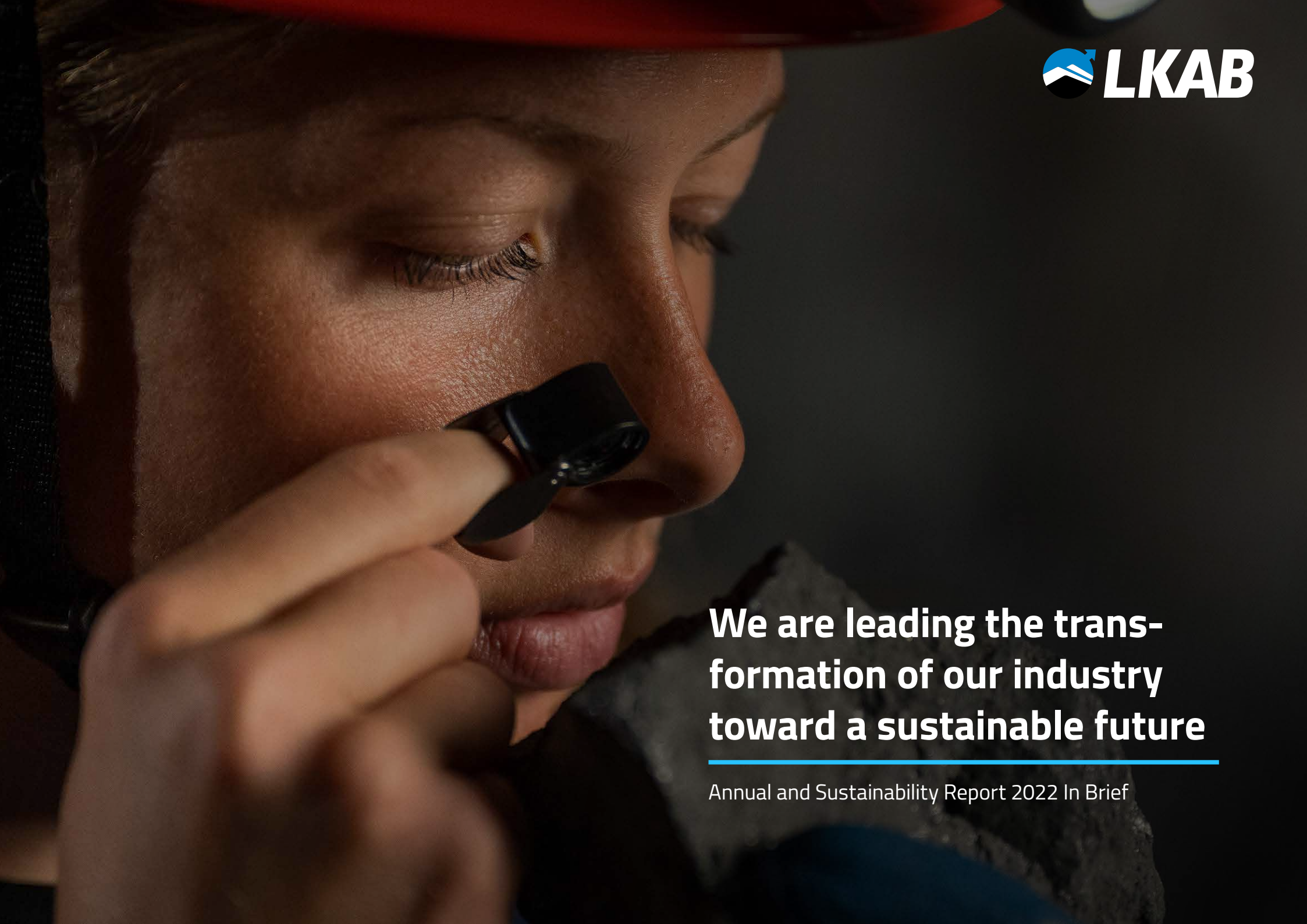
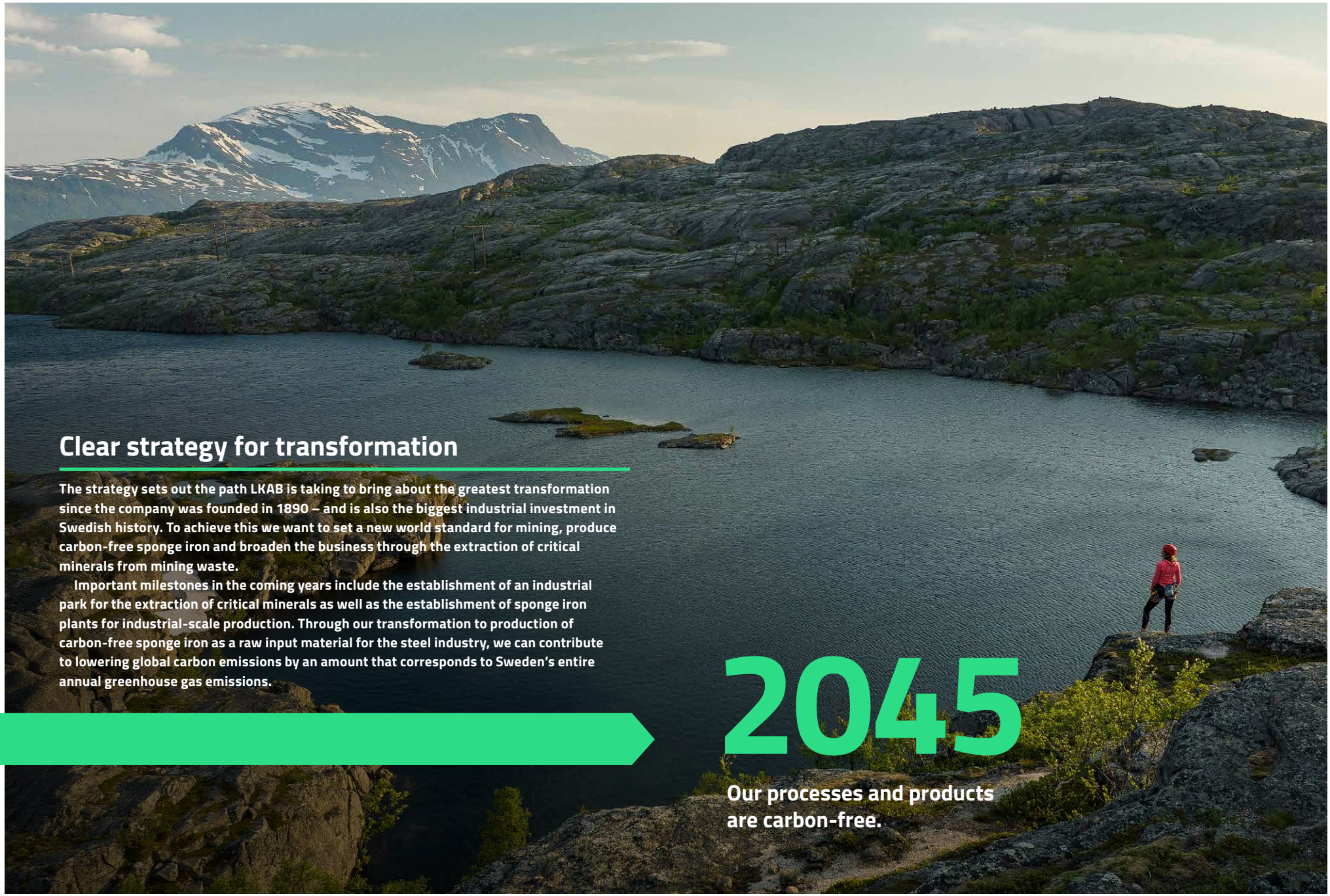


We are leading the transformation of our industry toward a sustainable future

Annual and Sustainability Report 2022 In Brief

Towards a new iron age

The world is facing a great challenge caused by emissions that are impacting the climate. The global iron and steel industry currently accounts for as much as a quarter of total carbon emissions from industry.



