ship management services	Associate	**50 %**	50 %
Combined Cargo Warehousing BV	Moerdijk	Netherlands	Warehousing	Associate	**33 %**	33 %
Euro Nordic Agencies Belgium NV	Antwerpen	Belgium	Ship agencies services	Associate	**50 %**	50 %
EPB Chartering AS	Oslo	Norway	Deep sea charter services	Associate	**25 %**	25 %
GIE Osiris	Roussillon	France	Business supplies and equipment	Associate	**25 %**	25 %
Future Materials AS	Grimstad	Norway	Marketing of research facilities	Associate	**20 %**	20 %

The share of equity interests are equal to Elkem's voting rights, with the exception of Elkem's investments in Vianode AS where the parties in accordance with the shareholder agreement have 33,33% ownership influence. The shareholder agreements for Jiangxi Guoxing Intelligence Energy Co. Ltd requires a two-third majority in order to approve a majority of business decision on behalf of the entity, making Elkem together with one other party in control of the business.

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

There is no quoted market price for the investments.

31 January 2022 Elkem increased its ownership in Salten Energigjenvinning AS (SEAS) from 50% to 100% by acquisition from Kvitebjørn Energi AS. The total investment in the energy recovery plant has amounted to around NOK 1,180 million, financed through a NOK 350 million grant from Enova, external debt and some equity. The book value of Elkem's 50% share was NOK 47 million at 31 January 2022. The difference between the fair value and the book value of the 50% share results in a fair value gain of NOK 75 million. This gain is partially offset by a loss on pre-existing relationships of NOK 58 million and a loss of NOK 13 million related to the cash flow reserve from an interest rate hedge in SEAS which has been reclassified from other comprehensive income to other items in profit and loss as a result of the transaction (see note 12 Other items). If the company had been part of the group from 1 January 2022 revenue would have increased with NOK 1 million and profit after tax would have decreased with NOK 6 million.

6 April 2022 Elkem, Hydro and Altor (Altor Fund V) announced a partnership with the intention to accelerate the growth of Elkem ASA's subsidiary Vianode AS, a producer of sustainable battery materials. The final regulatory approvals for the transaction were received on the 14 September 2022 upon which Elkem lost of control of Vianode. Elkem has recognised a gain of NOK 149 million in the third quarter resulting from the loss of control. The entire gain is attributable to the fair value measurement of Elkem's retained investment in Vianode. Following the transaction Elkem classified the remaining investment as a joint venture and measure the investment using the equity method of accounting. The value of the investment on initial recognition was NOK 576 million including the first tranche of capital injection on loss of control, NOK 134 million.

Elkem has also committed to cover its proportion of total capital injections in Vianode AS. Elkem's proportion is NOK 534.5 million, whereof NOK 267 million is paid as of 31 December 2022.

At the end of 2022 Elkem invested in Jiangxi Guoxing Intelligence Energy Co. Ltd (Jinangxi Energy) an entity established to build a cogeneration production facility near Elkem's plant Silicones Xinghuo. Elkem has committed to cover its proportion of total estimated capital injections in Jinangxi Energy of CNY 48.7 million, whereof CNY 17.5 million is paid as of 31 December 2022. In addition Elkem has committed to sell the land, buildings and equipment needed to establish the cogeneration facility and when the facility is up and running committed to supply excess steam from production.

See note 32 Related parties for commitments and transactions related to the joint ventures and associates.

Movements in equity accounted investments

	2022			2021		
Amounts in NOK million	**Joint ventures**	**Associates**	**Total**	Joint ventures	Associates	Total
Opening balance	**115**	**126**	**241**	74	106	181
Acquisition of and capital contribution to joint ventures	**292**	**-**	**292**	-	-	-
Change in equity interest, in relation to business combinations	**(47)**	**-**	**(47)**	-	-	-
Change in equity interest, in relation to disposal of subsidiaries	**443**	**-**	**443**	-	-	-
Dividend received	**(13)**	**(14)**	**(26)**	(28)	(7)	(34)
Share of profit (loss) from equity accounted companies	**42**	**93**	**135**	19	31	49
Share of profit (loss) from equity accounted financial investments	**(17)**	**-**	**(17)**	37	-	37
Part of other comprehensive income	**7**	**7**	**15**	12	-	12
Currency translation differences	**0**	**5**	**5**	1	(4)	(3)
Closing balance	**822**	**217**	**1 039**	115	126	241

Share of profit and loss and carrying amount for equity accounted investments

Amounts in NOK million	**2022 Share of profit**	**31.12.2022 Carrying amount**	2021 Share of profit	31.12.2021 Carrying amount
North Sea Container Line AS	**42**	**95**	19	65
North-Sea Management AS	**(0)**	**2**	1	3
Salten Energigjenvinning AS	**(6)**	**-**	37	46
Klafi EHF	**(0)**	**1**	(1)	1
Weldermate AS	**(0)**	**0**	-	0
Vianode AS	**(11)**	**699**	-	-
Jiangxi Guoxing Intelligence Energy Co. Ltd	**-**	**25**	-	-
Euro Partnership BV	**10**	**44**	11	39
Combined Cargo Warehousing BV	**1**	**6**	1	5
Euro Nordic Agencies Belgium NV	**1**	**4**	18	36
EPB Chartering AS	**80**	**117**	(0)	2
GIE Osiris	**-**	**46**	-	44
Future Materials AS	**-**	**0**	-	0
Total	**117**	**1 039**	86	241

Cash-flow from operations, equity accounted investments

Amounts in NOK million	**2022**	2021
Share of profit (loss) from equity accounted investments	**(135)**	(49)
Dividend received	**26**	34
Equity accounted investments	**(108)**	(15)

Summary of financial information for joint ventures on a 100% basis

Amounts in NOK million	Vianode AS [1]	Other	**Total 2022**	Other	Total 2021
Current assets, including cash and cash equivalents NOK 784 million (NOK 92 million)	729	269	**998**	234	234
Non-current assets	783	92	**875**	817	817
Current liabilities, including current financial liabilities NOK 0 million (NOK 0 million)	120	94	**214**	112	112
Non-current liabilities, including non-current financial liabilities NOK 0 million (NOK 651 million)	127	-	**127**	710	710
Net assets/equity	1 265	268	**1 533**	229	229
Excess value	193	-	**193**	-	-
Elkem's carrying amount	699	123	**822**	115	115
Total revenue	0	907	**907**	777	777
Total expenses, including depreciation and amortisation NOK 31 million (NOK 5 million) and other items	(33)	(834)	**(867)**	(715)	(715)
Financial income, including interest income NOK 0 million (NOK 0 million)	5	3	**8**	125	125
Financial expenses, including interest expenses NOK 4 million (NOK 11 million)	(0)	(4)	**(4)**	(76)	(76)
Tax expense	0	(0)	**(0)**	(0)	(0)
Total profit for the year	(28)	71	**43**	110	110
Other comprehensive income	-	(14)	**(14)**	24	24
Total comprehensive income	(28)	57	**29**	134	134
Elkem's share of profit for the year	(11)	36	**24**	55	55
Elkem's share of other comprehensive income	-	7	**7**	12	12

[1] *The figures for Vianode AS is based on preliminary figures for 2022*

Summary of financial information for associates on a 100% basis

Amounts in NOK million	**Total 2022**	Total 2021
Total operating income	**1 785**	152
Total expenses	**(1 437)**	(53)
Total profit for the year	**347**	99
Other comprehensive income	**29**	-
Total comprehensive income	**377**	99
Elkem's share of profit for the year	**93**	31
Elkem's share of other comprehensive income	**7**	-
Net assets/equity	**768**	417
Elkem's carrying amount	**217**	126

6. Operating segments

Principle

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's operating segments represent separately managed business areas with unique products serving different markets.

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

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

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

Non-current assets by geographical areas are based on the location of the entity owning the assets.

The segment reporting is based on the accounting policies applied for the group with the exception of:
Realised effects from hedge ineffectiveness and from the discontinuation of hedging is included in other items in Elkem's statement of profit and loss, but included in operating expenses in the segment reporting. This is because management follows up the operating segments including the impact of the realised effects from power contracts. Elkem has previously included realised effects from discontinuation of hedging in other items for both group and operating segments. The change in presentation does not impact comparable figures for 2021.

Lease payments under internal lease agreements are recognised as operating expenses on a straight-line basis over the lease term.

Elkem's operating segments
Elkem identifies its segments according to the organisation and reporting structure used by group management. Elkem has three reportable segments; Silicones, Silicon Products and Carbon Solutions.

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 Silicon Products division produces various grades of metallurgical silicon, ferrosilicon, foundry alloys and microsilica for use in a wide range of end applications.

The Carbon Solutions division produces carbon electrode materials, lining materials and specialty carbon products for metallurgical processes for the production of a range of metals.

Other comprise Elkem group management and centralised functions within finance, logistics, power purchase, technology, digital office and strategic projects such as biocarbon and battery projects. The battery technology company Vianode AS was de-consolidated in the third quarter of 2022 and is now classified as a joint venture.

Eliminations comprise intersegment sales and profit. 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.

The main related party transactions between operating segments in Elkem can be divided as follows:

- → Silicon Products sale of metallurgical silicon to Silicones. Sales prices are based on sale to external customers and CRU prices.
- → Carbon Solutions sale of electrode paste and lining material to Silicon Products. Sales prices are based on prices to external customers.
- → Other sale of management services e.g., logistics, procurement, financial services, technical support and R&D services. Prices are based on cost plus.

Major customers
Elkem has a range of customers, but no single customer amounts to 10% or more of total operating income.

Main items by operating segment
2022

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Eliminations	Total
Revenue from sale of goods (note 7)	18 994	22 361	3 393	(87)	-	**44 660**
Other revenue (note 7)	66	72	21	199	-	**358**
Other operating income (note 7)	150	542	5	48	-	**746**
Share of profit from equity accounted companies (note 5)	-	(0)	(0)	135	-	**135**
Total operating income from external customers	19 210	22 974	3 419	295	-	**45 898**
Operating income from other segments	78	1 483	333	395	(2 289)	**-**
Total operating income	19 288	24 457	3 752	690	(2 289)	**45 898**
Operating expenses	(17 266)	(14 233)	(2 586)	(921)	2 032	**(32 973)**
EBITDA	2 022	10 224	1 166	(231)	(257)	**12 925**
EBIT	743	9 630	1 063	(281)	(257)	**10 898**
Cash flow from operations	1 271	7 802	620	(156)	14	**9 551**
Working capital	2 449	5 467	739	(648)	(371)	**7 637**
Capital employed	16 762	11 304	1 597	1 018	(371)	**30 310**
Reinvestments						**(1 682)**
Strategic investments						**(2 797)**
Movement CAPEX payables						**421**
Cash flow from investments in property, plant and equipment and intangible assets, including received investment grants						**(4 058)**

Main items by operating segment
2021

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Eliminations	Total
Revenue from sale of goods (note 7)	17 206	13 557	1 917	64	-	**32 743**
Other revenue (note 7)	43	96	21	179	-	**340**
Other operating income (note 7)	117	422	5	41	-	**586**
Share of profit from equity accounted companies (note 5)	-	(1)	-	51	-	**49**
Total operating income from external customers	17 366	14 074	1 943	335		**33 717**
Operating income from other segments	63	710	234	398	(1 404)	**-**
Total operating income	17 429	14 783	2 176	733	(1 404)	**33 717**
Operating expenses	(13 758)	(11 081)	(1 669)	(777)	1 358	**(25 926)**
EBITDA	3 672	3 702	508	(44)	(46)	**7 791**
EBIT	2 528	3 154	360	(97)	(46)	**5 899**
Cash flow from operations	1 448	2 273	376	3	0	**4 100**
Working capital	2 517	3 487	276	(518)	(90)	**5 673**
Capital employed	14 678	8 169	1 003	839	(90)	**24 599**
Reinvestments						**(1 657)**
Strategic investments						**(1 717)**
Movement CAPEX payables						**245**
Cash flow from investments in property, plant and equipment and intangible assets, including received investment grants						**(3 128)**

Definitions
Segments performance are evaluated based on EBITDA and EBIT. Elkem's definition of EBITDA may be different from other companies.

EBITDA is defined as Elkem's profit (loss) for the period, less income tax (expense) benefit, finance expenses, foreign exchange gains (losses), finance income, share of profit from equity accounted financial investments, other items (except realised gains and losses from hedge ineffectiveness and discontinuation of hedging), impairment losses and amortisation and depreciation.

EBIT is defined as Elkem's profit (loss) for the period, less income tax (expense) benefit, finance expenses, foreign exchange gains (losses), finance income, share of profit from equity accounted financial investments and other items (except realised gains and losses from hedge ineffectiveness and discontinuation of hedging).

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, current employee benefit obligations and other current liabilities. Accounts receivables 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, assets at fair value through profit or loss 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, contingent considerations, contract obligations and liabilities to related parties.

Capital employed consists of working capital as defined above, property, plant and equipment, right-of-use assets, other intangible assets, goodwill, equity accounted investments, grants payable, trade payables and prepayments related to purchase of non-current assets. The definition was changed in 2022 to include right-of-use assets, goodwill and other intangible assets. Comparable figures are restated.

Elkem's definitions may be different from other companies.

Below is a reconciliation of profit (loss) for the year against EBIT and EBITDA:

2022

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Eliminations	Elkem
Profit (loss) for the year						**9 642**
Income tax (expense) benefit						**2 594**
Finance expenses						**313**
Foreign exchange gains (losses)						**(85)**
Finance income						**(67)**
Share of profit from equity accounted financial investments						**17**
Other items						**(2 151)**
Operating profit (loss) before other items						**10 263**
Realised effects from hedge ineffectiveness and discontinuation of hedging						**635**
EBIT	743	9 630	1 063	(281)	(257)	**10 898**
Impairment losses						**28**
Amortisation and depreciation						**1 999**
EBITDA	2 022	10 224	1 166	(231)	(257)	**12 925**

2021

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Eliminations	Elkem
Profit (loss) for the year						**4 664**
Income tax (expense) benefit						**1 163**
Finance expenses						**276**
Foreign exchange gains (losses)						**(241)**
Finance income						**(40)**
Share of profit from equity accounted financial investments						**(37)**
Other items						**(10)**
Operating profit (loss) before other items						**5 775**
Realised effects from hedge ineffectiveness and discontinuation of hedging						**124**
EBIT	2 528	3 154	360	(97)	(46)	**5 899**
Impairment losses						**76**
Amortisation and depreciation						**1 816**
EBITDA	3 672	3 702	508	(44)	(46)	**7 791**

The table below show realised effects from Elkem's power and foreign exchange hedging programme, including embedded derivatives and realised effects from hedge ineffectiveness and discontinuation of hedging, on the different group segments.

2022

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Eliminations	Elkem
Revenue from sale of goods (note 26)	0	37	-	(86)		**(49)**
Operating expenses (note 26)	-	982	44	(15)		**1 012**
Total realised effects from derivatives included in EBITDA	0	1 019	44	(100)		**963**

2021

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Eliminations	Elkem
Revenue from sale of goods (note 26)	-	27	-	65		**92**
Operating expenses (note 26)	-	295	2	17		**315**
Total realised effects from derivatives included in EBITDA	-	322	2	82		**407**

Total revenue by geographic market based on customer location

Amounts in NOK million	2022	2021
Norway	**1 342**	814
Other Nordic countries	**1 545**	1 637
United Kingdom	**1 354**	1 094
Germany	**5 394**	2 903
France	**1 566**	791
Italy	**1 719**	1 274
Poland	**869**	511
Spain	**1 066**	765
Other European countries	**3 238**	2 791
Europe	**18 093**	12 579
Africa	**345**	217
USA	**5 470**	3 451
Canada	**770**	368
Brazil	**1 854**	1 046
Other South American countries	**548**	326
America	**8 643**	5 191
China	**10 849**	10 534
Japan	**2 153**	1 197
South Korea	**501**	549
India	**1 485**	989
Other Asian countries	**2 792**	1 635
Asia	**17 780**	14 904
Rest of the world	**206**	99
Total revenue before hedging effects	**45 067**	32 991
Realised effects from hedging programs (note 26)	**(49)**	92
Total revenue	**45 018**	33 083

Non-current assets by geographic areas based on entity location

Amounts in NOK million	2022	2021
Norway	**5 744**	4 606
Other Nordic countries	**1**	528
United Kingdom	**38**	37
Germany	**97**	49
France	**4 133**	3 535
Italy	**134**	126
Poland	**0**	1
Spain	**324**	281
Other European countries	**177**	70
Europe	**10 647**	9 232
Africa	**112**	89
USA	**882**	710
Canada	**643**	523
Brazil	**357**	255
Other South American countries	**494**	436
America	**2 376**	1 924
China	**10 930**	8 411
Japan	**2**	3
South Korea	**230**	222
India	**79**	71
Other Asian countries	**48**	49
Asia	**11 288**	8 757
Total non-current assets	**24 423**	20 001

Non-current assets are presented less derivatives and deferred tax assets.

7. Operating income

Principle

Operating income consists of:

a. Revenue
b. Other operating income
c. Share of profit (loss) from equity accounted investments (note 5)

(a) Revenue

Revenue is measured based on the consideration specified in a contract with a customer. Elkem recognises revenue when Elkem transfers control over a goods or service to a customer. A five-step process is applied before revenue can be recognised:

- → identify contracts with customers
- → identify the separate performance obligation
- → determine the transaction price of the contract
- → allocate the transaction price to each of the separate performance obligations, and
- → recognise the revenue as each performance obligation is satisfied.

Sale of goods

Elkem's main performance obligation is related to sale of goods where the obligation is to deliver 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 commodity products, such as sales of ferrosilicon and silicones 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 for sale of metallurgical silicon some contracts that cover a period longer than one year. In these contracts the prices are normally negotiated on an annual basis. Some of Elkem's sales contracts include an element of freight services, see separate section below for accounting policies.

Revenue is recognised when control of the goods is transferred to the customer, at an amount that reflects the consideration to which Elkem expects to be entitled in exchange for those goods. Control is transferred to the buyer, according to the agreed delivery term for each sale. Delivery terms are based on Incoterms 2020 issued by International Chamber of Commerce, and the main terms are:

"F" terms, where the buyer arranges and pays for the main carriage. The risk is transferred to the buyer when the goods are handed to the carrier engaged by the buyer.

"C" terms, where the group arranges and pays for the main carriage but without assuming the risk of the main carriage. The risk is transferred to the buyer when the goods are handed over to the carrier engaged by the seller.

"D" terms, where the group arranges and pays for the carriage and retains the risk of the goods until delivery at the agreed destination. The ownership is transferred to the buyer upon arrival at the agreed destination, usually the purchaser's warehouse.

The goods are normally sold with standard warranties that the goods comply with the agreed-upon specifications. These standard warranties are accounted for using IAS 37 Provisions, Contingent Liabilities and Contingent Assets. Elkem does not have any other significant obligations for returns or refunds.

Freight services included in sale of goods

Freight components included in sale of goods on incoterms "C" terms are considered as a separate performance obligation and recognised over the period the service is performed. Shipping and handling services that occur before the customer takes control of the goods for sales on "D" terms are considered to be part of fulfilling the sale of the goods.

Sale of power and revenue connected to energy recovery

Sale of electric power and revenue connected to energy recovery, mainly heat supply in the form of steam and hot water, el-certificates and el-tax, are recognised in income based on volume and price agreed with the customer. Revenue connected to energy recovery is mainly based on long-term contracts where the prices are regulated yearly based on changes in CPI or government regulated prices, except for the el-certificates where the price is based on the observable market price at date of delivery.

Revenue from sale of services

Revenue from sale of services is recognised when the services have been provided. Sale of services are mainly related to management agreements with related parties based on a cost plus a margin and sale of shipping and handling related services.

(b) Other operating income

Insurance settlements

Income from insurance settlements are recognised as other operating income when it is virtually certain that the group will receive the compensation. Expected cash flows from credit insurance contracts where such contracts are deemed to be an integral part of the sale transactions is presented net against impairment losses trade and other receivables, included in other operating expenses. See note 21 Trade receivables.

Grants

See note 8 Grants

Details of revenue from contracts with customers 2022

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Total
Sale of goods, Silicones	18 954	-	-	-	**18 954**
Sale of goods, Silicon Products	39	22 324	-	(1)	**22 362**
Sale of goods, Carbon Solutions	-	-	3 393	-	**3 393**
Revenue from energy recovery and other energy related income	2	38	0	52	**92**
Service agreements with related parties (note 32)	14	1	-	14	**30**
Other revenue from contracts with customers	48	31	21	133	**232**
Total revenue from contracts with customers	19 057	22 395	3 413	197	**45 063**
Rental income	2	1	0	1	**4**
Realised hedging effects (note 26)	0	37	-	(86)	**(49)**
Total revenue	19 060	22 432	3 414	112	**45 018**

Details of revenue from contracts with customers 2021

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Total
Sale of goods, Silicones	17 111	-	-	-	**17 111**
Sale of goods, Silicon Products	94	13 529	-	-	**13 623**
Sale of goods, Carbon Solutions	-	-	1 917	-	**1 917**
Revenue from energy recovery and other energy related income	19	32	1	57	**108**
Service agreements with related parties (note 32)	2	8	12	50	**73**
Other revenue from contracts with customers	21	55	7	71	**155**
Total revenue from contracts with customers	17 247	13 624	1 937	178	**32 987**
Rental income	2	1	-	1	**4**
Realised currency hedging effects (note 26)	-	27	-	65	**92**
Total revenue	17 249	13 652	1 937	244	**33 083**

Details of other operating income

Amounts in NOK million	**2022**	2021
Gain on disposal of fixed assets	**0**	0
Insurance settlements	**19**	27
Grants (note 8)	**717**	554
Other	**10**	5
Total other operating income	**746**	586

8. Grants

Principle

Grants are recognised when it is reasonably assured that Elkem will comply with the conditions attached to them and the grants will be received. Grants are recognised in the statement of profit or loss as other operating income, over the periods necessary to match them with the cost they are intended to compensate.

Tax credits related to R&D projects are classified as government grants in other operating income if they ultimately are settled with cash, tax credits settled only via taxes are classified as tax allowances. Grants relating to cost of production of goods are recognised as other operating income when the produced goods are sold. Grants relating to property, plant and equipment (fixed assets) and intangible assets are deducted from the carrying amount of the asset and recognised in profit or loss as a reduction of the depreciation charge over the lifetime of the asset.

Details of grants

	2022		2021	
Amounts in NOK million	**Other operating income**	**Deduction of carrying amount FA/IA**	Other operating income	Deduction of carrying amount FA/IA
R&D grants from the Norwegian government	**59**	**-**	59	15
R&D grants from the French government	**71**	**-**	59	-
Other R&D grants	**13**	**-**	14	-
CO_2 compensation from the Norwegian Environment Agency	**497**	**-**	367	-
Energy recovery related grants	**-**	**-**	-	14
Other government grants	**72**	**93**	54	43
Total government grants	**712**	**93**	553	72
Norwegian NO_x fund for reduced emission of NO_x	**1**	**64**	-	31
Other grants	**3**	**-**	1	-
Total grants from other than governments	**5**	**64**	1	31
Total grants	**717**	**157**	554	103
Grants receivable related to fixed and intangible assets (note 22)		**64**		63
Grants receivable related to income (note 22)		**862**		633
Grants payable (note 24)		**(16)**		(15)
Grants, deferred income (note 24)		**(8)**		(18)

CO_2 allowances
CO_2 emission allowances allocated from the government are classified as grants, measured at nominal value (zero). The CO_2 allowance scheme pertains to the group's plants in Europe. If actual emissions exceed the number of allocated allowances, additional allowances must be purchased and the cost is inclued as a part of production cost of inventory. The allocation of free allowances for the period 2021-2025 has been decided by the national authorities.

CO_2 compensation
The Norwegian government has since 2013 had a CO_2 compensation scheme to partially compensate for CO_2 costs included in the power price for certain industries. The compensation scheme is based on a corresponding scheme for EU and are approved by the EFTA surveillance authority ESA. The previous CO_2 compensation scheme ended 31 December 2020 and a new scheme for 2021-2025 has been approved by ESA and implemented into Norwegian regulation. The CO_2 compensation scheme applies for Elkem's Norwegian Silicon and Ferrosilicon plants. The compensation is based on the market price of CO_2 allowances and will as such vary with the price development. As the grant compensates power costs, which are costs recognised as part of the cost price of inventory during the production process, the compensation is recognised in the statement of profit or loss when the produced goods are sold.

NO_x Fund
The industry in Norway pays a fee for their emission of NO_x to a public foundation run by 15 industry and commerce associations. The foundation is self-financed by the fees and the purpose is to support projects that reduces NO_x emissions from the industry in Norway.

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

9. Employee benefits

Principle

Employee benefits
Employee benefits are all forms of considerations given by an entity in exchange for service rendered by employees or for termination of employment.

Employee benefits include both current and non-current benefits, and are expensed as incurred, together with any social security taxes applicable.

Current benefits consist of wages and salaries, bonuses, holiday payments and other short-term benefits that are expected to be settled within 12 months after the reporting period. Non-current benefits consist mainly of jubilee and long-service benefits, post-employment benefits and post-retirement benefits, not expected to be wholly settled within the next 12 months.

Defined contribution plans
Defined contribution plans comprise of arrangements whereby the company makes monthly contributions to the employees' pension plans, and where the future pensions are determined by the amount of the contributions and the return on the individual pension plan asset. The contributions are expensed as incurred and there is no further obligation related to the contribution plans. Prepaid contributions are recognised as an asset.

Defined benefit plans
Defined benefit plans are pension plans where Elkem is responsible for paying pensions at a certain level, based on employees' salaries when retiring. Defined benefit plans are recognised at present value of future liabilities considered retained at the end of the reporting period, calculated separately for each plan. Plan assets are measured at fair value and deducted in calculating the net pension obligation. Pension plans with a net asset and no offsetting rights are presented as a part of other assets. Actuarial assumptions are used to measure both the obligation and the expense and effects of changes in estimates due to financial and actuarial assumptions are recognised as other comprehensive income. Past service costs arising due to amendments in benefit plans are expensed as incurred. Service costs are recognised as part of employee benefit expenses. Net interest is calculated based on net pension obligations 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 other comprehensive income. Interest on net pension obligations 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.

Judgements and estimates
Estimation uncertainty is mainly related to defined benefit pension plans, where the calculation of pension obligations is based on financial and actuarial assumptions, such as discount rates, future salary and pension adjustments, expected turnover and mortality. Deviations between applied assumptions and actual results in future periods will have effects on the calculated obligation. See information about sensitivity on pension obligations based on changes in main actuarial assumptions below.

Employee benefit expenses

Amounts in NOK million	2022	2021
Salaries, holiday pay and variable compensation	**(3 755)**	(3 459)
Employer's national insurance contributions / social security tax	**(787)**	(727)
Pension expenses	**(168)**	(137)
Share-based payments (note 10)	**(24)**	(28)
Other payments / benefits	**(185)**	(179)
Total employee benefit expenses	**(4 919)**	(4 530)
Average number of full-time equivalents	**7 592**	7 178

Remuneration to corporate management

Amounts in NOK million	2022	2021
Fixed compensation	**(33)**	(31)
Variable compensation - STI	**(20)**	(29)
Variable compensation - LTI	**(31)**	(9)
Other benefits	**(2)**	(1)
Pension benefits	**(4)**	(4)
Total remuneration to corporate management	**(90)**	(75)
Remuneration provided to the board of directors	**(5)**	(5)
Remuneration provided to the committee remuneration	**(1)**	(0)

For more details on the remuneration to corporate management see "Report on salary and other remuneration to leading personnel in Elkem ASA for the financial year 2022". The report is published on Elkem's website. ↗

Shares and options granted to corporate management and board members

		2022		2021	
Name	Position	**Number of shares**	**Number of options**	Number of shares	Number of options
Helge Aasen	CEO	**46 206**	**101 000**	46 206	101 000
Morten Viga	CFO	**46 896**	**408 380**	46 896	800 000
Katja Lehland	SVP Human Resources	**-**	**400 000**	-	800 000
Asbjørn Søvik	SVP Green Ventures & Digital	**10 000**	**400 000**	10 000	900 000
Håvard Moe	SVP Elkem Technology	**110 000**	**600 000**	60 000	900 000
Louis Vovelle	SVP Innovation R&D	**6 896**	**425 140**	6 896	800 000
Frédéric Jacquin	SVP Business development	**81 551**	**408 380**	6 551	850 000
Inge Grubben-Strømnes	SVP Silicon Products	**35 189**	**676 526**	35 189	900 000
Luiz Simao	SVP Carbon Solutions	**20 000**	**350 000**	10 000	650 000
Larry Zhang	SVP Silicones	**-**	**250 000**		500 000
Zhigang Hao [1]	Chair	**-**	**-**	-	-
Dag Jakob Opedal	Vice chair	**40 000**	**-**	40 000	-
Olivier de Clermont-Tonnerre [1]	Board member	**15 517**	**-**	15 517	-
Yougen Ge [1]	Board member	**-**	**-**	-	-
Marianne Johnsen	Board member	**-**	**-**	15 000	-
Grace Tang	Board member	**-**	**-**	-	-
Nathalie Brunelle (from May)	Board member	**-**	**-**	-	-
Jin Wang Johnny Wu (from May) [1]	Board member	**-**	**-**	-	-
Terje Andre Hanssen	Board member (employee representative)	**-**	**-**	-	-
Marianne Færøyvik	Board member (employee representative)	**4 950**	**-**	4 950	-
Thomas Eggan (from July)	Board member (employee representative)	**-**	**-**		-
Heidi Feldborg	Observer (employee representative)	**-**	**-**	-	-
Jan Harald Karlsen (from July)	Observer (employee representative)	**-**	**-**		-
Anja Isabel Dotzenrath (until Apr)	Board member	**-**	**-**	-	-
Knut Sande (until June)	Board member (employee representative)	**-**	**-**	-	-
Per Roar Aas (until June)	Observer (employee representative)	**-**	**-**	-	-

[1] *Representatives for the majority shareholder.*

Employee benefit assets and obligations

	Non-current		Current	
Amounts in NOK million	**31.12.2022**	31.12.2021	**31.12.2022**	31.12.2021
Pension plan assets, net	**40**	-	**-**	-
Pension contribution fund (note 22)	**1**	1	**2**	2
Employee prepayments etc.	**-**	-	**5**	8
Total employee benefit assets	**41**	1	**7**	10
Salaries, holiday pay and variable compensation	**-**	-	**752**	761
Employer's national insurance contributions / social security tax	**-**	-	**226**	203
Pension plan obligations, net	**370**	492	**-**	-
Other benefit plans	**119**	119	**16**	12
Total employee benefit obligations	**489**	611	**994**	976

(a) Salaries, holiday pay and variable compensation
The obligations are related to incurred employee benefits, not paid.

A profit-sharing plan is applicable for French entities with more than 50 employees, where the bonus liability must be calculated based on profit after tax, using a specific formula given by the authorities. As at 31 December 2022 EUR 2 million (EUR 0 million) is accrued related to the agreement.

