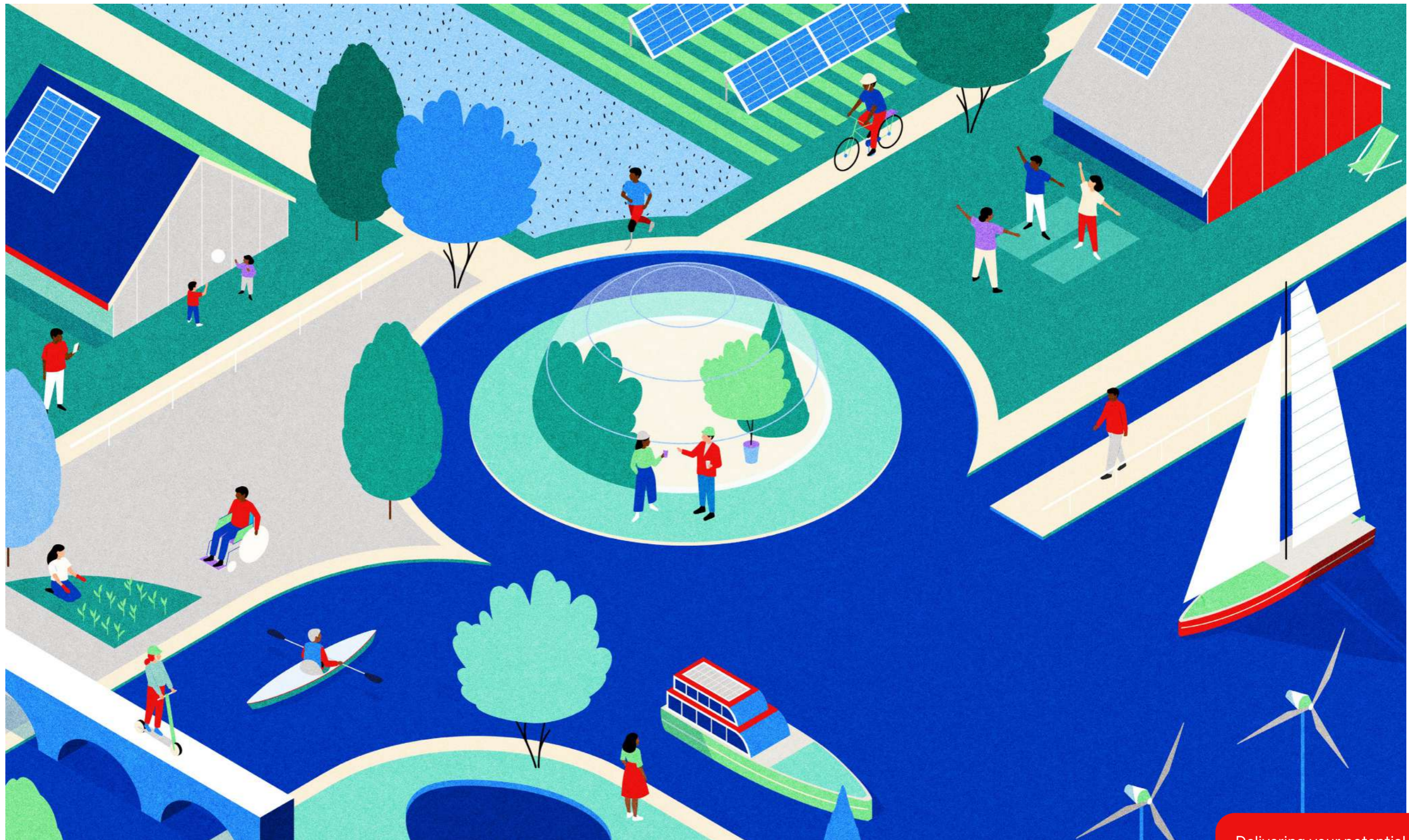


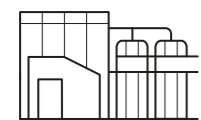
# Reducing emissions towards net zero while growing supplies to the green transition



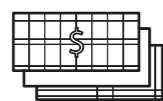
# ESG report content

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:

|   |    |
|---|----|
| Elkem's ESG agenda                                | 06 |
| Letter from the CEO                               | 08 |
| Elkem's value chain                               | 12 |
| The Elkem climate roadmap                         | 14 |
| ESG management: People and organisation           | 18 |
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| Environmental material topics                     | 30 |
| Social material topics                            | 54 |
| Governance material topics                        | 70 |
| UN SDG reporting                                  | 84 |
| ESG third party assurance                         | 88 |



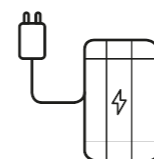
Operations:  
30 plants world-wide and  
more than 7,300 employees



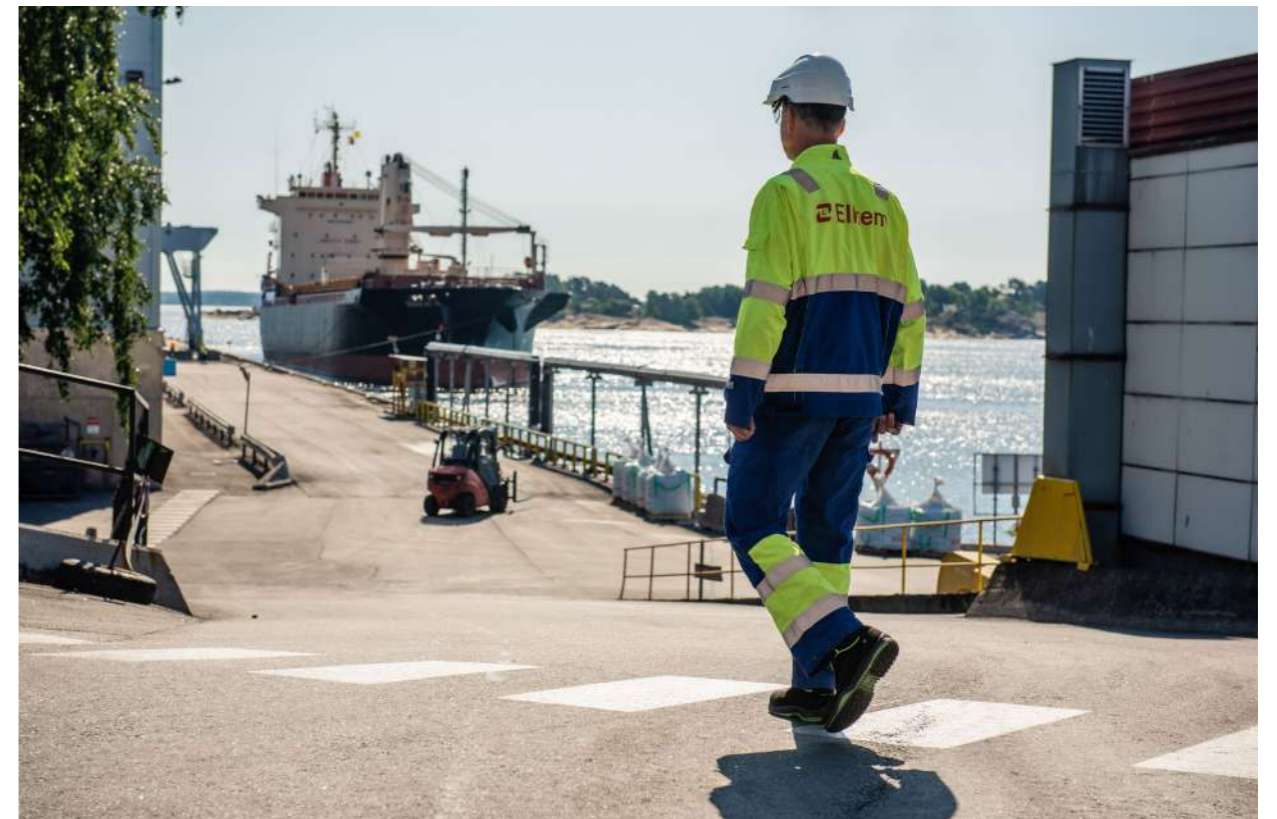
Operating income 2022:  
45.9 billion NOK