Clear strategy for transformation

The strategy sets out the path LKAB is taking to bring about the greatest transformation since the company was founded in 1890 – and is also the biggest industrial investment in Swedish history. To achieve this we want to set a new world standard for mining, produce carbon-free sponge iron and broaden the business through the extraction of critical minerals from mining waste.

Important milestones in the coming years include the establishment of an industrial park for the extraction of critical minerals as well as the establishment of sponge iron plants for industrial-scale production. Through our transformation to production of carbon-free sponge iron as a raw input material for the steel industry, we can contribute to lowering global carbon emissions by an amount that corresponds to Sweden's entire annual greenhouse gas emissions.

2045

Our processes and products are carbon-free.

Comments by the President and CEO

"We can and we want to
– but will we be allowed to?"

– Jan Moström, President and CEO

2022 has been one of LKAB's most successful years. We have made progress in various respects, but the hardest challenges still lie ahead of us – and in many cases are beyond our control.

Never has the future been so difficult to predict. The turbulence in the world around us, with the war in Ukraine, increased geopolitical tensions, the energy crisis and inflation, is affecting us all. Despite many uncertainties, however, we know that our strategy for the future remains firm. We will streamline production and broaden our business – while at the same time driving the transformation of the iron and steel industry.

Climate-impacting emissions are one of the greatest challenges of our time and despite good intentions, consumption of fossil fuels in the world remains high. With a fossil-free value chain from mine to steel we can make a noticeable difference for the climate. We are helping to lower global carbon emissions by 40–50 million tonnes, which is as much as today's annual greenhouse gas emissions for the whole of Sweden.

The transformation calls for cooperation on a broad front, and above all decisive action from politicians and other actors in society – with a particular focus on permit issues, energy supply and investments in infrastructure.

Strong year in an uncertain market

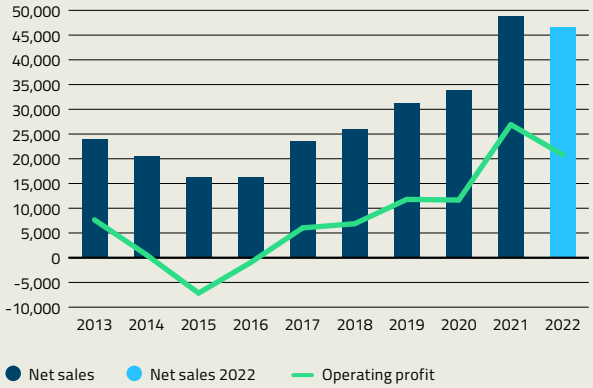
2022 has been a year edged with uncertainty, with LKAB nonetheless delivering strong results. Operating profit for the year amounted to nearly SEK 21 billion, which corresponds to an operating margin of 45 percent. This despite increased costs and lower revenues as a result of factors such as higher energy prices and disruptions in production.

The covid-19 pandemic continued to affect us well into this year. Measures to prevent the spread of infection meant that maintenance work was not able to be carried out to the extent we would have liked, and we therefore have a maintenance deficit that impacted our production volumes. In addition, capacity on the Ore Railway remained one of our greatest challenges, affecting our ability to transport the volumes demanded by customers.

Our deliveries of iron ore products during the year amounted to 25.8 (27.0) Mt and production amounted to 25.0 (26.7) Mt. The lower production volume is associated with production disruptions and extended maintenance shutdowns, particularly in Kiruna.

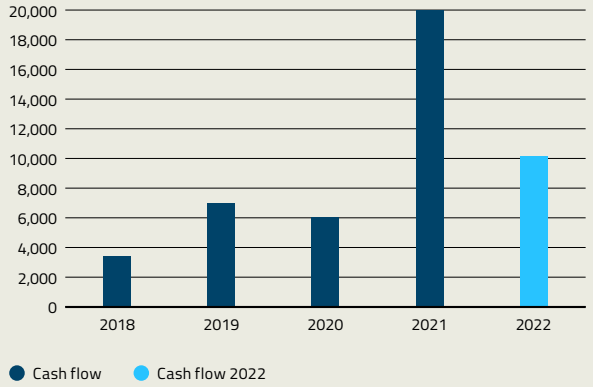
Net sales and operating profit

(MSEK)



Operating cash flow

(MSEK)



25.0

Produced (Mt)

25.8

Delivered (Mt)

We are also seeing the inconsistent production at the pelletising plants causing problems as regards our energy targets. Each new start-up of our plants increases energy consumption.

The iron ore price was volatile during the year, a consequence of the uncertainty we are seeing in the world around us. The average global spot price for iron ore was USD 120 (160) per tonne, which despite the downturn was a historically high level. Quoted pellet premiums also remained at a historic high. A strong dollar during the year also contributed positively to our results. Looking ahead there are indications of continued good demand for iron ore products.

Mine production, technology shift and increased value added

It is essential for all our operations that we have the ability to develop our mine production and mining methods for large-scale mining of iron ore at great depths. During the year work was carried out in various areas, such as development of our mining methods and autonomous production systems.

A key part of our transformation involves increasing the value which is added to our products by processing. We will do this through a gradual transition over a couple of decades, going from producing iron ore pellets to sponge iron, using hydrogen produced with electricity from Swedish fossil-free sources in the reduction process.

During the year we also received positive confirmation of the quality of the sponge iron. Research results within the framework of the HYBRIT initiative, which is being conducted in collaboration with SSAB and Vattenfall, show that direct reduction using hydrogen also results in a product that can lead to better processes and products among the customers. The pilot facility for storing fossil-free hydrogen in Luleå, which was taken into operation in the autumn, is the first of its type in the world and is also an important milestone.

In parallel we are making progress in the development of methods and standards for next-generation mining at great depths, which will be digitalised, autonomous and carbon-free. We are continuing to gradually introduce more battery-powered vehicles and to increase the degree of automation in the operations.

Critical minerals in LKAB's deposits

Currently, China and Russia account for by far the majority of production and exports of critical minerals. By utilising residual products from the iron ore mining we can extract rare earth elements, phosphorus and fluorine. This makes the most of resources and reduces Europe's import dependency for critical minerals, while at the same time broadening our business so that we become less sensitive to price fluctuations in the iron ore market.