(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 are the main pension 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 111 477 as at 1 May 2022. 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 pension premium in 2022 is 2.6% 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 yearly premium for 2023 is set to 2.6%.

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. The pension scheme in UK and two of Canada's schemes are overfunded and are net in an asset position. The schemes that are underfunded and are net in a liability position as at 31 December 2022 are distributed as follows Norway 23%, France 51%, Canada 9%, other Europe 14%, other countries 3%. In Canada provisions are also made for medical insurance as well as pension benefit plans.

The Norwegian pension plans are unfunded and comprise pension on salaries above 12G, where the expense is 15% of annual base salary that exceeds 12G plus interest on the individual calculated pension obligation, and some individual retirement schemes that are closed.

Breakdown of net pension expenses

Amounts in NOK million	**2022**	2021
Current service expenses	**(43)**	(40)
Administration expenses	**(1)**	(1)
Net pension expenses, defined benefit plans	**(45)**	(40)
Defined contribution plans	**(102)**	(78)
Early retirement scheme AFP (Norway)	**(21)**	(18)
Total pension expenses	**(168)**	(137)
In addition, interest expenses on net pension liabilities are recognised as a part of finance expenses	**(9)**	(8)

Net defined benefit obligations

Amounts in NOK million	**2022**	2021
Present value of funded pension obligations	**(384)**	(509)
Fair value of plan assets	**425**	487
Net funded pension obligations	**40**	(22)
Present value of unfunded pension obligations	**(370)**	(470)
Net value of funded and unfunded obligations	**(329)**	(492)

Movements in the defined benefit obligations and plan assets

	2022			2021		
Amounts in NOK million	**Defined benefit obligations**	**Defined benefit plan assets**	**Net pension plan obligations**	Defined benefit obligations	Defined benefit plan assets	Net pension plan obligations
Opening balance	**(978)**	**487**	**(492)**	(1 014)	460	(554)
Current service expenses	**(43)**	**-**	**(43)**	(40)	-	(40)
Interest (expenses) income	**(22)**	**13**	**(9)**	(18)	10	(8)
Administration expenses	**-**	**(1)**	**(1)**	-	(1)	(1)
Remeasurement gains (losses)	**237**	**(91)**	**146**	59	9	69
Contributions from employer	**-**	**32**	**32**	-	15	15
Benefits paid	**85**	**(33)**	**52**	40	(23)	17
Other changes	**3**	**-**	**3**	-	-	-
Currency translation differences	**(36)**	**18**	**(19)**	(5)	16	10
Closing balance	**(754)**	**425**	**(329)**	(978)	487	(492)

Breakdown of pension plan assets

	31.12.2022		31.12.2021	
Amounts in NOK million	**Distribution%**	**Fair value of plan assets**	Distribution%	Fair value of plan assets
Cash, cash equivalents and money market investments	**12 %**	**52**	11 %	55
Bonds	**15 %**	**62**	19 %	95
Shares	**36 %**	**152**	38 %	185
Property	**35 %**	**147**	30 %	148
Other plan assets [1]	**3 %**	**12**	1 %	4
Total pension plan assets	**100 %**	**425**	100 %	487

[1] *Includes insurance contracts (Buy in policies and Annuity insured contracts)*

Actual return on plan assets	**-16.0 %**	**(78)**	4.3 %	20

In addition, some Norwegian entities have pension contribution funds, mainly based on excess pension assets from settlement of the defined benefit plans in 2010. The pension contribution funds are classified as non-current pension funds, except next year's expected contributions which are classified as current (see note 22 Other assets)

Principal assumptions used for the actuarial valuations in 2022 (2021)

	Norway		France		Canada		Germany		UK	
Discount rate	**4.2%**	(2.0%)	**3.0%**	(0.9%)	**5.0%**	(3.0%)	**3.9%**	(1.0%)	**5.1%**	(1.6%)
Expected rate of salary increase	**na**	(na)	**3.0%**	(2.1%)	**3.5%**	(3.5%)	**3.0%**	(3.0%)	**na**	(na)
Annual regulation of pensions paid	**1.9%**	(1.5%)	**na**	(na)	**na**	(na)	**2.0%**	(2.0%)	**na**	(na)

Assumptions regarding future mortality are based on actuarial advice in accordance with published statistics and experience in each country.

Sensitivity on pension obligations based on changes in main actuarial assumptions
The defined benefit pension schemes expose the group to actuarial risk 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 obligation based on reasonable changes in the main assumptions.

The calculations are based on a change in one assumption while holding all other assumptions constant. Negative amounts show an expected decrease in the net pension liability.

Assumption

	Discount rate		Life expectancy		Salary growth	
Amounts in NOK million	0.5% increase	0.5% decrease	1 year increase	1 year decrease	0.5% increase	0.5% decrease
2022: Effect on the pension obligation	(38)	42	14	(15)	10	(10)
2021: Effect on the pension obligation	(63)	71	25	(25)	24	(22)

As the group's main pension plans are defined contribution plans, there are no group policies for funding of the defined benefit plans. This is managed locally, based on the terms and status for the individual plan.

Expected contribution for the pension plans next year and average duration for the main defined benefit plans

Amounts in NOK million	Norway	France	Canada	Germany	UK
Contribution to be paid to defined pension plans next year	5	18	19	3	5
Weighted average duration of the defined benefit obligations	6 years	14 years	17 years	11 years	11 years

(c) Other benefit plans
Other employee benefits consist of provisions related to jubilee and long-service benefits, and post-employment benefits to be paid until ordinary retirement age for former employees in Elkem's Chinese entities.

Of total non-current provisions, NOK 64 million (NOK 74 million) relate to jubilee and long-service benefits in the Silicones segment, mainly in France. Estimated duration of the obligation is 13 years. Non-current provisions for other employee benefits for Elkem's Chinese entities, in the Silicones segment, are calculated to NOK 35 million (NOK 30 million), mainly consisting of post-employment benefits related to employees laid off due to reorganisation. No further obligations are expected to incur however in 2022 an addition of NOK 13 million has incurred related to update of estimate for future health insurance premiums. The estimated remaining duration for these two obligations is 16 years.

10. Share-based payment

Principle
The fair value of options granted under the share-based payment programme is recognised as an employee benefit expense with a corresponding increase in equity for equity settled awards. The total amount to be expensed is determined by reference to the fair value of the options granted. The total expense is recognised over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. At the end of each period, the entity revises its estimates of the number of options that are expected to vest based on the non-market vesting and service conditions. It recognises the impact of the revision to original estimates, if any, in the statement of profit or loss, with a corresponding adjustment to equity.

Social security contributions payable in connection with an option grant are considered an integral part of the grant itself and the charges are treated as cash-settled transactions.

Judgements and estimates
Estimating fair value for share based payment transactions requires determination of the most appropriate valuation model and assumptions to the valuation model. The fair value at the grant date is determined using the Black-Scholes option pricing model, which takes into account the exercise price, the life of the option, the current price of the underlying shares, the expected volatility of the share price, any dividends expected on the shares and risk-free interest rate for the life of the option. The expected share price volatility is based on historical volatility for a selection of comparable listed companies adjusted with a premium taking into account the maturity of the peers compared to the Elkem. The risk-free interest rate is based on Norwegian government bonds with same maturity as the option.

Elkem's share option scheme
The group has in 2018 - 2021 granted share options to corporate management and selected key employees. Each option gives the right to acquire one share in Elkem ASA on exercise. In 2022 the Board decided to terminate the option scheme and replace it with a new Long-term Bonus Scheme (LTBS). Please refer to the "Report on salary and other remuneration to leading personnel in Elkem ASA for the financial year 2022" for description of the new bonus scheme. The previous granted options are still exercisable over the exercise period.

The share options vest annually in equal tranches over a three-year period following the date of grant, with one-third vesting each year. The options will expire two years after vesting, in total 5 years after the date of grant. No option holder may in any calendar year realise a total gain on exercise of options in excess of twice the option holder's base salary in the same calendar year, however provided that the maximum gain for Elkem's CEO shall be four times the CEO's base salary. See note 9 Employee benefits for an overview of options granted to Elkem's corporate management.

When the options are exercised, the corresponding number of shares are transferred to the employee. The proceeds received from the exercise of the options (net of any directly attributable transaction costs) are credited directly to equity.

Components of share-based payments employee benefit expenses

Amounts in NOK million	2022	2021
Share-based payment	**(24)**	(28)
Social security contribution	**(9)**	(16)
Total expenses related to share-based payments	**(33)**	(44)

Parameters connected to share options granted in years respectively

Amounts in NOK million	2021	2020	2019
Number of options granted	7 451 000	8 000 000	8 000 000
Date of Grant	29 Jul 2021	29 Jul 2020	29 Jul 2019
Exercise price (NOK)	31.2	19.1	23.5
Share price (NOK)	32.9	17.2	24.7
Expected lifetime*	3.34	3.12	3.12
Volatility*	34.4 %	46.0 %	35.8 %
Interest rate*	0.9 %	0.2 %	1.3 %
Dividend*	6.5 %	6.5 %	6.5 %
FV per instrument*	5.19	2.95	4.08
Vesting conditions	Service	Service	Service

**Weighted average parameters of instruments*

Outstanding instruments

		31 December 2022		31 December 2021	
Grant Amounts in NOK million	Exercise price	Number of instruments outstanding	Remaining contractual life	Number of instruments outstanding	Remaining contractual life
2018 programme	38.52	2 300 000	0.72	4 650 000	1.21
2019 programme	23.53	612 688	1.57	2 967 500	2.37
2020 programme	19.10	2 945 140	2.38	5 411 272	2.94
2021 programme	31.20	5 778 375	2.85	7 451 000	3.58
Total outstanding		**11 636 203**	**2.24**	**20 479 772**	**2.70**

Quantity and weighted average prices

Overview of outstanding options Amounts in NOK million	31 December 2022 Number of instruments	31 December 2022 Weighted average exercise price	31 December 2021 Number of instruments	31 December 2021 Weighted average exercise price
Outstanding options 1 January	20 479 772	28.55	22 767 000	26.76
Granted during the year	-	-	7 451 000	31.20
Exercised during the year	(6 443 569)	23.97	(6 271 228)	22.16
Forfeited during the year	(200 000)	30.01	(900 000)	21.16
Expired during the year	(2 200 000)	38.52	(2 567 000)	38.52
Outstanding options 31 December	11 636 203	29.18	20 479 772	28.55
Of which exercisable (vested)	4 368 870	32.47	5 728 772	35.30
Average share price at exercise date (NOK per share)		37.64		34.00

11. Other operating expenses

Details of operating expenses

Amounts in NOK million	**2022**	2021
Loss on disposal of fixed assets	**(2)**	(5)
Freight and commission expenses	**(2 395)**	(1 661)
Leasing short-term and low value contracts (note 16)	**(70)**	(56)
Machinery, equipment, spare parts and operating materials	**(1 344)**	(1 336)
External services [1]	**(2 441)**	(2 051)
Insurance expenses	**(137)**	(106)
Impairment losses trade and other receivables	**(2)**	9
Other operating expenses[2] [3]	**(324)**	(330)
Total other operating expenses	**(6 714)**	(5 536)

[1] *Including services from auditor, see specification below*
[2] *Including changes in inventories of finished goods and work in progress of positive NOK 288 million (positive NOK 1 million)*
[3] *Including capitalised salary on fixed asset projects of positive NOK 125 million (positive NOK 114 million)*

Research and development
During 2022, Elkem expensed NOK 1,000 million (NOK 716 million) related to research and innovation activities, which includes product and business development, technical customer support and improvement projects. In addition, Elkem capitalised development expenses of NOK 312 million (NOK 300 million).

Grants relating to research and development amount to NOK 143 million (NOK 132 million) and are recognised in other operating income. In addition NOK 91 million (NOK 15 million) is recognised as a reduction of intangible assets.

Audit fees
KPMG is the group auditor of Elkem.

Fees to KPMG and other audit firms

Amounts in NOK million	**2022**	2021
KPMG		
Audit fee	**(19)**	(19)
Other assurance services	**(1)**	(1)
Tax services	**-**	(0)
Other services	**-**	-
Other audit firms		
Audit fee	**(2)**	(2)
Other assurance services	**(0)**	(0)
Tax services	**(2)**	(1)
Other services	**(0)**	(1)
Total fees to KPMG and other audit firms	**(25)**	(24)

Fees to auditors are reported exclusive of VAT.

12. Other items

Principle

Other gains (losses)
Other gains (losses) consists of changes in fair value of financial instruments that are not designated as a part of a hedging relationship, any ineffective part of hedging relationships, effects from discontinuation of hedging and foreign exchange gains (losses) related to operating activities such as trade receivables, trade payables, bank accounts / overdrafts. Foreign exchange gains (losses) related to financing activities, mainly interest-bearing liabilities and group loans, are classified as a part of financial income and expenses.

Other income (expenses)
Other income and (expenses) consists of transactions and events that are related to acquisition of business, gains / (losses) on disposal of businesses, restructuring programme and profit and loss effects from other shares. In addition, performance incentives for Elkem employees related to such items. Cost related to liquidated / wound-up businesses, costs of public requirements or updated regulations related to events / periods before purchase of the business, e.g., environmental measures, are included in other income and expenses.

Acquisition related costs may include both costs related to acquisitions done, not completed and cancelled projects. Investments in equity instruments with an ownership below 20% are normally classified as other shares. Dividends from such shares are recognised when shareholders' right to receive dividends is determined by the shareholder's meeting. Fair value changes in other shares related to listed companies are recognised as other income (expenses).

Details of other items

Amounts in NOK million	2022	2021
Changes in fair value commodity contracts (note 25)	**(2)**	(1)
Net gains (losses) on embedded EUR derivatives power contracts (note 25)	**218**	3
Ineffectiveness on cash flow hedges (note 26)	**1 471**	127
Net foreign exchange gains (losses) - forward currency contracts	**9**	14
Operating foreign exchange gains (losses)	**387**	20
Total other gains (losses)	**2 084**	163
Dividends from other shares	**4**	3
Change in fair value from other shares measured at fair value through profit or loss	**1**	2
Gains (losses) on acquisition and disposal of subsidiaries	**159**	-
Restructuring expenses (note 24)	**26**	41
Dismantling and environmental expenses (note 24) [1]	**(72)**	(181)
Other [2]	**(50)**	(17)
Total other income (expenses)	**67**	(153)
Total other items	**2 151**	10

[1] 2022 includes NOK 70 million in restoration expense related to decommissioned business in Canada. 2021 Includes NOK 171 million related to expenses in connection with relocation of workers buildings located in proximity to the Silicones Xinghuo plant, as required by the authorities.

[2] Mainly expenses related to business projects and acquisitions

13. Finance income and expenses

Principle

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

Foreign exchange gains (losses) related to financing activities including group loans are classified as a part of financial income and expenses, and foreign exchange gains (losses) related to operations are classified as a part of other items.

Interest expenses are recognised on an accrual basis using the effective interest method and are classified as financial expenses. Interest is capitalised as a part of the carrying amount of a self-constructed item of property, plant and equipment when the construction period takes a substantial period of time, meaning more than 9-12 months, depending on the total amount, and borrowing costs are being incurred.

Financial expenses also include interest on net pension liabilities, unwinding of discounted provisions and contingent consideration acquisition of subsidiaries, and interest on lease liabilities.

Details of net finance income (expenses)

Amounts in NOK million	2022	2021
Interest income on loans and receivables	**65**	34
Other financial income	**1**	6
Total finance income	**67**	40
Net foreign exchange gains (losses) [1]	**85**	241
Interest expenses on interest-bearing liabilities measured at amortised cost	**(229)**	(206)
Interest expenses from other items measured at amortised cost [2]	**(50)**	(23)
Capitalised interest expenses	**20**	5
Interest expenses on lease liabilities (note 16)	**(30)**	(26)
Unwinding of discounted liabilities	**(10)**	(8)
Interest expenses on net pension liabilities (note 9)	**(9)**	(8)
Other financial expenses	**(5)**	(10)
Total finance expenses	**(313)**	(276)
Net finance income (expenses)	**(161)**	6

[1] Some / part of loans are designated as a hedging instrument, hence the unrealised part of net foreign exchange gains (losses) are recognised against OCI, see note 26 Hedging.

[2] Interest expenses from other items measured at amortised cost mainly consist of interest on bills payable and factoring agreements.

14. Taxes

Principle

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 payables includes any adjustment to tax payable in respect of previous years. Income tax is recognised in the statement of profit or loss 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 recognised as income tax (expense) benefit in the statement of profit or loss. Accrued penalties and interest are recognised in the statement of financial position in income tax payable and provisions for the current and non-current portions respectively.

Deferred tax

Deferred tax assets and liabilities are calculated using the liability method with full allocation of all temporary differences between the tax base and the carrying amount of assets and liabilities in the financial statements, including tax losses carried forward. Deferred tax relating to items outside statement of profit or loss 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 Elkem intends to settle current tax liabilities and assets on a net basis, or to realise the tax assets and settle the liabilities simultaneously.

Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised; such reductions are reversed when the probability of future taxable profits improves.

Judgements and estimates

Part of the basis for recognising deferred tax assets is based on applying the loss carried forward against future taxable income in the group, which requires use of estimates for calculating future taxable income. Deferred tax assets are not recognised for start-up projects and entities with longer periods of losses unless there is convincing evidence of recoverability. Elkem recognises a previously unrecognised deferred tax asset to the extent that it has become probable that future taxable profit will allow the deferred asset to be recovered. For example, when start up projects becomes profitable or the market condition has changed so the entity has longer periods with historic taxable profits and future forecasted taxable profits. When estimating uncertain tax positions the most probable amount, including interests and penalties, is used because in most cases the outcome of the tax review is binary.

Income tax recognised in profit or loss

Amounts in NOK million	2022	2021
Profit (loss) before income tax	**12 236**	5 827
Current taxes	**(2 234)**	(1 145)
Deferred taxes	**(360)**	(18)
Total income tax (expense) benefit	**(2 594)**	(1 163)

Income taxes recognised in other comprehensive income (OCI)

Amounts in NOK million	2022	2021
Remeasurement of defined benefit pension plans	**(33)**	(10)
Hedging of net investment in foreign operations	**31**	(29)
Cash flow hedges	**(125)**	(153)
Total tax charged to OCI	**(127)**	(192)

Reconciliation of income tax (expense) benefit

Amounts in NOK million	2022	2021
Profit (loss) before income tax	**12 236**	5 827
Expected income taxes, 22% of profit before tax (22%)	**(2 692)**	(1 282)
Tax effects of:		
Difference in tax rates for each individual jurisdiction	**(99)**	(94)
Preferential tax rates	**61**	12
Permanent differences		
Tax effects of income from Norwegian controlled foreign companies (NOKUS)	**(16)**	(8)
Tax effects share of profit (loss) from equity accounted companies	**24**	19
Tax effects non-deductible expenses	**(12)**	(24)
Tax relief based on value of equity	**19**	18
Tax effects gains (losses) on acquisition and disposal of subsidiaries	**34**	-
Tax effects non-taxable income	**134**	76
Other effects		
Tax effects of changes in unrecognised deferred tax assets	**(32)**	157
Tax effects of change in tax rate	**-**	(19)
Other current taxes paid	**(10)**	(35)
Previous year tax adjustment	**(5)**	15
Total income tax (expense) benefit	**(2 594)**	(1 163)
Effective tax rate	**21 %**	20 %

Three companies in China are taxed under the regulations for "High and new technology company" which mean that the tax rate is 15% compared to the regular 25%. The companies have to confirm to the authorities every year that they fulfil the conditions for "High and new technology company" in order to apply the preferential tax rate.

Tax effect of non-taxable income is mainly related to R&D, additional R&D deduction and non-taxable R&D grants, and additional deduction on investments in fixed assets equipment.

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

Deferred tax assets and deferred tax liabilities

	31.12.2022		31.12.2021	
Amounts in NOK million	**Temporary difference**	**Deferred tax**	Temporary difference	Deferred tax
Derivatives including cash flow hedges	**-**	**-**	17	4
Property, plant and equipment and intangible assets	**412**	**69**	795	198
Pension liabilities	**325**	**79**	465	121
Trade receivables	**92**	**7**	89	16
Inventories	**998**	**222**	639	157
Provisions	**364**	**72**	208	53
Other differences	**458**	**93**	302	68
Debt waiver	**595**	**161**	595	161
Tax losses carried forward	**2 901**	**648**	2 353	582
Gross deferred tax assets	**6 145**	**1 351**	5 463	1 359
Unrecognised deferred tax assets for tax loss carried forward	**(2 398)**	**(520)**	(1 960)	(486)
Unrecognised debt waiver	**(595)**	**(161)**	(595)	(161)
Unrecognised deferred tax assets other items	**(1 264)**	**(190)**	(1 361)	(340)
Recognised deferred tax assets	**1 888**	**480**	1 548	372
Netting		**(329)**		(324)
Net deferred tax assets		**151**		48
Derivatives including cash flow hedges	**2 162**	**476**	560	123
Property, plant and equipment and intangible assets	**3 451**	**775**	2 734	610
Inventories	**284**	**62**	210	46
Other differences	**683**	**139**	243	50
Gross deferred tax liabilities	**6 580**	**1 452**	3 748	828
Netting		**(329)**		(324)
Net deferred tax liabilities		**1 123**		505
Net deferred tax (liabilities) assets recognised		**(972)**		(457)

Unrecognised deferred tax assets other items, are mainly related to property, plant and equipment and inventories. The tax assets are not recognised due to uncertainty regarding future taxable income and the long period for which the tax asset shall be amortised.

Movements in net deferred tax assets and deferred tax liabilities

Amounts in NOK million	2022	2021
Opening balance	**(457)**	(240)
Recognised in profit or loss for the year	**(360)**	(18)
Effect of business combination	**(20)**	-
Disposal of subsidiaries	**2**	-
Recognised in other comprehensive income	**(127)**	(192)
Currency translation differences	**(10)**	(7)
Closing balance	**(972)**	(457)

Tax losses carried forward 31 December 2022

Amounts in NOK million	Gross tax losses carried forward	Net tax losses carried forward	Unrecognised tax losses	Recognised deferred tax losses carried forward
France	1 803	451	(337)	114
China	490	74	(73)	-
Brazil	175	59	(59)	-
Paraguay	295	30	(31)	-
Malaysia	61	15	(14)	-
US	56	14	-	14
Canada	18	5	(5)	-
Mexico	3	1	(1)	-
Total tax losses to carried forward	2 901	649	(520)	128

Tax losses carried forward 31 December 2021

Amounts in NOK million	Gross tax losses carried forward	Net tax losses carried forward	Unrecognised tax losses	Recognised deferred tax losses carried forward
France	1 602	431	(347)	84
China	183	39	(28)	11
Brazil	170	58	(58)	-
Malaysia	96	23	(23)	-
Paraguay	298	29	(29)	-
Canada	3	1	(1)	-
Mexico	1	0	(0)	-
Total tax losses to carried forward	2 353	582	(486)	95

Tax losses carried forward by expiry date

	31.12.2022		31.12.2021	
Amounts in NOK million	**Total unrecognised losses**	**Total recognised losses**	Total unrecognised losses	Total recognised losses
Loss car.forw.which exp. within 1 year	**(3)**	**-**	-	-
Loss car.forw.which exp. within 2 years	**(5)**	**-**	-	-
Loss car.forw.which exp. within 3 years	**(9)**	**-**	-	-
Loss car.forw.which exp. within 4 years	**(10)**	**-**	(29)	-
Loss car.forw.which exp. within 5 years	**(70)**	**-**	-	-
Loss car.forw.which exp. within 5-10 years	**(7)**	**-**	-	11
Without maturity	**(416)**	**128**	(458)	84
Total tax losses carried forward	**(520)**	**128**	(486)	95

Pending tax issues with tax authorities
The Norwegian Tax Office decided in February 2021 to increase Elkem ASA's taxable income for the fiscal years 2016-2019 by in total NOK 781 million, which would have lead to an increase in the income tax expense of NOK 181 million. The reassessments relate to loan arrangements / debt waiver agreements acquired by Elkem ASA in 2016 through the cross-border parent-subsidiary merger with Bluestar Silicones International Sarl. Elkem is of the opinion that the reassessment is unfounded and will appeal. Based on legal advice, Elkem's assessment is that the defence against the action will be successful, and the increase in taxable income is therefore not recognised in profit or loss. The amount was paid in first quarter of 2021 and a corresponding receivable for the paid income tax is recognised in 2021, see note 22 Other assets.

Debt waiver
Elkem Silicones France SAS has four Elkem internal debt waiver agreements where internal loans were converted to equity and the converted amounts were treated as taxable income. Elkem Silicones France SAS can only reinstate the loans to the extent that the company has an accounting profit according to IFRS. All debt that is reinstated under the agreements can be deducted against taxable income. The gross taxable value of the agreements as of 31 December 2022 is NOK 595 million (NOK 595 million). Elkem Silicones France SAS has not reinstated any loan amounts in 2022 or 2021 and correspondingly no tax credit is recognised in 2022 or 2021.

Debt waiver 31 December 2022

Amounts in NOK million	2010	2012	2013	2014	**Total**
Gross value of debt waiver	54	186	149	207	**595**
Utilised 2022	-	-	-	-	**-**
Total debt that can be reversed	54	186	149	207	**595**
Deferred tax asset unrecognised [1]	15	50	40	56	**161**
The respective agreements expire in	3 years	5 years	6 years	7 years	

Debt waiver 31 December 2021

Amounts in NOK million	2010	2012	2013	2014	**Total**
Gross value of debt waiver	54	186	149	207	**595**
Utilised 2021	-	-	-	-	**-**
Total debt that can be reversed	54	186	149	207	**595**
Deferred tax asset unrecognised [1]	15	50	40	56	**161**
The respective agreements expire in	4 years	6 years	7 years	8 years	

[1] *Based on tax rate 27.0% (28.4%), which is applicable in France.*

15. Property, plant and equipment

Principle

Property, plant and equipment

Property, plant and equipment (PPE) are stated in the consolidated statement of financial position at cost less accumulated depreciation and accumulated impairment losses. PPE acquired in business combinations are recognised at fair value at the acquisition date. PPE acquired in a business combination under common control are reflected at their carrying amounts. Assets in the course of construction are carried at cost less any recognised impairment loss. Such assets are classified to the appropriate categories of PPE when completed and ready for the intended use. When significant parts of an item of PPE have different useful lives, they are accounted for as separate items.

Initial cost includes expenditures that are directly attributable to the acquisition of the asset, cost of materials, direct labour, any other costs directly attributable to bringing the assets to working condition for their intended use and estimated dismantling or removal charges.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, when future benefits are probable and the cost can be measured reliably. The carrying amount of the replaced part is derecognised. Major periodic maintenance that is carried out less frequently than every year, is capitalised and depreciated over the period until the next periodic maintenance is performed. All other repairs and maintenance are charged to the statement of profit or loss when incurred.

Depreciations are calculated based on estimated useful life and expected residual value for each item of PPE and are recognised in the statement of profit or loss using the straight-line method. The estimated useful lives, residual values (if any) and depreciation method are reviewed, and if necessary adjusted, at least annually. Depreciation commences when the assets are ready for their intended use.

An item of PPE is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on disposal or retirement of PPE, determined as the difference between the sales proceeds and the carrying amount of the asset, is recognised under other operating income or other operating expenses in the statement of profit or loss.

Accounting principle for impairment of assets, see Note 19 Impairment assessment.

Judgements and estimates

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

Details of property, plant and equipment 2022

Amounts in NOK million	Land	Buildings and other property	Plant, machinery, equipment and motor vehicles	Office and other equipment	Construction in progress	**Total**
Cost						
Opening balance	217	8 064	23 043	866	2 819	**35 009**
Additions	1	13	34	5	4 091	**4 143**
Transferred from CiP	2	475	1 271	181	(1 929)	**-**
Reclassification	-	1	1	(6)	(40)	**(43)**
Business combinations (note 4)	1	185	749	0	7	**942**
Disposal of subsidiaries (note 4)	-	-	-	-	(29)	**(29)**
Disposals	(0)	(10)	(384)	(9)	(12)	**(415)**
Currency translation differences	13	229	691	40	116	**1 088**
Closing balance	233	8 957	25 406	1 078	5 022	**40 696**
Accumulated depreciation						
Opening balance		(2 999)	(13 085)	(430)		**(16 514)**
Additions		(263)	(1 293)	(137)		**(1 693)**
Reclassification		0	(1)	1		**0**
Disposals		8	306	6		**321**
Currency translation differences		(68)	(365)	(20)		**(453)**
Closing balance		(3 322)	(14 437)	(580)		**(18 339)**
Impairment losses						
Opening balance	(11)	(419)	(2 315)	(1)	(28)	**(2 774)**
Additions	-	(10)	(13)	(0)	(5)	**(28)**
Reclassification	-	6	(6)	(0)	-	**(0)**
Disposals	-	0	44	0	4	**48**
Currency translation differences	(1)	(13)	(68)	(0)	(1)	**(82)**
Closing balance	(11)	(435)	(2 358)	(1)	(30)	**(2 836)**
Carrying amount						
Closing balance	222	5 200	8 610	497	4 991	**19 520**
Original cost of assets fully depreciated but still in use	0	2 738	6 592	252	-	**9 583**
Estimated useful life	Indefinite	5–50 years	3–50 years	3–20 years		
Depreciation plan		Straight-line	Straight-line	Straight-line		

Capitalised interest is NOK 20 million in 2022. The weighted average cost of capital for capitalisation of loan interest in 2022 is in the range of 2.5% and 3.7% per annum.

Details of property, plant and equipment 2021

Amounts in NOK million	Land	Buildings and other property	Plant, machinery, equipment and motor vehicles	Office and other equipment	Construction in progress	Total
Cost						
Opening balance	184	7 474	21 720	582	1 799	**31 759**
Additions	17	55	67	132	2 762	**3 033**
Transferred from CiP	21	344	1 122	186	(1 674)	**-**
Reclassification	-	7	1	(14)	(105)	**(110)**
Business combinations (note 4)	-	-	-	-	-	**-**
Disposals	(0)	(21)	(290)	(12)	(6)	**(328)**
Currency translation differences	(5)	205	423	(8)	42	**656**
Closing balance	217	8 064	23 043	866	2 819	**35 009**
Accumulated depreciation						
Opening balance		(2 738)	(11 929)	(377)		**(15 043)**
Additions		(236)	(1 211)	(76)		**(1 523)**
Reclassification		(6)	(2)	9		**1**
Disposals		17	228	10		**255**
Currency translation differences		(37)	(171)	4		**(203)**
Closing balance		(2 999)	(13 085)	(430)		**(16 514)**
Impairment losses						
Opening balance	(11)	(384)	(2 162)	(0)	(26)	**(2 584)**
Additions	-	(9)	(54)	(1)	(3)	**(67)**
Reclassification	-	-	(0)	0	-	**-**
Disposals	-	0	35	0	2	**38**
Currency translation differences	0	(25)	(134)	(0)	(2)	**(160)**
Closing balance	(11)	(419)	(2 315)	(1)	(28)	**(2 774)**
Carrying amount						
Closing balance	206	4 646	7 644	435	2 790	**15 722**
Original cost of assets fully depreciated but still in use	0	1 368	6 455	126	-	**7 950**
Estimated useful life	Indefinite	5–50 years	3–50 years	3–20 years		
Depreciation plan		Straight-line	Straight-line	Straight-line		

Capitalised interest is NOK 5 million in 2021. The weighted average cost of capital for capitalisation of loan interest in 2021 is in the range of 2.5% and 3.1% per annum.