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



# 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

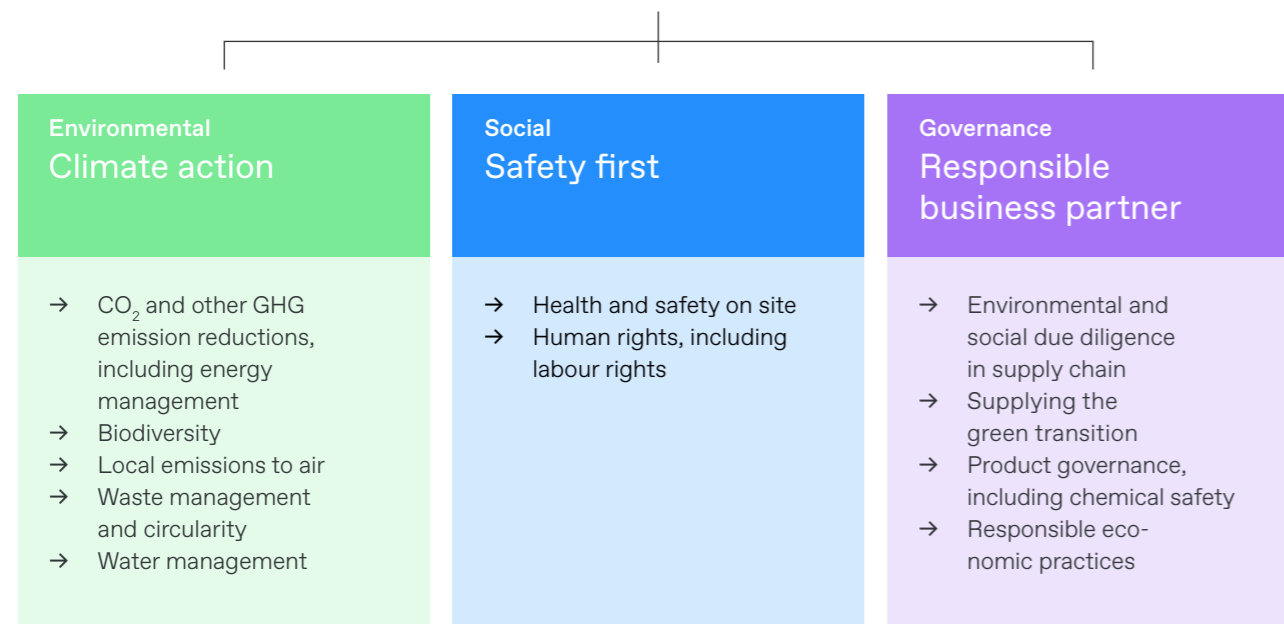
**Our commitment:**

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.



**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.



# Letter from the CEO

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<sub>2</sub> 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.

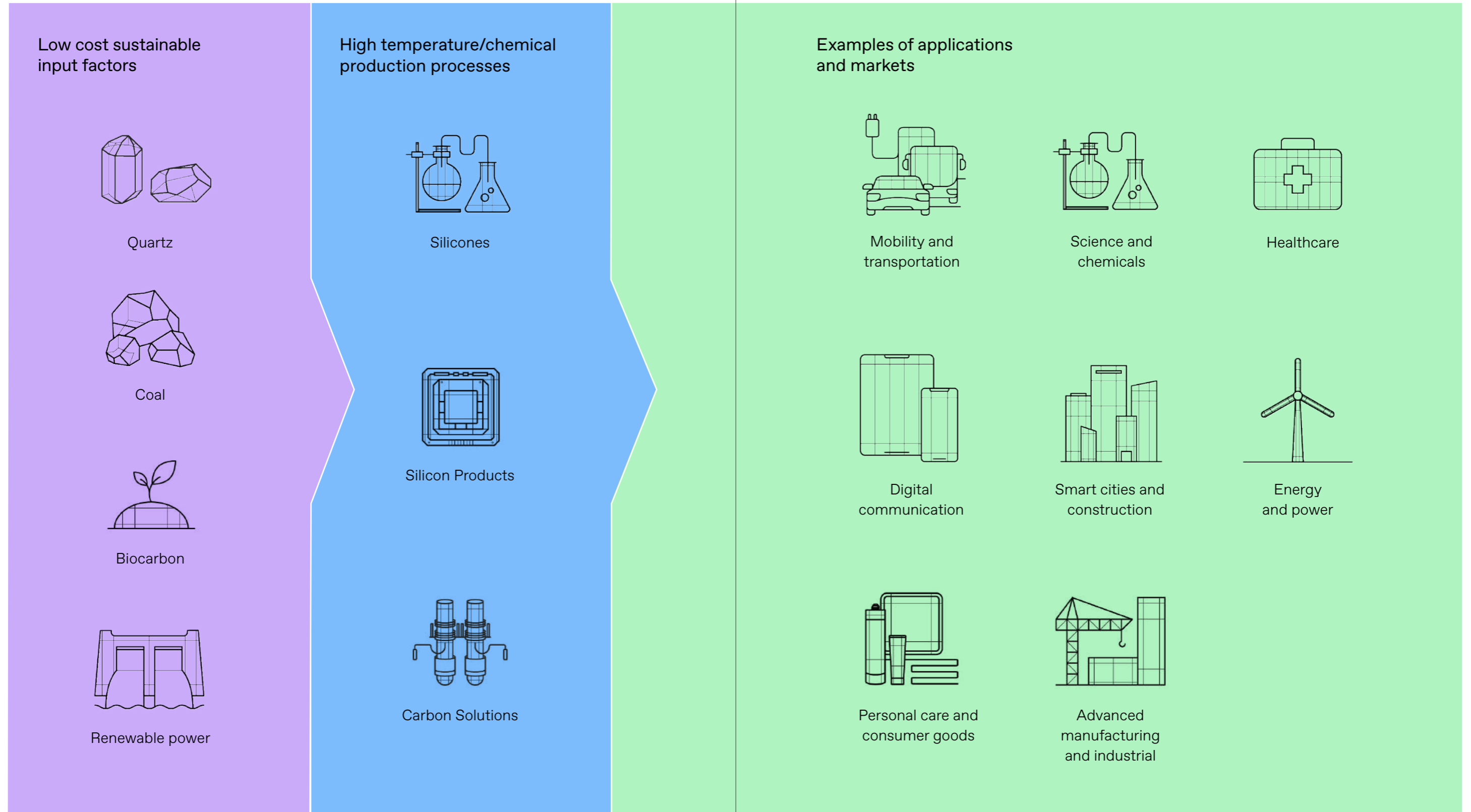
I have been in Elkem's top management for twenty-two years, and now more than twelve years as CEO.

