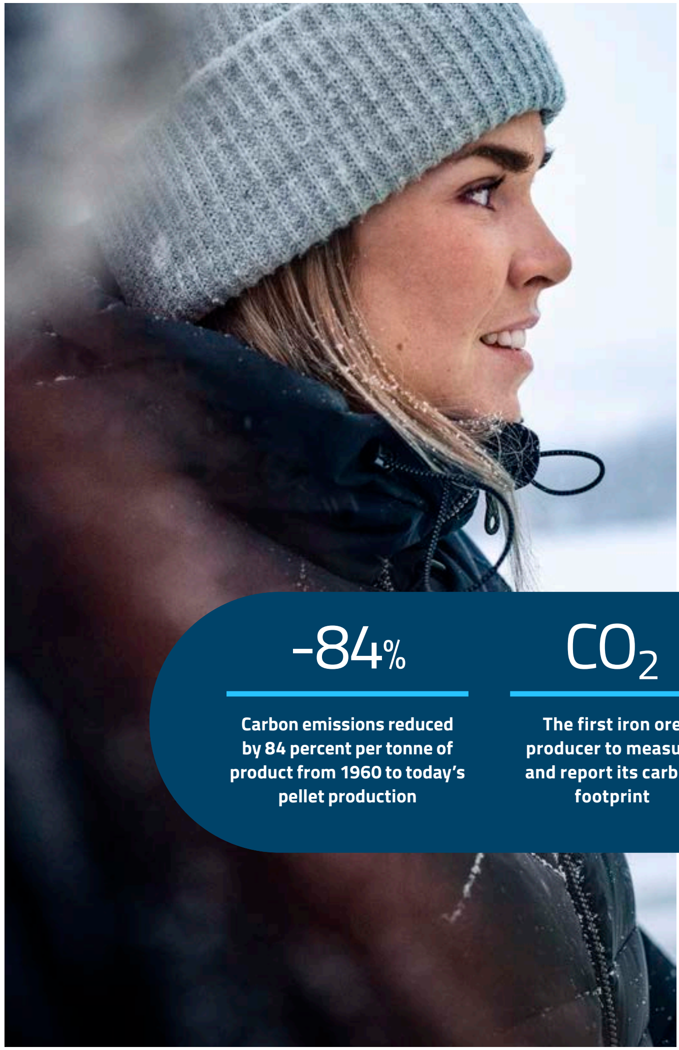
LKAB

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

Annual and Sustainability Report 2021



-84%
Carbon emissions reduced by 84 percent per tonne of product from 1960 to today's pellet production

CO_2
The first iron ore producer to measure and report its carbon footprint

-14%
Steel produced with LKAB's pellets contributes to 14 percent lower carbon emissions than the European average

2020
LKAB adopts a new strategy to achieve carbon-free processes and products

2026
HYBRIT plant for production of sponge iron

2027
Industrial park for extracting critical minerals from mine waste

2030
First industrialised sponge iron plant in production

Europe's leading mining and minerals group

MSEK 48,812
Net sales

MSEK 26,898
Operating profit

>90%
Iron ore products account for over 90 percent of sales

approx. 4,500
Average number of employees

MSEK 3,359
Investments in carbon-free processes and products

2035

New global standard for mining operations – carbon-free, digitalised and autonomous

2045

Our processes and products are carbon-free

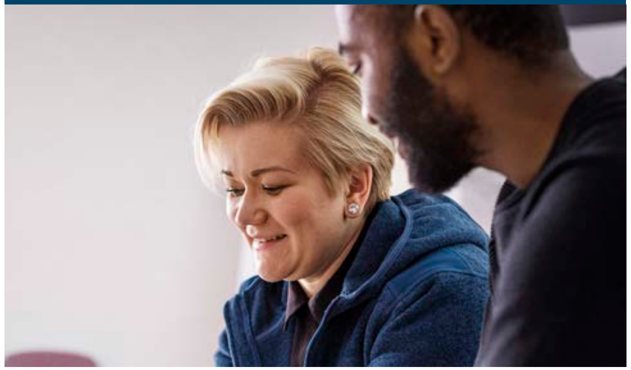
Towards a new iron age.

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

Right skills crucial for the future

The transformation of industry – both our own and others – is creating thousands of new jobs in northern Sweden. Ways of working and roles are both changing, which in turn requires us to continue developing our existing skills while at the same time recruiting more employees.