Elkem has decided to transfer the production at Elkem Carbon Malaysia to other Elkem Carbon Solutions production sites.

An impairment loss of NOK 60 million was recognised in 2021 due to the transfer, of which NOK 55 million is related to impairment of property, plant and equipment and NOK 5 million to right-of-use assets. The impairment loss of PPE is mainly related to plant, machinery, equipment and motor vehicles and buildings and other property.

16. Leases

Principle

Right-of-use assets are presented separately in the statement of financial position, whereas lease liabilities are recognised in interest-bearing liabilities.

Right-of-use-assets

Elkem`s policy in general is to own critical assets related to the production cycle, including production buildings and land where this is not controlled by the local government or other parties. The group`s main lease contracts comprise office buildings and machinery / storage assets to be used at production sites. The less significant lease contracts comprise employee cars, machinery and equipment.

Elkem assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Elkem applies single recognition and measurement approach for all leases, except for:

- Lease contracts for which the lease term ends within 12 months as of the date of initial application are not capitalised (short-term leases). Elkem's short-term lease commitments are mainly related to rental of equipment in connection with maintenance or installation of new equipment.
- Lease contracts for which the underlying asset is of low value, mainly office equipment, are not capitalised.
- Lease of intangible assets are not capitalised.
- Lease payments on contracts that are not capitalised are recognised as other operating expenses on a straight-line basis over the lease term.

Elkem recognise right-of-use assets at the commencement date of the lease (i.e., the date the underlying assets is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis from the commencement date to the earlier of the lease term and the remaining useful life of the right-of-use asset for assets where Elkem does not obtain ownership of the leased asset at the end of the lease term. Depreciation expense on the right-of-use asset is presented as depreciation in the statement of profit or loss. Right-of-use assets are subject to impairment assessments as described in note 19 Impairment assessment.

Lease liabilities

At the commencement date of a lease, Elkem recognise lease liabilities measured at the present value of the lease payments to be made over the lease term. The lease payments include fixed payments (less any lease incentives receivable), variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. Non-lease components like insurance, electricity and other property-related expenses to be paid to landlord are excluded from the lease commitment for offices. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by Elkem and payments of penalties for terminating the lease, if the lease term reflects exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses in the period in which the event or condition that triggers the payment occurs. Elkem uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease cannot be readily determined. The incremental borrowing rate is based on the respective country's risk-free rate for the term corresponding to the lease term, adjusted for own credit risk. Updated incremental borrowing rates are applied to new lease contracts recognised on a quarterly basis.

Lease liability is remeasured upon the occurrence of certain events like change in the lease term, lease payments or reassessment of options which in general implies a change in the carrying amount of the right-of-use asset. If any changes to the contractual terms and conditions; like increase of scope Elkem needs to assess whether the change implies a separate lease if the change has a standalone price. The existing right-of-use asset is adjusted if the increase of scope does not indicate a standalone price or for any other modifications.

Judgements and estimates

The lease term is determined as the non-cancellable period of a lease, together with any periods covered by an option to extend the lease if Elkem is reasonably certain to exercise that option and any periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option. Elkem's main renewal options relate to lease of buildings for office and production purpose, included in Plant, buildings and other property, and lease of land and it is reasonably certain that the renewal option will be used. Elkem reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise, or not to exercise, the option to renew.

Details of right-of-use assets
2022

Amounts in NOK million	Land	Buildings and other property	Plant, machinery, equipment and motor vehicles	Office and other equipment	**Total**
Cost					
Opening balance	432	730	138	11	**1 310**
Additions / lease modifications / remeasurements	4	105	21	0	**131**
Disposal of subsidiaries (note 4)	(118)	(145)	-	-	**(264)**
Partial or full termination of agreements	(0)	(46)	(15)	(9)	**(71)**
Currency translation differences	9	15	7	1	**31**
Closing balance	326	659	150	2	**1 138**
Accumulated depreciation					
Opening balance	(66)	(143)	(75)	(5)	**(288)**
Additions	(8)	(79)	(32)	(1)	**(119)**
Disposal of subsidiaries (note 4)	8	10	-	-	**18**
Reclassification	(3)	(7)	-	-	**(10)**
Partial or full termination of agreements	0	32	15	5	**53**
Currency translation differences	(2)	(6)	(4)	(0)	**(12)**
Closing balance	(70)	(191)	(96)	(1)	**(359)**
Impairment losses					
Opening balance	-	(1)	-	(4)	**(5)**
Disposals	-	1	-	4	**5**
Currency translation differences	-	(0)	-	(0)	**(0)**
Closing balance	-	(0)	-	-	**0**
Carrying amount					
Closing balance	256	468	55	1	**779**
Estimated useful life	8–99 years	2–25 years	2–6 years	3-4 years	
Depreciation plan	Straight-line	Straight-line	Straight-line	Straight-line	

Details of right-of-use assets
2021

Amounts in NOK million	Land	Buildings and other property	Plant, machinery, equipment and motor vehicles	Office and other equipment	**Total**
Cost					
Opening balance	415	529	134	10	**1 087**
Additions / lease modifications / remeasurements	0	239	18	2	**260**
Reclassification	(0)	0	0	(1)	**-**
Partial or full termination of agreements	-	(41)	(10)	-	**(51)**
Currency translation differences	17	2	(5)	(0)	**14**
Closing balance	432	730	138	11	**1 310**
Accumulated depreciation					
Opening balance	(51)	(105)	(53)	(3)	**(212)**
Additions	(4)	(77)	(34)	(2)	**(116)**
Reclassification	(7)	(0)	0	0	**(7)**
Partial or full termination of agreements	-	40	9	-	**49**
Currency translation differences	(3)	(1)	2	0	**(2)**
Closing balance	(66)	(143)	(75)	(5)	**(288)**
Impairment losses					
Opening balance	-	-	-	-	**-**
Additions	-	(1)	-	(4)	**(5)**
Currency translation differences	-	(0)	-	(0)	**(0)**
Closing balance	-	(1)	-	(4)	**(5)**
Carrying amount					
Closing balance	366	586	62	2	**1 017**
Estimated useful life	1–99 years	1–25 years	2–5 years	3-6 years	
Depreciation plan	Straight-line	Straight-line	Straight-line	Straight-line	

Carrying amounts of lease liabilities and the movements during the period

Amounts in NOK million	**2022**	2021
Opening balance	**801**	663
Additions / lease modifications / remeasurements	**124**	260
Partial or full termination of agreements	**(6)**	(2)
Disposal of subsidiaries	**(238)**	-
Payments	**(146)**	(144)
Interest expenses on lease liabilities	**30**	26
Currency translation differences	**13**	(2)
Closing balance (note 23)	**578**	801

The maturity analysis of lease liabilities is disclosed in note 23 Interest-bearing assets and liabilities

Amounts recognised in consolidated statement of profit or loss

Amounts in NOK million	2022	2021
Depreciation of right-of-use assets	**(119)**	(116)
Interest expenses on lease liabilities (note 13)	**(30)**	(26)
Leasing expenses, short-term leases (note 11)	**(56)**	(44)
Leasing expenses, low value assets (note 11)	**(13)**	(11)
Leasing expenses, variable lease payments (note 11)	**(2)**	(2)
Total amount recognised in consolidated statement of profit or loss	**(219)**	(199)

17. Other intangible assets

Principle

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, commencing when the asset is available for use. Assets that are an integral part of a group of assets are amortised from the date the related asset group as a whole is ready for its intended use. Such assets are impairment tested annually.

The estimated useful lives are reviewed at the end of each reporting period.

An intangible asset is derecognised on disposal, or when the group expects no future economic benefits to be derived from its use. Gain or loss arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, is recognised in other operating income or other operating expenses in the statement of profit or loss.

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. Expenditures related to research and development activities, see note 11 Other operating expenses.

Accounting principle for impairment of assets, see Note 19 Impairment assessment.

Judgements and estimates

Estimated useful lives are used in calculation of amortisation of intangible assets, these are reviewed, and if necessary adjusted, at least annually.

Details of intangible assets
2022

Amounts in NOK million	Land use rights	Technology and licences	Software	Development	Other intangible [1]	Intangible assets under construction	Total
Cost							
Opening balance	103	828	567	775	335	568	**3 175**
Additions [2]	-	-	24	1	0	310	**335**
Transferred from CiP	-	-	5	58	-	(63)	**-**
Reclassification	-	3	43	-	(1)	7	**53**
Business combinations (note 4)	-	0	-	-	6	-	**6**
Disposal of subsidiaries (note 4)	-	-	-	-	-	(460)	**(460)**
Disposals	-	-	(30)	-	-	(3)	**(33)**
Currency translation differences	5	36	18	46	11	18	**134**
Closing balance	108	868	627	880	350	377	**3 209**
Accumulated amortisation							
Opening balance	(55)	(513)	(398)	(519)	(87)		**(1 572)**
Additions	(2)	(41)	(54)	(57)	(33)		**(186)**
Reclassification	-	-	(1)	-	1		**(0)**
Disposals	-	-	8	-	-		**8**
Currency translation differences	(3)	(26)	(12)	(30)	(3)		**(74)**
Closing balance	(59)	(579)	(457)	(606)	(122)		**(1 824)**
Impairment losses							
Opening balance	(1)	-	-	-	-	-	**(1)**
Currency translation differences	(0)	-	-	-	-	-	**(0)**
Closing balance	(1)	-	-	-	-	-	**(1)**
Carrying amount							
Closing balance	48	288	170	273	228	377	**1 385**
Estimated useful life	3–10 years	3–15 years	3–10 years	3–16 years	3–10 years		
Amortisation plan	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line		

[1] Other intangible assets consists mainly of customer relationships.

[2] Additions in 2022 consists mainly of capitalisation of development projects of NOK 312 million of which NOK 230 million is related to Elkem's biocarbon initiative and battery projects.

Details of intangible assets
2021

Amounts in NOK million	Land use rights	Technology and licences	Software	Development	Other intangible [1]	Intangible assets under construction	**Total**
Cost							
Opening balance	108	836	469	714	322	305	**2 753**
Additions [2]	-	1	16	-	-	324	**342**
Transferred from CiP	-	2	6	80	-	(87)	**-**
Reclassification	-	8	81	-	-	29	**118**
Business combinations (note 4)	-	-	-	-	-	-	**-**
Disposals	-	-	(9)	-	(0)	-	**(9)**
Currency translation differences	(5)	(19)	4	(19)	12	(2)	**(28)**
Closing balance	103	828	567	775	335	568	**3 175**
Accumulated amortisation							
Opening balance	(56)	(487)	(349)	(486)	(55)		**(1 433)**
Additions	(1)	(41)	(50)	(53)	(31)		**(177)**
Reclassification	-	-	(1)	-	-		**(1)**
Disposals	-	-	5	-	0		**5**
Currency translation differences	3	15	(3)	21	(1)		**35**
Closing balance	(55)	(513)	(398)	(519)	(87)		**(1 572)**
Impairment losses							
Opening balance	(1)	-	-	-	-	-	**(1)**
Additions	-	-	(4)	-	-	-	**(4)**
Disposals	-	-	4	-	-	-	**4**
Currency translation differences	0	-	-	-	-	-	**0**
Closing balance	(1)	-	-	-	-	-	**(1)**
Carrying amount							
Closing balance	47	315	169	256	248	568	**1 602**
Estimated useful life	3–10 years	3–15 years	3–10 years	3–16 years	3–10 years		
Amortisation plan	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line		

[1] Other intangible assets consists mainly of customer relationships.
[2] Additions in 2021 consists mainly of capitalisation of development projects of NOK 300 million of which NOK 228 million is related to Elkem's biocarbon initiative and battery projects.

18. Goodwill

Principle

Goodwill

Goodwill is initially measured as the excess of the cost of an acquisition over the group's share of the fair values of the acquired entity's net identifiable assets at the acquisition date. If the fair value of the group's interest in the net assets of the acquired subsidiary exceeds the cost of the acquisition (negative goodwill), the differences are recognised directly in the statement of profit or loss as other items. 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.

Accounting principle for impairment of assets, see Note 19 Impairment assessment.

Judgements and estimates

The fair value of an acquired entity's net identifiable assets used to initially measure goodwill are dependent on assumptions such as future cash flows and discount rate. See note 4 Composition of the group.

Judgments and estimates for impairment of assets, see Note 19 Impairment assessment.

Details of goodwill

Amounts in NOK million	**2022**	2021
Opening balance	**941**	919
Currency translation differences	**43**	22
Closing balance	**984**	941

Origin of goodwill per CGU
31 December 2022

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	**Total**
Elkem Silicones Guangdong Co., Ltd.	499	-	-	**499**
Elkem Silicones Korea Co., Ltd	126	-	-	**126**
Elkem Silicones	80	-	-	**80**
Elkem Rana AS	-	40	-	**40**
Elkem Nagpur	-	38	-	**38**
Elkem Oilfield Chemical FZCO	-	23	-	**23**
Elkem Dronfield Ltd.	-	16	-	**16**
Elkem Materials Process Services BV	-	0	-	**0**
Ferroveld JV	-	-	43	**43**
Elkem Partiçipacòes Indústria e Comércio Limitada	-	-	8	**8**
Elkem Carbon (China) Co., Ltd.	-	-	1	**1**
NEH LLC	-	93	17	**110**
Total goodwill	705	209	69	**984**

Origin of goodwill per CGU
31 December 2021

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	**Total**
Elkem Silicones Guangdong Co., Ltd.	485	-	-	**485**
Elkem Silicones Korea Co., Ltd	119	-	-	**119**
Elkem Silicones	76	-	-	**76**
Elkem Rana AS	-	40	-	**40**
Elkem Nagpur	-	37	-	**37**
Elkem Oilfield Chemical FZCO	-	21	-	**21**
Elkem Dronfield Ltd.	-	16	-	**16**
Elkem Materials Process Services BV	-	0	-	**0**
Ferroveld JV	-	-	41	**41**
Elkem Partiçipacòes Indústria e Comércio Limitada	-	-	7	**7**
Elkem Carbon (China) Co., Ltd.	-	-	1	**1**
NEH LLC	-	83	15	**98**
Total goodwill	680	197	64	**941**

19. Impairment assessments

Principle
Impairment exists when the carrying value of an asset or cash generating unit (CGU) exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The fair value less cost of disposal calculation is based on data from binding sales transactions, conducted at arm's length for similar assets or observable market prices less incremental costs of disposing the asset. The value in use calculation is based on a DCF model. The cash flows are derived from the budget for the next five years and do not include restructuring activities that Elkem is not yet committed to or significant future investments that will enhance the performance of the assets of the CGU being tested. A long-term growth rate is calculated and applied to project future cash flows after the fifth year.

A CGU is the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets.

Indicators of impairment will typically be changes in technological development, changes in market conditions and changes in the competitive situation.

Impairment loss and reversal of previous impairment losses are recognised as impairment losses in the statement of profit or loss.

Goodwill
Goodwill arising from a business combination is allocated to CGUs or groups of CGUs that are expected to benefit from the synergies of the combination. 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.

Intangible assets, property plant and equipment and right-of-use assets
Intangible assets with indefinite useful lives are tested for impairment annually, or more frequently when there is an indication of impairment. For the other non-financial assets Elkem assess, at each reporting date, whether there is an indication that an asset may by impaired. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years.

Judgements and estimates
There is significant judgment required to determine the CGU for impairment testing. For goodwill the determination of the CGU is based on the level where synergies are expected to be realised following a business combination. The CGU for impairment testing of goodwill is determined to be the operating segments as presented in note 6 Operating segments.

For impairment testing of fixed, intangible and right of use assets the CGU the lowest level that generates ingoing cash flows. This can be both a single plant or a combination of plants depending on the facts and circumstances.

The recoverable amounts of assets of CGUs subject to impairment testing are determined based on value-in-use calculations, which are based on estimated future cash flows. The uncertainty in the cash flows relates to future prices for both key input factors in the production and market prices for the sale of Elkem's products. There is uncertainty regarding these factors both for the next 12 months and for the rest of the forecast period. The estimated future cash flows are discounted using a discount rate before tax. The estimation uncertainty in the discount rate relates to the determination of the risk free rate and the beta. Elkem have performed sensitivity analysis in the impairment test to reflect the uncertainty in the estimates.

(a) Impairment test of goodwill
Discounted cash flow models are applied to determine the value in use for the cash-generating unit. Key assumptions used in the calculation of value in use are growth rate, EBITDA levels, capital expenditure and discount rates.

Growth rates
The expected growth rates for a cash-generating unit converge from its current level experienced over the last few years, to the long-term growth level in the market in which the entity operates. The growth rates used to extrapolate cash flow projections beyond the explicit forecast period are based on management's past experience, assumptions in terms of market share and expectations for the market development in which the entity operates. Growth rate used in Elkem's DCF models is 1.5% (2.0%).

EBITDA levels
EBITDA level represents the operating profit (loss) before depreciation and amortisation. The key assumptions used in reaching the forecast figures are sales prices, volume mix, operating costs and productivity targets.

Sales prices, volume and product mix: The 2023 budget is used as a basis for the forecast the next four years. Elkem experienced an increase in sales prices for most of Elkem's products in the first part of the year, but prices declined in the latter part of 2022. For Elkem's Silicones business the sales prices in China have been very volatile in 2022. In the impairment assessment Elkem has assumed sales prices will normalise and the price assumptions are below the current market situation for Silicon Products and Carbon Solutions. For Silicones the assumption is an increase in volume and prices compared to the current level, especially within specialty products. There are no observable long-term market prices for Elkem's products, but there are external independent sources such as CRU for the Silicon Products market that are used as a basis for the budget. Elkem works continuously to improve the specialty ratio and this is reflected in the impairment models. Sales volumes are adjusted for necessary maintenance stops.

Raw materials and energy for smelting: Most of Elkem's plants have long term energy contracts that covers their future need of power. The contract prices is used in the estimate of future cash flows. For Elkem's spot exposure observable market prices are used adjusted for CPI. Raw material prices are based on 2023 budget and are adjusted to reflect expected volume / mix changes.

Climate related risk: The calculation of value in use reflects the expected development in both the cost of CO_2 quotas and the income from CO_2 compensation going forward in line with the current regulatory framework. Outside of this no climate related legislation has been passed at the current time that will impact the group. However, there is an expectation that any increase in cost due to new legislation will be covered by increased sales prices, full or partial compensation by incentive schemes or increased effectiveness resulting in limited impact on operating cash flows.

Other operating costs: These are estimated based on the current level and adjusted for 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 and are based on today's maintenance level and technology. Estimated capital expenditures do not include capital expenditures that significantly enhance the current performance, as such effects are not included in the cash flow projections.

Currency rates and inflation
The value-in-use calculation is performed in the functional currency for the CGU. The currency rates used to translate future incomes and expenses in other currencies than the functional currency are based on official forward rates from Reuters. The long-term inflation (CPI) are based on external predictions and reflect the CPI which each CGU is located.

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 are based on 10-year risk-free interest rate for the relevant currency of the CGU. 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 WACC are adjusted for tax to determine a pre-tax rate that is used for discounting the estimated future cash flows.

Goodwill acquired through business combination are allocated to the operating segments Silicones, Silicon Products and Carbon Solutions. Impairment testing of goodwill is done for a group of CGUs that is included in the respective operating segments. The following table give an overview of carrying amount of goodwill allocated to each of the operating segments. The table also includes the pre-tax discount rate for each operating segment.

Cash Generating Units

Amounts in NOK million	Carrying amount		Pre-tax discount rate	
	31 December 2022	31 December 2021	**31 December 2022**	31 December 2021
Silicones	**705**	680	**10.5 %**	9.2%
Silicon Products	**209**	197	**10.1 %**	8.5%
Carbon Solutions	**69**	64	**10.2 %**	9.6%
Goodwill	**984**	941		

Sensitivity for test of goodwill

- → An increase of 4% points in discount rate, for each operating segment's discount rate, will not result in impairment.
- → A growth rate equal to zero for the terminal period, for the cash-flows for each operating segment will not result in impairment.
- → A decrease in the forecasted EBITDA levels of 30% for the cash-flows for each operating segment will not result in impairment.

(b) Impairment test for intangible assets, property plant and equipment and right-of-use assets

For the assets with impairment indicators the recoverable amount was determined estimating the value in use of the assets, see the goodwill section above for assumption used. In 2022 Elkem has identified impairment indicators for one of its CGUs, see below. The CGU was not assessed to be impaired, as the recoverable amount exceed the carrying amount for the CGUs.

In 2021 Elkem identified impairment indicators within the Silicones segment, Silicones excluding Jiangxi Bluestar Xinghuo Silicones, Elkem Silicon Materials (Lanzhou), Elkem Silicones Korea and Elkem Silicones Guangdong, which are tested separately. The CGU have performed better in 2022 than in 2021, and no new impairment indicators are identified.

Elkem Silicones Guangdong

Elkem has identified impairment indicators within Elkem Silicones Guangdong. The total carrying amount of the CGU is NOK 187 million. The impairment indicators are largely due to deterioration of EBITDA margins in 2022 due to significantly increased raw material prices and limited pass-through opportunities for the specialty part of their sales portfolio. Raw material prices have come down and is expected to remain at a lower level with stable sales prices ensuring improved margins going forward.

The assumptions applied follow the assumptions as applied for the goodwill, see section above. It is assumed stable production and sales prices and somewhat reduced cost in 2023 compared to 2022. The contribution margin for the following years are on the same level as for 2022. Pre-tax discount rate used in the DCF calculation for the CGU is 9.5%. An increase of 4% points in discount rate, a growth rate used to extrapolate the cash-flows after five years equal to zero or a decrease in forecasted EBITDA of 30% points, will not result in an impairment for the CGU.

20. Inventories

Principle

Inventories are measured at the lower of cost and net realisable value. Inventory consists of raw materials, semi-finished goods and finished goods, in addition to operating materials and spare parts that do not meet the definition of property, plant and equipment. Raw materials, and operating materials and spare parts, are recognised at cost of purchase including transport and handling to their present location. Finished and semi-finished goods are measured at cost of raw materials, energy for production and cost of conversion up to the actual completion stage. Cost of conversion comprise operating expenses directly related to production of the products and an allocation of direct fixed operating expenses. The cost of CO_2 allowances that Elkem needs to purchase in addition to allowances received from the government (note 8), are based on estimated production / emissions for the year. The cost is allocated to cost of conversion proportionally over the year as the number of allocated allowances will not be revised unless there is a substantial change in the production level at the plants. Net realisable value represents the estimated selling price for inventories less estimated costs of completion and variable selling expenses.

Cost of goods sold is recognised in different lines in the statement of profit or loss based on nature; raw materials and energy for production, employee benefits and other operating expenses. Actual cost of conversion related to goods sold is reported net of change in cost of conversion in inventory and is included in other operating expenses.

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

Judgements and estimates

The assessment of net realisable value for the inventory is based on estimated market prices in the period the inventory is expected to be sold. The actual market price will differ from the estimates used.

Details of inventory

Amounts in NOK million	31.12.2022			31.12.2021		
	Cost price	**Provision**	**Net total**	Cost price	Provision	Net total
Raw materials	**3 322**	**(12)**	**3 310**	2 767	(74)	2 693
Semi-finished goods	**402**	**(41)**	**361**	343	(41)	302
Finished goods	**6 035**	**(142)**	**5 893**	4 198	(63)	4 135
Operating materials and spare parts	**792**	**(31)**	**761**	610	(23)	586
Total inventories	**10 550**	**(226)**	**10 325**	7 918	(202)	7 716

This year's change in provision for impairment of inventory, a loss of NOK 14 million (loss of NOK 87 million), is recognised as a part of raw materials and energy for production.

21. Trade receivables

Principle

Trade and bills receivables are initially recognised at transaction price, which in most cases corresponds to their nominal amount. The carrying amount is subsequently measured at amortised cost using the effective interest rate method, less any provision for expected credit losses. Current receivables with no stated interest rate are recognised at their nominal amount.

A bill receivable is a document where the customer formally agrees to pay for delivered goods or services at maturity date and are normally guaranteed by a financial institution. A bill receivable is transferable and can be used to pay trade payables (endorsed) or be settled in cash with a finance institution (discounted). The bills receivables-document effectively replaces, for the specified amount, the trade receivable exchanged for the bill. Bills receivables (mainly bank acceptance bills that are guaranteed by a financial institution) are primarily used by Elkem's Chinese entities and the duration is normally below six months.

Trade receivables are derecognised when settled, replaced by bills receivable or when transferred to a third party and the group has no further risk related to the receivables. Bills receivables are derecognised when they are settled on due date or when the risk and reward are transferred to a third party. Transferral to a third party can be done by discounting a bill receivable before due date or by endorsing the bill receivable, meaning that it is accepted by the supplier as payment for goods or services received.

Elkem calculates the expected credit losses (ECL) for trade receivables and bills receivables in accordance with the simplified approach. All expected cash flows, including cash flows from credit insurance contracts where such contracts are deemed to be an integral part of the transactions, is taken 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 for the different customer groups /segments where applicable.

Judgements and estimates

Judgement is applied when determining expected credit loss on trade receivables. The judgement is based on experienced losses in the past and expectations about future economic conditions for the different customer groups / business areas. Calculation of expected credit losses takes into account cash flows from credit insurance contracts where such contracts are deemed to be an integral part of the transaction. Elkem generally secures its trade receivables by credit insurance from a reputable credit insurance company, see note 27 Financial risk.

Details of trade receivables

Amounts in NOK million	31.12.2022	31.12.2021
Trade receivables	**3 208**	3 343
Trade receivables, related parties (note 32)	**19**	33
Allowance for expected credit losses	**(65)**	(69)
Bills receivable	**1 086**	990
Total trade receivables	**4 248**	4 297

Elkem has entered into factoring agreements with a credit limit of a total of EUR 162 million (EUR 127), NOK 1,698 million (NOK 1,265 million), to sell on continuing basis trade receivables that meet specific conditions. The agreements include a recourse clause for maximum 5% -10%, depending on the agreement, of the face value of the individual receivables sold. The non-recourse amount of the receivables sold is derecognised and the recourse amount is recognised as a current liability when the title to the receivables is transferred. As of 31 December 2022, NOK 106 million (NOK 57 million) is recognised as current liability (see note 24 Provisions and other liabilities). In addition, Elkem has entered into factoring agreements without recourse for some specific customers. Receivables that are sold without recourse are derecognised in its entirety when the title is transferred, as there is no remaining credit risk after transfer.

As at 31 December 2022 NOK 1,777 million (NOK 1,467 million) of Elkem's trade receivables are derecognised under these agreements.

Bills receivable consist of NOK 1,086 million (NOK 989 million) bank acceptance bills and NOK 0 million (NOK 2 million) commercial acceptance bills.

A total of NOK 4,033 million (NOK 4,253 million) in unmatured bills receivables are endorsed to a third party where the final payment of the bill is guaranteed by a highly rated financial institution. Elkem will only suffer losses on an endorsed bill if the bank that have issued the bill or all companies that have endorsed the bill before Elkem goes bankrupt. These bills are derecognised as there is very low remaining credit risk related to endorsed bills.

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

Amounts in NOK million	31.12.2022	31.12.2021
Not due	**2 392**	2 883
Overdue by:		
1–30 days	**527**	352
31–60 days	**92**	48
61–90 days	**124**	27
More than 90 days	**91**	66
Total trade receivables [1]	**3 227**	3 376

[1] Bills receivable is not included in the ageing table

Movements in allowance for expected credit losses

Amounts in NOK million	2022	2021
Opening balance	**(69)**	(92)
Business combinations (note 4)	**-**	-
Realised losses during the year / Received on earlier losses	**5**	12
Provision for expected credit losses	**(27)**	(10)
Reversal of earlier provisions	**29**	24
Currency translation differences	**(2)**	(4)
Closing balance	**(65)**	(69)

Analysis of allowance for expected credit losses, presented based on related trade receivables

Amounts in NOK million	31.12.2022	31.12.2021
Not due	**(13)**	(14)
Overdue by:		
1–30 days	**(1)**	(1)
31–60 days	**(0)**	(0)
61–90 days	**(3)**	(4)
More than 90 days	**(48)**	(50)
Total allowance for expected credit losses	**(65)**	(69)

22. Other assets

Principle

Other shares
Investments in equity instruments with an ownership below 20% are normally classified as other shares and recognised in other non-current assets in the statement of financial position. Other shares consist of equity investments in both listed and unlisted companies. Shares in listed companies are measured at fair value through profit or loss. Investments in equity instruments that do not have a quoted market price in an active market are classified as financial assets measured at fair value through other comprehensive income (OCI). Changes in fair values recognised in OCI cannot be subsequently recycled to statement of profit or loss. Dividends from such investments are recognised as other items in the statement of profit or loss.

Financial assets
A financial asset is recognised in the statement of financial position when Elkem becomes party to a contract. Assets to be acquired in relation to a firm commitment to sell goods or services are recognised at the time Elkem 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 Elkem 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.

Loans and receivables
Loans and receivables are non-derivative hold to collect 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 profit or loss when the loans and receivables are derecognised or impaired, as well as through the amortisation process.

If there is objective evidence of impairment, or if there is a risk that the group may not recover the contractual amounts at the contractual maturity dates, an impairment loss is recognised in the statement of profit or loss. The provision is equal to the difference between the carrying amount and the estimated future recoverable cash flows.

Current assets
Current receivables are initially recognised at fair value, which in most cases corresponds to their nominal amount. The carrying amount is subsequently measured at amortised cost using the effective interest rate method, less any provision for expected credit losses. Current receivables with no stated interest rate are recognised at their nominal amount.

Judgements and estimates

Judgement is applied when assessing the value of shares in unlisted companies. For estimates related to valuation of financial assets, see note 25 Financial assets and liabilities. Judgement is applied when determining the estimated expected credit loss on other receivables and prepayments. The judgement is based on experienced losses in the past and expectations about future economic conditions for the different counterparties.