The development of our circular industrial park in Luleå is an important step in this direction. We also have great hopes for the exploration results from the Per Geijer deposit in north Kiruna. This is estimated to be Europe's largest known deposit of its type and contains seven times as much phosphorus as the orebodies we are currently mining in Kiruna. As well as the possibility of making us free from imports of phosphorus ore from Russia, it is a significant building block for obtaining the critical raw materials needed for wind turbines and electric cars. This is of great importance for the competitiveness of European industry and for managing climate change in Europe.

Our values

Committed
Our customers' results are the focus of everything we do

Innovative
We emphasise creative thinking to drive improvements forward

Responsible
We think long-term, are respectful and put safety first

Overview and key financial ratios

	2022	2021
Net sales, MSEK	46,543	48,812
Operating profit, MSEK	20,799	26,898
Costs for urban transformation provisions, MSEK	-545	-372
Net financial income/expense, MSEK	-2,119	1,484
Profit/loss before tax, MSEK	18,680	28,382
Profit/loss for the year, MSEK	15,080	22,604
Capital expenditure on property, plant and equipment, MSEK	4,944	3,359
Operating cash flow, MSEK	10,156	19,988
Return on equity, %	21.7	39.0
Net debt/equity ratio, %	-17.1	-24.5
Dividend to owner[1], MSEK	7,540	12,430

1) The dividend proposed by the Board of Directors is subject to approval by the Annual General Meeting on 27 April 2023.

Non-financial key ratios

	2022	2021
Carbon emissions, kt	661	713
Energy use, kWh per tonne of product	176	171
Accident rate	6.5	8.2
Number of permanent employees at year-end	4,952	4,825
Percentage of women among permanent employees, %	26	25

90 %
The Iron Ore business area's share of Group sales

10 %
The Special Products business area's share of Group sales

To meet the needs that exist and increase Europe's processing capacity LKAB has partnered with Norwegian company REEtec, and as of November has also become its new principal shareholder. REEtec has developed an innovative and sustainable process for separating rare earth elements to compete with the dominant Chinese production, with 90 percent lower carbon emissions. Processing is the next step in the value chain for the concentrates of rare earth elements that the industrial park in Luleå will extract.

Complex, protracted and unpredictable permitting processes are hampering efforts

Permitting processes are still one of our greatest challenges, and we cannot overemphasise the importance of making these more predictable and efficient.

The Land and Environment Court's rejection of our appeal against the earlier ruling on a permit for the operations in Kiruna is a clear example of a lack of alignment between what is needed, the will to provide it and resource efficiency. LKAB's appeal for the matter to be reviewed was subsequently rejected by the Supreme Court. In these types of permitting processes we need clearer directives in order to be able to live up to and steer towards society's shared goals for the environment and climate. Otherwise it will entail an waste of resources for us and for society in general.

In Malmberget in Gällivare the permitting issue will be crucial. For both the mine and the processing operations to be able to deliver planned volumes, the necessary permits must be in place. The ongoing process includes an application relating to both augmented production in existing plants and production in the world's first facility for hydrogen-produced sponge iron on an industrial scale.

It needs to be underlined that we are entirely dependent on permits in order to maintain our current production and realise the climate transition of the iron and steel industry. This is not a new issue, and constructive dialogue is no longer enough; words must now be put into action.

Society's need for energy is increasing

As one of Europe's leading industrial companies there is a high expectation on us to reduce emissions of carbon dioxide. These are expectations that also apply to other industries within the EU, and that will increase as and when the EU introduces its forthcoming taxes on carbon emissions. The energy needs of society and of LKAB will not reduce in the future; rather the contrary. We expect our energy requirement for future production to be just over 70 TWh per year, which represents almost half of Sweden's total electricity production today. To be able to deliver in accordance with expectations and with both financial and climate targets, a major and broad initiative in respect of fossil-free energy is therefore needed.

At present, Sweden's energy policy does not support the necessary change that the Swedish industry is facing. Against the background of the geopolitical security situation in Europe the costs of natural gas and fossil fuels have soared – making it even more important to focus on energy sources that are fossil-free. We believe wind power to be the best option by far in the short term.

In Sweden we have the advantage of being one of the countries in the world with the very best conditions for producing fossil-free energy. However, the political will is needed and society needs to take responsibility to make this possible. We are in continual discussions with authorities and are evaluating options for LKAB's future energy supply with several actors, including Vattenfall.

Key events in 2022

- Operating profit for the year amounted to nearly SEK 21 billion, which corresponds to an operating margin of 45 percent. This despite increased costs from factors such as higher energy prices and disruptions in production.
- Although lower than last year, the average global spot price for iron ore products remained at a high level and averaged USD 120 (160) per tonne for the year.
- Production volumes amounted to 25.0 Mt compared with 26.7 Mt in the previous year and were affected mainly by extended planned maintenance shutdowns, start-up problems following maintenance shutdowns and production disruptions at the processing plants in Kiruna.
- Lower production volumes affected delivery volumes, which amounted to 25.8 Mt compared with 27.0 Mt in 2021.
- Preparatory groundworks for the first demo plant for hydrogen-based production of sponge iron on an industrial scale began in the industrial area in Malmberget.
- Exploration results indicate significant quantities of rare earth elements and phosphorus in the Per Geijer deposit in Kiruna. The deposit is estimated to be one of the largest sources of rare earth elements discovered in Europe.
- LKAB became principal shareholder in Norwegian company REEtec, which has developed technology for separation of rare earth elements. This puts the conditions in place for building a Nordic value chain for rare earth elements.
- The Supreme Court did not grant leave of appeal against the ruling by the Land and Environment Court of Appeal in the environmental assessment of the operations in Kiruna. LKAB has begun a new permit application.

Infrastructure – a key issue

Every year we transport millions of tonnes of iron ore products by rail to the ports in Narvik and Luleå on Sweden's most heavily trafficked railway. As mentioned previously, capacity on the Ore Railway is a major challenge for LKAB. Both we and other industrial actors depend on having a functioning infrastructure in order to be able to transport products to the outside world within the scope of the demand and needs that exist globally. The quality of the Ore Railway is suboptimal, however, after multiple years of maintenance being neglected. What is needed is continued and preventive maintenance of the existing track while at the same time expanding the railway's capacity. We also need to introduce double tracks, for example, to cope with the increased volumes brought about by our own initiatives and those of other industrial actors.

Continued initiatives for skills supply

A supply of skilled workers is critical to manage the future we see for LKAB. We are implementing extensive initiatives to develop and retain existing employees, but also to attract new talent. Making LKAB attractive among the competition that exists in the region is key to being able to deliver on our ambitious strategy and achieve our transformation to carbon-free products and processes by 2045.

It is also crucial that our operating locations are attractive communities where more people want to live and work. The extensive urban transformations in Kiruna and Gällivare, which are a consequence of the physical extent of the mining, also provide us with great opportunities in this respect. During the year we achieved a milestone with the grand opening of Kiruna's new city centre. We have been a major participant in the development of Kiruna's new central area and we are continuing to work in partnership with the municipality and local businesses to make the region even more attractive.