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,**  
CEO, Elkem ASA

# Elkem's value chain

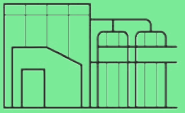
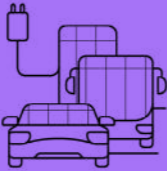



The Elkem climate roadmap

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

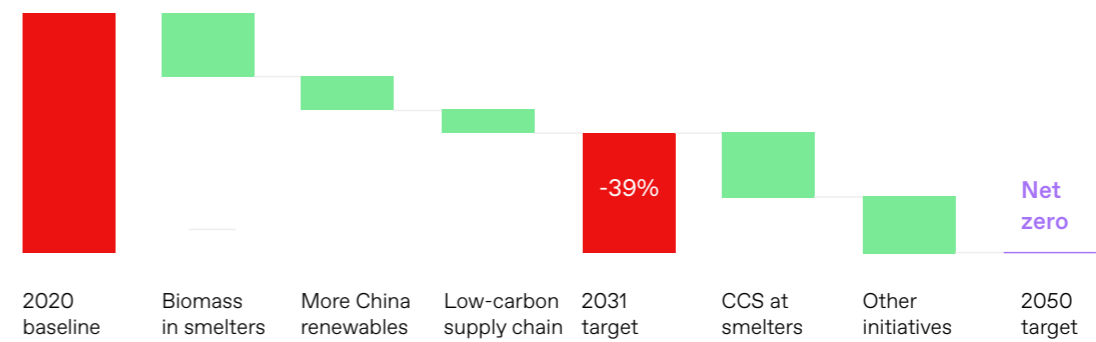
Elkem announced its global climate roadmap in 2021, which is closely linked to the corporate strategy of green leadership. [↗](#)

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:

|  |   |   |
|--|---|---|
|   |    |    |
| <p><b>Reducing our emissions</b></p>   | <p><b>Supplying to the transition</b></p>   | <p><b>Enabling circular economies</b></p>   |
| <p>Achieving fully climate neutral production throughout our value chain</p> <p><b>By 2031:</b> Reducing absolute emissions by 28% from 2020-2031 while growing the business – delivering 39% improvement in product footprint</p> <p><b>By 2050:</b> Achieving fully carbon neutral production (zero fossil emissions) globally</p> | <p>Providing the advanced material solutions required to enable the green transition</p> <p><b>Grow supplies of advanced materials to green markets</b> such as better buildings, electric vehicles and renewable energy</p> <p><b>Build new business in green markets</b> such as battery materials, biomass and energy recovery</p> | <p>Enabling more circular activities in our operations, products and markets</p> <p><b>Increase recycling</b> in our own operations</p> <p><b>Increase recycling</b> with our customers</p> <p><b>Develop the eco-design</b> of innovative products</p> |

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  |
|--|----------------------|--------------|-------|-------|
| <b>Total GHG emissions (CO<sub>2</sub>e)</b> | Mill tonnes          | <b>10.74</b> | 11.60 | 10.27 |
| <b>Scope 1</b>                               | Mill tonnes          | <b>2.42</b>  | 2.34  | 2.39  |
| <b>Scope 2</b>                               | Mill tonnes          | <b>0.94</b>  | 0.90  | 0.91  |
| <b>Scope 3</b>                               | Mill tonnes          | <b>7.38</b>  | 8.35  | 6.96  |
| <b>Product group carbon footprint*</b>       | CO <sub>2</sub> e/kg | <b>6.9</b>   | 7.4   | N/A   |

\* CO<sub>2</sub> 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<sub>2</sub> 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. [↗](#)

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

**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<sub>2</sub> emissions than today's standard battery materials – supporting the ambitions of leading battery cell and automotive manufacturers. More information on Vianode. [↗](#)

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.

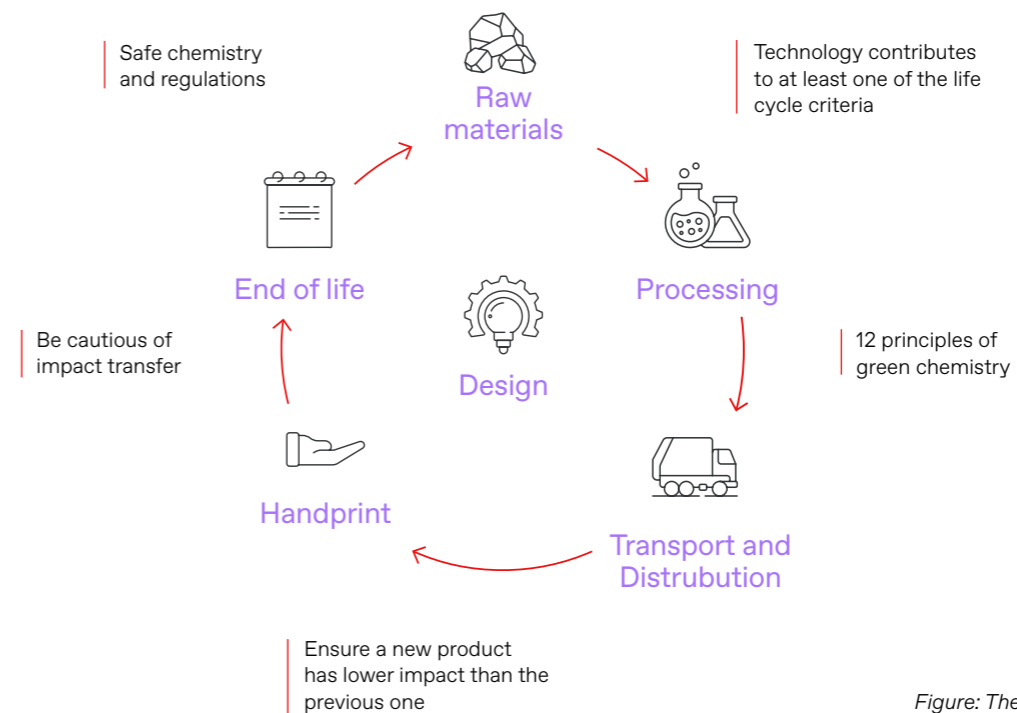


Figure: The circular economy wheel



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.