See focus area Skills on page 32



Roadmap for sustainability

During the year we have made clear our ambitions and put in concrete terms how sustainability work is integrated throughout the business. As well as working on our climate transformation and increased circularity in the business, there has been a major focus on topics such as biodiversity and our social responsibility.

See focus area Sustainability on page 37

Innovation. Working on the undiscovered.

Our transformation to carbon-free products and processes is dependent on us being able to continue mining profitably and competitively. Tomorrow's progress is enabled today.

See focus area Innovation on page 27

Contents

Administration report pages: 10–16, 20, 32–73 and 133.

Sustainability report pages: 10–16, 20, 32–53, 55, 57 and 138–158.

The Board of Directors and the President hereby submit the annual and sustainability report for 2021 for Luossavaara-Kiirunavaara AB (publ), corporate identity number 556001-5835, a limited liability company domiciled in Luleå that is wholly owned by the Swedish state.

The annual report is integrated, meaning that the description of operations – including our sustainability work and corporate governance – is reported together with the administration report and financial statements that make up the statutory part of the annual report. A statutory sustainability report has been prepared as part of the administration report, in accordance with Chapter 6 of the Swedish Annual Accounts Act, and can be found on pages 10–16, 20, 32–53, 55 and 57. A corporate governance report has been prepared as part of the administration report. The sustainability work is reported in accordance with Global Reporting Initiative (GRI) Standards. The scope of sustainability reporting is defined on pages 157–158.

The English version of this report is a translation of the Swedish original version. In case of discrepancies, the Swedish version shall prevail.

Comments by the President and CEO

2021 was a historically strong year in terms of profits. At the same time, we made important progress on the transformation that is crucial for the future.

The vital issue facing our generation – climate change – has been high on the global agenda for some time now. Yet I feel that something significant happened in 2021. Most companies have now realised that it is not about their own primary emissions. A lorry consists of 70 percent steel, for example, and each tonne of steel gives rise to two tonnes of carbon emissions. People have started to properly understand that the end product is only sustainable if its entire value chain is sustainable. The transformation to a climate-neutral global economy demands that the energy supply and the raw materials on which our society is built are carbon-free. And to an increasing extent it is industry, particularly primary industry, that is driving this green transformation.

At the same time, 2022 has started with a changed situation in the world. We have a war in Europe and we must come together to manage the evident humanitarian crisis that this brings. It is also clear that in the longer term the situation in Ukraine will impact what for LKAB are key areas, such as energy, commodities markets and supply chains.

Vision

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

Mission

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

Strong earnings in a favourable market

Although the world around us remains turbulent, we have delivered a very strong result for 2021. This enhances our ability to implement the extensive structural investments required for our transformation to carbon-free processes and products, while also securing our long-term competitiveness.

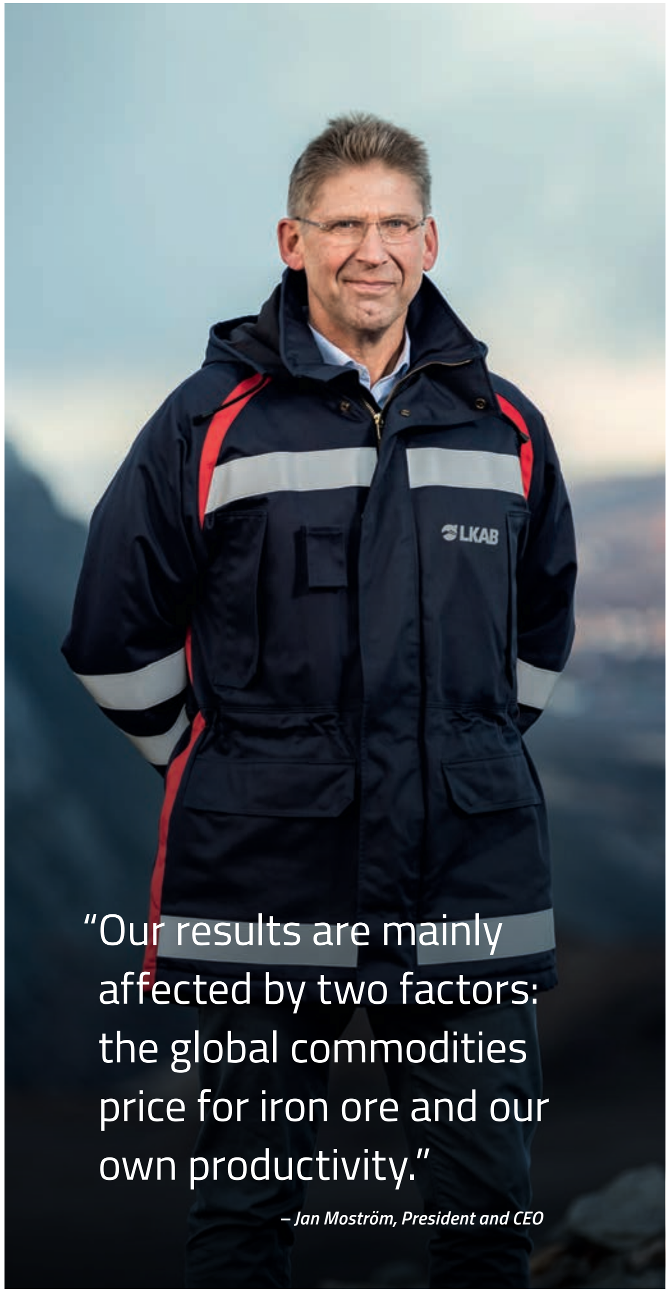
Conditions in the iron ore market were very good, with an average global iron ore price of USD 160 per tonne and peaks of over USD 220 per tonne. Quoted pellet premiums were twice as high as last year.