Details of other assets

	Non-current		Current	
Amounts in NOK million	**31.12.2022**	31.12.2021	**31.12.2022**	31.12.2021
Other shares	**24**	32	**-**	-
Restricted deposits	**46**	41	**-**	-
Other deposits	**10**	34	**-**	-
Pension assets, defined benefits and contribution plans (note 9)	**41**	1	**2**	2
Prepayments for construction of fixed assets	**99**	24	**-**	-
Prepayments for goods and equipment	**-**	-	**150**	169
Prepayments for other expenses	**77**	72	**90**	87
Prepayments to related parties (note 32)	**-**	-	**15**	18
Receivables from related parties, interest-bearing (note 32)	**1**	1	**-**	-
Receivables from related parties, interest free (note 32)	**-**	-	**7**	1
Grants receivable (note 8)	**306**	202	**620**	493
Value added tax	**64**	47	**418**	361
Corporate income tax	**-**	-	**338**	237
Interest receivables	**-**	-	**0**	1
Other receivables	**8**	8	**47**	155
Assets at fair value through profit or loss	**-**	-	**-**	14
Other assets	**39**	15	**11**	14
Total other assets	**716**	478	**1 698**	1 551

Provision for impairment included in total other assets, mainly prepayments.			**(75)**	(69)

Restricted deposits mainly consist of restricted deposits related to the ongoing tax litigation in Elkem's business in Brazil of NOK 15 million (NOK 14 million), see note 24 Provisions and other liabilities, and deposit for pension guarantee, related to unfunded pension liabilities for salaries above 12G, of NOK 31 million (NOK 27 million). Other receivables includes NOK 12 million (NOK 87 million) related to settlement of power derivatives.

Corporate income tax receivable partly consists of Elkem ASA's pending tax issues with tax authorities (see note 14 Taxes). Elkem's assessment is that the defence against the action will be successful, but that the case consideration might take up to 3 years. Parts of Elkem's income tax receivables is correspondingly expected to be settled later than one year.

23. Interest-bearing assets and liabilities

Principle

Interest-bearing liabilities
The liabilities are initially recognised at fair value of the amount required to settle the associated obligation, net of prepaid costs directly attributable to the liability. Subsequently and insofar, as they are not designated as liabilities at fair value through profit or loss, such liabilities are recognised at amortised cost using the effective interest rate method.

Financial assets are derecognised when the rights to receive cash flows from the assets have expired or have been transferred to a third party. Financial liabilities are derecognised when they are extinguished.

Bills payable
A bill payable is a document where the buyer formally agrees to pay for purchased goods or services at maturity date and are normally guaranteed by a financial institution. The bills payable are initially recognised when the supplier accepts the bill of exchange and is recognised at the amount equal to the trade payables it replaces. Bills payable are used by Elkem's Chinese entities, and the duration is normally below six months. When the bill payable is guaranteed by a financial institution it is normally required to deposit a certain per centage of the nominal value of the bill payable into a restricted bank account. All bills payable in Elkem are bank acceptance bills which is guaranteed by a financial institution.

Cash and cash equivalents
Cash and cash equivalents are held for the purpose of meeting short-term fluctuations in liquidity. Deposits with a term of 3 months or less on acquisition are included. Bank overdrafts are presented within interest-bearing current liabilities in the statement of financial position. Restricted deposits are presented separately in the statement of financial position and excluded from cash and cash equivalents presented in the statement of cash flows.

Lease liabilities
See note 16 Leases for accounting policies for right-of-use assets and lease liabilities.

Details of interest-bearing assets / (liabilities)

	Non-current		Current	
Amounts in NOK million	**31.12.2022**	31.12.2021	**31.12.2022**	31.12.2021
Interest-bearing liabilities				
Lease liabilities (note 16)	**475**	685	**103**	116
Loans from external parties, other than bank	**3 697**	3 125	**10**	1 264
Bank financing	**6 160**	4 599	**74**	572
Accrued interest	**-**	-	**17**	20
Total interest-bearing liabilities	**10 331**	8 409	**204**	1 972
Total bills payable	**-**	-	**1 742**	2 096
Total interest-bearing liabilities including bills payable	**10 331**	8 409	**1 946**	4 067
Interest-bearing assets				
Cash and cash equivalents	**-**	-	**9 255**	7 040
Restricted deposits bills payable	**-**	-	**395**	601
Other restricted deposits	**46**	41	**12**	8
Receivables from related parties	**1**	1	**-**	-
Loans to external parties	**8**	8	**-**	-
Accrued interest income	**-**	-	**0**	1
Total interest-bearing assets	**55**	50	**9 663**	7 650
Net interest-bearing assets / (liabilities)	**(10 276)**	(8 359)	**7 717**	3 583

Interest-bearing liabilities by currency

	31.12.2022		31.12.2021	
Amounts in NOK million	**Currency amount**	**NOK**	Currency amount	NOK
EUR	**630**	**6 620**	608	6 083
USD	**3**	**31**	4	38
NOK	**2 753**	**2 753**	3 038	3 038
CNY	**1 963**	**2 809**	2 333	3 240
Other currencies	**-**	**66**	-	77
Total interest-bearing liabilities		**12 278**		12 476

Maturity of interest-bearing liabilities 31 December 2022

Amounts in NOK million	2023	2024	2025	2026	2027	2028 and later	Total
Lease liabilities	103	74	57	47	40	257	**578**
Loans from external parties, other than bank	10	916	1 234	942	500	105	**3 706**
Bank financing	74	9	39	63	5 335	755	**6 276**
Bills payable	1 742						**1 742**
Accrued interest	17						**17**
Total interest-bearing liabilities excluding prepaid loan fees	1 946	1 000	1 330	1 052	5 875	1 117	**12 320**
Prepaid loan fees							**(42)**
Total interest-bearing liabilities							**12 278**

Maturity of interest-bearing liabilities 31 December 2021

Amounts in NOK million	2022	2023	2024	2025	2026	2027 and later	Total
Lease liabilities	116	101	80	64	53	387	**801**
Loans from external parties, other than bank	1 264	7	1 118	1 000	500	500	**4 389**
Bank financing	572	4 398	206	3	3	4	**5 186**
Bills payable	2 096						**2 096**
Accrued interest	20						**20**
Total interest-bearing liabilities excluding prepaid loan fees	4 067	4 506	1 404	1 067	557	891	**12 492**
Prepaid loan fees							**(16)**
Total interest-bearing liabilities							**12 476**

Loan agreements
The main non-current loan agreements as of 31 December 2022 are a term loan of EUR 500 million (EUR 400 million), a term loan of EUR 0 million (EUR 5 million), issued bond loans of a total of NOK 2,500 million (NOK 2,500 million) and a series of loans issued in the Schuldschein market of EUR 113 million (EUR 61 million). The main loan agreements are granted to Elkem ASA. In addition Elkem Silicones Xinghuo financing is parts of its upgrade of property, plant and equipment with a unsecured term loan of CNY 650 million (CNY 0 million). The interest rates for the non-current loan agreements are in the range of 4.38% to 4.78% for the bond loans, 1.82% to 4.5% for the loans in the Schuldschein market and 3.45% to 3.95% for the PPE loans. For the term loan the interest rate is 3.44%.

Elkem placed EUR 200 million in the Schuldschein market on 4 and 6-year tenors in December 2022, where of EUR 52 million was disbursed in December 2022, while EUR 148 million was disbursed in January 2023. In June Elkem signed new bank facilities with a term loan of EUR 500 million and a credit facility of EUR 500 million, refinancing the term loan of EUR 400 million from prior year. Later in 2022 the facilities was linked to two sustainability KPIs, KPI 1 Lost Time Injury Rate and KPI 2 – Product Group Carbon Footprint. The margin of the RCF and term loan shall be reduced by 0.025% if both KPIs are met, and increased by 0.025% if none of the KPIs are met. If one KPI is met there shall be no change to the margin. The sustainability KPIS will first be tested for 2023 with effect from 2024.

One of the loans issued in the Schuldschein market (EUR 15 million), is a fixed rate loan with a fixed rate of 1.8160%. Given the market conditions as at 31 December 2022 the loan would have been approximately EUR 0.7 million lower, due to the difference between fixed and market rate.

The bond loans are listed on Oslo Børs. There are no covenants related to the bond loans. There are no material differences between fair value of the bond loans and book values.

The loan facilities are unsecured, but part of the loans has financial covenants related to them, see below.

Credit facilities
As of 31 December 2022 the group is granted credit facilities of NOK 6,356 million. At 31 December 2022 NOK 14 million is drawn.

As of 31 December 2021 the group is granted credit facilities of NOK 3,144 million. The credit facilities are undrawn at 31 December 2021.

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 500 million, CNY 199 million, CNY 300 million and NOK 250 million respectively. See note 27 Financial risk, section (c) liquidity risk for more information.

Hedging
Some / part of loans are designated as a hedging instrument, see note 26 Hedging.

Loan covenant
Elkem has financial covenants related to its main bank financing and parts of loans from external parties, other than bank (Schuldschein), in Norway. The interest-bearing loans in China have no connected financial covenants. In addition to the covenants on these loan facilities in Norway there are loan covenants related to the credit facilities in Elkem Metal Canada Inc of CAD 2 million. Elkem and Elkem Metal Canada Inc. are compliant with their covenants at the end of 2022 and 2021.

The covenants for the interest-bearing loan facilities in Norway relate to the financial performance of Elkem and are as specified in the table below.

Covenant Elkem related to drawn loan of NOK 6,501 million (NOK 5,971 million) in Elkem ASA

Amounts in NOK million	**31.12.2022**	31.12.2021	Loan covenant
Equity ratio	**55 %**	47 %	> 30%
Interest cover ratio	**58.38**	37.33	> 4.00

Movements in interest-bearing liabilities 2022

		Cash flows	Non-cash changes				
Amounts in NOK million	31.12.2021	Receipts/ Payments	Additions, lease modifications, remeasurements and terminations	Acquisition / Disposal of subsidiaries	Reclassification	Currency translation differences	**31.12.2022**
Lease liabilities	685	-	118	(218)	(117)	8	**475**
Loans from external parties	3 125	547	-	-	(9)	34	**3 697**
Bank financing	4 615	902	-	650	(189)	223	**6 202**
Total movements non-current	8 425	1 449	118	432	(315)	266	**10 374**
Lease liabilities	116	(116)	-	(20)	117	5	**103**
Loans from external parties	1 264	(1 328)	-	-	9	64	**10**
Bank financing	572	(710)	-	10	189	13	**74**
Total movements current	1 952	(2 153)	-	(9)	315	82	**187**
Total	10 376	(704)	118	423	-	348	**10 561**

Movements in interest-bearing liabilities 2021

		Cash flows	Non-cash changes			
Amounts in NOK million	31.12.2020	Receipts/ Payments	Additions, lease modifications, remeasurements and terminations	Reclassification	Currency translation differences	**31.12.2021**
Lease liabilities	566	-	258	(138)	(1)	**685**
Loans from external parties	1 996	2 464	-	(1 266)	(69)	**3 125**
Bank financing	4 652	132	-	(5)	(164)	**4 615**
Total movements non-current	7 214	2 596	258	(1 409)	(233)	**8 425**
Lease liabilities	97	(118)	-	138	(1)	**116**
Loans from external parties	2 407	(2 373)	-	1 266	(36)	**1 264**
Bank financing	762	(226)	-	5	31	**572**
Total movements current	3 266	(2 717)	-	1 409	(6)	**1 952**
Total movements	10 479	(122)	258	-	(239)	**10 376**

24. Provisions and other liabilites

Principle

Provisions
A provision is recognised when the group has a present obligation (legal or constructive) and it is probable that an outflow of resources is required to settle the obligation. The amount recognised is the best estimate of the consideration required to settle the obligation, taking into account the risks and uncertainties surrounding the obligation, known at the end of the reporting period. Provisions are measured at present value, unless the time value is assessed to be immaterial.

Contract obligations
Contract obligations are liabilities assumed in business combinations, liabilities related to cancellation of contracts and contracts that includes guarantees for losses.

Other liabilities
The liabilities are initially recognised at fair value of the amount required to settle the associated obligation, net of prepaid costs directly attributable to the liability.

Contingent liabilities
Contingent liabilities are liabilities which are not recognised because they are possible obligations that have not yet been confirmed, or they are present obligations where an outflow of resources is not probable. Any significant contingent liabilities are disclosed in the notes.

Contingent assets
Contingent assets are not recognised but disclosed in the notes if probable.

Judgements and estimates

Elkem has several types of provisions due to its operations. Such liabilities are normally uncertain in timing and amount, and recognised amounts are estimates based on available information at the end of the reporting period. The estimated liability is based on expected cash flows necessary to settle the obligation, adjusted for any related risk and discounted by using the pre-tax interest applicable for the specific entity. The estimates are updated when new or updated information is available, or at a minimum at each reporting date. The actual outcome will differ from the estimate.

Details of provision and other liabilities

	Non-current		Current	
Amounts in NOK million	**31.12.2022**	31.12.2021	**31.12.2022**	31.12.2021
Employee withholding taxes and other public taxes	**-**	-	**160**	133
Value added tax	**-**	-	**137**	223
Prepayments	**-**	-	**356**	375
Prepayments from related parties (note 32)	**-**	-	**17**	10
Liabilities to related parties (note 32)	**-**	-	**30**	32
Provisions	**216**	127	**102**	287
Contract obligations power	**-**	-	**-**	4
Contingent consideration acquisition of subsidiaries	**-**	40	**42**	163
Accrued expenses	**-**	-	**516**	320
Grants, deferred income (note 8)	**-**	-	**8**	18
Grants payable (note 8)	**16**	15	**-**	-
Recourse liability factoring agreement (note 21)	**-**	-	**106**	57
Other liabilities	**-**	-	**72**	35
Total provisions and other liabilities	**232**	182	**1 545**	1 657

The contingent consideration acquisition of subsidiaries relates to the acquisition of Polysil on 1 April 2020. The payments of the contingent consideration was due in installements and the payments have not differed significantly from the maximum that was recognised intially.

Movements in contingent consideration

Amounts in NOK million	**2022**	2021
Opening balance	**203**	261
Fair value adjustment of contingent consideration upon payment	**(0)**	1
Unwinding	**4**	6
Payments	**(176)**	(78)
Currency translation differences	**12**	13
Closing balance	**42**	203

Movements in provision
2022

Amounts in NOK million	Restructuring	Site restoration	Environmental measures	Litigations	Customers	Other provisions	**Total provisions**
Opening balance	70	32	109	66	4	134	**415**
Additional provisions recognised	-	2	83	7	6	0	**99**
Used during the year	(31)	(0)	(2)	(17)	(1)	(127)	**(180)**
Reversal of provisions recognised	(26)	-	(1)	(1)	(1)	-	**(28)**
Currency translation differences	3	0	0	7	1	0	**12**
Closing balance	17	34	190	62	9	7	**318**
Hereof non-current	-	34	131	50	-	1	**216**
Hereof current	17	-	58	12	9	6	**102**
Closing balance	17	34	190	62	9	7	**318**

Movements in provision
2021

Amounts in NOK million	Restructuring	Site restoration	Environmental measures	Litigations	Customers	Other provisions	**Total provisions**
Opening balance	127	31	94	60	9	12	**332**
Additional provisions recognised	-	2	16	10	0	171	**199**
Used during the year	(17)	(0)	-	(1)	(5)	(47)	**(72)**
Reversal of provisions recognised	(41)	-	-	-	-	-	**(41)**
Currency translation differences	1	(0)	(0)	(3)	(0)	(2)	**(4)**
Closing balance	70	32	109	66	4	134	**415**
Hereof non-current	-	32	55	40	-	0	**127**
Hereof current	70	0	54	26	4	134	**287**
Closing balance	70	32	109	66	4	134	**415**

Restructuring
The provision is related to Elkem's group wide productivity improvement programme launched in first quarter of 2020.

Site restoration
The site restoration provisions are related to the necessary site remediation work that Elkem will have to undertake in respect of its quartz mines.

Environmental measures
Elkem has worldwide operations representing potential exposure towards environmental consequences. Elkem has established clear procedures to minimise environmental emissions, well within public emission limits. The provisions relate to clean up costs for a closed down production site and landfills, mainly in Canada and Norway, and also estimated cost for clean-up cost of polluted soil and fjord in relation to production sites in Norway and France. The additional provision recognised in 2022 includes NOK 70 million in restoration expense related to decommissioned business in Canada.

Litigations
The provisions due to litigations are mainly related to business tax cases in the Carbon division in Brazil.

Tax cases in Brazil can take a substantial amount of time before resolution by the tax authorities, hence the time of settlement is uncertain. Provisions are made for each case based on the estimated amount expected to be paid, including interest and penalties. In accordance with Brazilian regulations, agreed amounts have been transferred to restricted bank accounts and are adjusted for interest. The restricted cash is recognised in other non-current assets, see note 22 Other assets.

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

Other provisions
Consist mainly of a provision related to relocation of workers buildings located in proximity to the Silicones Xinghuo plant, required by the authorities. The provision was settled in 2022.

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 and see note 14 Taxes for ongoing tax audits by authorities.

25. Financial assets and liabilities

Principle

Financial assets
A financial asset or a financial liability is recognised in the statement of financial position when Elkem becomes party to a contract. Assets to be acquired and liabilities to be incurred as a result of a firm commitment to purchase or sell goods or services are recognised at the time one of the parties has performed under the agreement.

At initial recognition, the financial assets are carried in the statement of financial position at fair value plus any transaction costs directly attributable to the acquisition or issue of the asset. Financial assets are derecognised when the right to future cash flows have expired or been transferred to a third party, once the group has transferred substantially all the risk and rewards of control of these assets. Any rights or obligations retained in any transferred assets are booked separately as assets or liabilities.

Financial assets with a maturity exceeding one year are classified as non-current financial assets. Short-term investments that do not meet the definitions of a cash equivalent, and financial assets with a maturity of less than one year, are classified as current financial assets.

Financial liabilities
Non-derivative financial liabilities include interest-bearing liabilities, bills payable and trade payables. The liabilities are initially recognised at fair value of the amount required to settle the associated obligation, net of prepaid costs directly attributable to the liability. Subsequently and insofar, as they are not designated as liabilities at fair value through profit or loss, such liabilities are recognised at amortised cost using the effective interest rate method.

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 profit or loss. 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 profit or loss 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 profit or loss in the same period(s) as the hedged objects affects the profit or loss.

Derivatives are presented as current assets or liabilities, unless they are expected to be realised more than 12 months after the reporting period. In that case, they are classified as non-current assets or liabilities.

Embedded derivatives
An embedded derivative is a component of a hybrid instrument that also includes a non-derivative host contract with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. Derivatives embedded in financial liability of a non-financial host are separated from the host and accounted for as separate derivatives if; the economic characteristics and risks are not closely related to the host, a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative and the hybrid contract is not measured at fair value through profit and loss. Elkem has long-term power contracts settled in other currencies than the entity's functional currency. The currency portion of these contracts is an embedded derivative and is recognised and presented as an independent derivative, see section derivatives above.

Commodity contracts within the scope of IFRS 9
Non-financial commodity contracts where the relevant commodity is readily convertible to cash and where the contracts are not for own use, fall within the scope of IFRS 9 Financial instruments - recognition and measurement. The group currently has energy contracts in Norway that do not meet the own use criteria, since the power under the contracts is delivered in another grid area to where the plants are located. Transfer between different grid areas is assessed to be net settlement and considered to be two different transactions. Such contracts are therefore measured at fair value through profit or loss and classified as derivatives, unless they are designated as hedging instruments.

Judgements and estimates
Estimates are used for financial assets and liabilities where there are no listed prices or direct observable prices. Calculation of fair value is in such cases based on observable prices for similar contracts, as far as possible. For contracts with a duration beyond the period of observable prices, the assumptions are derived based on the latest observable data. Due to the current market situation in the energy market with very high prices and high volatility there is significant uncertainty in the estimation of forward power prices with direct impact on the value of the power contracts classified as financial instruments. The estimated value of the power contracts can be impacted by the changes in the power prices both within the next 12 months, but also in the period beyond 12 months. There is also uncertainty related to the discount rate used for discounting future cash flows and the expectation to the development in the consumer price index going forward.

See assumptions used at the balance sheet date in chapter (a) Fair value measurement below, and sensitivity of the main power contracts in note 27 Financial risk.

Assets by category
31 December 2022

Amounts in NOK million	Note	Assets at fair value through profit or loss	Assets at fair value - hedging instruments	Assets at fair value through other comprehensive income	Loans and receivables at amortised cost	Non-financial assets	Total
Derivatives, non-current		822	740	-	-	-	**1 562**
Other assets, non-current	22	7	-	18	65	627	**716**
Trade receivables	21	-	-	-	4 248	-	**4 248**
Derivatives, current		284	427	-	-	-	**711**
Other assets, current	22	-	-	-	54	1 644	**1 698**
Restricted deposits	23	-	-	-	408	-	**408**
Cash and cash equivalents	23	-	-	-	9 255	-	**9 255**
Total		1 113	1 167	18	14 030	2 271	

Liabilities by category
31 December 2022

Amounts in NOK million	Note	Liabilities at fair value through profit or loss	Liabilities at fair value - hedging instruments	Liabilities at amortised cost	Non-financial liabilities	Total
Interest-bearing liabilities, non-current [1]	23	-	-	10 331	-	**10 331**
Provisions and other liabilities, non-current	24	-	-	-	232	**232**
Trade payables		-	-	5 335	-	**5 335**
Interest-bearing liabilities, current [1]	23	-	8	196	-	**204**
Bills payable	23	-	-	1 742	-	**1 742**
Derivatives, current [2]		(27)	136	-	-	**109**
Provisions and other liabilities, current	24	42	-	724	779	**1 545**
Total		15	144	18 329	1 011	

Assets by category
31 December 2021

Amounts in NOK million	Note	Assets at fair value through profit or loss	Assets at fair value - hedging instruments	Assets at fair value through other comprehensive income	Loans and receivables at amortised cost	Non-financial assets	Total
Derivatives, non-current		(4)	308	-	-	-	**304**
Other assets, non-current	22	6	-	27	84	362	**478**
Trade receivables	21	-	-	-	4 297	-	**4 297**
Derivatives, current [2]		(2)	285	-	-	-	**283**
Other assets, current	22	14	-	-	157	1 381	**1 551**
Restricted deposits	23	-	-	-	609	-	**609**
Cash and cash equivalents	23	-	-	-	7 040	-	**7 040**
Total		14	593	27	12 187	1 743	

Liabilities by category
31 December 2021

Amounts in NOK million	Note	Liabilities at fair value through profit or loss	Liabilities at fair value - hedging instruments	Liabilities at amortised cost	Non-financial liabilities	Total
Interest-bearing liabilities, non-current [1]	23	-	3	8 406	-	**8 409**
Derivatives, non-current [2]		(71)	88	-	-	**18**
Provisions and other liabilities, non-current	24	40	-	-	142	**182**
Trade payables		-	-	4 614	-	**4 614**
Interest-bearing liabilities, current [1]	23	-	8	1 964	-	**1 972**
Bills payable	23	-	-	2 096	-	**2 096**
Derivatives, current [2]		(16)	40	-	-	**23**
Provisions and other liabilities, current	24	163	-	448	1 047	**1 657**
Total		116	138	17 527	1 189	

[1] *In addition to the hedging instruments included in derivatives, currency effect of EUR loan is designated as a hedging instrument in a cash flow hedge of highly probable future sales. See note 26 Hedging.*

[2] *The group applies hedge accounting for certain currency contracts and certain parts of power contracts. The negative value reported as assets and liabilities at fair value 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
Elkem's financial instruments measured to fair value are categorised into three levels based on the inputs to the valuation techniques used to measure fair value.

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.

Level 2 inputs are inputs, other than quoted prices included within level 1, that are observable for the asset or liability, either directly or indirectly.

Level 3 inputs are unobservable inputs for the asset or liability.

Assets and liabilities measured at fair value 31.12

Amounts in NOK million	Level 1	Level 2	Level 3	Total 2022	Level 1	Level 2	Level 3	Total 2021
Financial assets at fair value through profit or loss	7	287	819	**1 113**	6	39	(31)	**14**
Derivatives designated in a hedging relationship	-	(55)	1 222	**1 167**	-	175	418	**593**
Assets at fair value through other comprehensive income	-	-	18	**18**	-	-	27	**27**
Total assets	7	233	2 058	**2 297**	6	214	414	**634**
Financial liabilities at fair value through profit or loss	-	(27)	42	**15**	-	(87)	203	**116**
Derivatives designated in a hedging relationship	-	144	-	**144**	-	138	-	**138**
Total liabilities	-	117	42	**159**	-	51	203	**254**

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, contingent consideration and shares in unlisted companies. The power contracts are assessed to be settled net in cash and are therefore within the scope of IFRS 9 and recognised as financial instruments.

When valuing the power contracts observable data is used, such as power price, currency rates, CPI and CfD, when available. The power prices for long-term electricity contracts in Norway are not directly observable in the market for the whole contract length. Power prices are observable until 2031, CfD prices are only observable for a short time period and currency rates are observable until 2026. Valuation of the contracts for the remaining periods are based on the latest observable data adjusted for CPI, if relevant.

Overview of contracts and the assumptions used for assessment of fair value for the level 3 contracts
Power contract "30-øringen"
"30-øringen" power contract lasts until 31 December 2030 and the power from the contract is restricted to be used at Elkem ASA plants. For the years 2019 - 2020 the price under the contract was 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, starting 1 January 2021, the price is fixed based on the average spot price the five years preceding 1 January 2021, 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 was classified as other items before 1 January 2021. Due to the change in the contact's price structure of the instrument from 2021, the contract is designated as a hedging instrument from 1 January 2021. This means that fair value changes from the effective part of the hedging relationship from 1 January 2021 is recognised as raw materials and energy for production in statement of profit or loss in the same period(s) as the hedged objects affects the profit or loss. The ineffective part of the hedging relationship is recognised in other items.

Power contract with Salten Energigjenvinning AS
On 31 January 2022 entered into agreement to purchase the remaining 50% of the shares in Salten Energigjenvinning AS. The company was subsequently merged into Elkem ASA. The power contract was therefore de-recognised at the date of the merger.

Assumptions for valuation of the contracts

- Discount rate: 4,87% (3.5%) p.a. for the "30-øringen" power contract. The assumptions are based on the estimated risk of the contract, including credit risk.
- Inflation: 2% (2%) p.a.
- Power prices: Market prices per 31 December 2022 until 2031.
- CfDs: 4-year average historic CfD prices based on Nord Pool prices.
- Exchange rate EUR: Observable rates for the next 5 years, thereafter calculated rates based on long-term interest rates.

For external shares measured at level 3, book value of equity adjusted for excess values at purchase date is used as an approximation of fair value.

See note 24 Provision and other liabilities for value of contingent liabilities.

Movements in fair value measurement level 3

Amounts in NOK million	2022	2021
Opening balance	**212**	(348)
Acquisition / business combinations	**(58)**	-
Transfer to / from other levels	**3**	-
Change in fair value recognised in OCI, cash flow hedges	**1 227**	737
Hedge ineffectiveness	**1 391**	-
Disposal	**(5)**	-
Settlement / realised effects	**(735)**	(157)
Other changes in fair value through profit or loss, unrealised	**(7)**	(9)
Currency translation differences	**(12)**	(13)
Closing balance	**2 016**	212

(b) Details of financial instruments

Details of currency exchange contracts
31 December 2022

Purchase currency	Purchase ccy million	Sale currency	Sale ccy million	Type of instrument	Currency deal rate	Due	Fair value NOK	Notional amount [1] NOK
CAD	40	USD	31	Fwd	1,3101	2023	(9)	301
NOK	1 750	EUR	170	Fwd	10,2788	2023	(44)	1 790
NOK	189	JPY	2 014	Fwd	0,0938	2023	36	151
NOK	426	JPY	4 242	Fwd	0,1005	2024-2026	88	317
NOK	764	USD	79	Fwd	9,6767	2023	(10)	780
USD	1	JPY	123	Fwd	0,0072	2023	(0)	9
NOK	719	EUR	69	Embedded [2]	10,4520	2023	(22)	723
NOK	3 688	EUR	335	Embedded [2]	11,0169	2024-2034	42	3 520
Total fair value [3]							80	

Details of currency exchange contracts
31 December 2021

Purchase currency	Purchase ccy million	Sale currency	Sale ccy million	Type of instrument	Currency deal rate	Due	Fair value NOK	Notional amount [1] NOK
CAD	40	USD	32	Fwd	1,2549	2022	(4)	284
NOK	1 231	EUR	120	Fwd	10,2303	2022	20	1 203
NOK	2	GBP	0	Fwd	11,6549	2022	(0)	2
NOK	169	JPY	1 844	Fwd	0,0916	2022	27	141
NOK	615	JPY	6 256	Fwd	0,0984	2023-2026	112	479
NOK	392	USD	45	Fwd	8,6557	2022	(9)	399
USD	1	JPY	102	Fwd	0,0088	2022	0	8
NOK	709	EUR	69	Embedded [2]	10,3355	2022	1	686
NOK	4 039	EUR	371	Embedded [2]	10,8877	2023-2034	(18)	3 709
Total fair value [3]							129	

[1] Notional value of the contracts, based on currency rates 31 December.

[2] Embedded EUR derivatives in own use power contracts.

[3] The spot element of forward currency contracts with duration more than 3 months are designated as hedging instruments in a cash flow hedge of highly probable future sales, hence this part is classified as "Derivatives used for hedging" in the table "Assets and liabilities classified by category" above. The interest element of these contracts and contracts of duration < 3 months are classified as "Assets/liabilities at fair value through profit or loss".

Details of power contracts and other commodity contracts within the scope of IFRS 9
31 December 2022

Amounts in NOK million	Volume GWh / Oz	Due	Fair value	Notional amount [1]
Forward power contracts financial institutions	44	2023	43	15
Power contract "30-øringen"	501	2023	608	158
Power contract "30-øringen"	3 510	2024-2030	1 430	1 199
Equity warrants		2023	3	3
Commodity contracts Platinum	2 380	2023	1	7
Total fair value contracts within scope of IFRS 9 [2]			2 085	

Details of power contracts and other commodity contracts within the scope of IFRS 9
31 December 2021

Amounts in NOK million	Volume GWh / Oz	Due	Fair value	Notional amount [1]
Forward power contracts financial institutions	98	2022	23	52
Forward power contracts financial institutions	44	2023	4	15
Power contract "30-øringen"	501	2022	167	157
Power contract "30-øringen"	4 011	2023-2030	163	1 378
Power contract with Salten Energigjenvinning AS (note 32)	124	2022	35	32
Power contract with Salten Energigjenvinning AS (note 32)	1 733	2023-2036	22	555
Equity warrants		2022	3	3
Commodity contracts Platinum	8 954	2022	0	7
Total fair value contracts within scope of IFRS 9 [2]			417	

*[1] Notional value of underlying asset at the end of reporting period, calculated as volume * price * currency rate as at 31 December (if other currencies than NOK).*

[2] Certain power contracts 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
31 December 2022

Amounts in NOK million	Gross amount of financial assets	Gross amount of financial liabilities set off in the statement of financial position	Net amounts of financial assets recognised / presented	Financial instruments not set off in the statement of financial position	Cash collateral pledged	Net amount
Power contracts including embedded derivatives	2 123	(1)	2 122	-	-	2 122
Forward currency contracts	147	-	147	21	-	168
Total	2 269	(1)	2 268	21	-	2 289

Financial liabilities
31 December 2022

Amounts in NOK million	Gross amount of recognised financial liabilities	Gross amount of recognised financial assets set off in the statement of financial position	Net amounts of financial liabilities presented	Financial instruments not set off in the statement of financial position	Cash collateral pledged	Net amount
Power contracts including embedded derivatives	23	(1)	22	-	-	22
Forward currency contracts	86	-	86	21	-	108
Total	109	(1)	108	21	-	129

Financial assets
31 December 2021

Amounts in NOK million	Gross amount of financial assets	Gross amount of financial liabilities set off in the statement of financial position	Net amounts of financial assets recognised / presented	Financial instruments not set off in the statement of financial position	Cash collateral pledged	Net amount
Power contracts including embedded derivatives	414	-	414	-	-	414
Forward currency contracts	170	-	170	16	-	186
Total	585	-	585	16	-	601

Financial liabilities
31 December 2021

Amounts in NOK million	Gross amount of recognised financial liabilities	Gross amount of recognised financial assets set off in the statement of financial position	Net amounts of financial liabilities presented	Financial instruments not set off in the statement of financial position	Cash collateral pledged	Net amount
Power contracts including embedded derivatives	17	-	17	-	-	17
Forward currency contracts	24	-	24	16	-	40
Total	41	-	41	16	-	57

26. Hedging

Principle

Hedge accounting

Elkem has applied IFRS 9 for hedge accounting. According to Elkem'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) 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 profit or loss and classified as other items. Realised effects are recognised through statement of profit or loss, in the same line item as the hedged objects.

ii) Net investment hedges

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income and included in foreign currency translation reserve in equity. The gain or loss relating to the ineffective portion is recognised immediately in the statement of profit or loss within other items. Gains and losses accumulated in equity are reclassified to the statement of profit or loss 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 profit or loss when the forecast transaction is ultimately recognised in the statement of profit or loss. 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 profit or loss.