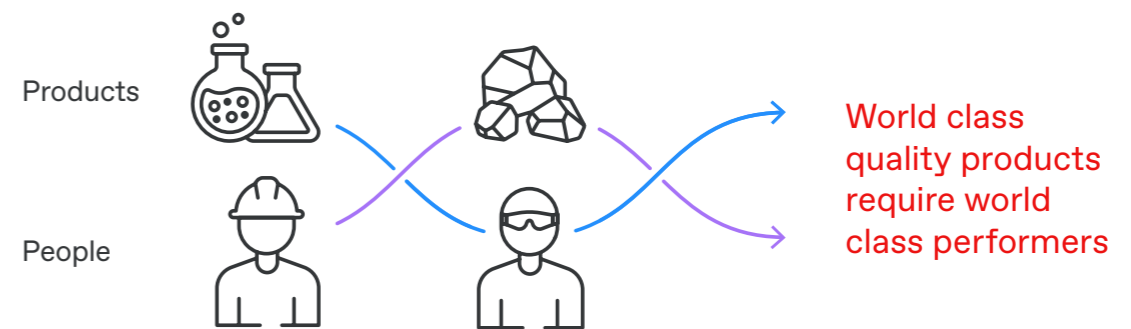


Figure: The double value chain

**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.

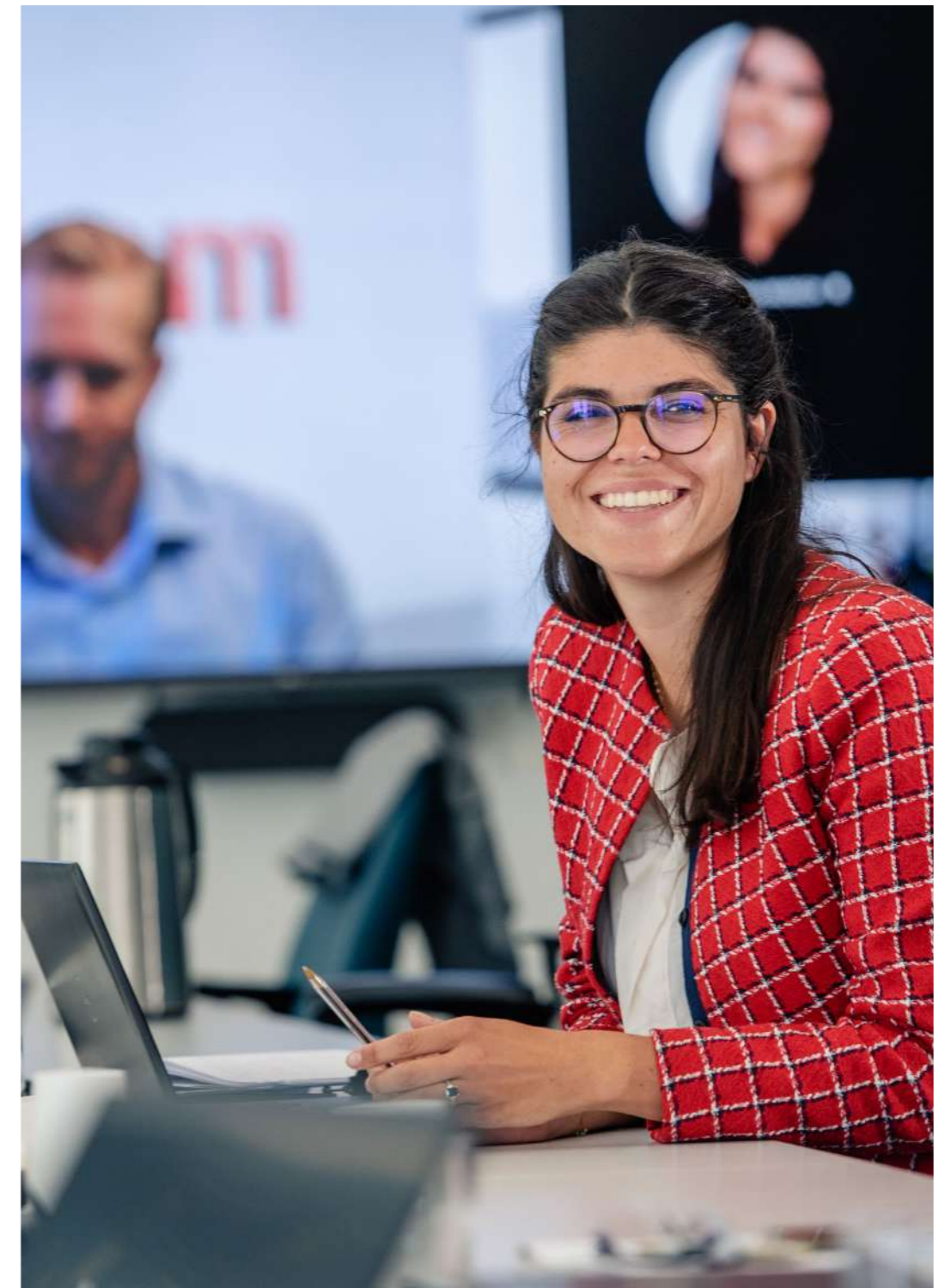
**Contractors and temporary hires**

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

|   |  |   |
|---|--|---|
| <p><b>36%</b></p> <p>women in the board</p> | <p><b>50%</b></p> <p>independent directors</p> | <p><b>3</b></p> <p>employee representatives</p> |
|---|--|---|

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.

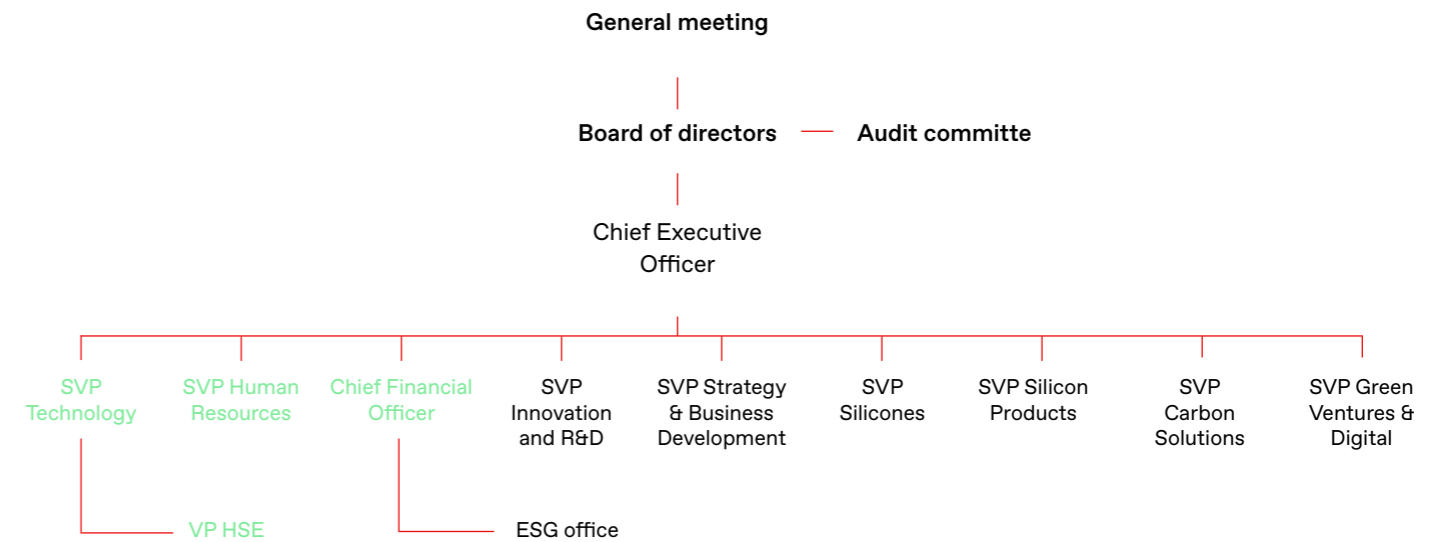
**Management and operational level**

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

ESG and sustainability governance structure



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

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 board 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.

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.