LKAB – a safer workplace

For a long time we have been making targeted efforts to ensure that LKAB is a healthy and safe workplace. Safety efforts have the highest priority and the key is to have a culture in which people take responsibility for their own safety and that of their colleagues. Leadership and collaboration are important elements in maintaining such a culture.

During the year the number of accidents amounted to 6.5 per million hours worked. This is a clear improvement on the previous year when the figure was 8.2, but is still a long way from our long-term goal. We can see that our systematic proactive efforts are having an effect and we will continue with these. "Safety first" is our shared framework, and the golden rules set out in this framework reflect how we work together.

The future is bright – if we are given the opportunity

We are one of Sweden's biggest and oldest industries and we are taking the lead in the biggest industrial investment in Swedish history. By setting a new world standard for mining, transitioning to producing carbon-free sponge iron and extracting critical minerals from mining waste we are making the biggest contribution Sweden can do for the climate. To achieve this we are highly dependent on external factors and decisions that are beyond our control. Our most exciting years are ahead of us, but it needs many of us to work together. I look forward to a 2023 in which more of us put words into action.

Luleå, 28 March 2023

Jan Moström, President and CEO

Our strategy enables reduced emissions and increased sales

A crucial part of our strategy is to increase the value added by processing through a gradual transition to the production of carbon-free sponge iron. Once fully implemented, our transformation will mean we have carbon-free processes and products while at the same time lowering total carbon emissions from our customers' steelmaking by 40–50 Mt per year. This is approximately equal to Sweden's entire annual emissions of greenhouse gases.

40–50 Mt

Contribute to reducing our global customers' emissions by 40–50 Mt

1/1

A reduction equivalent to Sweden's annual emissions of greenhouse gases

3x

Sales to be tripled

Strategy

By 2045 LKAB's processes and products shall be carbon-free. We are increasing the value of our products, streamlining production and broadening our business – while at the same time making a real difference for the climate.

Mission

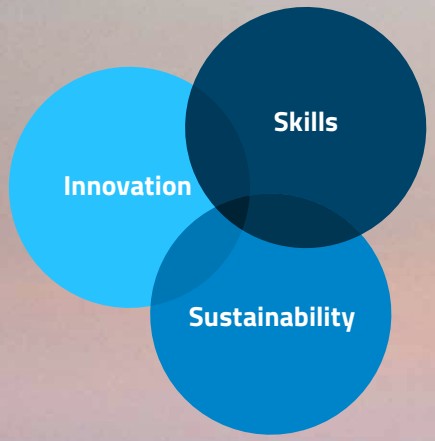
The innovative and competitive mining and processing of iron ore and minerals to produce climate-efficient quality products.

Vision

We are leading the transformation of our industry toward a sustainable future.

Our focus areas

Innovation, skills and sustainability are our key focus areas for success.



Strategic goals for 2030

Our strategic goals for sustainable value creation for the period 2022–2030 aim to support our vision of leading our industry toward a sustainable future.

Stable and efficient operations

We shall have the financial strength required to support our strategy and increase flexibility in our transformation.

Safe, healthy and stimulating workplace

We shall be the best workplace for recruiting, retaining and developing the skills we need, thereby contributing to future prosperity and communities that are good places to live and work in.

Climate-efficient, sustainable transformation

We shall lead the transformation of the iron and steel industry for a better climate and sustainable development.

Our strategy sets out the path we are taking to achieve carbon-free processes and products, and secures our competitiveness in the long term. As we move forward in the value chain and create increased growth, we are at the same time building Norrbotten into an innovation cluster for the mining and minerals industry of the future. Three important areas will enable the transformation.

2045

New world standard for mining operations

Mining iron ore profitably and safely at great depths, and moreover by carbon-free processes, demands a high level of expertise in mining design, methods and planning. Ongoing work is therefore taking place at LKAB to develop a new world standard for mining through digitalisation, automation, electrification and new ways of working. In so doing we are laying the foundation for a new value chain including further processing into sponge iron.

Milestones in 2022

- Work to develop a new main design, to adapt mining methods to great depths and to ensure optimal planning of the mining is progressing and will form a foundation for future mine surveys.
- The electrification of vehicles and machinery is an important piece in the puzzle for carbon-free mining production. In 2022 a battery-powered loader and battery-powered underground truck were evaluated in Kiruna and an electric goods vehicle was delivered to Gällivare. The result showed increased flexibility, reduced emissions and a better working environment. In the Kiruna mine half of all loading is now carried out by remote-controlled autonomous machinery.

Future supplier of carbon-free sponge iron

Production capacity for sponge iron is being built up in stages based on technology that uses hydrogen produced with fossil-free electricity. We are strengthening our position in the value chain, increasing the value of our products and enabling carbon emissions to be reduced significantly throughout the value chain.

Milestones in 2022

- Research shows that iron ore from LKAB that has been direct-reduced with hydrogen yields a product of very high quality. This is confirmation that fossil-free production, in addition to climate benefits, can also lead to better industrial processes and products.
- The pilot facility for storage of fossil-free hydrogen in Luleå was taken into operation. The rock cavern facility is the first of its type in the world for the storage of fossil-free hydrogen. The test period runs until 2024.
- Preparatory groundworks for the first demo plant for hydrogen-based production of sponge iron on an industrial scale began in the industrial area in Malmberget.

Broadening the business with extraction of critical minerals

Strategically valuable earth elements and phosphorus are to be extracted from our raw materials flows, enabling us to move into new markets for minerals use.
The earth elements are used within technologically advanced applications such as permanent magnets, while phosphorus is needed in mineral fertilisers for agriculture.

Milestones in 2022

- Exploration results indicate significant quantities of rare earth elements and phosphorus in the Per Geijer deposit in Kiruna. The deposit is estimated to be one of the largest known sources of rare earth elements in Europe to date.
- The land allocation agreement for LKAB's new industrial park for rare earth elements and phosphorus in Luleå was completed, enabling consultation to begin. The establishment is expected to bring in extensive investment and jobs.
- LKAB became principal shareholder in Norwegian company REEtec, which has developed unique technology for separation of rare earth elements with higher environmental performance. This puts the conditions in place for building a Nordic value chain for rare earth elements.

The world around us and market trends

Global greenhouse gas emissions need to decrease substantially, and within a short period of time.
The transformation required is affecting external conditions for all actors in society, including the iron and steel industry.

Iron and steel remain important basic materials for the construction of infrastructure and buildings as well for the transport sector and industry. Greater prosperity leads to consumption of steel both in developing countries and in reinvestments in industrialised countries. Steelmaking consumes large quantities of carbon, however, resulting in significant carbon emissions.

To achieve climate neutrality entire value chains need to transform, and account needs to be taken of the relationship of mutual dependence between companies and stakeholders. In various countries manufacturing industry is working in partnership with the iron and steel industry and other industries to reduce their climate footprint and secure long-term competitiveness. In the Nordic region such collaboration has been ongoing for a number of years. The transformation demands collaboration and decisions throughout society, and it calls for decisive political action and broad social acceptance. Raw materials are needed from the mining industry along with an expansion of energy systems and of infrastructure in order to reduce greenhouse gas emissions. With the right conditions in place and if implemented in the right way, competitiveness will be enhanced.