Elkem's hedging instruments

Cash flow hedge

Elkem has forward currency contracts, embedded EUR derivatives in power contracts and a EUR loan amounting to EUR 5 million (EUR 11 million) where the spot element 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. In addition 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 of the financial instruments is booked against OCI, and recycled to profit or loss as an adjustment of revenue and power cost (included in raw materials and energy for production) when realised. The ineffective part of changes in the fair value of the financial instrument is recognised in other items in the statement of profit and loss.

Net investment hedge

Elkem entered in 2017 into a bank loan amounting to EUR 275 million. In 2018 the bank loan of EUR 275 million was re-financed and increased to EUR 400 million. In 2022 the loan was refinanced again and increased to EUR 500 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 2022 was NOK 2,891 million (NOK 2,749 million). The change foreign exchange gain of NOK 142 million (a gain of NOK 130 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 the statement of changes in equity. There was no ineffectiveness to be recorded from net investment hedges.

See note 27 Financial risk for Elkem's hedging policy.

Cash flow hedging instruments, by type

Amounts in NOK million	**31.12.2022 Assets fair value**	**31.12.2022 Liabilities fair value**	31.12.2021 Assets fair value	31.12.2021 Liabilities fair value
Forward currency contracts	**110**	**80**	146	18
Power contracts financial institutions	**28**	**-**	27	-
Power contract "30-øringen"	**1 235**	**-**	364	-
Power contract Salten Energigjenvinning AS	**-**	**-**	58	-
Power contracts embedded derivatives	**(207)**	**56**	-	110
Currency effect loan EUR	**-**	**8**	-	10
Commodity contracts Platinum	**1**	**-**	-	-
Total hedging instruments	**1 167**	**144**	593	138
Less non-current portion:				
Forward currency contracts	**87**	**-**	102	-
Power contracts financial institutions	**-**	**-**	4	-
Power contract "30-øringen"	**861**	**-**	180	-
Power contract Salten Energigjenvinning AS	**-**	**-**	22	-
Power contracts embedded derivatives	**(207)**	**-**	-	88
Currency effect loan EUR	**-**	**-**	-	5
Commodity contracts Platinum	**-**	**-**	-	-
Current portion of hedging instruments	**427**	**144**	285	45

As at 31 December 2022 financial power contracts designated in a hedging relationship comprise 15% of expected consumption in Norway in 2023 and about 14% in the period 2024 - 2030.

Elkem has hedged approximately 19% of the expected revenues in EUR and approximately 7% of expected revenues in USD for 2023. For the years 2024-2034 EUR is hedged at a range of 1 - 5%.

Financial instruments
31 December 2022

Amounts in NOK million	Net fair value	Hereof recognised in OCI	Effects to be recycled from OCI: Within 1 year	Within 2 years	Within 3 years	Within 4 years or more
Forward currency contracts	60	30	(57)	33	46	7
Embedded EUR derivatives	20	(263)	(56)	(51)	(49)	(108)
Power contracts	2 080	1 263	402	229	167	464
Warrants [2]	3	-	-	-	-	-
Commodity contracts Platinum	1	1	1	-	-	-
Total [1]	2 164	1 031	291	211	165	364
EUR loan designed as cash flow hedging instrument	(56)	(8)	(8)	-	-	-
Total		1 023	283	211	165	364

Financial instruments
31 December 2021

Amounts in NOK million	Net fair value	Hereof recognised in OCI	Effects to be recycled from OCI: Within 1 year	Within 2 years	Within 3 years	Within 4 years or more
Forward currency contracts	146	127	25	24	29	49
Embedded EUR derivatives	(17)	(110)	(21)	(21)	(19)	(48)
Power contracts	414	448	242	57	32	117
Warrants [2]	3	-	-	-	-	-
Commodity contracts Platinum	0	0	0	-	-	-
Total [1]	547	465	245	60	42	118
EUR loan designed as cash flow hedging instrument	(107)	(10)	(5)	(5)	-	-
Total		455	240	54	42	118

[1] *Hedge accounting is applied for certain contracts and for parts of contracts.*

[2] *Subscription SAFE (Simple Agreement for Future Equity)*

Of total changes in fair value of power contracts designated as hedging instruments NOK 1,471 million (NOK 124 million) is recognised in profit or loss, and classified as other items (see note 12 Other items), due to ineffectiveness in the hedging relationship and discontinuation of hedging. The ineffectiveness on cash flow hedges relates to Elkem's hedges of future power purchase. The ineffectiveness is caused by the extraordinary developments in the Norwegian power market with significant differences in prices between the different price areas. Consequently, the cumulative change in fair value of some of the hedging instruments are higher than the cumulative changes in the present value of the hedge objects from the inception of the hedge. The difference between the two is the recognised as ineffectiveness. Of the NOK 1,471 million recognised in 2022, NOK 1,422 million relates to hedge ineffectiveness caused by these price differences. The remaining gain of NOK 49 million is related to discontinuation of power hedging caused by furnace closures in Norway. For 2021 the entire ineffectiveness of NOK 124 million is caused by price differences. Effects from recognition of ineffectiveness from forward currency contracts are NOK 0 million (NOK 3 million).

Realised effects hedge accounting

Amounts in NOK million	31.12.2022	31.12.2021
Realised effects from forward currency contracts, recognised in revenue	**(14)**	127
Realised effects from embedded derivatives EUR, recognised in revenue	**(29)**	(31)
Realised effects from EUR loans, recognised in revenue	**(5)**	(4)
Realised effects from platinum contracts, included in Revenues	**0**	-
Realised effects from power contracts, recognised in raw materials and energy for production	**377**	190
Realised effects hedge discontinuation, recognised in other items	**38**	-
Realised effects Salten Energigjenvinning, business combination (note 4)	**58**	-
Total realised effects hedge accounting	**424**	282

In addition, Elkem applies hedge accounting principles related to currency risk from a net investment in foreign operation, see note 23 Interest-bearing assets and liabilities.

Movements in OCI related to hedging instruments 2022

Amounts in NOK million	Opening balance	Net change in fair value	Reclassified to P&L	Closing balance
Hedging of future sales, forward currency contracts	127	(112)	14	30
Hedging of future need for power, contracts with financial institutions	27	57	(56)	28
Hedging of future need for power, contract "30-øringen" [2]	364	1 230	(359)	1 235
Hedging of future need for power, contract Salten Energigjenvinning, business combination (see note 4)	58	0	(58)	-
Hedging of future sales, embedded EUR derivatives in own use power contracts [1]	(110)	(182)	29	(263)
Hedging of future sales, currency effects EUR loan	(10)	(3)	5	(8)
Hedging of future sales, platinum contracts [2]	0	2	(0)	1
Total (before tax)	**455**	**992**	**(424)**	**1 023**

Movements in OCI related to hedging instruments 2021

Amounts in NOK million	Opening balance	Net change in fair value	Reclassified to P&L	Closing balance
Hedging of future sales, forward currency contracts	150	104	(127)	127
Hedging of future need for power, contracts with financial institutions	(6)	65	(33)	27
Hedging of future need for power, contract "30-øringen" [2]	-	501	(138)	364
Hedging of future need for power, contracts with Statkraft (swap) [1]	(3)	15	(12)	0
Hedging of future need for power, contract with Salten Energigjenvinning	(29)	94	(8)	58
Hedging of future sales, embedded EUR derivatives in own use power contracts [1]	(332)	191	31	(110)
Hedging of future sales, currency effects EUR loan	(23)	8	4	(10)
Hedging of future sales, platinum contracts [2]	-	0	-	0
Total (before tax)	(242)	979	(282)	455

[1] *Hedge accounting from 2016.*
[2] *Hedge accounting from 2021.*

27. Financial risk

Elkem is exposed to financial risks from fluctuations in market prices for finished goods, raw materials, currency exchange rates and interest rates (a) Market risk. In addition, Elkem is exposed to financial risks related to (b) Counterparty credit risk (c) Liquidity risk and (d) Climate risk. This may have considerable impact on Elkem's financial performance.

Elkem's principle is to organise resources close to the value chain. Risk management is an integrated part of Elkem's business activities, included in the line management's responsibility. Financial risks, including financing, liquidity, currency, interest rates, and counterparty risks are generally managed centrally by Group Finance and Treasury. Elkem has financial risk policies in place, approved by the board of directors.

Elkem's financial risk exposure and business performance are evaluated regularly, and the main risks are analysed in terms of impact, likelihood and correlation. Based on the overall risk evaluation Elkem may accept or seek to further reduce the risks arising from operational activities.

(a) Market risk

(i) Price risk

Commodity prices

Elkem is exposed to fluctuations in market prices for finished goods and raw materials. The market risk assessment is based on a holistic approach as prices for Elkem's products tend to fluctuate with underlying macroeconomic conditions. The same dynamics tend to apply to prices for the main raw materials, giving Elkem a certain degree of natural hedging.

For the main upstream products and raw materials Elkem seeks to reduce the risk exposure by entering sales and purchase contracts for corresponding time periods and volumes. The goal is to partly offset changes in sales prices through changes in raw material costs.

A significant part of Elkem's sales consist of specialised products. These products have generally more stable pricing. Elkem's integrated value chain mitigates the supply chain and pricing risks and also give flexibility to realise value at various levels through the value chain. Elkem aims to ensure sales volumes and raw material supply by entering into long-term customer relationships.

Power

Electric power is a key input factor and Elkem enters into long-term power contracts to reduce the future exposure to changes in power prices, particularly in Norway where electricity prices based on hydro power tend to have different pricing dynamics than for Elkem's products and other raw materials.

Normally all plants have covered their main future need for power by entering into power contracts, primarily classified as own use contracts according to IFRS 9, hence such contracts are off-balance. In addition to the own use contracts certain financial power contracts are classified as derivatives and designated in a cash flow hedging relationship in accordance with IFRS (see notes 25 and 26). For plants located in Norway, Elkem's policy is that minimum 80% of the expected power consumption shall be covered by fixed price contracts for current and next year. This includes both own use and derivative contracts at fair value. For the following periods, the ratio extends until 4 years ahead, declining with 10%-point per year ending at 50%. Elkem currently fulfils this minimum hedge policy, and also has a substantial amount of contracts at fixed price for the later years. Optimisation of 24-hour-, seasonal- and capacity utilisation variations are solved through utilising financial and physical contracts that are traded bilaterally. The purpose of entering into long term power contracts 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.

Changes in fair value of commodity contracts, classified as financial instruments, reflect unrealised gains or losses, and are calculated as the difference between market price and contract price, discounted to present value. Valuations are based on market information where this is available, if not, valuations are based on estimated market price for non-observable parameters.

Valuation of the power contracts

The assumptions for the fair value measurement of power contracts are described in note 25 Financial assets and liabilities.

Sensitivity analysis - power contracts

Sensitivity on the "30-øringen" contract is as follows.

"30-øringen" contract

Amounts in NOK million		31.12.2022 Fair value	31.12.2022 Adjusted NPV	31.12.2021 Fair value	31.12.2021 Adjusted NPV
Discount rate (used 4.9% (3.5%))	change with -3.5 %-point	2 037	2 239	330	360
Discount rate (used 4.9% (3.5%))	change with +3.5 %-point	2 037	1 869	330	319
CPI (used 2.0%)	change to 1%	2 037	2 084	330	379
CPI (used 2.0%)	change to 3%	2 037	1 988	330	279
Power price	decrease -10%	2 037	1 721	330	166
Power price	increase + 10%	2 037	2 353	330	494

(ii) Currency risk

Elkem has revenues and operating costs in various currencies. The prices of finished goods are to a large extent determined in international markets, primarily denominated in US dollar, Chinese yuan and Euro. This is partly offset by purchases of raw materials denominated in the same currencies. Elkem aims to establish natural hedging positions if this is possible and economically viable. Financial derivatives are then used to hedge the remaining net currency risk exposures. Elkem has net positive operating cash flows in mainly Euro, US dollar, Chinese yuan and Brazilian real. Due to the location of its plants, Elkem has net cost positions in certain other currencies, mainly Norwegian krone, but also Canadian dollar and Icelandic krona.

Elkem's policy is to hedge the net positive cash flows in foreign currencies against NOK 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 subject to internal approval. Chinese yuan (CNY) is not included in the hedging programme. Elkem has hedged Japanese yen until 2026, related to a long-term customer contract. Elkem uses hedge accounting for all cash flow hedges over 3 months. Embedded EUR derivatives in power contracts are included in the foreign exchange hedging programme. 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.

Elkem realised a loss of NOK 49 million from hedging programme (gain of NOK 92 million).

Elkem aims to mitigate the currency risk in the statement of financial position by keeping interest-bearing debt in the same currencies as the group's assets. Elkem has mainly interest-bearing debt in Euro, Chinese yuan and Norwegian krone.

Currency effects recognised in total comprehensive income for the year, excluding effects from cash flow hedging

Amounts in NOK million	2022	2021
Net foreign exchange gains (losses) - forward currency contracts - recognised in other items	**9**	14
Operating foreign exchange gains (losses) - recognised in other items	**387**	20
Net foreign currency exchange gains (losses) on financing activities - recognised in foreign exchange gains (losses)	**85**	241
Currency translation differences - recognised in other comprehensive income	**765**	358
Hedging of net investment in foreign operations - recognised in other comprehensive income	**(142)**	130
Total	**1 104**	764

Currency exposure

The amounts in the tables below are translated to NOK using exchange-rates against NOK per 31 December.

Exchange rates against NOK per 31 December

	2022	2021
USD	**9.8714**	8.8242
EUR	**10.5130**	9.9978
CNY	**1.4309**	1.3891
CAD	**7.2879**	6.9449

Currency exposure affecting statement of profit or loss

The tables show carrying amount of assets and liabilities denominated in foreign currencies different from the entities functional currency, where changes in currency rates will affect profit and loss. The tables include notional amount of currency exchange contracts (note 25 Financial assets and liabilities). Amounts are presented in NOK based on currency rates as at 31 December.

31 December 2022

Amounts in NOK million	USD	EUR	CNY	CAD	NOK	Other	Total
Other non-current assets	-	-	-	-	-	-	**-**
Trade receivables	662	98	-	-	-	-	**759**
Other assets	-	-	-	-	-	-	**-**
Restricted deposits	-	-	-	-	-	-	**-**
Cash and cash equivalents	1 658	3 124	489	(265)	0	459	**5 466**
Total monetary assets	2 320	3 222	489	(265)	0	459	**6 225**
Interest-bearing liabilities	-	6 505	-	-	-	-	**6 505**
Other liabilities	-	-	-	-	-	-	**-**
Trade payables	592	232	-	-	-	37	**862**
Bills payable	-	-	-	-	-	-	**-**
Total monetary liabilities	592	6 738	-	-	-	37	**7 367**
Derivatives, notional value	780	6 033	-	-	-	468	**7 281**
Net currency exposure financial position	948	(9 549)	489	(265)	0	(46)	**(8 423)**

31 December 2021

Amounts in NOK million	USD	EUR	CNY	CAD	NOK	Other	Total
Other non-current assets	-	-	-	-	-	-	**-**
Trade receivables	927	457	-	-	0	98	**1 483**
Other assets	-	-	-	-	-	-	**-**
Restricted deposits	-	-	-	-	-	-	**-**
Cash and cash equivalents	1 172	25	80	(95)	0	387	**1 570**
Total monetary assets	2 100	482	80	(95)	0	485	**3 052**
Interest-bearing liabilities	-	6 773	-	-	-	-	**6 773**
Other liabilities	-	-	-	-	-	-	**-**
Trade payables	442	117	3	0	2	56	**620**
Bills payable	-	-	-	-	-	-	**-**
Total monetary liabilities	442	6 890	3	0	2	56	**7 393**
Derivatives, notional value	399	5 598	-	-	-	631	**6 629**
Net currency exposure financial position	1 258	(12 006)	77	(95)	(1)	(202)	**(10 969)**

Sensitivity on profit and loss from financial assets and liabilities

The following tables demonstrate the sensitivity to a reasonable possible change in EUR and USD exchange rates by 5%, with all other variables held constant. The impact on Elkem's profit before tax is due to changes in the fair value of monetary assets and liabilities including foreign currency derivatives and embedded derivatives not designated for hedging. The impact on Elkem's pre-tax equity is due to changes in the fair value of forward exchange contracts designated as cash flow hedges and net investment hedges. The impact on pre-tax equity would be booked against OCI and recycled through profit before tax, when the hedged items are realised. In addition the profit and loss will be affected by translation differences on intra group balances, mainly in EUR, USD and CNY.

Currency		31.12.2022		31.12.2021	
Amounts in NOK million	Change in FX rate	Effect on profit before tax	Effect on pre-tax equity	Effect on profit before tax	Effect on pre-tax equity
EUR	5 %	(46)	(431)	(194)	(410)
EUR	-5 %	46	431	194	410
USD	5 %	79	(31)	70	(16)
USD	-5 %	(79)	31	(70)	16

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 total currency exposure that will affect currency translation differences both in the consolidated statement of comprehensive income and / or profit and loss.

31 December 2022

Amounts in NOK million	USD	EUR	CNY	CAD	NOK	Other	Total
Other non-current assets	64	399	113	40	67	34	**716**
Trade receivables	1 451	452	1 644	29	3	668	**4 248**
Other assets	64	215	236	32	938	213	**1 698**
Restricted deposits	7	0	400	-	-	1	**408**
Cash and cash equivalents	2 017	3 363	2 083	(60)	998	854	**9 255**
Total monetary assets	3 603	4 429	4 476	41	2 006	1 771	**16 325**
Asset non-monetary items	2 828	5 917	12 311	1 278	12 264	1 858	**36 455**
Total assets	6 431	10 345	16 787	1 319	14 270	3 628	**52 781**
Interest-bearing liabilities	31	6 620	1 066	-	2 753	66	**10 535**
Other liabilities	25	193	334	36	605	351	**1 545**
Trade payables	778	1 277	2 341	96	630	212	**5 335**
Bills payable	-	-	1 742	-	-	-	**1 742**
Total monetary liabilities	834	8 090	5 485	132	3 988	628	**19 158**
Liabilities non-monetary items	169	694	310	391	3 080	204	**4 849**
Total liabilities	1 004	8 785	5 794	524	7 069	832	**24 007**

31 December 2021

Amounts in NOK million	USD	EUR	CNY	CAD	NOK	Other	Total
Other non-current assets	47	285	43	-	72	31	**478**
Trade receivables	1 387	660	1 549	21	184	497	**4 297**
Other assets	20	185	262	12	939	134	**1 551**
Restricted deposits	2	-	604	-	3	-	**609**
Cash and cash equivalents	1 438	219	1 448	221	3 066	647	**7 040**
Total monetary assets	2 894	1 349	3 906	254	4 264	1 308	**13 976**
Asset non-monetary items	1 864	4 878	11 162	837	7 710	1 423	**27 874**
Total assets	4 758	6 227	15 068	1 092	11 974	2 731	**41 850**
Interest-bearing liabilities	38	6 083	1 144	-	3 038	77	**10 380**
Other liabilities	39	225	469	25	664	235	**1 657**
Trade payables	567	1 049	1 705	95	1 011	186	**4 614**
Bills payable	-	-	2 096	-	-	-	**2 096**
Total monetary liabilities	644	7 357	5 414	121	4 714	498	**18 747**
Liabilities non-monetary items	139	709	606	188	1 403	184	**3 228**
Total liabilities	782	8 065	6 020	308	6 117	683	**21 976**

(iii) Interest rate risk

Elkem's interest rate risk arises from interest-bearing liabilities granted by external financial institutions. Elkem's liabilities are mainly drawn in Euro, Chinese yuan and Norwegian krone.

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. A floating interest rate policy is therefore 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. During 2022 the interest rate has increased as many central banks have inflation targets and have adjusted interest rates to control a higher rise in the price level than targeted. 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 futhure interest rate hikes.

Elkem has the following interest-bearing assets and liabilities 31 December 2022

Amounts in NOK million	Floating	Fixed	Total
Interest-bearing liabilities	12 120	158	**12 278**
Interest-bearing assets	9 718	-	**9 718**
Net exposure	2 402	158	**2 559**

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 100 basis points higher for a full year, based on net debt as at 31 December 2022, with all other variables held constant, the profit (loss) for the year would have been NOK 20 million (NOK 38 million) lower. An overview of Elkem's debt portfolio is presented in note 23 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 trade receivable and financial trading counterparties.

Trade receivables are generally secured by credit insurance from a reputable credit insurance company. For customers where credit insurance cannot be obtained, other methods are generally used to secure the sales proceeds, such as prepayment, letter of credit, documentary credit or guarantees. In particular, when sales are made in countries with a high political risk, or to remote customers, trade finance products are used to reduce the credit risk. Of Elkem's revenue outside China 85% - 95% is covered by credit insurance or other trade finance tools.

Elkem realised credit losses of NOK 5 million (NOK 12 million) trade receivables. The maximum exposure to credit risk for trade receivables for the group is NOK 4,257 million per 31 December 2022 (NOK 4,306 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 2022 or 2021 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 2022 Elkem has unrestricted cash of NOK 9,255 million (NOK 7,040 million). In addition, revolving credit facilities amount to NOK 6,356 million (NOK 3,144 million), of which NOK 6,342 million is undrawn (NOK 3,144 million).

The external loan agreements contain two financial covenants. The ratio of EBITDA 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 2022 and also complied with the covenants as of 31 December 2021, see note 23 Interest-bearing assets and liabilities.

The policy is to have cash and available credit facilities to cover known capital needs and generally not less than 10% of annual total operating income. 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 2022 for Elkem is shown in the table below.

Year / maturity

Amounts in NOK million	2023	2027	Total
Total amount of credit facilities	1 100	5 257	**6 356**

The table below analyses the group's financial liabilities and assets into relevant maturity groupings based on the remaining period at the date of the statement of financial position to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows, and the amounts are including interest payments.

31 December 2022

Amounts in NOK million	2023	2024	2025	2026	2027	2028 and later	Total	Carrying amount
Trade receivables	4 248	-	-	-	-	-	**4 248**	4 248
Derivative assets	698	434	346	306	287	482	**2 554**	2 273
Total assets	4 946	434	346	306	287	482	**6 802**	6 521
Trade payables	5 335	-	-	-	-	-	**5 335**	5 335
Derivative liabilities	109	8	-	-	-	-	**117**	109
Lease liabilities	103	101	79	65	55	291	**695**	578
Loans from external parties, other than bank	103	1 009	1 299	979	518	105	**4 014**	3 706
Bank financing	140	73	102	125	5 395	827	**6 661**	6 276
Bills payable	1 742	-	-	-	-	-	**1 742**	1 742
Total liabilities	7 532	1 191	1 480	1 169	5 968	1 223	**18 564**	17 747

31 December 2021

Amounts in NOK million	2022	2023	2024	2025	2026	2027 and later	Total	Carrying amount
Trade receivables	4 297	-	-	-	-	-	**4 297**	4 297
Derivative assets	269	62	37	54	18	154	**594**	588
Total assets	4 567	62	37	54	18	154	**4 891**	4 885
Trade payables	4 614	-	-	-	-	-	**4 614**	4 614
Derivative liabilities	23	2	(1)	4	7	8	**43**	41
Lease liabilities	116	123	99	80	68	427	**912**	801
Loans from external parties, other than bank	1 334	64	1 174	1 037	519	509	**4 637**	4 389
Bank financing	671	4 477	214	4	4	4	**5 374**	5 186
Bills payable	2 096	-	-	-	-	-	**2 096**	2 096
Total liabilities	8 854	4 666	1 486	1 124	597	948	**17 675**	17 127

(d) Climate risk
Climate-related issues represent important risk factors to the business, as well as attractive business opportunities since our products can be key enablers for lower greenhouse gas emissions through amongst other things renewable energy, energy storage and electrification of transportation. Elkem's board of directors and management conduct regular reviews of the group's strategy, which includes processes for identifying, assessing, and responding to climate-related risks and opportunities. Climate-risk assessments are also integrated into our multi-disciplinary company-wide risk management process and each year a mapping is performed to identify the top risks for each division and corporate function. The individual risks are then organised into categories and aggregated on group level. The process for identifying climate risks are part of the annual risk mapping.

28. Capital managment

Elkem focuses on having a balanced capital structure, which seeks to reflect the return requirements for the shareholders and the need for a strong financial position to facilitate the group's strategy for growth and specialisation. The target is to have a leverage between 1.0x and 2.0x over a cycle. The leverage ratio is defined as net interest-bearing assets, less non-current interest-bearing assets (see note 23 Interest-bearing assets and liabilities), divided by EBITDA, as defined in the APM section.

Elkem is managing its financing and liquidity position to reduce liquidity risk and to ensure that the company can meet its financial obligations at all times. Elkem has centralised the responsibility for group financing and liquidity handling. The policy is to raise financing at parent company level however, country specific exceptions may be made due to local legislation or currency restrictions. Loan maturities are subject to liquidity and refinancing risk and the company aims to have a long-term and smooth maturity profile on its loan portfolio.

Cash pooling is used to secure availability and access to cash across the group. Due to local legislation, not all subsidiaries are able to participate in international cash pooling arrangements. In these cases, repatriation of excess cash is mainly executed through dividend payments and inter-company deposits, while liquidity needs are covered through capital injections and inter-company loans. Liquidity forecasts are prepared and updated on a regular basis. The short-term forecasts are updated weekly. Elkem's cash position is reported on a daily basis and tracked against respective forecasts. The policy is that available liquidity reserves, defined as cash and cash equivalents and available long-term credit facilities, should exceed 10% of total operating income.

Financial covenants are applicable in some of Elkem's loan agreements. Financial covenants, if required, are standardised across all loan agreements. Financial covenants and other financial policy targets are monitored monthly and included in the company's management reports.

Elkem intends to pay dividends reflecting the underlying earnings and cash flow. Elkem envisages a dividend pay-out ratio of 30 - 50% based on profit for the year. When deciding the annual dividend level, Elkem's leverage, capital expenditure plans and financing requirements will be taken into consideration. Focus will also be on maintaining appropriate strategic flexibility. For the year 2021 Elkem distributed NOK 3.00 per share in dividends and for the year 2022 the proposed dividend is NOK 6.00 per share.

As at 31 December 2022, Elkem's equity was NOK 28,773 million, including minority interests of NOK 134 million. The equity ratio was 55%.

29. 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 largest shareholders are listed in note 21 to the financial statement of Elkem ASA.

Number of shares

	2022			2021		
	Shares outstanding	**Treasury shares**	**Total issued shares**	Shares outstanding	Treasury shares	Total issued shares
Opening balance	**633 037 606**	**6 403 772**	**639 441 378**	581 310 344	-	581 310 344
Capital increase	**-**	**-**	**-**	58 131 034	-	58 131 034
Increase in treasury shares	**(5 000 000)**	**5 000 000**	**-**	(6 403 772)	6 403 772	-
Sale of treasury shares	**6 439 379**	**(6 439 379)**	**-**			
Closing balance	**634 476 985**	**4 964 393**	**639 441 378**	633 037 606	6 403 772	639 441 378

The share capital of Elkem ASA is NOK 3,197,206,890 divided on 639,441,378 shares of NOK 5 par value. Of this amount Elkem ASA held 4,964,393 treasury shares, 0.7% of total issued shares. Elkem has in 2022 acquired 5,000,000 own shares that will be used as settlement in Elkem's share option scheme. Total transaction value was NOK 192 million. Elkem has in 2022 sold 6,439,379 shares in connection with Elkem's share option scheme. Total consideration was NOK 154 million.

In the annual general meeting held on 27 April 2022, the board of directors was granted an authorisation to repurchase the company's own shares within a total nominal value of up to NOK 319,720,689. 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 2023, but not later than 30 June 2023. The authorisation can be used to acquire shares as the board of directors deems appropriate, provided however, that acquisition of shares shall not be by subscription.

In the annual general meeting held on 27 April 2022, the board of directors was granted an authorisation to increase the company's share capital with an amount up to NOK 319,720,689 - corresponding to 10 per cent of the current share capital. The authorisation is valid until the annual general meeting in 2023, but not later than 30 June 2023. The authorisation can be used to cover share capital increases against contribution in kind and in connection with mergers.

In the annual general meeting held on 27 April 2022, the board of directors was granted an authorisation to increase the share capital by up to NOK 40,000,000 to be used in connection with the issuance of new shares under share incentive scheme. The authorisation is valid until the annual general meeting in 2023, but not later than 30 June 2023. The authorisation does not cover capital increases against contribution in kind or capital increases in connection with mergers.

30. Earnings per share

Principle

The calculation of basic earnings per share (EPS) has been based on profit attributable to ordinary shareholders and weighted-average number of ordinary shares outstanding. The calculation of diluted EPS has been based profit attributable to ordinary shareholders and weighted-average number of ordinary shares outstanding after adjustment for the effects of all dilutive potential ordinary shares.

	2022	2021
Weighted average number of shares outstanding	**633 563 574**	618 160 299
Effects of dilution	**2 025 138**	3 876 305
Weighted average number of shares outstanding - diluted	**635 588 712**	622 036 604
Owners of the parent's share of profit (loss) (NOK million)	**9 561**	4 628
Earnings per share (NOK)	**15.09**	7.49
Diluted earnings per share (NOK)	**15.04**	7.44

31. Supplemental information to the consolidated statement of cash flows

The following table gives an detailed overview of changes in working capital in the statement of cash flow. Working capital is defined as accounts receivable, inventory, other current assets, accounts payable, current 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, assets at fair value through profit or loss and accrued interest income. Accounts payable are defined as trade payables less trade payables related to purchase of non-current assets. Other current liabilities are defined as provisions and other current liabilities less current provisions, contingent considerations, contract obligations and liabilities to related parties.