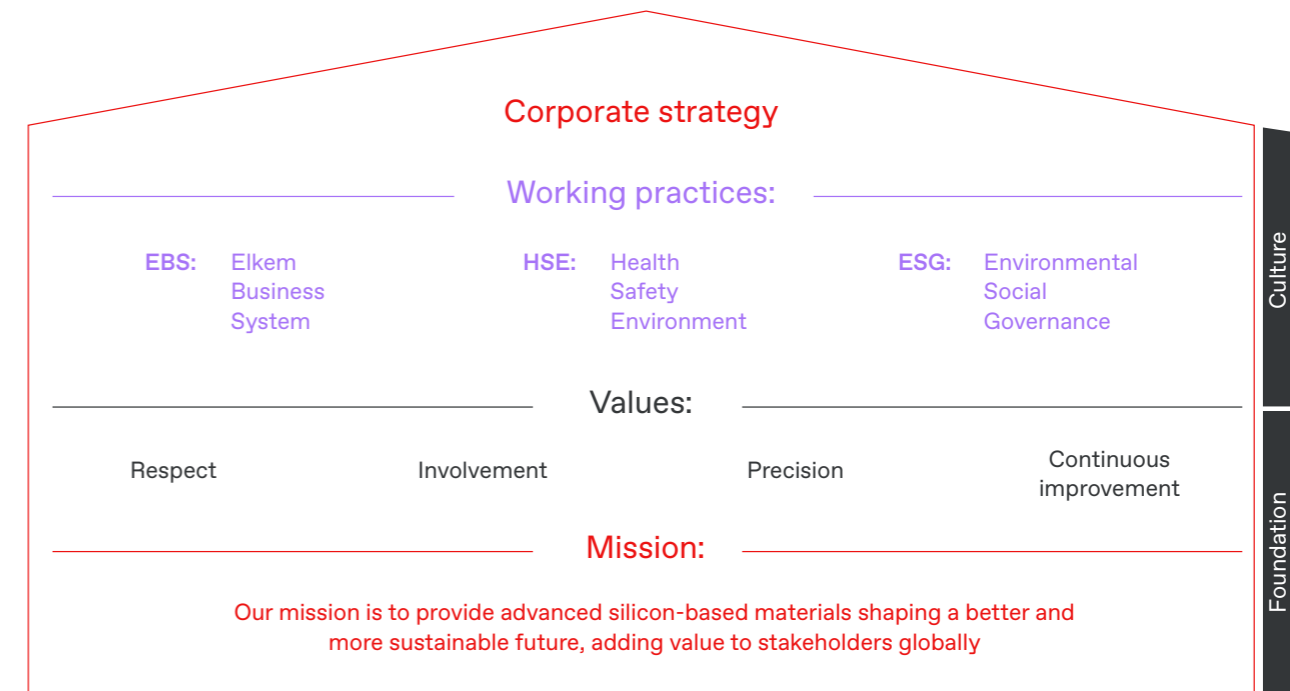


Figure: The Elkem house

**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.



**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 acknowledges 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<sub>2</sub> 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

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.

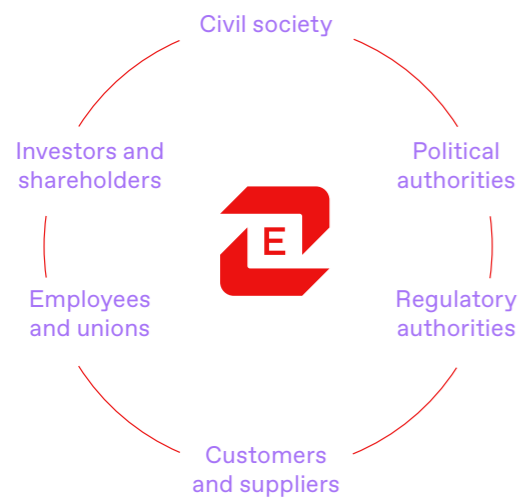
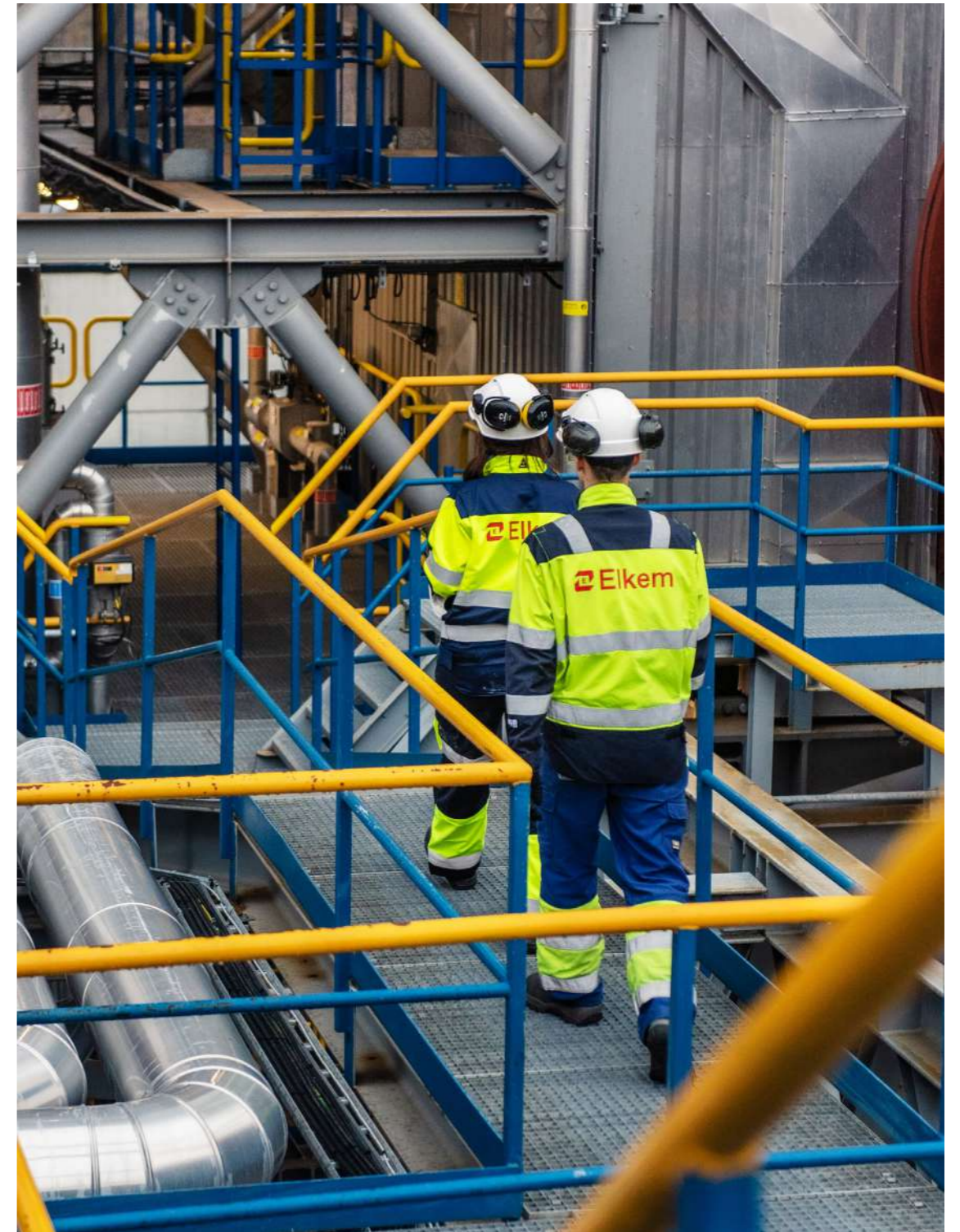


Figure: Key stakeholders

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<sub>2</sub>, NO<sub>x</sub> (Nitrogen Oxides), SO<sub>2</sub> (Sulphur Oxides) and dust.

Reducing our CO<sub>2</sub> 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<sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> e/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<sub>2</sub> and other GHG emission reductions

Elkem is committed to taking a leading industry position in reducing fossil CO<sub>2</sub> 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<sub>2</sub> 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 <sub>2</sub> / 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> emission numbers are CO<sub>2</sub> 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<sub>2</sub> emissions come from the smelting processes (1.7 million tonnes CO<sub>2</sub>e), 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> emissions compared to other places Elkem operate.

### Scope 3

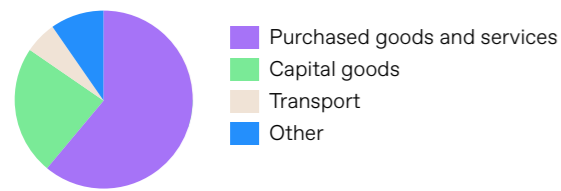
Scope 3 is the term used to describe the indirect GHG emissions resulting from activities in the value chain, but outside of our operational control, according to the GHG protocol. There are 15 categories of scope 3 emissions. The full scope 3 emissions were reported for the first time in the 2021 report.