Our deliveries of iron ore products amounted to 27.0 Mt and production to 26.7 Mt. Measures to minimise the spread of coronavirus affected volumes again in 2021. For instance, planned maintenance shutdowns were replaced by a larger number of smaller shutdowns. We succeeded in protecting our employees well, with a lower infection rate within the company than in society as a whole.

We are monitoring developments in Ukraine carefully. The direct impact on the company is limited, but it is difficult to assess exactly what the longer term consequences may be.

Technology shift and increased value added

A key part of our transformation plan is to increase the value added to our products by processing. We will do this through a gradual transition from the production of iron ore pellets to sponge iron, in which the reduction process uses hydrogen produced with electricity from Swedish fossil-free sources. Offering the market a carbon-free raw material makes us more competitive and increases our ability to bear the cost of the investments needed to secure



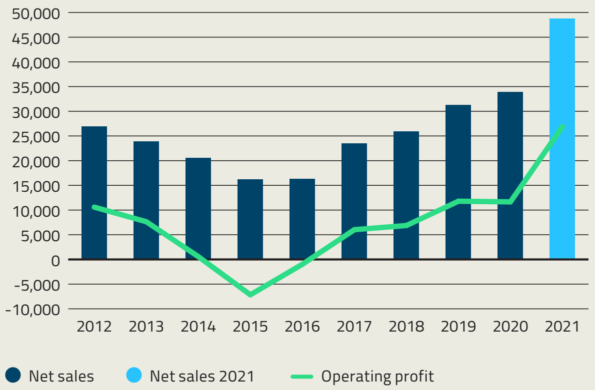
"Our results are mainly affected by two factors: the global commodities price for iron ore and our own productivity."

– Jan Moström, President and CEO

2021 results

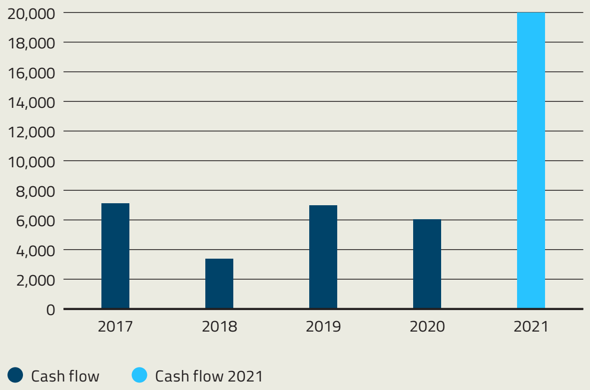
Net sales and operating profit

(MSEK)



Operating cash flow

(MSEK)



Overview and key financial ratios

	2021	2020
Net sales, MSEK	48,812	33,914
Operating profit, MSEK	26,898	11,654
Costs for urban transformation provisions, MSEK	-372	-1,396
Net financial income/expense, MSEK	1,484	797
Profit/loss before tax, MSEK	28,382	12,452
Profit/loss for the year, MSEK	22,604	9,757
Capital expenditure on property, plant and equipment, MSEK	3,359	2,763
Operating cash flow, MSEK	19,988	6,038
Return on equity, %	39.0	20.8
Net debt/equity ratio, %	-24.5	-3.0
Dividend to owner[1], MSEK	12,430	5,850

1) The dividend proposed by the Board of Directors is subject to approval by the Annual General Meeting on 28 April 2022.