Increased costs for carbon emissions

It already costs to release carbon emissions in the EU and the cost is expected to increase when the free allocation of emission allowances reduces over the coming 10 years. Within the industries where there is a risk of competition being distorted or production being moved outside the EU, the allocation of emission allowances is expected to be replaced by a tax on the climate footprint of imported products. The steel industry is one of the industries affected. Various systems for taxing carbon emissions are expected to be introduced around the world, but at a differing pace. Analysts[1] predict that the cost of carbon emissions will increase but also that the cost of measures will come down over time. The EU currently has the most extensive programme in the world for taxing carbon dioxide and this is expected to remain the case for the coming 10–15 years.

Emissions from the global steel industry average around two tonnes of carbon dioxide per tonne of steel. This is the level of emissions from blast furnace-based steel production, with variation between companies and plants. Steelmakers in the EU receive a free allocation of emission allowances, but as this system is phased out the costs will increase – becoming significant unless the steel companies reduce emissions substantially.

1) Analysts: companies engaged in analysis of the value chain for iron and steel which sell these analysis services. LKAB buys analysis services from several such companies.

We are leading the transformation of our industry toward a sustainable future.

Increased costs for energy

Steelmakers in the EU have long been planning to replace coal with natural gas as a first step until new systems with no climate footprint can be built up. The transition from coal to natural gas will reduce emissions, which may enable the targets that the companies have set for 2030 to be achieved. Known paths to achieving climate-neutral production include hydrogen-based systems using fossil-free power and solutions for storing carbon dioxide.

Plans by the iron and steel industry and other industries within the EU for reducing carbon emissions did not fundamentally change in 2022. However, the changed situation as regards political security resulted in increased costs for industries that are using natural gas and other fossil fuels as a first step towards reducing emissions and for industries that are electricity-intensive. The higher cost level for natural gas and electricity in Europe is expected to remain for several years and this may result in the companies changing their investment schedules. This could in turn lead to decisions on state assistance for investments and on investments in electric power being brought forward.

The iron ore market is changing

Analysts are predicting lower steel consumption in China over the coming 10–15 years, which will result in low growth in global demand for steel. Lower demand in China is expected to be followed by lower domestic steel production and lower iron ore production. Since the global steel industry is transforming step by step from blast furnaces to electrified steelmaking and new production processes, the mix of raw materials will change. Scrap iron is expected to make up a higher proportion of the raw material used and demand for sponge iron will increase. The input material for the production of sponge iron using conventional technology is iron ore pellets.

Lower demand for steel in China and increased proportion of scrap as an input material is likely to lead to a reduction in demand for standard-grade iron ore fines and iron ore with a lower iron content, with a simultaneous expected increase in demand for iron ore pellets and the high-grade ore that LKAB produces.

Gradual phase-out of carbon-based steelmaking

The shift from carbon-based to electrified processes will increase demand for electricity. The pace of the transition, and the time when the demand for electricity arises, will depend on the conditions for establishing electrical power, the level of technological maturity of the new processes and financial developments for managing the significant investments required. The steel companies can be expected to gradually reduce or shut down production capacity with carbon emissions from the time that their blast furnaces have to undergo extensive renovation, which will take place over a period of 15–20 years.

Sustainable value chains

Securing both environmental and social sustainability through global value chains is a challenge. Geopolitical developments have also highlighted the issues surrounding the risks of import dependency. Extracting rare earth elements (REEs) and phosphorus from apatite found in residual waste from the Swedish iron ore operations meets the need in the EU for what are classed as critical minerals.

Demand for REEs is driven by future areas such as electrification, the transition to fossil-free energy generation and the storage of energy. Access to effective fertiliser products based on phosphorus is also a priority within the EU. Flows of phosphorus and REEs to Europe from existing countries of supply such as Russia and China are expected to be uncertain in the long term.

Well positioned

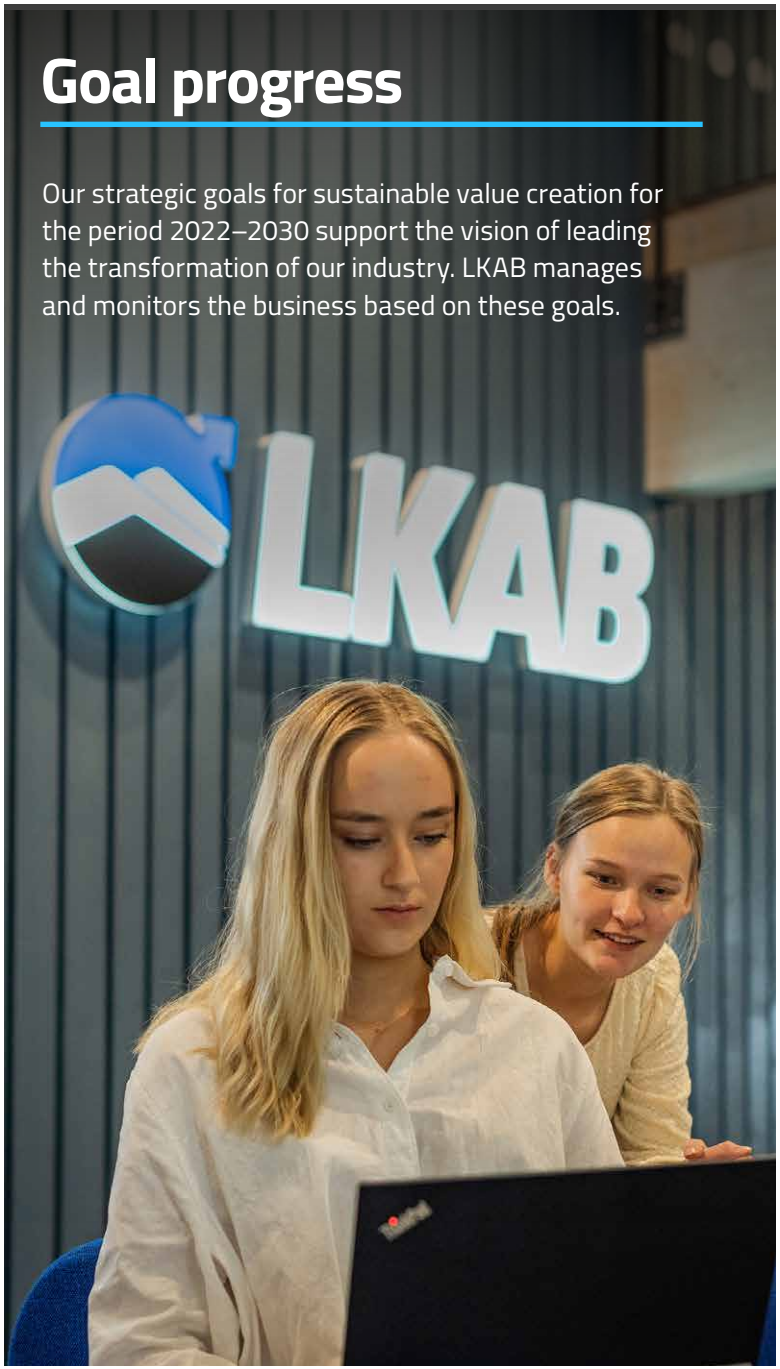
LKAB has a strong position as an enabler in the steel industry's step-by-step transformation. This is a shift that is taking place gradually and that is also expected to impact demand for various raw input materials over the coming 20 years. As the steelmakers' production processes change, LKAB will gradually build up its capacity to produce sponge iron using fossil-free power. The need for sponge iron and high-grade iron ore pellets produced without fossil energy will increase, both in LKAB's existing markets and globally.