Changes in working capital

Amounts in NOK million	2022	2021
Changes in accounts receivable	**324**	(1 374)
Changes in inventory	**(2 258)**	(2 358)
Changes in other current assets	**99**	(205)
Changes in accounts payable	**134**	1 213
Changes in other current liabilities including employee benefit obligations	**118**	704
Total	**(1 583)**	(2 020)

Liquidity effects of contingent considerations

Amounts in NOK million	2022	2021
Settlement of contingent consideration	**160**	83
Discounting element on settlement of contingent consideration	**12**	3
Fair value adjustment on settlement of contingent consideration	**(0)**	1
Foreign exchange gains (losses) from date of control	**4**	(9)
Total payment of contingent consideration related to acquisitions (IFRS 3)	**176**	78

32. Related parties

Related parties' relationships are defined to be entities outside Elkem group that are under control (either directly or indirectly), joint control or significant influence by the owners of Elkem.

Elkem ASA is owned 52.9% by Bluestar Elkem International Co. Ltd S.A., Luxembourg, which is under control of Sinochem Holdings Co., Ltd (Sinochem), a company registered and domiciled in China. All companies under control by Sinochem are considered to be related parties, including among others China Blue Chemicals Ltd and Jiangxi Xinghuo spaceflight New Material Co., Ltd.. On 1 February 2022 Elkem purchased the remaining shares in Salten Energigjenvinning AS and transactions from that date are eliminated.

Elkem also consider equity accounted companies as related parties. On 14 September 2022 Elkem lost control of Vianode AS and transactions are from that date considered to be related party transactions.

The structure of Elkem group is disclosed in note 4 Composition of the group and note 5 Equity accounted investments and joint operation.

Transactions with related parties 2022

Amounts in NOK million	Sale of goods	Purchase of goods	Sale of services [1]	Purchase of services	Interest income	Financial expenses
Bluestar Elkem International Co. Ltd S.A.	-	-	-	-	-	-
Joint ventures and associates	-	(280)	15	(191)	0	-
Related parties within Sinochem	336	(434)	14	(126)	-	-
Other related parties	-	(21)	-	(18)	-	-
Total	**336**	**(735)**	**30**	**(335)**	**0**	**-**

[1] *Including sub-lease*

Transactions with related parties 2021

Amounts in NOK million	Sale of goods	Purchase of goods	Sale of services [1]	Purchase of services	Interest income	Financial expenses [1]
Bluestar Elkem International Co. Ltd S.A.	-	-	-	-	-	-
Joint ventures and associates	-	(158)	32	(184)	0	-
Related parties within Sinochem	581	(414)	41	(153)	-	-
Other related parties	0	(18)	-	(16)	-	-
Total	**581**	**(591)**	**73**	**(354)**	**0**	**-**

1) Including sub-lese

Balances with related parties

	Non-current		Current	
Amounts in NOK million	**31.12.2022**	31.12.2021	**31.12.2022**	31.12.2021
Receivables from joint ventures and associates, interest-bearing	**1**	1	**-**	-
Receivables from related parties within Sinochem, interest free	**-**	-	**7**	1
Liabilities to related parties within Sinochem, interest free	**-**	-	**(30)**	(32)
Trade receivables, related parties within Sinochem	**-**	-	**4**	17
Trade receivables, joint ventures and associates	**-**	-	**15**	16
Trade payables, Bluestar Elkem Investment Co. Ltd. S.A	**-**	-	**(5)**	(5)
Trade payables, related parties within Sinochem	**-**	-	**(79)**	(56)
Trade payables, joint ventures and associates	**-**	-	**(71)**	(43)
Prepayments to related parties within Sinochem	**-**	-	**15**	18
Prepayments from joint ventures and associates	**-**	-	**(17)**	(10)
Financial power contract with joint ventures and associates	**-**	22	**-**	35
Net balances with related parties	**1**	23	**(161)**	(60)

Outstanding balances at year-end are unsecured, and the current receivables and payables are interest-free, with an exception of the non-current receivables. The interest rate for the non-current receivables to the joint ventures and associates are currently 3.0% (2.5%).

Information about main transactions with related parties:

Related parties within Sinochem

- → Sale of silicone to China Bluestar International Chemical Ltd, Jiangxi Xinghuo Spaceflight New Material Co., Ltd and other companies within Sinochem
- → Purchase of raw materials from companies within Sinochem

Equity accounted companies

Vianode AS

The group has entered into a investment agreement and committed to cover its proportion of total estimated capital injections in Vianode AS. Elkem's proportion is NOK 534.5 million, whereof NOK 267 million is paid as of 31 December 2022.

Jiangxi Guoxing Intelligence Energy Co. Ltd

Elkem has committed to cover its proportion of total estimated capital injections in Jinangxi Energy of CNY 48.7 million, whereof CNY 17.5 million is paid as of 31 December 2022.

In addition Elkem has committed to sell the land, buildings and equipment needed to establish the cogeneration facility and when the facility is up and running committed to supply steam.

Other equity accounted companies

- → Purchase of short and deep sea transport from North Sea Containerline AS and EPB Chartering AS
- → Purchase of warehousing for Combined Cargo Warehousing BV
- → Purchase of services related to shared infrastructure such as laboratory analysis, IT and telephone, warehousing and purchase of basic chemistry products such as gas, nitrogen, compressed air from GIE Osiris

There are no other contingent liabilities or commitments related to the joint ventures and associates.

Key management personnel and board of directors

Information on transactions with key management personnel, see note 9 Employee benefits and "Report on salary and other remuneration to leading personnel in Elkem ASA for the financial year 2022".

33. Pledge of assets and guarantees

Pledges

The main part of Elkem's interest-bearing liabilities are not pledged. Details of liabilities that have pledged assets or guarantees related to them are stated below.

Pledged liabilities

Amounts in NOK million	**31.12.2022**	31.12.2021
Pledged liabilities	**125**	79

Book value pledged assets

Amounts in NOK million	**31.12.2022**	31.12.2021
Building	**30**	28
Machinery and plant	**0**	0
Other assets	**106**	57

Elkem makes limited use of guarantees, see specification below.

Guarantee commitments

Amounts in NOK million	**31.12.2022**	31.12.2021
Guarantee commitment KLIF (Climate and Pollution Agency)	**40**	40
Guarantee commitment tax cases Brazil	**38**	15

34. Change in presentation

Presentation of realised hedge ineffectiveness is changed from raw materials and energy for production to other items in the statement of profit or loss. The impact on comparable figures in the statement of profit or loss are shown in the tables below. The change in presentation will not affect accounting policies for operating segments, see note 6 Operating segments.

Consolidated statement of profit or loss

Amounts in NOK million	**2022 before change**	**Impact**	2022 After change
Raw materials and energy for production	**(21 378)**	**(597)**	(21 976)
Other items	**1 554**	**597**	2 151
Operating profit (loss)	**12 414**	**-**	12 414

Consolidated statement of profit or loss

Amounts in NOK million	**2021 Financial statement**	**Impact of change**	2021 Restated
Raw materials and energy for production	**(15 861)**	**(124)**	(15 985)
Other items	**(114)**	**124**	10
Operating profit (loss)	**5 785**	**-**	5 785

35. Events after the reporting period

Principle

Events after the reporting period

Events after the reporting period related to the group's financial position at the end of the reporting period, are considered in the financial statements. Events after the reporting period that have no effect on the group's financial position at the end of the reporting period, but will have effect on future financial position, are disclosed if the future effect is material.

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.

Contents

Income statement - Elkem ASA

Amounts in NOK million	Note	2022	2021 Restated [1]
1 January - 31 December			
Revenue	4	**15 912**	9 309
Other operating income	4, 5	**543**	431
Total operating income		**16 455**	9 740
Raw materials and energy for production		**(6 183)**	(4 392)
Employee benefit expenses	6,7	**(1 348)**	(1 257)
Other operating expenses	8,9	**(2 684)**	(2 172)
Other gains (losses) related to operating activities	10	**1 712**	253
Amortisation and depreciation	13,14	**(407)**	(359)
Impairment losses	13,14	**(3)**	(14)
Total operating expenses		**(8 912)**	(7 941)
Operating profit (loss)		**7 543**	1 799
Income from subsidiaries	15	**229**	126
Income (loss) from joint ventures	16	**(17)**	37
Finance income	11	**166**	134
Foreign exchange gains (losses)	11	**(62)**	377
Finance expenses	11	**(267)**	(198)
Profit (loss) before income tax		**7 593**	2 274
Income tax (expenses) benefit	12	**(1 603)**	(501)
Profit (loss) for the year		**5 990**	1 773

[1] *See note 29 Changes in presentation*

Balance sheet - Elkem ASA

Amounts in NOK million	Note	31.12.2022	31.12.2021
Assets			
Property, plant and equipment	13	**4 098**	3 003
Goodwill	14	**16**	20
Intangible assets	14	**81**	111
Investments in subsidiaries	15	**12 604**	11 982
Investments in joint ventures	16	**639**	46
Derivatives	24	**1 559**	301
Other assets	19	**4 278**	3 322
Total non-current assets		**23 275**	18 785
Inventories	17	**2 753**	1 677
Trade receivables	18	**1 582**	1 739
Derivatives	24	**709**	283
Other assets	19	**1 786**	1 136
Cash and cash equivalents	22	**5 316**	4 260
Total current assets		**12 145**	9 095
Total assets		**35 420**	27 880
Equity and liabilites			
Paid-in capital	20, 21	**3 493**	6 178
Retained earnings	20	**10 515**	5 104
Total equity		**14 009**	11 283
Interest-bearing liabilities	22	**9 074**	7 292
Deferred tax liabilities	12	**741**	306
Pension liabilities	7	**80**	85
Derivatives	24	**-**	18
Provisions and other liabilities	23	**82**	109
Total non-current liabilities		**9 977**	7 810
Trade payables		**1 353**	1 553
Income tax payables	12	**1 330**	446
Interest-bearing liabilities	22	**3 903**	3 945
Derivatives	24	**108**	23
Dividend	20	**3 813**	1 918
Provision and other liabilities	23	**927**	902
Total current liabilities		**11 435**	8 788
Total equity and liabilities		**35 420**	27 880

Oslo, 8 March 2023

Zhigang Hao
Chair

Dag Jakob Opedal
Vice chair

Olivier Tillette de Clermont-Tonnerre
Board member

Yougen Ge
Board member

Jingwan Wu
Board member

Grace Tang
Board member

Marianne Elisabeth Johnsen
Board member

Nathalie Brunelle
Board member

Thomas Eggan
Board member

Terje Andre Hanssen
Board member

Marianne Færøyvik
Board member

Helge Aasen
CEO

Cash flow statement - Elkem ASA

Amounts in NOK million	Note	2022	2021 Restated [1]
1 January - 31 Desmeber			1 799
Operating profit (loss)		**7 543**	6
Changes fair value financial instruments		**(1 042)**	373
Amortisation, depreciation and impairment losses	13, 14	**410**	(481)
Changes in working capital [2]		**(875)**	2
Changes in provisions, pension obligations and other		**(94)**	63
Interest payments received		**91**	(170)
Interest payments made		**(269)**	(213)
Income taxes paid		**(450)**	1 380
Cash flow from operating activities		**5 314**	
			(467)
Investments in property, plant and equipment and intangible assets	13, 14	**(619)**	90
Received investment grants	5	**42**	0
Proceeds from sale of property, plant and equipment	13	**5**	-
Cash effect from merged companies	28	**38**	(481)
Acquisition and capital increase in subsidiaries	15	**(913)**	-
Acquisition of and cash contributions to joint ventures	16	**(267)**	(291)
Increase in loans to subsidiaries	22,26	**(1 848)**	201
Re-payment on loans to subsidiaries	22,26	**334**	234
Dividends and group contributions	15	**138**	0
Other investments / sales		**0**	(714)
Cash flow from investing activities		**(3 089)**	
			(96)
Dividend paid to owners	20	**(1 900)**	1 900
Capital increase	20	**-**	(278)
Net sale (purchase) of treasury shares	20	**(38)**	2 500
New interest-bearing loans and borrowings	22	**5 702**	(2 426)
Repayment of interest-bearing loans and borrowings	22	**(6 131)**	910
New cash deposits to / from subsidiaries	22,26	**1 578**	(715)
Repayment of cash deposits to / from subsidiaries	22,26	**(380)**	1 795
Cash flow from financing activities		**(1 169)**	
			2 461
Change in cash and cash equivalents		**1 056**	
			(0)
Currency translation differences		**0**	
			2 461
Net change in cash and cash equivalents		**1 056**	
			1 799
Cash and cash equivalents opening balance	22	**4 260**	4 260
Cash and cash equivalents closing balance	22	**5 316**	

[1] See note 29 Changes in presentation

[2] Working capital is defined as trade receivables, inventory, other current assets, trade payables and other current liabilities. Other current assets is defined as other current assets less current receivables to related parties, current interest-bearing receivables, tax receivables, grants receivable and accrued interest income. Accounts payable is defined as trade payables less accounts payable related to purchase of non-current assets. Other current liabilities is defined as other current liabilities less provisions.

Notes to the financial statement - Elkem ASA

1. General information

Elkem ASA is a limited liability company located in Norway, whose shares are publicly traded on Oslo Børs. The main activities are related to production and sale of silicon materials, ferrosilicon, specialty alloys for the foundry industry and microsilica. Elkem ASA is owned 52.9% by Bluestar Elkem International Co. Ltd S.A., Luxembourg, which is under the control of Sinochem Holdings Co., Ltd (Sinochem), a company registered and domiciled in China.

The presentation currency of Elkem ASA is Norwegian Krone (NOK). All financial information is presented in NOK million, unless otherwise stated. As a result of rounding adjustments, the amounts shown in one or more columns included in the financial statements may not add up to the total. In text the current year's figures are presented outside parentheses, followed by the comparative figures presented in parentheses.

2. Significant accounting policies

The financial statements have been prepared in accordance with the Norwegian Accounting Act and generally accepted accounting principles in Norway. The accounts are prepared based on a going concern assumption.

Changes in accounting policies

Changes in accounting policies are recognised directly in equity and the opening balance is adjusted as if the new accounting policy had always been applied. Last year's figures are changed correspondingly, for comparative purposes.

Change in presentation

Presentation of realised hedge ineffectiveness is changed from raw materials and energy for production to other gains (losses) related to operations in the statement of profit and loss. Comparable figures are restated. See note 29 Changes in presentation.

Elkem has changed from net to gross presentation of cash flows from loans and deposits against subsidiaries. Comparable figures are restated. See note 29 Changes in presentation.

Accounting estimates

In the event of uncertainty, the best estimate is applied, based on the information available when the financial statements are prepared. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected. See note 3 Accounting estimates.

Foreign currency translation

Elkem ASA's functional currency is Norwegian Krone (NOK). Transactions in currencies other than the entity's functional currency are translated using the transaction date's currency rate. Monetary items in foreign currencies are presented at the exchange rate applicable on the balance sheet date. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rate at the date fair value is measured. If the currency exposure of a transaction is designated as a part of a hedging relationship, realised effects from the associated hedging instrument is classified in the same line in the financial statements as the hedged transaction. Currency gains (losses) related to operating activities, i.e. receivables, payables, bank accounts for operating purposes, are classified as a part of other gains (losses) related to operating activities. Currency effects included in finance income and expenses are related to loans and dividends.

Revenue recognition

Sale of goods

Revenue is recognised when it is earned and the revenue can be measured reliably. Revenue is measured at the fair value of the consideration received or receivable, net of any taxes, rebates and discounts. Expenses are recognised in the same period as the related revenue. When products are sold with warranties, the expected warranty amounts are recognised as expenses at the time of the sale, and are subsequently adjusted for any changes in estimates or actual outcome.

Revenue from sale of goods is recognised when the significant risk and reward of the ownership of the goods has passed to the buyer, according to the agreed delivery term for each sale. Delivery terms are based on Incoterms 2020 issued by International Chamber of Commerce, and the main terms are:

"F" terms, where the buyer arranges and pays for the main carriage. The risk and reward is passed to the buyer when the goods are handed over to the carrier engaged by the buyer.

"C" terms, where the group arranges and pays for the main carriage but without assuming the risk of the main carriage. The risk and reward is passed to the buyer when the goods are handed over to the carrier engaged by the seller.

"D" terms, where the group arranges and pays for the carriage and retain the risk and reward of the goods until delivery at agreed destination. The risk is transferred to the buyer upon arrival at agreed destination, usually the purchaser's warehouse.

Sale of power and revenue connected to energy recovery
Sale of electric power and revenue connected to energy recovery, mainly heat supply in form of steam and hot water, el-certificates and el-tax, are recognised in income based on volume and price agreed with the customer. Revenue connected to energy recovery is mainly based on long-term contracts where the prices are regulated yearly based on changes in CPI or government regulated prices, except for the el-certificates where the price is based on the observable market price at date of delivery.

Revenue from sale of services
Revenue from sale of services is recognised when the services have been provided. Sale of services are mainly related to management agreements with related parties, based on cost plus a margin.

Other
Income from insurance settlements are recognised when it is virtually certain that the group will receive the compensation, and is recognised as other operating income. Cash flows from credit insurance contracts where such contracts are deemed to be an integral part of the sale transactions is presented as reduction of net against impairment losses assets / receivables, included in other operating expenses. Interest income is recognised on accrual basis. Dividends are recognised when shareholders' right to receive dividends is determined by the shareholders' meeting.

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

Investment in subsidiaries, associates and jointly controlled entities
Subsidiaries are companies in which Elkem ASA has controlling interests, normally obtained when Elkem ASA owns more than 50% of the shares.

Associates are those entities in which Elkem ASA has significant influence, but no control, over the financial and operating policies. Significant influence is presumed to exist when Elkem ASA holds between 20% and 50% of the voting power of another entity. Jointly controlled entities are those entities over whose activities Elkem ASA has joint control, established by contractual agreement and requiring unanimous consent for strategic financial and operating decisions.

Subsidiaries
Interests in subsidiaries are recognised at cost less any write-down for impairment.

Associates
Investments in associates are valued at cost less any write-down for impairment. Dividends received from associated companies are included in the income statement.

Joint ventures
Elkem ASA's interests in jointly controlled entities, which operates within Elkem ASA's main business areas (silicon materials and foundry products), are accounted for using the gross method, meaning that the company's share of the income, expense, assets and liabilities are recognised. Elkem ASA combines its share of the joint ventures' individual income and expenses, assets and liabilities and cash flows on a line-by-line basis with similar items in the financial statements.

Elkem ASA's interests in joint controlled entities, which do not operate within Elkem ASA's main business areas, are accounted for using the equity method. Under the equity method, the investment is initially recognised at cost, and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss and other comprehensive income of the investee after the date of acquisition. In cases where a joint ventures' loss increases the initially recognised cost, the carrying amount is presented to reflect Elkem's liability to finance the joint venture. Any liability to finance a joint venture is presented either as part of provisions and other liabilities, current, or netted against Elkem's receivables towards the joint venture.

Impairment of investment in subsidiaries, associates and jointly controlled entities
Impairment loss is recognised if the carrying amount exceeds the recoverable amount and the impairment is not considered to be temporary. The recoverable amount is the higher of fair value less costs to sell, or its value in use. Value in use is the present value of the future cash flow expected to be derived from the asset or the cash generating unit to which it belongs, after taking into account all other relevant information. The impairment is reversed if the basis for the write-down is no longer present.

Intangible assets
Intangible assets are stated in the balance sheet at cost less subsequent accumulated amortisation and subsequent accumulated impairment losses. Intangible assets with a finite useful life are amortised, using the straight-line method. The estimated useful life and amortisation method is reviewed at the end of each reporting period.

An intangible asset is derecognised on disposal, or when no future economic benefits from its use are expected to be derived. Gain or loss arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, is recognised in the income statement.

Expenditure on research activities is recognised as an expense in the period in which it is incurred. An intangible asset arising from an internal development project is recognised if the company can demonstrate technical feasibility of completing the intangible asset, has intention to complete it, ability to use it, can demonstrate that it will generate probable future economic benefits and the cost can be reliably measured.

Property, plant and equipment
Property, plant and equipment is presented at cost, less accumulated depreciations and any accumulated impairment losses. Construction in progress is carried at cost, less any recognised impairment loss. Such assets are classified to the appropriate class of property, plant and equipment when completed and ready for its intended use. Significant parts of an item of property, plant and equipment which have different useful life, are accounted for as separate items. Depreciation commences when the assets are ready for their intended use.

Initial cost includes expenditures that are directly attributable to the acquisition of the asset, cost of materials, direct labour, any other costs directly attributable to bringing the assets to working condition for their intended use and estimated dismantling or removal charges, and capitalised borrowing costs.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, when future benefits are probable and the cost can be measured reliably. The carrying amount of the replaced part is derecognised. Major periodic maintenance that is carried out less frequently than every year, is capitalised and depreciated over the period until the next periodic maintenance is performed. All other repairs and maintenance are charged to the income statement when incurred.

Depreciation is recognised using the straight-line method. The estimated useful life, residual values and depreciation method 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 from disposal or retirement is determined as the difference between the sales proceeds and the carrying amount of the asset, and is recognised in the income statement.

Impairment of tangible and intangible assets
At the end of each reporting period, the carrying amounts of tangible and intangible assets are reviewed to determine whether there is any indication of impairment. If any such indication exists, the recoverable amount of the individual asset is estimated in order to determine the extent of the impairment loss. 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 is reversed, based on an updated estimate of the recoverable amount, but not exceeding the carrying amount that would have been determined had no impairment loss been recognised for the asset. Any impairment of goodwill is not reversed.

Leasing
Leases are classified as financial leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases and expenses are recognised as incurred.

Assets held under finance leases are initially recognised as assets at the present value of the minimum lease payment. The corresponding liability to the lessor is included in the financial statements as a finance lease obligation. Each lease payment is allocated between the liability and finance charges so as to achieve a constant rate on the obligation.

Non-derivative financial assets and liabilities
A financial asset or a financial liability is recognised in the balance sheet when the entity becomes party to a contract. Assets to be acquired and liabilities to be incurred as a result of a firm commitment to purchase or sell goods or services are recognised at the time one of the parties has performed under the agreement.

Financial assets are initially recognised in the balance sheet at fair value plus any transaction costs directly attributable to the acquisition or issue of the asset. Financial assets are derecognised once the right to future cash flows has expired or when substantial all risks and rewards related to control of the assets are transferred to a third party.

Financial assets with a maturity exceeding one year are classified as non-current financial assets. Short-term investments that do not meet the definitions of a cash equivalent and financial assets with a maturity of less than one year are classified as current financial assets. Non-current financial assets are recognised and subsequently measured at cost less any impairment loss, if the impairment is assessed not to be temporary.

Loans and receivables
Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in a

regulated market. They are recognised at amortised cost using the effective interest method. Gains and losses are recognised in the income statement when the loans and receivables are derecognised or impaired, as well as through the amortisation process. An impairment loss is recognised when the carrying amount exceeds the estimated recoverable amount.

The category includes trade receivables, deposits, guarantees and loans. These assets are classified in the balance sheet as either other non-current assets or other current assets. Other current assets are receivables with maturity less than one year.

Trade and other receivables are recognised at nominal value less provisions for doubtful accounts.

Cash and cash equivalents

Cash and cash equivalents are held for the purpose of meeting short-term fluctuations in liquidity, rather than for investment purposes. Cash and cash equivalents comprise cash funds and short-term deposits with a term of 3 months or less on acquisition. Bank overdrafts are shown within current interest-bearing liabilities in the balance sheet. Elkem ASA's deposits and drawings within the group cash pool are netted by offsetting deposits against withdrawals.

The subsidiaries' deposits and drawings are classified as current assets / liabilities.

Derivative financial instruments

Currency 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.

The part of commodity derivative contracts that do not qualify as hedging instruments and are not held for trading are booked at the lower of cost and fair value.

Embedded currency 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 hedging 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. Elkem ASA applies IFRS 9 for all hedge accounting.

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 hedge reserve. Gains / losses recognised in equity are reclassified into the income statement in the same period(s) as the forcasted transaction occurs. The unrealised gains / loss relating to the ineffective portion is recognised immediately in the income statement.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in the equity at that time remains in equity until the forecast transaction is ultimately recognised in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to the income statement.

Inventories

Inventories are recognised at the lowest of cost and net realisable value. The cost of inventory comprises of the costs incurred in bringing the goods to their current condition and location, such as raw materials, energy for production, direct labour, other direct costs and production overhead costs based on normal capacity. Net realisable value represents the estimated selling price for inventories less estimated costs of completion and variable selling expenses.

Cost of goods sold is included in different lines in the income statement based on nature; raw materials and energy for production, employee benefits and other operating expenses, for the remaining part.

The cost of CO_2 allowances that Elkem needs to purchase in addition to allowances received from the government (note 5), are based on estimated production / emissions for the year. The cost is allocated to cost of producing semi-finished and finished goods proportionally over the year, as the number of allocated allowances will not be revised unless there is a substantial change in the production level at the plants.

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.

Uncertain tax positions are included when it is virtually certain 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 Elkem and can no longer be appealed.

Deferred tax

Deferred tax assets and liabilities are calculated using the liability method with full allocation for all temporary differences between the tax base and the carrying amount of assets and liabilities in the financial statements, including tax losses carried forward. Deferred tax items are recognised in correlation to the underlying transaction either in the income statement or directly in equity.

Deferred tax assets are recognised in the balance sheet to the extent it is more likely than not that the tax assets will be utilised. The enacted tax rate at the end of the reporting period and undiscounted amounts are used. Deferred tax assets arising from tax losses are recognised when there is convincing evidence of recoverability. Deferred tax assets and liabilities items are offset if there is a legally enforceable right to offset current tax liabilities and assets.

Employee benefits

Employee benefits consist of wages and salaries, bonuses, holiday payments, share-based payments and other considerations paid in exchange for services rendered from employees, and are expensed as incurred together with any social security tax applicable.

Employee retirement benefits

Defined contribution plans

Defined contribution plans comprise arrangements whereby the company makes monthly contributions to the employees' pension plans, and where the future pensions are determined by the amount of the contributions and the return on the individual pension plan asset. Payments related to the contribution plans are expensed as incurred, as a part of employee benefit expenses.

Defined benefit plans

Defined benefit plans are recognised at present value of future liabilities considered retained at the end of the reporting period, calculated separately for each plan. Social security tax related to pension payments is included in estimated pension liability. Plan assets are measured at fair value and deducted in calculating the net pension obligation. Actuarial assumptions are used to measure both the obligation and the expense and effects of changes in estimates due to financial and actuarial assumptions that are recognised in equity. Service costs are classified as part of employee benefit expenses and net interest on pension liabilities / assets are presented as a part of finance expenses. Past service cost arising due to amendments in benefit plans are expensed as incurred.

Multi-employer defined benefit plans where available information is insufficient to be able to calculate each participant's obligation, are accounted for as contribution plans.

Share-based payment

The fair value of options granted under the share-based payment program is recognised as an employee benefit expense with a corresponding increase in equity. The total amount to be expensed is determined by reference to the fair value of the options granted. The total expense is recognised over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. At the end of each period, the entity revises its estimates of the number of options that are expected to vest based on the non-market vesting and service conditions. It recognises the impact of the revision to original estimates, if any, in the income statement, with a corresponding adjustment to equity.

Social security contributions payable in connection with an option grant are considered an integral part of the grant itself and the charges are treated as cash-settled transactions.

Provisions

A provision is recognised when a present obligation exists and it is probable that an outflow of resources is required to settle the obligation. The amount recognised is the best estimate of the consideration required to settle the obligation, taking into account the risks and uncertainties surrounding the obligation, known at the end of the reporting period. Provisions are measured at present value, unless the time value is assessed to be immaterial.

Contingent assets and liabilities

Contingent liabilities are liabilities which are not recognised because they are possible obligations that have not yet been confirmed, or they are present obligations where an outflow of resources is not probable. Contingent assets are not recognised. Any significant contingent assets and liabilities are disclosed in the notes.

Events after the reporting period

Events after the reporting period related to Elkem ASA's financial position at the end of the reporting period, are considered in the financial statement. Events after the reporting period that have no effect on the company's financial position at the end of the reporting period, but will have effect on future financial position, are disclosed if the future effect is material.

3. Accounting estimates

In the event of uncertainty the best estimate is applied, based on the information available when the annual accounts are prepared.

Property, plant and equipment

The estimated useful lives, residual values (if any) and depreciation method are reviewed, and if necessary adjusted, at least annually.

Financial instruments

Elkem ASA holds financial instruments such as forward currency contracts and commodity contracts, which are booked at fair value. For commodity contracts denominated in EUR, the embedded EUR derivative is separated from the host contract and booked at fair value. Hedge accounting is applied for these contracts. Commodity contracts that do not qualify as hedging instruments are booked at the lower of cost and fair value. Fair value for the contracts is based on observable prices and assumptions derived from observable prices for comparable instruments. For assumptions applied in fair value measurement of the contracts see details in note 25 Financial assets and liabilities in the consolidated financial statement.

Net book value of contracts booked at fair value as at 31 December 2022 is in total positive NOK 2,160 million (positive NOK 544 million), see note 24 Financial instruments.

4. Operating income

Operating income by type

Amounts in NOK million	**2022**	2021
Revenue from sale of goods, Silicon Products	**12 227**	7 269
Revenue from sale of goods to related parties	**2 985**	1 465
Other operating revenue	**134**	118
Other operating revenue to related parties	**565**	457
Total revenue	**15 912**	9 309
Sale of fixed assets	**1**	-
Insurance settlement	**12**	25
Grants (note 5)	**530**	406
Total other operating income	**543**	431
Total operating income	**16 455**	9 740

Operating income by geographic market

Amounts in NOK million	**2022**	2021
Nordic countries	**2 569**	1 681
United Kingdom	**795**	633
Germany	**3 408**	1 753
France	**2 166**	802
Italy	**677**	522
Poland	**224**	179
Spain	**445**	319
Netherlands	**85**	74
Other European countries	**1 759**	1 382
Europe	**12 129**	7 345
Africa	**29**	35
North America	**1 458**	565
South America	**51**	41
America	**1 509**	606
China	**397**	284
Japan	**1 040**	696
South Korea	**126**	113
Other Asian countries	**1 207**	642
Asia	**2 770**	1 734
The rest of the world	**18**	20
Total operating income	**16 455**	9 740

5. Grants

	2022		2021	
Amounts in NOK million	**Other operating income**	**Deduction of carrying amount FA**	Other operating income	Deduction of carrying amount FA
R&D grants from the Norwegian government	**28**	**-**	39	-
CO_2 Compensation from the Norwegian Environment Agency	**497**	**-**	367	-
Energy recovery related grants	**-**	**-**	-	6
Other government grants	**2**	**-**	-	-
Total government grants	**527**	**-**	406	6
Norwegian NO_x fund for reduced emission of NO_x	**1**	**64**	-	31
Other grants	**1**	**-**	-	-
Total other grants	**3**	**64**	-	31
Total grants	**530**	**64**	406	37
Grants receivables related to fixed and intangible assets (note 19)		**64**		42
Grants receivables related to income (note 19)		**489**		364
Grants, deferred income (note 23)		**(7)**		(5)

CO_2 allowances

CO_2 emission allowances allocated from the government are classified as grants, measured at nominal value (zero). If actual emissions exceed the number of allocated allowances, additional allowances must be purchased. The allocation of free allowances for the period 2021-2025 has been decided by the Norwegian government.