## Environmental CO<sub>2</sub> and other GHG emission reductions

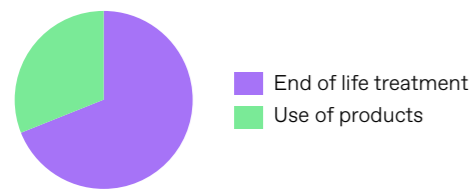
Elkem has expanded our reporting to ensure we capture the largest and most material indirect sources of GHG emissions in our value chain. The two largest categories identified are “purchased goods and services” and “end of life treatment”. Scope 3 emissions were 7.38 million tonnes in 2022, a 12% reduction 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> e (scope 1+2+3 to gate) per kilogram of product produced.

Silicon produced by Elkem in Europe has a low CO<sub>2</sub> 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.

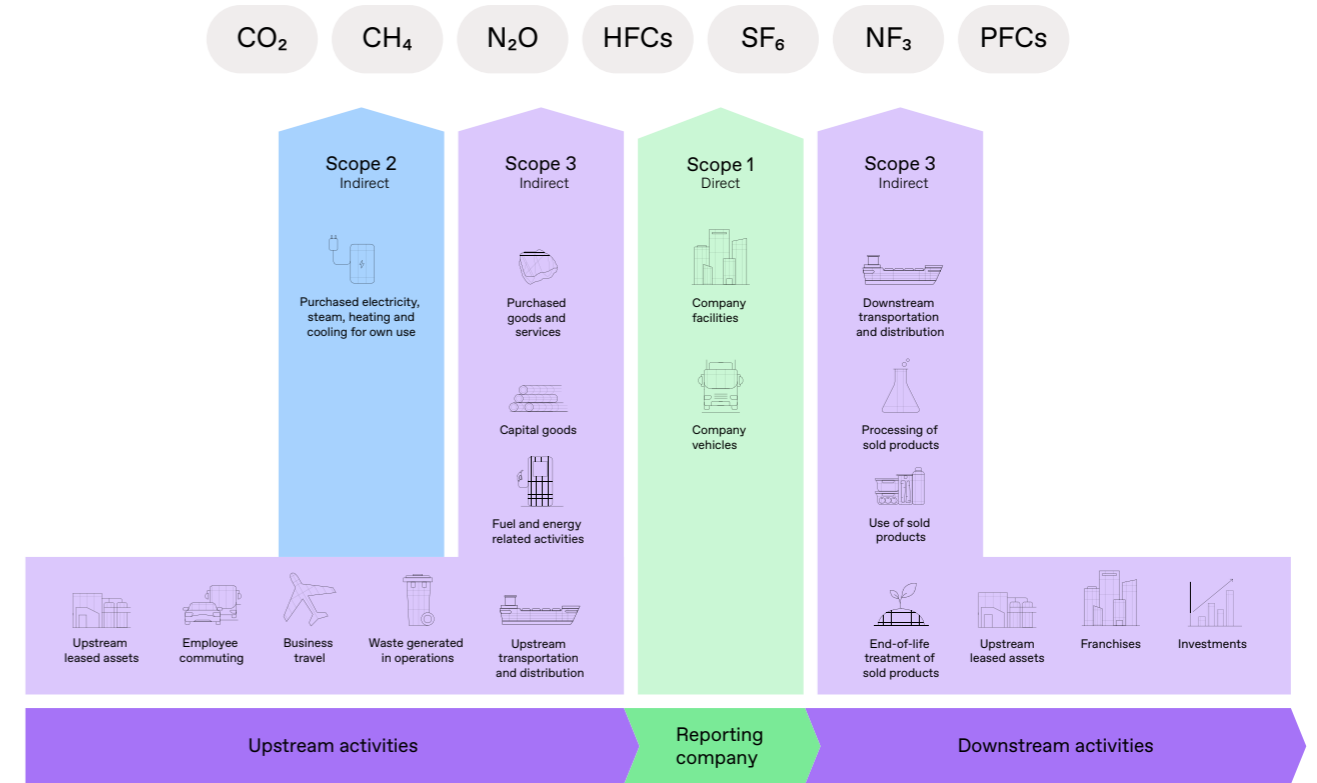


Figure: GHG scope definition

### KPIs

| Product group            | Weight | 2022 | 2021 (baseline year)         |
|--------------------------|--------|------|------------------------------|
| Avg. silicones PGCF      | 50%    | 8.8  | 10.0 kg CO <sub>2</sub> e/kg |
| Avg. silicon alloys PGCF | 50%    | 5.0  | 4.9 kg CO <sub>2</sub> e/kg  |
| Elkem average PGCF       | 100%   | 6.9  | 7.4 kg CO <sub>2</sub> e/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<sub>2</sub> 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

## Environmental Energy management

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

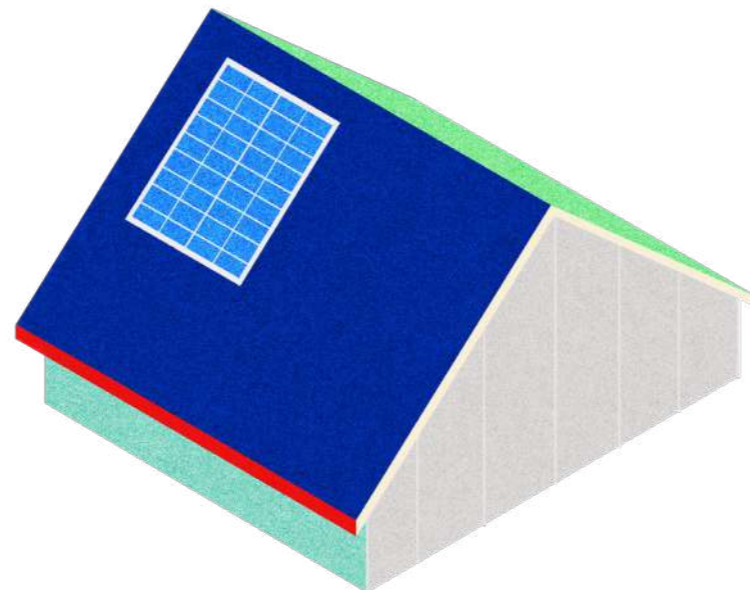
Elkem has a long-term strategy to increase energy recovery annually as part of its climate programme. Most of Elkem's major production sites have production processes that generate surplus heat with high enough temperatures to be recovered. This heat can be used to generate new electricity for the grid, 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 44. ↗

### 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<sup>3</sup> 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 annually 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   |
|--|-------------|---------------|--------|--------|
| <b>Withdrawal</b>  |             |               |        |        |
| Total freshwater withdrawal  | Megaliters  | <b>89 587</b> | 85 654 | 86 900 |
| Fresh surface water, including rainwater, water from wetlands, rivers, and lakes | Megaliters  | <b>46 509</b> | 46 698 | 46 644 |
| Groundwater – renewable  | Megaliters  | <b>452</b>    | 581    | 613    |
| Third party sources  | Megaliters  | <b>42 716</b> | 38 391 | 39 913 |
| <b>Discharge</b>   |             |               |        |        |
| Discharge of cooling water   | Megaliters  | <b>54 542</b> | 52 925 | 59 000 |
| Discharge of process water   | Megaliters  | <b>7 605</b>  | 7 020  | 16 500 |
| Fresh surface water  | Megaliters  | <b>4 489</b>  | 4 936  | 5 000  |
| Brackish surface water/seawater  | Megaliters  | <b>56 437</b> | 54 883 | 43 000 |
| Third-party destinations   | Megaliters  | <b>1 210</b>  | 1 260  | 1 100  |
| COD flow   | Thousand kg | <b>183</b>    | 202    | 263    |
| Total water discharge  | Megaliters  | <b>62 145</b> | 59 945 | 75 500 |
| Total water consumption  | Megaliters  | <b>27 439</b> | 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 [Z](#)