Highly competitive

Analysts consider LKAB to be highly competitive when production costs are weighed together with the companies' differences in revenue per tonne of ore. Mining under ground involves higher costs compared with large iron ore companies that have open-pit mines, but LKAB's ore largely consists of magnetite – which has a higher yield and a consistently high iron content, making it a good starting point for pellet production. LKAB receives a premium for iron ore pellets and can utilise the energy present in the magnetite ore when producing pellets.

Goal progress

Our strategic goals for sustainable value creation for the period 2022–2030 support the vision of leading the transformation of our industry. LKAB manages and monitors the business based on these goals.



Stable and resource-efficient operations[1)]

	2022	2021	Goal for 2026	Goal for 2030
Net debt/equity ratio, %	-17.1	-24.5	<60%	<60%
Return on equity, %	21.7	39.0	>9%	>9%
Dividend, %	50%[2)]	55%	40–60%	40–60%

Comments: Strong earnings and cash flow result in a negative net debt/equity ratio and a high return on capital. The net debt/equity ratio increased during the year as a result of the dividend to the owner of SEK 12.4 billion.

Safe, healthy and stimulating workplace

	2022	2021	Goal for 2026	Goal for 2030
Accidents involving absence per million hours worked	6.5	8.2	4	2
Long-term sick leave (%)	0.7	0.6	0.8	0.8
Women in the workforce (%)	26	25	30	–[3)]
Women managers (%)	28	27	30	–[3)]

Comments: LKAB is able to report an improvement in the lost-time accident rate and in serious incidents during the year. Group-wide efforts focusing on the safety culture are in progress to prevent and mitigate serious incidents and to ensure safe and healthy workplaces. During the year there was an increase in both the percentage of women in the workforce and the percentage of female managers.

Climate-efficient sustainable transition

	2022	2021	Goal for 2026	Goal for 2030
Energy use (kWh per tonne of finished product)	176	171	162	154
Carbon emissions (kt)	661	713	608	536
Biodiversity[4)]	–	–	–	–

Comments: Energy use has increased compared with 2021 due to a greater number of unplanned stoppages combined with lower availability in the pelletising plants. This is a consequence of the maintenance deficit built up during the pandemic years when planned maintenance was reduced to maintain a safe work environment.

Carbon emissions have decreased compared with the previous year, mainly through lower production and use of an increased percentage of tall oil pitch.

Biodiversity

LKAB is following Svemin's biodiversity roadmap, with the objective that by 2030 the Group will contribute to a biodiversity net gain in the regions where we operate. The interim goal for 2026 is for LKAB to have established a systematic way of working for increased biodiversity. Biodiversity efforts are being planned in order to create the conditions for this. Guidelines describing the goal and working method have been developed, and workshops were held during the year. Read more about our biodiversity efforts at lkab.com

1) The relevant financial targets were established by the Board in October 2021.
2) The dividend proposed by the Board of Directors is subject to approval by the Annual General Meeting on 27 April 2023.
3) The goal for 2030 is to achieve a 60/40 gender distribution in management teams.
4) For a description of the goals and status see the section Biodiversity above.

Our value chain

Our operation form the basis of many and extensive value chains. Through our responsibility and our own transformation, we have great opportunities to influence these in a sustainble direction. More than 95 percent of the emissions in our value chain are attributable to suppliers and customers. It is therefore important that we create the conditions for them to lower their emissions at the same time as making efforts to reduce our own.

Suppliers

LKAB works in partnership with strategic suppliers to increase sustainability, productivity and cost efficiency. As a significant purchaser, we are influential and have the opportunity to make an impact. In total we have around 5,400 suppliers around the world.

Exploration

Exploration secures the supply of iron ore and other minerals in the long term. In addition to geological expertise, we need access to land areas that potentially contain ore. In return we need to respect the surrounding area, take responsibility for the environment and cooperate with local livelihoods.

Mining

Every day around 135,000 tonnes of crude ore is mined in our underground mines and open-pit mines in Kiruna, Malmberget in Gällivare and Svappavaara. The mining impacts the landscape and it is essential that we cooperate with authorities and local communities.

Processing

The iron ore we mine is processed in our plants. The process is highly energy-intensive and LKAB is one of Sweden's biggest consumers of energy. Increased resource efficiency and decreased environmental impact have a high priority. Among other things, we are working to phase out fossil fuels and working on measures to ensure that over time we are a net contributor to biodiversity.

Transport

Millions of tonnes of iron ore products are transported annually by rail to the ports of Narvik and Luleå for shipment to customers around the world. LKAB is one of Sweden's biggest freight companies and accounts for around 40 percent of the freight on Swedish railways – which demands a logistics system that is world-class in terms of capacity and sustainability.

Customers

The iron ore products we supply are used as inputs by steelmakers with high requirements as regards reliable deliveries, consistent quality and sustainability. Steel made with LKAB's pellets results in 14 percent lower carbon emissions compared with steel produced at an average sinter-based European steelworks.

Metals and minerals in society

The steel products are sold and processed by manufacturing industry into end products such as machinery, tools, cars, mobile phone masts, wind turbines, railways, bridges and buildings. As a supplier of the raw materials for these products we have great opportunities to positively impact this part of the value chain.

Our core business is supplemented by a growing industrial minerals portfolio, where the focus is on extracting critical minerals from mine waste. In today's society some form of mineral is used in most products and industrial processes.

Resource recycling

Steel is society's most recycled construction material. There are also opportunities for resource recycling and increased circularity earlier in the value chain: we use waste rock from the mines to produce ballast materials for the construction industry, while waste heat from the plants is reused for district heating.

LKAB is also running development projects to extract mineral fertiliser (phosphorus) and rare earth elements from mine waste. Slag from steelmaking is used to produce Ground Granulated Blast Furnace Slag (GGBS), a more sustainable alternative to cement.

Our contribution to Agenda 2030

The UN Sustainable Development Goals make up the world's shared Agenda 2030. The goals are integrated and cover three dimensions of sustainable development: economic, social and environmental. As a supplier to global industries, but also as a business partner, purchaser, member of society and significant employer, LKAB has both an opportunity and a duty to exert its influence on all these dimensions – both locally and globally.

Value creation

Our mission is to innovatively and competitively mine and process iron ore and minerals to produce climate-efficient quality products. LKAB has a strong tradition of taking responsibility and being a positive force for development – as a supplier to a global industry, but also as an employer, a collaborative partner and as a part of the community.