CO_2 compensation

The Norwegian government has since 2013 had a CO_2 compensation scheme to partially compensate for CO_2 costs included in the power price for certain industries. The compensation scheme is based on a corresponding scheme for EU and are approved by the EFTA surveillance authority ESA. The previous CO_2 compensation scheme ended 31 December 2020 and a new scheme for 2021-2025 has been approved by ESA and implemented into Norwegian regulation.

The CO_2 compensation scheme applies for Elkem's Silicon and Ferrosilicon plants. The compensation is based on the market price of CO_2 allowances and will as such vary with the price development. As the grant compensates power costs, which are costs recognised as part of the cost price of inventory during the production process, the compensation is recognised in the statement of profit or loss when the produced goods are sold.

Other

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

6. Employee benefit expenses

Amounts in NOK million	**2022**	2021
Salaries, holiday pay and variable compensation	**(1 090)**	(1 024)
Employer's national insurance contributions / social security tax	**(141)**	(126)
Pension expenses (note 7)	**(78)**	(74)
Share-based payments	**(24)**	(18)
Other payments / benefits	**(15)**	(15)
Total employee benefit expenses	**(1 348)**	(1 257)
Average number of full time equivalents	**1 308**	1 295

For information concerning remuneration to management and share-based payments, see "Report on salary and other remuneration to leading personnel in Elkem ASA for the financial year 2022", note 9 Employee benefits and note 10 Share-based payment in the consolidated financial statement.

7. Employee retirement benefits

Defined contribution plans

Pension for employees in Elkem ASA are mainly covered by pension plans that are classified as contribution plans.

Elkem ASA' contributions to the employees individual pension plan assets constitutes 5% of base salary up to 7.1G and 15% between 7.1 and 12G. G refers to the national insurance scheme's basic amount in Norway, amounting to NOK 111,477 as at 1 May 2022. 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 2022 is 2.6% 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 2023 will be 2.6%. At 31 December there is 1,544 participants below the age of 61 years in the scheme.

Defined benefit plans

The defined benefit pension plans are unfunded and comprise pension on salaries above 12G, where the expense is 15% of annual base salary that exceeds 12G plus interest on the individual calculated pension obligation, and some individual retirement schemes. The individual retirement schemes are closed.

Net interest is calculated based on pension liability at the start of the period multiplied by the discount rate and is presented as a part of finance expenses. Remeasurements of the defined benefit plans are recognised directly in equity.

The company's retirement schemes meet the minimum requirement of the Norwegian Act of Mandatory Occupational Pension.

Breakdown of pension expenses

Amounts in NOK million	**2022**	2021
Defined benefit plans	**(4)**	(4)
Defined contribution plans	**(57)**	(55)
Early retirement scheme (AFP)	**(18)**	(16)
Total pension expenses	**(78)**	(74)

Amounts in NOK million	**31.12.2022**	31.12.2021
Present value of pension obligations	**(80)**	(85)
Net value pension liabilities	**(80)**	(85)
Active participants in pension scheme for salary above 12G	**49**	49
Retired participants	**45**	50
Changes in actuarial gains / (losses) recognised in equity / deferred tax	**6**	3

Principal assumptions used for the actuarial valuation

Amounts in NOK million	2022	2021
Discount rate [1]	4.2 %	2.0 %
Annual regulation of pensions paid	1.9 %	1.5 %

[1] *The discount rate is based on high quality corporate bonds reflecting the timing of the benefit payments.*

8. Other operating expenses

Amounts in NOK million	2022	2021
External distribution expenses	(707)	(531)
Commission expenses sales	(138)	(91)
Machinery, tools, fixtures and fittings	(381)	(432)
Repair, maintenance and other operating expenses	(246)	(159)
Other external expenses (fees, transport, IT services, etc.)	(600)	(404)
Energy and fuel expenses	(70)	(103)
Leasing expenses (note 9)	(51)	(58)
Travel expenses	(26)	(9)
Loss on trade receivables	(1)	4
Miscellaneous manufacturing, administration and selling expenses	(463)	(389)
Total other operating expenses	**(2 684)**	(2 172)
Miscellaneous manufacturing, administration and selling expenses include:		
Capitalisation of salary on fixed assets (employee benefit expenses are presented gross in note 6)	10	10
Changes in inventories of finished and semi-finished goods	74	(4)

During 2022, Elkem ASA expensed NOK 193 million (NOK 82 million) as research and development related to process, product and business development, including technical customer support and improvement projects.

Grants received related to research and development amount to NOK 28 million (NOK 39 million) and are included in other operating income.

Audit and other services

Amounts in NOK million	2022	2021
Audit fee	(6)	(5)
Other assurance services	(1)	(1)
Tax services	-	-
Other services	-	-
Total fees to auditor	**(7)**	(6)

9. Operating lease

Amounts in NOK million	2022	2021
Leasing expenses, current year (note 8)	(51)	(58)
Minimum future lease payments due in accordance with non-cancellable operating lease contracts:		
Within one year	(27)	(26)
Within two years	(25)	(25)
Within three years	(25)	(22)
Over three years	(227)	(196)

Future leasing obligations are mainly related to rental of office buildings. The rental agreement contains an extension option for 5+5 years for one of the leases. The future obligation for the extension option is approximately NOK 125 million.

10. Other gains (losses) related to operating activites

Amounts in NOK million	2022	2021
Realised currency gains (losses) from forward currency contracts	(17)	158
Unrealised currency gains (losses) from forward currency contracts	(86)	(38)
Other currency gains (losses) operational	134	8
Realised effects other financial instruments [1]	640	65
Unrealised and reversal of unrealised effects other financial instruments [2]	1 041	60
Total other gains (losses) related to operating activities	**1 712**	253

[1] *Of the realised effects other financial instruments, a gain of NOK 597 million (gain NOK 124 million) relates to realised ineffectivenes on power derivatives designated as hedging instruments. Se note 24 financial instruments.*

[2] *Of the amount NOK 817 million (NOK 0 million) relates to unrealised ineffectivenes on power derivatives designated as hedging instruments. The remainng part relates mainly to movements in the value of the part of embedded currency derivatives that are not designated as hedging instrument. Se note 24 financial instruments.*

11. Finance income and expenses

Amounts in NOK million	2022	2021
Interest income	29	3
Interest income from related parties (note 26)	130	129
Other financial income	7	2
Total finance income	166	134
Net foreign exchange gains (losses)	(62)	377
Interest expenses	(215)	(179)
Interest expenses to related parties (note 26)	(48)	(11)
Interest on net pension liabilities	(3)	(3)
Other financial expenses	(2)	(5)
Total finance expenses	(267)	(198)
Net finance income (expenses)	(163)	313

Foreign exchange gains (losses) in 2022 and 2021 are mainly related to the bank loans in EUR and group loans in EUR and CNY.

12. Taxes

Income tax recognised in income statement

Amounts in NOK million	2022	2021
Current tax expenses	(1 330)	(458)
Deferred tax	(270)	(22)
Other taxes	(3)	(21)
Total income tax (expense) benefit	(1 603)	(501)

Reconciliation of income tax (expense) benefit

Amounts in NOK million	2022	2021
Profit before tax	7 593	2 274
Applicable tax rate Norway	22 %	22 %
Tax expense at applicable tax rate	(1 670)	(500)
Permanent differences		
Tax effects of income from Norwegian controlled foreign companies (NOKUS)	(16)	(8)
Tax effects share of profit (loss) from joint ventures	(4)	9
Dividend within the Tax exemption method	31	27
Gain on realised shares	20	-
Tax effects other permanent differences	19	(2)
Other effects		
Previous year tax adjustment	20	(6)
Other current tax paid	(3)	(22)
Total income tax (expenses) benefit	(1 603)	(501)
Effective tax rate	21 %	22 %

Pending tax issues with tax authorities

Elkem ASA has four debt waiver agreements with Elkem Silicones France SAS. The gross taxable value of these agreements as of 31 December 2022 is NOK 595 million (NOK 595 million), book value NOK 0. Elkem Silicones France SAS has not repaid anything under this agreement in 2022 or 2021. Elkem has previously assessed that the effect of repayment is tax exempted.

The Norwegian Tax Office (NTO) decided in February 2021 to increase Elkem ASA's taxable income for the fiscal years 2016-2019 by NOK 781 million, which increased the income tax expenses by NOK 181 million in 2020. The amount was paid in the first quarter of 2021. The reassessments relate to the debt waiver agreements acquired by Elkem ASA in 2016 through the cross-border parent-subsidiary merger with Bluestar Silicones International Sarl. Elkem is of the opinion that the reassessment is unfounded and will appeal. Based on legal advice, Elkem's assessment is that the defence against the action will be successful. According to a decision by the Supreme Court in Norway related to interpretation of Norwegian Accounting Standards, Elkem needs to be virtually certain that the decision by the NTO will be overruled by the Tax Appeal Board, in order for the decision not to be reflected in the financial statements. Due to the complexity of the case, Elkem is not currently able to reach a conclusion with that high level of certainty and the paid amount concerning this case is not reflected in the balance sheet.

Deferred tax assets and deferred tax liabilities

Amounts in NOK million	31.12.2022	31.12.2021
Derivatives	(475)	(120)
Property, plant, equipment and intangible assets	(244)	(184)
Pension liabilities	17	18
Trade receivable	2	2
Inventory	(42)	(26)
Provisions	(0)	3
Other differences	1	1
Net deferred tax assets (liabilities)	(741)	(306)

Movement in net deferred tax assets (liabilities)

Amounts in NOK million	2022	2021
Opening balance	(306)	(128)
Charged to profit (loss)	(270)	(21)
Changes in deferred tax hedges charged to equity	(146)	(156)
Change in actuarial gains (losses) charged to equity	(1)	(1)
Effect of merger	(19)	-
Currency translation differences	-	0
Closing balance	(741)	(306)

13. Property, plant, and equipment

2022

Amounts in NOK million	Land	Buildings and other property	Plant, machinery, equipment and motor vehicles	Office and other equipment	Construction in progress	Total
Opening balance	9	599	1 840	27	528	**3 003**
Additions	1	8	4	0	539	**552**
Disposals	-	(0)	(0)	-	(5)	**(5)**
Transferred from CiP	0	79	401	6	(486)	**-**
Reclassifications	-	-	1	-	(7)	**(6)**
Merger	-	183	748	-	7	**938**
Impairment losses	-	-	(2)	-	(1)	**(3)**
Depreciation	-	(64)	(309)	(8)	-	**(381)**
Closing balance	10	805	2 683	25	575	**4 098**
Historical cost	10	1 894	6 136	101	575	**8 716**
Accumulated depreciation	-	(1 084)	(3 385)	(75)	-	**(4 544)**
Accumulated impairment losses	(0)	(5)	(68)	(0)	-	**(73)**
Closing balance	10	805	2 683	25	575	**4 098**
Estimated useful life	Indefinite	5-40 years	3-30 years	3-20 years		
Depreciation plan		Straight-line	Straight-line	Straight-line		

2021

Amounts in NOK million	Land	Buildings and other property	Plant, machinery, equipment and motor vehicles	Office and other equipment	Construction in progress	Total
Opening balance	7	629	1 771	30	504	**2 941**
Additions	-	0	-	0	405	**406**
Disposals	-	-	-	-	-	**-**
Transferred from CiP	2	28	346	3	(379)	**-**
Reclassifications	-	(1)	(2)	3	-	**(0)**
Impairment losses	-	-	(8)	-	(2)	**(10)**
Depreciation	-	(57)	(267)	(8)	-	**(333)**
Closing balance	9	599	1 840	27	528	**3 003**
Historical cost	9	1 629	5 099	97	528	**7 363**
Accumulated depreciation	-	(1 025)	(3 191)	(70)	-	**(4 286)**
Accumulated impairment losses	(0)	(5)	(69)	(0)	-	**(74)**
Closing balance	9	599	1 840	27	528	**3 003**
Estimated useful life	Indefinite	5-40 years	3-30 years	3-20 years		
Depreciation plan		Straight-line	Straight-line	Straight-line		

14. Intangable assets

2022

Amounts in NOK million	Goodwill	Software	Other intangible assets	Intangible assets under construction	**Total intangible assets**
Opening balance	20	50	13	48	**111**
Additions	-	0	-	0	**1**
Disposals	-	-	-	(16)	**(16)**
Transferred from CiP	-	3	-	(3)	**-**
Reclassifications	-	6	0	-	**6**
Impairment losses	-	-	-	-	**-**
Amortisation	(4)	(19)	(3)	-	**(22)**
Closing balance	16	40	11	30	**81**
Historical cost	40	216	28	30	**274**
Accumulated amortisation	(24)	(177)	(17)	-	**(193)**
Closing balance	16	40	11	30	**81**
Estimated useful life	10 years	3-10 years	3-10 years		
Amortisation plan	Straight-line	Straight-line	Straight-line		

2021

Amounts in NOK million	Goodwill	Software	Other intangible assets	Intangible assets under construction	**Total intangible assets**
Opening balance	24	59	16	40	**115**
Additions	-	8	-	14	**22**
Disposals	-	(0)	-	-	**(0)**
Transferred from CiP	-	5	-	(5)	**-**
Reclassifications	-	-	-	-	**-**
Impairment losses	-	(4)	-	-	**(4)**
Amortisation	(4)	(19)	(3)	-	**(22)**
Closing balance	20	50	13	48	**111**
Historical cost	40	206	29	48	**283**
Accumulated amortisation	(20)	(156)	(15)	-	**(172)**
Closing balance	20	50	13	48	**111**
Estimated useful life	10 years	3-10 years	3-10 years		
Amortisation plan	Straight-line	Straight-line	Straight-line		

15. Investments in subsidiaries

Investment in subsidiaries of Elkem ASA	Owner share Vote rights (%)	Country	**Carrying amount 31.12.2022**	Carrying amount 31.12.2021
Elkem Carbon AS	100 %	Norway	**125**	122
Elkem Chartering Holding AS	80 %	Norway	**1**	1
Elkem Digital Office AS	100 %	Norway	**8**	8
Elkem Distribution Center B.V.	100 %	Netherlands	**0**	0
Elkem Foundry (China) Co., Ltd.	100 %	China	**66**	66
Elkem GmbH	100 %	Germany	**1**	1
Elkem Iberia S.L.U	100 %	Spain	**0**	0
Elkem International AS	100 %	Norway	**5**	5
Elkem International Trade (Shanghai) Co. Ltd. [1]	11 %	China	**1**	1
Elkem Ísland ehf.	100 %	Iceland	**785**	784
Elkem Japan K.K	100 %	Japan	**0**	0
Elkem Korea Co. Ltd.	100 %	Republic of Korea	**19**	1
Elkem Madencilik Metalurji Sanayi Ve Ticaret Ltd. STI [1]	1 %	Turkey	**0**	0
Elkem Materials Processing (Tianjin) Co., Ltd.	100 %	China	**1**	1
Elkem Materials Processing Services BV	100 %	Netherlands	**1**	1
Elkem Metal Canada Inc.	100 %	Canada	**7**	7
Elkem Milling Services GmbH	100 %	Germany	**12**	12
Elkem Nordic A.S.	100 %	Denmark	**5**	5
Elkem Oilfield Chemicals FZCO Ltd.	51 %	UAE	**13**	13
Elkem Paraguay S.A. [1]	79 %	Paraguay	**498**	498
Elkem Processing Services S.A. [2]	100 %	Belgium	**34**	-
Elkem S.a.r.l.	100 %	France	**-**	-
Elkem S.r.l.	100 %	Italy	**6**	6
Elkem Silicon Materials (Lanzhou) Co., Ltd.	100 %	China	**1 033**	1 033
Elkem Silicon Product Development AS	100 %	Norway	**8**	8
Elkem Siliconas España S.A.U	100 %	Spain	**125**	125
Elkem Silicones Brasil Ltda.	100 %	Brazil	**214**	214
Elkem Silicones Canada Corp.	100 %	Canada	**6**	6
Elkem Silicones Czech Republic, s.r.o.	100 %	Czech Republic	**2**	2
Elkem Silicones Finland OY	100 %	Finland	**5**	5
Elkem Silicones France SAS	100 %	France	**2 163**	2 160
Elkem Silicones Germany GmbH	100 %	Germany	**130**	130
Elkem Silicones Guangdong Co., Ltd.	100 %	China	**1 543**	1 543
Elkem Silicones Hong Kong Co., Ltd.	100 %	Hong Kong	**102**	102
Elkem Silicones Korea Co., Ltd.	100 %	Republic of Korea	**219**	219
Elkem Silicones México S. De R.L. De C.V.	100 %	Mexico	**5**	5
Elkem Silicones Poland sp. z o.o.	100 %	Poland	**4**	4
Elkem Silicones Scandinavia AS	100 %	Norway	**15**	15
Elkem Silicones Services S.à.r.l	100 %	France	**5**	4
Elkem Silicones Shanghai Co., Ltd.	100 %	China	**109**	109

Investment in subsidiaries of Elkem ASA

	Owner share Vote rights (%)	Country	**Carrying amount 31.12.2022**	Carrying amount 31.12.2021
Elkem Silicones USA Corp.	USA	100 %	**261**	261
Elkem Siliconi Italia S.r.l.	Italy	100 %	**24**	24
Elkem Singapore Materials Pte. Ltd.	Singapore	100 %	**0**	0
Elkem South Asia Private Limited	India	100 %	**34**	34
Elkem (Thailand) Co., Ltd.	Thailand	100 %	**3**	3
Elkem UK Holdings Ltd.	United Kingdom	100 %	**78**	78
Elkem Uruguay S.A.	Uruguay	100 %	**33**	33
Explotación de Rocas Industriales y Minerales S.A. (ERIMSA)	Spain	100 %	**80**	80
Jiangxi Bluestar Xinghuo Silicones Co., Ltd.	China	100 %	**4 716**	4 153
NEH LLC	USA	100 %	**98**	98
Vianode AS [3]	Norway	-	**-**	1
Total			**12 604**	11 982

[1] Elkem ASA and a subsidiary own 100% of Elkem International Trade (Shanghai) Co. Ltd., Elkem Madencilik Metalurji Sanayi Ve Ticaret Ltd and Elkem Paraguay S.A.

[2] Elkem ASA acquired Elkem Processing Services S.A. (then KeyVest Belgium S.A.) in June 2022

[3] Elkem ASA sold 60% of the shares in Vianode AS in September 2022, reducing its ownership from 100% to 40%

Impairment

For more details see note 19 Impairment assessment in the consolidated financial statement.

Income from investments in subsidiaries

Amounts in NOK million	**2022**	2021
Dividends and group contributions from subsidiaries	**138**	126
Net income on disposal of subsidiary	**92**	-
Total income from subsidiaries	**229**	126

16. Investments in joint ventures

	Company address	Country	Owner share Voting rights 2022	Owner share Voting rights 2021	Accounting method
Elkania DA	Hauge i Dalane	Norway	50 %	50 %	Gross method
Vianode AS [1]	Oslo	Norway	40 %	-	Equity
Salten Energigjenvinning AS [2]	Oslo	Norway	-	50 %	Equity

[1] The share of ownership are equal to Elkem's voting rights, with the exception of Elkem's investments in Vianode AS where the parties have 33,33% ownership influence. Elkem ASA sold 60% of the shares in Vianode AS in September 2022, reducing its ownership from 100% to 40%

[2] The remaining shares was purchased on 31 January 2022 and the company was followingly merged with Elkem ASA.

Main figures for the investments accounted for by equity method. The figures show Elkem ASA's portion.

Total interests in joint ventures

Amounts in NOK million	2022	2021
Opening balance	**46**	(3)
Acquisition of shares and capital contributions	**267**	-
Change in equity interest, to subsidiary	**(47)**	-
Change in equity interest	**383**	-
Share of profit / (loss)	**(17)**	37
Share of other comprehensive income	**7**	12
Closing balance	**639**	46

Main figures for investments accounted for using the gross method, showing Elkem ASA's portion.

Amounts in NOK million	Elkania DA	Total 2022
Current assets	47	**47**
Non-current assets	24	**24**
Current liabilities	18	**18**
Non-current liabilities	8	**8**
Net assets	45	**45**
Total revenue	53	**53**
Total expenses	(29)	**(29)**
Financial items	(0)	**(0)**
Tax	-	**-**
Total profit / (loss) for the year	24	**24**

Amounts in NOK million	Elkania DA	Total 2021
Current assets	26	26
Non-current assets	18	18
Current liabilities	14	14
Non-current liabilities	8	8
Net assets	21	21
Total revenue	44	44
Total expenses	(26)	(26)
Financial items	(0)	(0)
Tax	-	-
Total profit / (loss) for the year	18	18

17. Inventories

Amounts in NOK million	31.12.2022	31.12.2021
Finished goods	**1 206**	684
Semi-finished goods	**228**	185
Raw materials	**1 012**	547
Operating materials and spare parts	**307**	261
Total inventories	**2 753**	1 677
Provisions for write down of inventories	**2**	2

18. Trade receivables

Amounts in NOK million	31.12.2022	31.12.2021
Trade receivables	**518**	1 008
Trade receivables, related parties	**1 075**	740
Provision for doubtful accounts	**(11)**	(10)
Total trade receivables	**1 582**	1 739

Elkem ASA and its subsidiary Elkem Carbon AS has entered into a factoring agreement with a credit limit of EUR 100 million, NOK 1,051 million, to sell on continuing basis trade receivables that meet specific conditions. The agreement includes a recourse clause for maximum 5 %, of the face value of the individual receivables sold. The non-recourse amount of the receivables sold is derecognised and the recourse amount is recognised as a current liability when the title to the receivables is transferred. As of 31 December 2022, NOK 50 million (NOK 33 million) is recognised as current liability (see note 23 Provisions and other liabilities). In addition, Elkem has entered into factoring agreements without recourse for some specific customers. Receivables that are sold without recourse are derecognised in its entirety when the title is transferred, as there is no remaining credit risk after transfer. As at 31 December 2022 NOK 1,235 million (NOK 1,053 million) of Elkem ASA's trade receivables are derecognised under these agreements.

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

Amounts in NOK million	31.12.2022	31.12.2021
Not due	**269**	850
1 - 30 days	**204**	141
31 - 60 days	**6**	9
61 - 90 days	**23**	2
More than 90 days	**16**	6
Total trade receivables	**518**	1 008

Elkem applies for credit insurance for all customers when this can be obtained. In cases where credit insurance coverage is refused, other methods of securing the sales income are used. Other methods used for securing the sales are, among others, prepayment, letter of credit, documentary credit, guarantee etc.

Movements in provisions for doubtful accounts

Amounts in NOK million	31.12.2022	31.12.2021
Opening balance	**(10)**	(16)
Losses during the year	**0**	2
New provisions	**(3)**	(3)
Reversed provisions	**1**	7
Closing balance	**(11)**	(10)

Analysis of ageing of trade receivables where allowance for expected credit losses are made

Amounts in NOK million	31.12.2022	31.12.2021
Not due	**(2)**	(2)
Overdue by:		
1 - 30 days	**(1)**	(0)
31 - 60 days	**(0)**	(0)
61 - 90 days	**(0)**	(0)
More than 90 days	**(8)**	(7)
Total provisions for doubtful accounts	**(11)**	(10)

19. Other assets

	Non-current		Current	
Amounts in NOK million	31.12.2022	31.12.2021	31.12.2022	31.12.2021
Shares in associated companies	**9**	9	**-**	-
Other shares	**8**	7	**-**	-
Restricted deposits	**31**	27	**-**	-
Other deposits	**1**	1	**-**	-
Pension assets, defined benefits and contribution plans (note 7)	**-**	0	**1**	1
Prepayments	**1**	0	**30**	43
Loans and deposits to related parties, interest-bearing (note 26)	**4 221**	3 269	**1 074**	447
Receivables from related parties, interest free (note 26)	**-**	-	**-**	10
Grants receivable (note 5)	**-**	-	**553**	406
Value added tax	**-**	-	**75**	88
Corporate income tax	**-**	-	**-**	-
Interest receivables	**-**	-	**-**	-
Interest receivables from related parties (note 26)	**-**	-	**26**	17
Other receivables	**8**	8	**19**	120
Other assets	**0**	0	**6**	5
Total other assets	**4 278**	3 322	**1 786**	1 136

20. Equity

2022

Amounts in NOK million	Share capital	Other paid in capital	Total paid in capital	Retained earnings	Total equity
Opening balance	3 197	2 981	6 178	5 104	**11 283**
Cash flow hedge	-	-	-	516	**516**
Share of items booked against equity from joint ventures	-	-	-	20	**20**
Remeasurement pension obligations gains (losses)	-	-	-	5	**5**
Currency translation differences	-	-	-	0	**0**
Share-based payments	-	24	24	-	**24**
Net movement treasury shares	-	7	7	(46)	**(38)**
Merger (note 28)	-	-	-	4	**4**
Dividends	-	(2 716)	(2 716)	(1 079)	**(3 795)**
Profit for the year	-	-	-	5 990	**5 990**
Closing balance	3 197	296	3 493	10 515	**14 009**

The share capital of Elkem ASA is NOK 3,197,206,890 divided on 639,441,378 shares of NOK 5 par value. Of this amount Elkem ASA held 4,964,393 treasury shares.

For the year 2022 NOK 6.0 per share corresponding to NOK 3,813 million has been allocated for the distribution of dividends to the shareholders. In addition an decreased amount of NOK 18 million was allocated for distribution of dividends for 2021, in 2022.

2021

Amounts in NOK million	Share capital	Other paid in capital	Total paid in capital	Retained earnings	Total equity
Opening balance	2 907	3 302	6 208	3 012	**9 220**
Cash flow hedge reserve	-	-	-	552	**552**
Share of items booked against equity from joint ventures	-	-	-	12	**12**
Remeasurement pension obligations gains (losses)	-	-	-	3	**3**
Currency translation differences	-	-	-	(0)	**(0)**
Share-based payments	-	28	28	-	**28**
Net movement treasury shares	-	(32)	(32)	(246)	**(278)**
Capital increase	291	1 610	1 900	-	**1 900**
Dividends	-	(1 927)	(1 927)	-	**(1 927)**
Profit for the year	-	-	-	1 773	**1 773**
Closing balance	3 197	2 981	6 178	5 104	**11 283**

21. Shareholders

The table shows shareholders holding 1% or more of the total 639,441,378 shares outstanding as of 31 December 2022, according to information in the Norwegian 'securities' registry system (Verdipapirsentralen).

	Number of Shares	Ownership
Bluestar Elkem International Co., Ltd. S.A.	338 338 536	52.9 %
Folketrygdfondet	26 475 551	4.1 %
Must Invest AS	14 000 000	2.2 %
Verdipapirfondet Alfred Berg Gambak	11 946 530	1.9 %
Pareto Aksje Norge Verdipapirfond	9 761 626	1.5 %
State Street Bank and Trust Comp [1]	8 989 837	1.4 %
Verdipapirfondet Storebrand Norge	8 173 294	1.3 %
The Bank of New York Mellon SA/NV [1]	7 400 041	1.2 %
Euroclear Bank S.A./N.V. [1]	6 419 487	1.0 %
Total shareholders with ownership greater than 1%	431 504 902	67.5 %

[1] *Nominee accounts*

Information on shares held by key management personnel is included in "Report on salary and other remuneration to leading personnel in Elkem ASA for the financial year 2022" and note 9 Employee benefits in the consolidated financial statement.

22. Interest-bearing assets and liabilities

	Non-current		Current	
Amounts in NOK million	**31.12.2022**	31.12.2021	**31.12.2022**	31.12.2021
Interest-bearing liabilities				
Deposits from related parties (note 26)	**171**	145	**3 831**	2 618
Loans from external parties, other than bank	**3 688**	3 110	**1**	1 256
Bank financing	**5 214**	4 037	**56**	53
Accrued interest	**-**	-	**16**	19
Total interest-bearing liabilities	**9 074**	7 292	**3 903**	3 945
Interest-bearing assets				
Cash and cash equivalents	**-**	-	**5 316**	4 256
Restricted deposits	**31**	27	**-**	3
Loans to related parties (note 26)	**4 221**	3 269	**801**	24
Deposits to related parties (note 26)	**-**	-	**272**	422
Loans to external parties	**8**	8	**-**	-
Interest receivables from related parties (note 26)	**-**	-	**26**	17
Interest receivables from external parties	**-**	-	**-**	-
Total interest-bearing assets	**4 260**	3 304	**6 416**	4 723
Net interest-bearing assets / (liabilities)	**(4 814)**	(3 988)	**2 512**	778

Interest-bearing liabilities by currency

	31.12.2022		31.12.2021	
Amounts in NOK million	Currency amount	**NOK**	Currency amount	NOK
EUR	710	**7 469**	674	6 740
USD	106	**1 045**	46	408
NOK	4 137	**4 137**	3 622	3 622
Other currencies	-	**326**	-	467
Total interest-bearing liabilities		**12 977**		11 237

The table below analyses the financial liabilities into relevant maturity groupings based on the remaining period at the date of the statement of financial position to the contractual maturity date. The amounts disclosed in the table are discounted.

Maturity of interest-bearing liabilities 31 December 2022

Amounts in NOK million	2023	2024	2025	2026	2027	2028 and later	**Total**
Deposits from related parties	3 831	171	-	-	-	-	**4 002**
Loans from external parties, other than bank	1	908	1 234	942	500	105	**3 689**
Bank financing	56	-	-	-	5 257	-	**5 313**
Accrued interest	16	-	-	-	-	-	**16**
Total	3 903	1 079	1 234	942	5 757	105	**13 019**
Prepaid loan fees							**(42)**
Total interest-bearing liabilities							**12 977**

Maturity of interest-bearing liabilities 31 December 2021

Amounts in NOK million	2022	2023	2024	2025	2026	2027 and later	**Total**
Deposits from related parties	2 618	145	-	-	-	-	**2 763**
Loans from external parties, other than bank	1 256	-	1 110	1 000	500	500	**4 366**
Bank financing	53	4 053	-	-	-	-	**4 106**
Accrued interest	19	-	-	-	-	-	**19**
Total	3 945	4 198	1 110	1 000	500	500	**11 253**
Prepaid loan fees							**(16)**
Total interest-bearing liabilities							**11 237**

Loan agreements

The main non-current loan agreements as of 31 December 2022 are a term loan of EUR 500 million (EUR 400 million), a term loan of EUR 0 million (EUR 5 million), issued bond loans of a total of NOK 2,500 million (NOK 2,500 million) and a series of loans issued in the Schuldschein market of EUR 113 million (EUR 61 million). The interest rates for the non-current loan agreements are in the range of 4.38% to 4.78% for the bond loans and 1.82% to 4.5% for the loans in the Schuldschein market. For the term loan the interest rate is 3.44%.