Non-financial key ratios

	2021	2020
Carbon emissions, kg per tonne of product	25	25
Energy intensity, kWh per tonne of product	165	159
Accident rate	8.2	6.3
Number of permanent employees at year-end	4,825	4,555
Percentage of women among permanent employees, %	25	25

93%

Iron Ore business area's share of Group sales

7%

Special Products business area's share of Group sales

our own future and that of our operating locations once the current main haulage levels have been mined out.

Through the HYBRIT initiative that we have been conducting along with SSAB and Vattenfall since 2016, we are driving technological development towards a fossil-free value chain from mine to steel. In 2021 we showed that it is technically possible to produce sponge iron using hydrogen technology. In the summer the first 100 tonnes of sponge iron from the pilot plant in Luleå were delivered to SSAB, which was then able to supply fossil-free steel to Volvo. In October Volvo presented the world's first vehicle – a loader – made of fossil-free steel.

In 2021 we also developed our plans to scale up the production of sponge iron industrially. In stages, two large plants are soon to be built next to our existing pelletising plant in Gällivare/Malmberget, where the first HYBRIT plant will be ready in 2026.

In parallel, and in partnership with Epiroc, ABB, Combitech and Sandvik, we are making progress on developing a new world standard for mining that is digitalised, autonomous and carbon-free. Among other things, we have introduced more self-driving and battery-powered machinery and solutions and have also developed a new method of mining known as raise caving. You can read more about this on page 30.

Minerals business grows by processing residual products

Industrial minerals is a growing business for us, and more than a third of the portfolio is already based on processing waste streams along the value chain. One of our major strategic initiatives is to extract critical minerals from mine waste. In a first step apatite concentrate is being extracted and processed into phosphorus, rare earth elements and fluorine, and during the year we made concrete our plans for the apatite plants in Kiruna and Gällivare/Malmberget. We have also signed an agreement with Boliden to investigate the possibility of extracting pyrite concentrate from waste arising at Boliden's mine in Aitik. The concentrate can be processed into sulphuric acid, which is used in the processes for extracting critical minerals from our mine waste.

Provided the environmental permit process takes place efficiently, the production of apatite concentrate and the establishment of a new fossil-free industrial park for further processing could begin in 2027. This would enable us to cover 30 percent of current raw materials imports for the production of rare earth elements, as well as Sweden's entire requirement of phosphorus mineral fertiliser and gypsum.

Competitiveness here and now

Since we mainly expect to finance the transformation over the coming decades using our own cash flow, our ability to do so is boosted by high iron ore prices. At the same time the market is very sensitive to economic fluctuations, and decisions on investments in new infrastructure above and below ground give rise to commitments for many years to come. To succeed, therefore, we need to make our current production structure more efficient.

Using our plants to full capacity and maintaining consistently high production are also key to achieving our sustainability goals, particularly as regards energy efficiency.

Another area where we are falling well short of our goal is accidents. In 2021 there were 8.2 accidents per million hours worked compared with 6.3 in the previous year. This may be partly due to our having to adjust procedures as a result of measures to control infection, and restrictions on physical meetings, which are such an important part of our safety work. We have established, however, that there are shortcomings in how our health and safety work is implemented in the operations. This is a failure and we are now concentrating efforts on finding new approaches to turn around this trend. The development of leadership and employeeship form the foundation for a strong safety culture. This culture is built on personal meetings, which the pandemic has made difficult in recent years. We are working on the safety culture across the Group, involving all employees within all functions and at all levels in the company.

Requirements for the future

In just over 20 years' time, when our transition to carbon-free processes and products is complete, we will have reduced our steel customers' emissions by at least 35 Mt a year. That is equivalent to two thirds of Sweden's total carbon emissions. For this to become a reality, we are dependent on a number of conditions in the outside world and decisions over which we have little influence.

Industrial production of carbon-free sponge iron based on hydrogen requires huge quantities of renewable electricity. In five years' time we will start producing on a large scale at a first demo plant, after which more plants will be built. For now, we are relatively confident that we can secure access to electricity sufficient for the first two plants, but thereafter our need will increase.