Iron Ore

Operations within the Iron Ore business area take place mainly in Norrbotten, Sweden's northernmost county, where we have mines and processing as well as logistics for transport by rail and sea. Already today our products offer a cleaner value chain for steelmaking. Steel made only with LKAB's pellets results in 14 percent lower carbon emissions compared with steel produced at an average sinter-based European steelworks.

90%

The Iron Ore business area's share of Group sales

Special Products

The Special Products business area develops products and services that create value in other markets or enhance the competitiveness of our iron ore operations. The operations are mainly conducted within wholly owned subsidiaries and comprise divisions within the following areas:

- industrial minerals
- products and services for the mining and construction industries
- a development division which forms a hub for the critical minerals business

10%

The Special Products business area's share of the Group's external sales

approx. 4,500	MSEK 5,085	5,400	MSEK 17,336	MSEK 4,564	MSEK 7,540
Average number of employees	**Paid in wages, salaries and employee benefits**	**Suppliers**	**Payments to suppliers**	**Taxes**	**Proposed dividend to owner, the Swedish state**

Iron ore for a global steel industry

LKAB's future market is carbon-free sponge iron, but the existing market for iron ore pellets will continue to provide the framework for our profitability for a long time to come. The transformation of the steel industry is expected to take place successively, with a transition to processes that utilise climate-efficient iron ore pellets as a step along the way.

Market and position

LKAB is an important supplier of iron ore products to Western Europe and accounted for around 85 percent of iron ore production within the EU in 2022. Globally we are a leading supplier of seaborne iron ore pellets. Our leading position is built on a long-term reliable supply of iron ore with a consistently high iron content that we upgrade into iron ore products for steelmakers with high requirements of delivery reliability, quality and climate-efficiency. Europe is our largest market, followed by the Middle East, North Africa, the USA and Asia.

Market developments in 2022

The year began with increasing demand for seaborne iron ore. China – which has a significant role in global pricing – increased its steel production, resulting in higher prices for iron ore during the first quarter. During 2022, China's economic growth was mainly impacted by the country's strict Covid-19 restrictions. Combined with lower than expected growth and lower demand for steel, this led to the country cutting back on steel production in the second half of the year, resulting in a slowdown in demand for iron ore and lower prices in the seaborne iron ore market. Steel production decreased by 2.1 percent in China and total production of steel in the world decreased by 4.2 percent over the year as a whole.[1)]

The outbreak of the war in Ukraine in February was a game-changer and had a major impact particularly in Europe. Both Russia and Ukraine have traditionally been major suppliers of both steel and other important input materials for steel production. After the war broke out, the prices of these inputs initially increased. Prices were subsequently curbed by rising energy prices, increased inflation and higher interest rates. However, price premiums for iron ore pellets were buoyed up by a shortage of seaborne pellets following a decrease in deliveries from Eastern Europe and temporary export duties on pellets from India.

The average global spot price for iron ore products over the year was USD 120 per tonne, which was USD 40 lower compared to the previous year. At the end of the year the price level was USD 117 per tonne. Quoted pellet premiums have generally been high, reaching a historic peak during the year as a result of the shortage that arose on the seaborne pellet market.

There is significant uncertainty in the world around us and the market outlook is difficult to judge. However, the demand for LKAB's iron ore products continued to be good during the year with the need for iron ore pellets remaining stable.

Deliveries and production

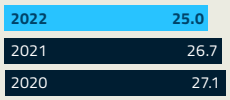
Production stability and continuous improvement are key for the business. In 2022, LKAB delivered 25.8 (27.0) Mt of iron ore products, of which pellets represented 83.0 (83.0) percent. Volumes were affected by lower production volumes, mainly as a result of production disruptions at the processing plants in Kiruna and also to a certain extent in Svappavaara. In Malmberget, on the other hand, production remained stable at a high level. In total, production amounted to 25.0 (26.7) Mt. The production of crushed ore continued to be affected by the substantial seismic event in the Kiruna mine in spring 2020, but supply of crushed ore between the operating locations helped to supply the processing plants.

Operating locations and iron ore production

The extensive changes in the communities of Kiruna and Gällivare as a result of the mining are taking place gradually, with the majority of residents affected in some way. The proximity of the communities to the mining operations means that the urban transformation is being planned meticulously and carried out carefully. During the year, the grand opening of Kiruna's new city centre was a much appreciated milestone for the residents. Read more at lkab.com.

25.0 Mt

Iron ore products produced



25.8 Mt

Iron ore products delivered

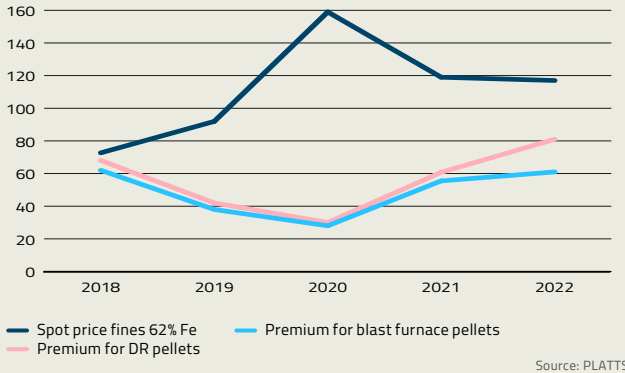
1) World Steel Association.

Operations summary

MSEK	2022	2021
Net sales	43,288	46,146
Operating profit/loss	21,322	27,625

Development of iron ore price and pellet premium

(USD per tonne)

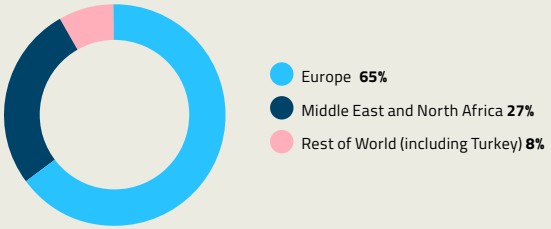


Source: PLATTS

Based on prevailing market conditions and demand for iron ore fines on the spot market, price indexes and estimates are published for iron ore products of different grades based on iron content, processing, freight costs and various premiums or different price deductions due to less favourable quality. For LKAB, which has a consistently high iron content and higher processing costs, it is essential that the products are sold at a premium.

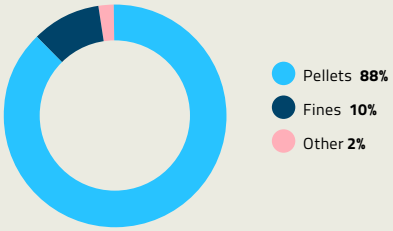
Sales by region

Percentage of sales (MSEK)



Sales by product area

Percentage of sales of iron ore products (MSEK)



Provisions for and costs of the urban transformations

LKAB's provisions during the year for the urban transformations in our operating locations amounted to MSEK 13,644 (14,423). The costs for provisions for the urban transformations in 2022 amounted to MSEK 545 (372). Disbursements totalled MSEK 2,216 (2,681).