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   |
|--|---------------|----------------|----------------|----------------|------------|---|
| <b>Total waste generated</b>                                   | <b>Tonnes</b> | <b>462 745</b> | <b>397 247</b> | <b>356 156</b> | 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%        | **  |
| <b>Total waste directed to disposal</b>                        | <b>Tonnes</b> | <b>121 225</b> | <b>118 116</b> | <b>118 544</b> | <b>3%</b>  | <b>Approx. 30% of total waste generated</b>   |
| 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%         |   |
| <b>Total waste diverted from disposal (reused or recycled)</b> | <b>Tonnes</b> | <b>341 520</b> | <b>279 131</b> | <b>237 645</b> | <b>22%</b> | <b>Approx. 70% of total waste generated</b>   |
| 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 processes and are therefore deemed material to the company. As local emissions to air, such as NO<sub>x</sub>, SO<sub>2</sub> 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<sub>x</sub> and SO<sub>2</sub> 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<sub>2</sub> emissions
- Elkem biocarbon strategy will reduce SO<sub>2</sub> 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 <sub>2</sub> | Thousand tonnes | 7 229 | 7 280 | 6 880 |         |
| NO <sub>x</sub> | 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 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<sub>2</sub> were stable in 2022 compared to 2021. Both dust and NO<sub>x</sub> emissions were reduced in 2022, compared to 2021.

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

Nitrogen oxides (NO<sub>x</sub>) 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<sub>x</sub> emission from Silicon smelting furnaces and will continue to do so going forward. The 2022 NO<sub>x</sub> 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<sub>x</sub> furnace design at several silicon smelters.

More than 80% of reported NO<sub>x</sub> emissions are based on online monitoring and reporting. The approximately 20% remaining is based on industrial emission factors.

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

Sulphur dioxide (SO<sub>2</sub>) is generated when using carbon materials in the smelting process and when calcining coal and coke in the carbon products process. SO<sub>2</sub> emissions can have a negative effect on both plant and animal life, as well as human health. SO<sub>2</sub> emissions can be reduced through the use of carbon materials with low sulfur

content, or by off-gas treatment. The SO<sub>2</sub> emissions in 2022 were at the same level as 2021. A 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<sub>2</sub> 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<sub>2</sub> 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 were 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.

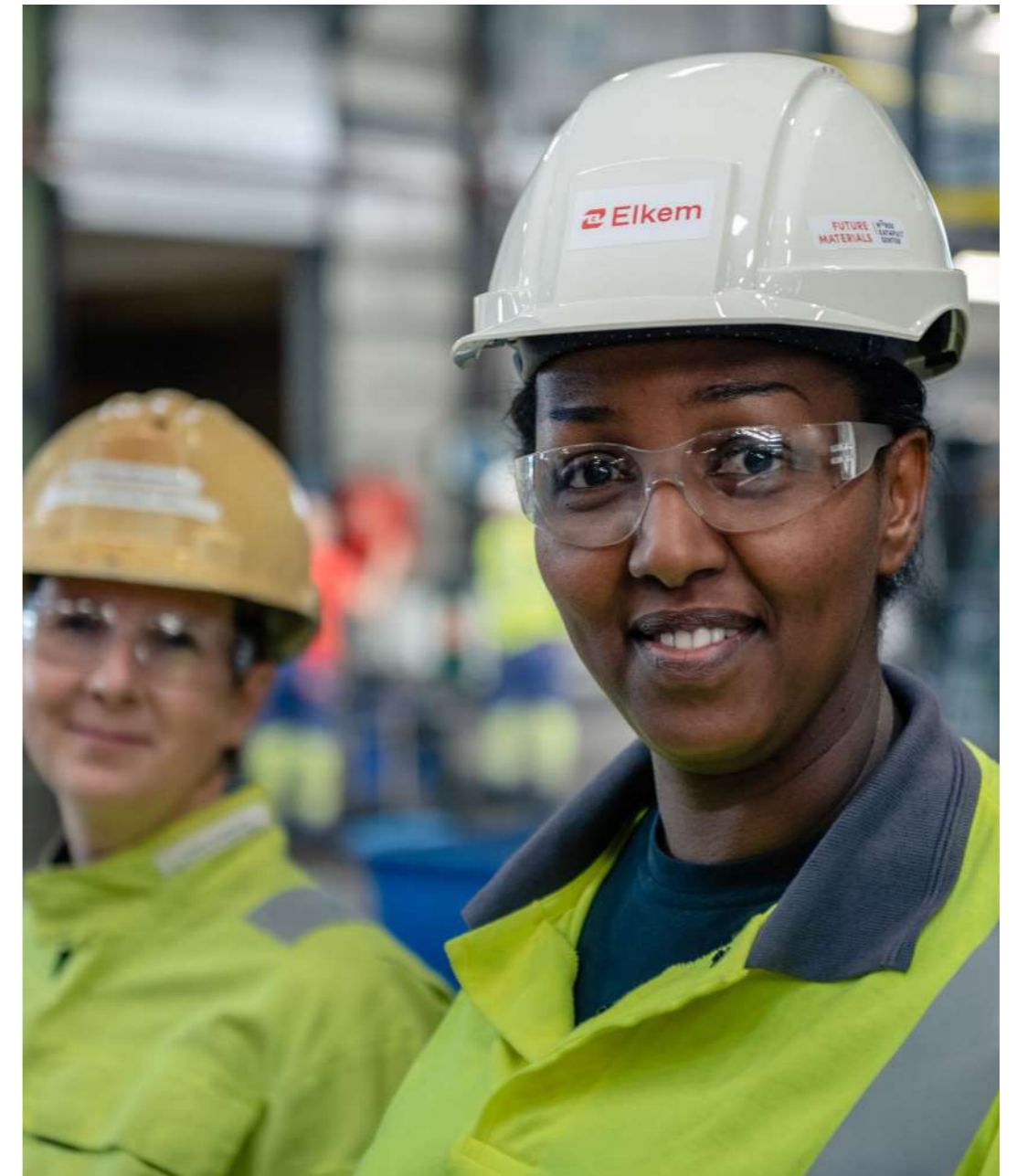
The social topics material to Elkem are:

- 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. [↗](#)

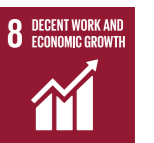
Key highlights in 2022

- 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%  |



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.