Elkem placed EUR 200 million in the Schuldschein market on 4 and 6-year tenors in December 2022, where of EUR 52 million was disbursed in December 2022, while EUR 148 million was disbursed in January 2023. In June Elkem signed new bank facilities with a term loan of EUR 500 million and a credit facility of EUR 500 million, refiniancing the term loan of EUR 400 million from prior year. Later in 2022 the facilities was linked to two sustainability KPIs, KPI 1 Lost Time Injury Rate and KPI 2 – Product Group Carbon Footprint. The margin of the RCF and term loan shall be reduced by 0.025% if both KPIs are met, and increased by 0.025% if none of the KPIs are met. If one KPI is met there shall be no change to the margin. The sustainability KPIS will first be tested for 2023 with effect from 2024.

One of the loans issued in the Schuldschein market (EUR 15 million) is a fixed rate loan with a fixed rate of 1.8160%. Given the market conditions as at 31 December 2022 the loan would have been approximately EUR 0.7 million lower, due to the difference between fixed and market rate.

Covenants Elkem group

Amounts in NOK million	**31.12.2022**	31.12.2021	Loan covenant
Equity ratio	**55 %**	47 %	> 30%
Interest cover ratio	**58.38**	37.33	> 4.00

The bond loans are listed on Oslo Børs. There are no material differences between fair value of the bond loan and book values.

The loan facilities are unsecured, but part of the loans have financial covenants related to them, see below.

Credit facilities

Elkem ASA is granted credit facilities of EUR 500 million (NOK 5,257 million) and NOK 250 million, a total of NOK 5,507 million in granted credit facilities. Both facilities remained undrawn at 31 December 2022 and 31 December 2021.

Covenants

The credit facilities and the bank financing in Elkem ASA contain financial covenants based on the consolidated financial statements of Elkem group. In addition parts of the loans from external part, other than bank, contain financial covenants. The financial covenants are identical towards the different parties and remain equal to previous year's covenants. In total drawn loans of NOK 6,501 million (NOK 5,971 million) have covenants as described below. Elkem ASA is compliant with its covenants at the end of 2022 and 2021.

23. Provisions and other liabilities

	Non-current		Current	
Amounts in NOK million	**31.12.2022**	31.12.2021	**31.12.2022**	31.12.2021
Employee withholding taxes, soc. sec.tax and other public taxes	**-**	-	**103**	85
Value added tax	**-**	-	**29**	81
Prepayments from customers	**-**	-	**24**	51
Prepayments from related parties (note 26)	**-**	-	**-**	6
Payables to related parties (note 26)	**-**	-	**60**	43
Provisions	**45**	33	**3**	7
Obligation to finance subsidiary	**37**	37	**-**	-
Contingent consideration related to purchase of subsidiary	**-**	40	**42**	163
Accrued expenses	**-**	-	**358**	194
Employee benefits	**-**	-	**248**	232
Deferred income, government grants	**-**	-	**7**	5
Recourse liability factoring agreement (note 18)	**-**	-	**50**	33
Other liabilities	**-**	-	**5**	2
Total provisions and other liabilities	**82**	109	**927**	902

The contingent consideration related to purchase of subsidiaries relates to the acquisition of Polysil on 1 April 2020.

Movements in provision 2022

Amounts in NOK million	Restructuring	Site restoration	Environmental measures	**Total provisions**
Opening balance	3	31	6	**40**
Additional provisions recognised	-	1	11	**13**
Used during the year	(3)	-	(1)	**(4)**
Reversal of provisions recognised	-	-	(0)	**(0)**
Closing balance	-	32	16	**48**
Hereof non-current	-	32	13	**45**
Hereof current	-	-	3	**3**
Closing balance	-	32	16	**48**

Site restoration

The site restoration provisions are related to the necessary site remediation work that Elkem ASA will have to undertake in respect of its quartz mines.

Environmental measures

Elkem ASA has nationwide operations representing potential exposure towards environmental consequences. Elkem ASA has established clear procedures to minimise environmental emissions, well within public emission limits. The estimated provisions relate to estimated clean-up costs in connection with closed landfills.

24. Financial instruments

Currency exchange contracts

Elkem ASA 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 in the income statement. 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 in the income statement. There are no currency contracts against subsidiaries as at 31 December 2022.

Embedded EUR derivatives in power contracts where the spot element is designated as hedging instruments in a cash flow hedge to hedge currency fluctuations in highly probable future sales, from 1 January 2016. Unrealised effects are from that date booked against equity and later reclassified to revenue when realised. Realised hedging effects from such derivatives in 2022 are a loss of NOK 29 million (loss of NOK 31 million).

See note 10 Other gains (losses) related to operating activities for information on contracts classified as held for trading.

Details of currency exchange contracts
31 December 2022

Purchase currency	Purchase ccy million	Sale currency	Sale ccy million	Type of instrument	Currency rate	Due	Fair value [1]	Notional value [2]
CAD	40	USD	31	Fwd	1,310	2023	(9)	301
NOK	1 750	EUR	170	Fwd	10,279	2023	(44)	1 790
NOK	189	JPY	2 014	Fwd	0,094	2023	36	151
NOK	426	JPY	4 242	Fwd	0,101	2024-2026	88	317
NOK	764	USD	79	Fwd	9,677	2023	(10)	780
NOK	719	EUR	69	Embedded [2]	10,452	2023	(22)	723
NOK	3 688	EUR	335	Embedded [2]	11,017	2024-2034	42	3 520
Total fair value							**80**	

Details of currency exchange contracts
31 December 2021

Purchase currency	Purchase ccy million	Sale currency	Sale ccy million	Type of instrument	Currency rate	Due	Fair value [1]	Notional value [2]
CAD	40	USD	32	Fwd	1,255	2022	(4)	284
NOK	1 231	EUR	120	Fwd	10,230	2022	20	1 203
NOK	2	GBP	0	Fwd	11,655	2022	(0)	2
NOK	169	JPY	1 844	Fwd	0,092	2022	27	141
NOK	615	JPY	6 256	Fwd	0,098	2023-2026	112	479
NOK	392	USD	45	Fwd	8,656	2022	(9)	399
NOK	709	EUR	69	Embedded [2]	10,336	2022	1	686
NOK	4 039	EUR	371	Embedded [2]	10,888	2023-2034	(18)	3 709
Total fair value							**129**	

[1] The currency exchange contracts are measured at fair value based on the observed forward exchange rate for contracts with a corresponding maturity term, on the balance sheet date.

[2] Notional value of underlying asset, based on currency rates at 31 December.

[3] Embedded EUR derivatives in own use power contracts.

Power contracts recognised at fair value

Elkem ASA enters into power derivative contracts to meet its need for power at the plants. These 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.

The effective part of change in fair value of contracts designated in hedging relationships is booked temporarily in equity, and recycled to the income statement when the hedged items are realised. Realised effects from the hedging of future need for power are a gain of NOK 377 million (gain of NOK 190 million) which is included in raw materials and energy for production. The ineffective part of change in fair value of contracts designated in hedging relationships is recognised as a part of other gains (losses) related to operating activities, see note 10 Other gains (losses).

In addition, Elkem ASA holds power contracts which are entered into and continue to be held for the purpose of the receipt of power. These contracts are booked at the lower of cost and fair value. As at 31 December 2022 the fair value of these contracts is higher than cost (zero).

Details of fair value of power derivative contracts
31 December 2022

Amounts in NOK million	Volume GWh	Due	Fair value	Notional amount [1]
Forward contracts financial institutions	44	2023	43	15
Commodity contract "30-øringen" [1]	501	2023	608	158
Commodity contract "30-øringen" [1]	3 510	2024-2030	1 430	1 199
Total fair value			**2 080**	

Details of fair value of power derivative contracts
31 December 2021

Amounts in NOK million	Volume GWh	Due	Fair value	Notional amount [1]
Forward contracts financial institutions	98	2022	23	52
Forward contracts financial institutions	44	2023	4	15
Commodity contract "30-øringen" [1]	501	2022	167	157
Commodity contract "30-øringen" [1]	4 011	2023-2030	163	1 378
Power contract with Salten Energigjenvinning AS (note 26)" [2]	124	2022	35	32
Power contract with Salten Energigjenvinning AS (note 26)" [2]	1 733	2023-2036	22	555
Total fair value			**414**	

[1] Notional amount based on currency rates at 31 December.

[2] Elkem ASA merged with its subsidiary Salten Energigjenvinning AS in 2022.

25. Financial risk

Financial risk management in Elkem ASA is described in note 27 Financial risk and capital management policies are described in note 28 Capital management in the consolidated financial statement. Elkem ASA's use of derivative instruments are described in note 24 Financial instruments. See note 22 Interest-bearing assets and liabilities for details of credit facilities and maturity profile of interest-bearing liabilities. The exposure to credit risk is represented by the carrying amount of each class of financial assets, including derivative financial instruments, recorded in the balance sheet.

26. Related parties

Elkem ASA is owned 52.9% by Bluestar Elkem International Co. Ltd S.A., Luxembourg, which is under control of Sinochem Holdings Co., Ltd (Sinochem), a company registered and domiciled in China. The structure of the Elkem group is disclosed in notes to the consolidated financial statement; note 4 Composition of the group and in note 5 Equity accounted investments and joint operation. Details of transactions between Elkem ASA and the parent company, subsidiaries, joint ventures and associates and related parties within Sinochem are disclosed below.

2022

Amounts in NOK million	Sale of good	Purchase of goods	Sale of services	Purchase of services	Interest income	Interest expenses
Bluestar Elkem International Co., Ltd. S.A.	-	-	-	-	-	-
Related parties within Sinochem	-	-	-	-	-	-
Subsidiaries	2 985	(1 148)	554	(540)	130	(48)
Joint ventures and associates	-	-	12	(145)	-	-
Total	2 985	(1 148)	565	(685)	130	(48)

2021

Amounts in NOK million	Sale of goods	Purchase of goods	Sale of services	Purchase of services	Interest income	Interest expenses
Bluestar Elkem International Co., Ltd. S.A.	-	-	-	-	-	-
Related parties within Sinochem	5	(154)	20	(0)	-	-
Subsidiaries	1 461	(664)	424	(498)	129	(11)
Joint ventures and associates	-	-	13	(124)	-	-
Total	1 465	(818)	457	(623)	129	(11)

Balances with related parties

	Non-current		Current	
Amounts in NOK million	**31.12.2022**	31.12.2021	**31.12.2022**	31.12.2021
Trade receivables, subsidiaries	**-**	-	**1 068**	734
Trade receivables, joint ventures and associates	**-**	-	**6**	6
Loans to subsidiaries, interest-bearing	**4 221**	3 269	**801**	24
Deposits from subsidiaries, interest-bearing	**-**	-	**272**	422
Interest receivable from subsidiaries	**-**	-	**26**	17
Receivables from subsidiaries, interest-free	**-**	-	**-**	10
Deposits from subsidiaries, interest-bearing	**(171)**	(145)	**(3 831)**	(2 618)
Other payables to subsidiaries, interest free	**-**	-	**(60)**	(43)
Trade payables, Bluestar Elkem Investment Co. Ltd. S.A	**-**	-	**(5)**	(5)
Trade payables, subsidiaries	**-**	-	**(412)**	(534)
Trade payables, joint ventures and associates	**-**	-	**30**	12
Prepayments from subsidiaries	**-**	-	**-**	(0)
Prepayments from joint ventures and associates	**-**	-	**-**	(6)
Financial power contract with joint ventures and associates	**-**	22	**-**	35

Transactions with key management personnel

Information on transactions with key management personnel is included in "Report on salary and other remuneration to leading personnel in Elkem ASA for the financial year 2022" and note 9 Employee benefits in the consolidated financial statement.

Commitment with related parties

Elkem has entered into a investment agreement and committed to cover its proportion of total estimated capital injections in Vianode AS. Elkem's proportion is NOK 534.5 million, whereof NOK 267 million is paid as of 31 December 2022.

Information about transactions between related parties

Elkem follows internationally accepted principles for transactions between related parties. In general, Elkem seeks to use transaction based methods (comparable uncontrolled price, cost plus and resale price method) in order to set the price for the transaction.

The majority of the transactions between related parties relate to products involving:

→ Raw materials (quartz) from quarries to plants
→ Metallurgical silicon to Silicones
→ Electrode paste from Carbon plants to FeSi and Silicon plants
→ Surplus raw materials between plants
→ Ad-hoc supplies of finished goods to Elkem's internal distributors
→ Purchase of short and deep-sea transport
→ Sale of management and technology services
→ Rent of plant facilities and related services
→ Purchase of management services for the Silicones segment

Elkem's set-up for sales is based on an agent structure, rather than a distribution network. Elkem also owns companies sourcing key raw materials and other supplies from selected suppliers world-wide. In both activities above, the transaction between the related parties is a delivered service, either sales-service or sourcing-service. Additionally, Elkem has internal help chains that are established to serve several operating units more efficiently.

Elkem ASA has both non-current receivables and non-current payables to related parties. The group loans are normally interest-bearing and interest is calculated based on interbank rates (for example NIBOR) and a margin.

27. Pledge of assets and guarantees

Guarantee commitments

Amounts in NOK million	**31.12.2022**	31.12.2021
Guarantees given on behalf of the operating plants regarding environmental obligations	**40**	40
Guarantees given on behalf of subsidiaries regarding financing	**681**	576

As part of the factoring agreement parts of Elkem's trade receivables are pledged (see note 18 Trade receivables). The book value of the pledged assets and liability is NOK 50 million (NOK 33 million).

28. Merger

Elkem ASA merged with its subsidiary Salten Energigjenvinning AS in 2022. Salten Energigjenvinning AS operates a energy recovery plant in connection to the Salten plant in Norway.

Following the purchase of the remaining 50% of the shares giving Elkem ASA a 100% ownership in Salten Energigjenvinning AS, the merger was effective from 21 November 2022 with Elkem ASA as transferee entity.

The merged entity`s total carrying amounts is based on group book value and the continuity accounting method is applied. For accounting purposes the merger was effective from 1 February 2022.

Net assets

Amounts in NOK million	Note	**Total**
Property, plant and equipment	13	**938**
Investments in subsidiaries		**(182)**
Total non-current assets		**756**
Inventories		**1**
Trade receivables		**2**
Other current assets		**2**
Cash and cash equivalents		**38**
Total currents assets		**44**
Non-current interest-bearing liabilities		**(650)**
Deferred tax liabilities		**(19)**
Derivatives		**(87)**
Total non-current liabilities		**(756)**
Trade payables		**5**
Other current liabilities		**(45)**
Total current liabilities		**(40)**
Net assets / equity contributed in the merger	20	**4**

29. Changes in presentation

Presentation of realised hedge ineffectiveness is changed from raw materials and energy for production to other gains (losses) related to operating activities in the inomce statement. The impact on comparable figures in the inomce statement are shown in the tables below.

Income statement

Amounts in NOK million	**2022 before change**	Impact	2022 After change
Raw materials and energy for production	**(5 585)**	(597)	(6 183)
Other gains (losses) related to operating activities	**1 115**	597	1 712
Operating profit (loss)	**7 543**	-	7 543

Income statement

Amounts in NOK million	**2021 Financial statement**	Impact of change	2021 Restated
Raw materials and energy for production	**(4 268)**	(124)	(4 392)
Other gains (losses) related to operating activities	**129**	124	253
Operating profit (loss)	**1 799**	-	1 799

Elkem has changed from net to gross presentation of cash flows from loans and deposits against subsidiaries. Cash flows from repayment and new cash deposits are presented as financing activities. Comparable figures are restated.

Cash flow statement

Amounts in NOK million	**2022 Before change**	Impact of change	2022 After change
Increase in loans to subsidiaries	**-**	(1 848)	(1 848)
Re-payment on loans to subsidiaries	**-**	334	334
Increase /decrease in loans to subsidiaries	**(316)**	316	-
Cash flow from investing activities	**(1 891)**	(1 198)	(3 089)
New cash deposits to / from subsidiaries	**-**	1 578	1 578
Repayment of cash deposits to / from subsidiaries	**-**	(380)	(380)
Cash flow from financing activities	**(2 367)**	1 198	(1 169)
Change in cash and cash equivalents	**1 056**	-	1 056

Cash flow statement

Amounts in NOK million	**2021 Financial statement**	Impact of change	2021 Restated
Increase in loans to subsidiaries	**-**	(291)	(291)
Re-payment on loans to subsidiaries	**-**	201	201
Increase /decrease in loans to subsidiaries	**(451)**	451	-
Cash flow from investing activities	**(1 075)**	361	(714)
Repayment of interest-bearing loans and borrowings	**(1 870)**	(555)	(2 426)
New cash deposits to / from subsidiaries	**-**	910	910
Repayment of cash deposits to / from subsidiaries	**-**	(715)	(715)
Cash flow from financing activities	**2 156**	(361)	1 795
Change in cash and cash equivalents	**2 461**	-	2 461

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 2022 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, 8 March 2023

Zhigang Hao
Chair

Dag Jakob Opedal
Vice chair

Olivier Tillette de Clermont-Tonnerre
Board member

Yougen Ge
Board member

Jingwan Wu
Board member

Grace Tang
Board member

Nathalie Brunelle
Board member

Marianne Elisabeth Johnsen
Board member

Terje Andre Hanssen
Board member

Marianne Færøyvik
Board member

Thomas Eggan
Board member

Helge Aasen,
CEO, Elkem ASA

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Enterprise 935 174 627 MVA

To the General Meeting of Elkem ASA

Independent Auditor's Report

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Elkem ASA, which comprise:

- the financial statements of the parent company Elkem ASA (the Company), which comprise the balance sheet as at 31 December 2022, 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 consolidated statement of financial position as at 31 December 2022, the consolidated statement of profit or loss, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion

- the financial statements comply with applicable statutory requirements,
- the financial statements give a true and fair view of the financial position of the Company as at 31 December 2022, and its financial performance and its cash flows for the year then ended in accordance with Norwegian Accounting Act and accounting standards and practices generally accepted in Norway, and
- the consolidated financial statements give a true and fair view of the financial position of the Group as at 31 December 2022, 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.

Our opinion is consistent with our additional report to the Audit Committee.

Basis for Opinion

We conducted our audit in accordance with 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 relevant laws and regulations in Norway and the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code), 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.

To the best of our knowledge and belief, no prohibited non-audit services referred to in the Audit Regulation (537/2014) Article 5.1 have been provided.

We have been the auditor of the Company for 7 years from the election by the general meeting of the shareholders on 20 April 2016 for the accounting year 2016.

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.

Assessment of impairment indicators of the carrying value of property plant and equipment

Refer to Note 3 Accounting estimates and Note 19 Impairment assessments

The key audit matter	*How the matter was addressed in our audit*
As at 31 December 2022 the Group has reported Property, plant and equipment of NOK 19,520 million across several cash-generating units (CGUs). For Property, plant and equipment management assess, at each reporting date, whether there is a trigger indicating that the carrying amount of an asset may not be recoverable. Due to the potential impact on the Group's consolidated financial statements given the size of the balance and uncertainty related to the future economic environment, and the auditor judgment required when evaluating whether management's assumptions are reasonable and supportable, the assessment of impairment indicators of the carrying value of Property, plant and equipment was considered to be a key audit matter. One CGU within the Silicones segment, Elkem Silicones Guangdong with total carrying value of NOK 187 million was identified to have impairment triggers mainly due to significant increase in raw material prices and limited pass-through opportunities for the specialty part of their sales portfolio. As the recoverable amount exceeded the carrying value, the CGU was assessed not to be impaired.	Our audit procedures performed to assess impairment indicators included: • Assessing management's process and results for identification and classification of CGUs to ensure they were appropriate and in accordance with relevant accounting standards; • Obtaining an understanding of management's process and testing design and implementation of management's control around the impairment trigger assessment; • Evaluating management's impairment trigger assessment and assessing any additional potential indicators of impairment through external and internal trigger indicators; When impairment triggers were identified, our procedures for the relevant CGUs included: • Evaluating and challenging the forecasted cash flows including timing of future cash flows applied in the models with reference to historical accuracy and approved business plans; • Evaluating key assumptions such as forecasted sales prices, discount rates, growth rates and EBITDA margin; • Assessing, with the assistance of KPMG valuation specialists, the mathematical and methodological integrity of management's impairment models and the reasonableness of discount rates applied with reference to market data; and • Evaluating the adequacy and appropriateness of the disclosures in the financial statements related to the carrying value of Property, plant and equipment.

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Other Information

The Board of Directors and the Managing Director (management) are responsible for the information in the Board of Directors' report and the other information accompanying the financial statements. The other information comprises information in the annual report, but does not include the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the information in the Board of Directors' report nor the other information accompanying the financial statements.

In connection with our audit of the financial statements, our responsibility is to read the Board of Directors' report and the other information accompanying the financial statements. The purpose is to consider if there is material inconsistency between the Board of Directors' report and the other information accompanying the financial statements or our knowledge obtained in the audit, or whether the Board of Directors' report and the other information accompanying the financial statements otherwise appear to be materially misstated. We are required to report if there is a material misstatement in the Board of Directors' report or the other information accompanying the financial statements. We have nothing to report in this regard.

Based on our knowledge obtained in the audit, it is our opinion that the Board of Directors' report

- is consistent with the financial statements and
- contains the information required by applicable statutory requirements.

Our opinion on the Board of Director's report applies correspondingly to the board of director's report on Corporate Governance and the ESG report.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway, and for the preparation and true and fair view of the consolidated financial statements of the Group in accordance with International Financial Reporting Standards as adopted by the EU, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's and the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern. The financial statements of the Company use the going concern basis of accounting insofar as it is not likely that the enterprise will cease operations. The consolidated financial statements of the Group use the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with 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 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.

3

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- 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 and 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's 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 a true and fair view.
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Board of Directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee 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

Report on Compliance with Requirement on European Single Electronic Format (ESEF)

Opinion

As part of the audit of the financial statements of Elkem ASA we have performed an assurance engagement to obtain reasonable assurance about whether the financial statements included in the annual report, with the file name 549300CVBE06T0SH6T76-2022-12-31-en, have been prepared, in all material respects, in compliance with the requirements of the Commission Delegated Regulation (EU) 2019/815 on the European Single Electronic Format (ESEF Regulation) and regulation pursuant to Section 5-5 of the Norwegian Securities Trading Act, which includes requirements related to the preparation of the annual report in XHTML format, and iXBRL tagging of the consolidated financial statements.

In our opinion, the financial statements, included in the annual report, have been prepared, in all material respects, in compliance with the ESEF regulation.

4

Management's Responsibilities
Management is responsible for the preparation of the annual report in compliance with the ESEF regulation. This responsibility comprises an adequate process and such internal control as management determines is necessary.

Auditor's Responsibilities
Our responsibility, based on audit evidence obtained, is to express an opinion on whether, in all material respects, the financial statements included in the annual report have been prepared in compliance with ESEF. We conduct our work in compliance with the International Standard for Assurance Engagements (ISAE) 3000 – "Assurance engagements other than audits or reviews of historical financial information". The standard requires us to plan and perform procedures to obtain reasonable assurance about whether the financial statements included in the annual report have been prepared in compliance with the ESEF Regulation.

As part of our work, we have performed procedures to obtain an understanding of the Company's processes for preparing the financial statements in compliance with the ESEF Regulation. We examine whether the financial statements are presented in XHTML-format. We evaluate the completeness and accuracy of the iXBRL tagging of the consolidated financial statements and assess management's use of judgement. Our procedures include reconciliation of the iXBRL tagged data with the audited financial statements in human-readable format. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Oslo, 17 March 2023
KPMG AS

Øyvind Skorgevik

Øyvind Skorgevik
State Authorised Public Accountant

5

Appendix - Alternative Performance Measures (APMs)

An APM is defined as a financial measure of historical or future financial performance, financial position, or cash flows, other than a financial measure defined or specified in the applicable financial reporting framework (IFRS). Elkem uses EBITDA and EBITDA margin to measure operating performance at the group and segment level. In particular, Management regards EBIT and EBITDA as useful performance measures at segment level because income tax, finance expenses, foreign exchange gains (losses), finance income and other items are managed on a group basis and are not allocated to each segment. Elkem uses cash flow from operations to measure the segments cash flow performance, this measure is excluding items that are managed on a group level. Elkem uses ROCE, or return on capital employed as measures of the development of the group's return on capital. Elkem relies on these measures as part of its capital allocation strategy. Elkem uses net interest-bearing debt less non-current interest-bearing assets / EBITDA as leverage ratio for measuring the group's financial flexibility and ability for step-change growth and acquisitions.

The APMs presented herein are not measurements of performance under IFRS or other generally accepted accounting principles and should not be considered as a substitute for measures of performance in accordance with IFRS. Because companies calculate the APMs presented herein differently, Elkem's presentation of these APMs may not be comparable to similarly titled measures used by other companies.

Elkem's financial APMs, EBITDA and EBIT

→ EBITDA is defined as Elkem's profit (loss) for the period, less income tax (expense) benefit, finance expenses, foreign exchange gains (losses), finance income, share of profit from equity accounted financial investments, other items (except realised gains and losses from hedge ineffectiveness and discontinuation of hedging), impairment losses and amortisation and depreciation.

→ EBITDA margin is defined as EBITDA divided by total operating income.

→ EBIT is defined as Elkem's profit (loss) for the period, less income tax (expense) benefit, finance expenses, foreign exchange gains (losses), finance income, share of profit from equity accounted financial investments and other items (except realised gains and losses from hedge ineffectiveness and discontinuation of hedging).

Below is a reconciliation of EBIT and EBITDA.

2022

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Eliminations	Elkem
Profit (loss) for the year						**9 642**
Income tax (expense) benefit						**2 594**
Finance expenses						**313**
Foreign exchange gains (losses)						**(85)**
Finance income						**(67)**
Share of profit from equity accounted financial investments						**17**
Other items						**(2 151)**
Realised effects from hedge ineffectiveness and discontinuation of hedging						**635**
EBIT	743	9 630	1 063	(281)	(257)	**10 898**
Impairment losses						**28**
Amortisation and depreciation						**1 999**
EBITDA	2 022	10 224	1 166	(231)	(257)	**12 925**

2021

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Eliminations	Total
Profit (loss) for the year						**4 664**
Income tax (expense) benefit						**1 163**
Finance expenses						**276**
Foreign exchange gains (losses)						**(241)**
Finance income						**(40)**
Share of profit from equity accounted financial investments						**(37)**
Other items						**(10)**
Realised effects from hedge ineffectiveness and discontinuation of hedging						**124**
EBIT	2 528	3 154	360	(97)	(46)	**5 899**
Impairment losses						**76**
Amortisation and depreciation						**1 816**
EBITDA	3 672	3 702	508	(44)	(46)	**7 791**

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, (gains) losses on disposal of subsidiaries, changes in provisions, bills receivable and other, changes in fair value of derivatives, other items (from the statement of profit or loss), realised effects from hedge ineffectiveness and discontinuation of hedging and including reinvestments.

→ Reinvestments generally consist of maintenance capital expenditure to maintain existing activities or that involve investments designed to improve health, safety or the environment.

→ Strategic investments generally consist of investments which result in capacity increases at Elkem's existing plants or that involve an investment made to meet demand in a new geographic or product area.

Below is a split of the items included in investment in property, plant and equipment and intangible assets.

Amounts in NOK million	2022	2021
Reinvestments	**(1 682)**	(1 657)
Strategic investments	**(2 797)**	(1 717)
Periodisations [1]	**421**	245
Investments in property, plant and equipment and intangible assets	**(4 058)**	(3 128)

[1] *Periodisations reflects the difference between payment date and accounting date of the investment.*

Amounts in NOK million	2022	2021
Cash flow from operating activities	**9 314**	4 913
Income taxes paid	**1 345**	423
Interest payments made	**319**	242
Interest payments received	**(66)**	(34)
(Gains) losses on disposal of subsidiaries	**159**	-
Changes in provisions, bills receivables and other	**539**	88
Changes fair value of derivatives	**1 139**	9
Other items	**(2 151)**	(10)
Realised effects from hedge ineffectiveness and discontinuation of hedging	**635**	124
Reinvestments	**(1 682)**	(1 657)
Cash flow from operations	**9 551**	4 100

Elkem's financial APMs, ROCE

→ ROCE, Return on capital employed, is defined as EBIT divided by the average capital employed.

→ Working capital is defined as accounts receivable, inventory, other current assets, accounts payable, current 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, assets at fair value through profit or loss and accrued interest income. Accounts payable are defined as trade payables less trade payables related to purchase of non-current assets. Other current liabilities are defined as provisions and other current liabilities less current provisions, contingent considerations, contract obligations and liabilities to related parties.

→ Capital employed consists of working capital as defined above, property, plant and equipment, right-of-use assets, other intangible assets, goodwill, equity accounted investments, grants payable, trade payables and prepayments related to purchase of non-current assets. The definition was changed in 2022 to include right-of-use assets, goodwill and other intangible assets. Comparable figures are restated.

→ 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:

Capital employed and working capital

Amounts in NOK million	31.12.2022	31.12.2021
Inventories	**10 325**	7 716
Trade receivables	**4 248**	4 297
Bills receivable	**(1 086)**	(990)
Accounts receivable	**3 162**	3 307
Other assets, current	**1 698**	1 551
Other receivables to related parties interest free	**(7)**	(1)
Grants receivables	**(620)**	(493)
Tax receivable	**(338)**	(237)
Assets at fair value through profit or loss	**-**	(14)
Accrued interest	**(0)**	(1)
Other current assets included in working capital	**733**	806
Trade payables	**5 335**	4 614
Trade payables related to purchase of non-current assets	**(1 117)**	(605)
Accounts payables included in working capital	**4 219**	4 008
Employee benefit obligations	**994**	976
Provisions and other liabilities, current	**1 545**	1 657
Provisions, contingent considerations and contract obligations	**(144)**	(454)
Liabilities to related parties	**(30)**	(32)
Other current liabilities included in working capital	**1 371**	1 172
Working capital	**7 637**	5 673
Property, plant and equipment	**19 520**	15 722
Right-of-use assets	**779**	1 017
Other intangible assets	**1 385**	1 602
Goodwill	**984**	941
Equity accounted investments	**1 039**	241
Grants payable	**(16)**	(15)
Trade payables- and prepayments related to purchase of non-current assets	**(1 018)**	(581)
Capital employed	**30 310**	24 599

Elkem's financial APMs, Leverage ratio

→ Net interest-bearing debt that is used to measure leverage ratio is excluding non-current other restricted deposits, receivables from related parties, loans to external parties and accrued interest income. These assets are not easily available to be used to finance the group's operations. Below a calculation of Elkem's leverage ratio.

Leverage ratio

Amounts in NOK million	**31.12.2022**	31.12.2021
Net interest-bearing assets / (liabilities)	**(2 559)**	(4 776)
Other restricted deposits, non-current	**(46)**	(41)
Receivables from related parties	**(1)**	(1)
Loans to external parties	**(8)**	(8)
Accrued interest income	**(0)**	(1)
Net interest-bearing assets / (liabilities) less non-current interest-bearing assets	**(2 615)**	(4 827)
EBITDA	**12 925**	7 791
Leverage ratio	**0,2**	0,6

Elkem ASA

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