Facts about the Iron Ore business area

The operations include mines and processing plants in Kiruna, Svappavaara and Malmberget in Gällivare, as well as rail freight services and ports in Luleå and Narvik.

Our iron ore

The iron ore we mine consists mainly of high-quality magnetite. This is naturally magnetic, which facilitates its concentration and means less external energy is required during pellet production. The iron content after concentration is over 70 percent. Its consistent quality over time makes it sought-after in the market.

Our products

LKAB primarily processes the iron ore into pellets. When customers use pellets instead of sinter in their processes the emissions from steel production are reduced.

- **Blast furnace pellets** are used to produce iron in blast furnaces, the iron ore being reduced and the pellets melted using coal. The liquid iron is then processed into steel in the neighbouring steelworks.
- **Direct reduction pellets**, or DR pellets, are used by customers that reduce the pellets in direct reduction plants using natural gas (or in the future hydrogen) to produce sponge iron (HBI/DRI) that is subsequently melted in an electric arc furnace and processed into steel.
- **Fines** means crushed, concentrated iron ore that our customers sinter together into lumps in a sinter plant before it can be reduced and melted during ironmaking in blast furnaces.

Industrial minerals and strategic products and services

The Special Products business area supplements the iron ore business by developing and selling services and products for applications other than steelmaking. This is a growing area and includes various innovative development projects for extracting critical minerals from mining waste. These operations have an important part to play in our transformation.

Market and position

The Special Products business area accounts for 10 percent of the Group's external sales – a share that is growing through organic growth, acquisitions and the development of new business along the value chain. The operations are mainly conducted by wholly owned subsidiaries that work in partnership with and support the production chain for iron ore products while at the same time broadening the business to include external markets.

Industrial minerals

Minerals are used in the production of everything from paints, cosmetics and water treatments to sound-insulating foams and polymers, high density concrete and products in the growth areas of green technology.

Our industrial minerals business is aimed primarily at the following market segments:

- **Agriculture:** mineral fertilisers, soil improvers and feedstuffs
- **Cleantech:** batteries, generators and renewable energy production
- **Construction and engineering:** cement, concrete, floor screed and roads
- **Manufacturing industry:** water treatment, sponge iron, plastics and coatings

Products and services for the mining and construction industries

In addition to industrial minerals, LKAB develops and sells services and products such as drilling systems, rockwork and concrete works, engineering services and explosives. We are one of the world's biggest producers of sprayed concrete, for example, and carry out advanced structural work all over Sweden. We have also developed a water-powered drilling technology that we sell to customers globally. The technology is being used in the major redevelopment Slussen in central Stockholm, among other places.

Market developments in 2022

It has been a successful year for more or less all parts of the business area's operations. The largest business is industrial minerals, where LKAB operates globally but with Europe as its main market. With our own supplies of raw material from the mines in Kiruna and Malmberget in Gällivare, magnetite is the largest product segment. Demand is driven by several industries including the production of iron powder, heavy concrete and water treatment. The war in Ukraine has brought the issue of energy supply into focus and demand has increased during the year, including from the offshore industry which uses magnetite in the construction of oil and gas pipelines.

The rockwork and concrete work operations continue to grow. The acquisition of the company Bergteamet in 2021 enabled further external sales while at the same time equipping us for the extensive work that awaits us as part of LKAB's future mining. Around 85 percent of sales in 2022 were to external customers.

We are also observing continued good demand for the cement substitute GGBS, which is made from blast furnace slag from steel production and has a smaller carbon footprint than cement.

1/3

More than a third of the value of sales of industrial minerals derives from secondary materials that LKAB Minerals has developed into valuable products

4

LKAB has four critical raw materials in our mineralisations:[1)]
REE
phosphorus
fluorine
vanadium

1) The critical raw materials that LKAB plans to extract are REEs (rare earth elements) and phosphorus. A fluorine product will also be extracted – something that other producers are obtaining from the critical raw material fluorite (fluorspar). Phosphorus, REEs and fluorine are separated from the iron ore within LKAB's process and deposited. Vanadium currently remains in the iron ore products and is usually separated at the steelworks, as part of the slag.

Growth and business development

Climate change and megatrends such as electrification are bringing increased demand for new sorts of minerals and metals, which is expected to result in supply problems. There is also increased awareness of the risks of being largely import-dependent in a more geopolitically complex world. Recycling residual products from the iron ore mining is an important part of our development and a vital element of our focused sustainability efforts – allowing us to utilise resources for the sake of the climate while at the same time broadening our business and becoming less sensitive to price fluctuations in the global iron ore market. In November LKAB became the principal shareholder in the Norwegian company REEtec, which has developed an innovative and sustainable process for separating rare earth elements. REEtec's first plant is scheduled for completion in the second half of 2024 in Herøya, Norway. A second plant is planned for 2026 and will be capable of processing material from LKAB's planned future extraction.

Increased self-sufficiency in Europe requires the entire value chain to be addressed – from mining to processing and the production of key components containing rare earth elements, such as permanent magnets. Since Europe has no extraction of its own and has only marginal processing capacity, the partnership between LKAB and REEtec marks the start of something new in Europe.

Operations summary

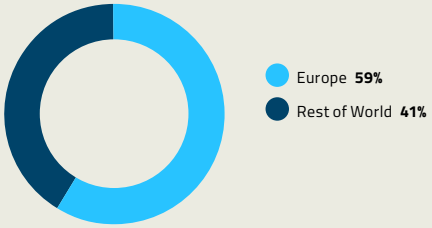
MSEK	2022	2021
Net sales	7,087	5,633
Operating profit/loss	541	380

MSEK 7,087

Net sales for the Special Products business area during the year, of which MSEK 4,620 (3,750) were external sales

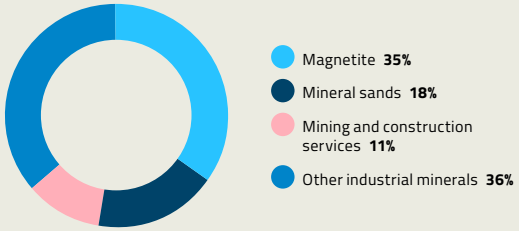
Sales by region

Percentage of external sales (MSEK)



Sales by product area and service area

Percentage of external sales (MSEK)



Facts about the Special Products business area

- **LKAB Minerals** – develops and sells our own minerals such as magnetite, recycled products from e.g. blast furnace slag and other industries, as well as traded and processed minerals. The business has sales offices and production units in Europe, the US and Asia.
- **LKAB Wassara** – develops and manufactures water-powered precision drilling systems for mining, construction and exploration drilling as well as dam building and geothermal energy to customers all over the world.
- **LKAB Berg & Betong and Bergteamet** – leaders within full service solutions for the mining and construction industries. Berg & Betong is the world's largest producer of sprayed concrete.
- **LKAB Kimit** – supplies explosives to the mining and construction industries.
- **LKAB Mekaniska** – provides engineering services for plant and machinery, from product development and design to servicing and maintenance.
- **LKAB Trading** – conducts purchasing operations in Asia and helps to secure a sustainable supplier base and value chain through audits and supplier development.

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