## 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.

## 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 [Z](#)

## 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

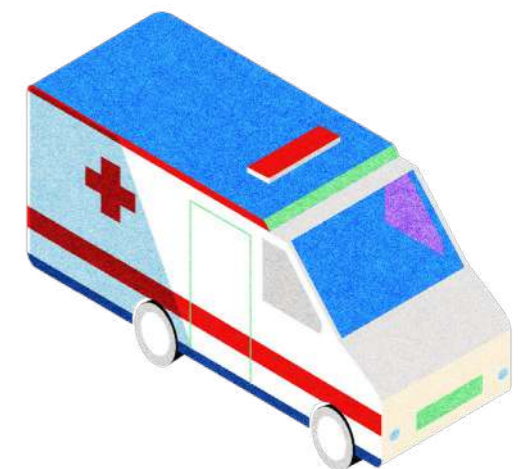
General requirements for recording, notification and classification of injuries and incidents are based on criteria from US OSHA, which are relevant for Elkem's type of industry. Elkem has a comprehensive digital incident management system and expects all employees to report any injuries, incidents, 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     | 0          | 0          | 0          | No change          |
|  | Rate                 | 0          | 0          | 0          |                    |
| High-consequence work-related injuries | Absolute no.<br>Rate | 1<br>0.1   | 0<br>0     | 1<br>0.1   | Number up 100%     |
| Lost workday injuries                  | Absolute no.<br>Rate | 13<br>0.9  | 21<br>1.5  | 10<br>0.8  | Number down by 38% |
| Other recordable injuries              | Absolute no.<br>Rate | 31<br>2.2  | 30<br>2.2  | 19<br>1.5  | Number up by 3%    |
| Total recordable injuries              | Absolute no.<br>Rate | 44<br>3.2  | 51<br>3.7  | 29<br>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     | 2         | 0         | 0         | Number up by 200%  |
|  | Rate                 | 0.3       | 0         | 0         |                    |
| High-consequence work-related injuries | Absolute no.<br>Rate | 2<br>0.3  | 0<br>0    | 0<br>0    | Number up by 200%  |
| Lost workday injuries                  | Absolute no.<br>Rate | 14<br>2.4 | 7<br>1.5  | 6<br>2.2  | Number up by 100%  |
| Other recordable injuries              | Absolute no.<br>Rate | 8<br>1.4  | 10<br>2.1 | 7<br>2.5  | Number down by 14% |
| Total recordable injuries              | Absolute no.<br>Rate | 22<br>3.8 | 17<br>3.5 | 13<br>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 82. [↗](#)

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 complainant 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 74. [↗](#)

### 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 initiatives 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 continuous 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         |
|---|--------|------|------|------|-----------------|
| <b>Female share</b>                                   |        |      |      |      |                 |
| 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 |                 |
| <b>Age distribution, employees</b>                    |        |      |      |      |                 |
| < 30 years  | %      | 16%  | 16%  | 14%  |                 |
| 30-50 years   | %      | 56%  | 56%  | 60%  |                 |
| >50 years   | %      | 28%  | 28%  | 26%  |                 |
| <b>Age distribution, management teams</b>             |        |      |      |      |                 |
| < 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 chronic 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

- x High risk markets
- x High value investments
- x Government interactions
- x Licenses and permits
- x 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<br>→ Corruption and fraud: 6<br>→ Conflicts of interest: 3<br>→ Inappropriate workplace behaviour and harassment: 4<br>→ Privacy violation: 1 | 13<br>→ Company / professional code violation: 1<br>→ HSE violation: 1<br>→ Corruption and fraud: 1<br>→ Human rights violation: 1<br>→ Conflicts of interest: 1<br>→ Inappropriate workplace behaviour: 7<br>→ Sanctions violation: 1 | 11<br>→ 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

|                            |   |
|----------------------------|---|
| <b>Product governance</b>  | Policies and management responsibilities  |
| <b>Product stewardship</b> | Regulations and standards, product safety (PS), advocacy, life cycle analyses               |
| <b>Product compliance</b>  | 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<sub>2</sub> 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).

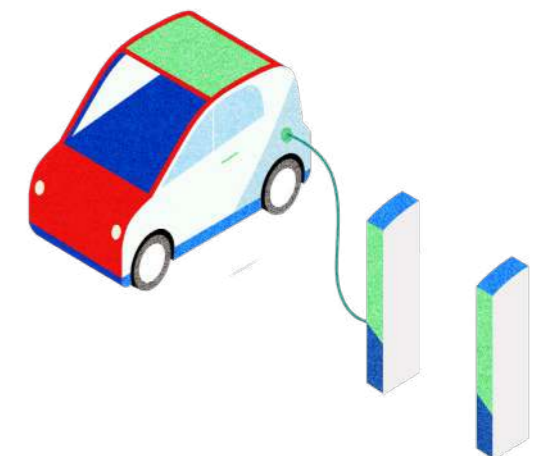
All transport is provided by professional transport companies that follow these standards and regulations.

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 (KKDİK 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 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.

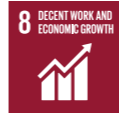
As a signatory to the UN Global Compact, Elkem supports the 2030 Agenda and is committed to develop our business in accordance with the framework. The UN Sustainable Development Goals (SDGs) were established in 2015 by the United Nations (UN) to build a more sustainable and equal world by 2030. The 2030 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  |
|---|---|--|--|---|
|  | <p>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.</p> <p><b>Our impact:</b> 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.</p> <p>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.</p> <p><b>Impacted by:</b> 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.</p> | <p><b>Target 8.7:</b> 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.</p> <p><b>Target 8.8:</b> Protect labour rights and promote safe and secure working environments for all workers.</p> | <p>No reported events of child and forced labour in Elkem</p> <p>One reported concern in supply chain</p> <p>No reported high severity injury</p> <p>Injury rate: 3.7, up from 2.3 in 2020</p> <p>Introduced human rights e-learning</p> <p>Employees covered by collective bargaining agreements: 39%</p> | <p>No reported events of child and forced labour in Elkem</p> <p>One sub-contractor fatality in India. One subcontractor fatality in China</p> <p>Injury rate: 3.2, down from 3.7 in 2021</p> <p>Human rights impact assessment conducted</p> <p>Employees covered by collective bargaining agreements: 40%</p> |

| SDG   | Impact analysis  | Prioritised SDG sub-targets Elkem reports on  | 2021   | 2022  |
|---|--|---|--|---|
|  | <p>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.</p> <p>Elkem has published an updated TCFD report in March 2023, with improved scenario and financial impact assessment. The full report is available here. <a href="#">2</a></p> <p><b>Our impact:</b> Greenhouse gas (GHG) emissions (CO<sub>2</sub>) 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<sub>2</sub> 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.</p> <p><b>Impacted by:</b> 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.</p> | <p><b>Target 13.1:</b> Strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries.</p> | <p>Scope 1: 2.34 mill. tonnes</p> <p>Scope 2: 901 000 tonnes</p> <p>Scope 3: 8.35 mill. tonnes</p> <p>Biocarbon share: 22%</p> <p>Energy recovery rate: 14%</p> <p>Increased ambitions announced in the climate roadmap</p> <p>CDP Climate change: A-, showing leadership in disclosure and transparency</p> | <p>Scope 1: 2.42 million tonnes</p> <p>Scope 2: 942 000 tonnes</p> <p>Scope 3: 7.38 mill. tonnes</p> <p>Biocarbon share: 20%</p> <p>Energy recovery rate: 11%</p> <p>Carbon group footprint: 6.9 kg CO<sub>2</sub> / kg produced</p> <p>CDP Climate: A-<br/>CDP Forests: A-</p> |



| SDG   | Impact analysis   | Prioritised SDG sub-targets Elkem reports on   | 2021  | 2022   |
|---|---|--|---|--|
|  | <p>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.</p> <p><b>Our impact:</b> 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.</p> <p><b>Impacted by:</b> 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.</p> | <p><b>Target 12.4:</b> 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.</p> <p><b>Target 12.5:</b> By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.</p> | <p>Have fully implemented environment management system in the organisation, with digital, quarterly reporting</p> <p>Total waste generated: 397,247 tonnes</p> <p>No significant spills of D4/D5</p> <p>CDP Water: B-</p> <p>Total waste diverted from disposal: 276,483 tonnes</p> <p>Share of process waste that was reused or recycled: 70%</p> | <p>Update on environmental management system</p> <p>Total waste generated: 462,745 tonnes</p> <p>No significant spills of D4/D5</p> <p>CDP Water: B</p> <p>Total waste diverted from disposal: 341,520 tonnes</p> <p>Share of process waste that was reused or recycled: 70%</p> |



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](http://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

State authorized public accountant (Norway)

(2)



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