What we are mainly evaluating – along with Vattenfall, among others – is an expansion of wind power. The idea is to balance volatile wind power with hydrogen production and hydrogen storage; in other words, we produce more hydrogen when there is plenty of electricity and use stored hydrogen when the electricity system is stretched.

In our modelling we have established that it is technically and commercially possible to develop the just over 50 TWh we need by 2040. This is a third of the whole of Sweden's current consumption, which puts the requirement into perspective. Sweden, and particularly northern Sweden, has some of the best conditions in the world for expanding renewable energy at a reasonable cost. But such an investment requires a clear political will and social acceptance.

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

Key events in 2021

- Very good market conditions have enabled LKAB to deliver historically strong earnings for 2021. The average global spot price for iron ore products was USD 160 (109) per tonne.
- Production volumes – which were affected by more extensive maintenance shutdowns for adjustments to limit the spread of Covid-19 – amounted to 26.7 Mt compared with 27.1 Mt in the previous year.
- Lower production volumes affected delivery volumes, which amounted to 27.0 Mt compared with 28.5 Mt in 2020.
- In partnership with Vattenfall and SSAB, LKAB produced the world's first hydrogen-reduced sponge iron for fossil-free steelmaking within the framework of the HYBRIT initiative.
- LKAB acquired 75 percent of the shares in Bergteamet AB. The acquisition strengthens our expertise and resources for future mining at great depths.
- In October the Land and Environment Court rejected LKAB's permit application for the existing operations in Kiruna in its entirety. The decision has been appealed.

Another of our challenges concerns the Ore Railway – one of Europe's most heavily used lines. In Sweden we account for nearly half of all rail freight each year. But it is not just us that depend on the capacity provided by the Ore Railway. Ore is transported along the track from Kaunis Iron and Boliden, as are other goods being carried between Sweden and Norway. The trains are also important for passenger traffic, not least for the tourism industry. The significance of the Ore Railway cannot be overstated and it is crucial for the implementation of the industrial initiatives planned in Norrbotten.

Environmental permits remain a challenge

The processing of environmental permits continues to be the greatest challenge. Today's processes are both inefficient and unpredictable, and the regulations are designed for a time when changes took place slowly and in stages. These days our operations take up relatively little land, but to make the investments required for the transformation we need access to land not just for ourselves but above all for electricity lines and new power production. Here I cannot emphasise enough the importance of a greater focus on environmental and climate aspects in the processes, rather than on the formalities.

Investing in skills availability

With the construction of our new levels in the mines and the new processing structure, we expect to need to recruit 3,000 people a year over the coming two decades. At the same time we are introducing new processes and new technology that requires us to develop the skills of our existing colleagues. Along with innovation and sustainability, skills availability is a focus area of our Group strategy.

Attracting new employees to Norrbotten is a challenge we share with other companies in the region. Various industrial initiatives are

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 eliminate our own carbon emissions while lowering total carbon emissions from our customers' steelmaking by 35 Mt per year. That is three times the effect of taking all the cars in Sweden off the road for good.

35 Mt

Contributes to reducing our global customers' emissions by at least 35 Mt

2/3

Equivalent to 2/3 of Sweden's carbon emissions

> 2 x

Sales will be more than doubled

taking place in parallel and we are actively working together across companies and with the municipalities in the region.

It is essential that our operating locations are attractive, so that new people will want to come and work here and existing colleagues will want to stay here. We invest in our local communities, and in cooperation with municipalities and other operators we are working to ensure that good homes and schools are available and that a wealth of commercial and leisure activities are offered.

The ongoing urban transformations – in which parts of Kiruna and Malmberget are being moved as the mining extends further – are complex projects in which many different interests must be satisfied. At the same time, this gives us a unique opportunity to develop our operating locations.

A positive footprint – today and tomorrow

By taking a step forward in the value chain we make a difference to the climate and while securing our future business as well as jobs and prosperity in the communities where we operate. We already we have the world's most climate-efficient pellet production and we have long worked to set an example internationally in ethics and corporate social responsibility.

We have been a signatory to the UN Global Compact since 2019 and work according to its principles for corporate sustainability. We have also mapped our activities against the UN Sustainable Development Goals set out in Agenda 2030. In 2021 we raised our ambitions in a number of areas, as is reflected in our new strategic goals for sustainable value creation.

An exciting time for us

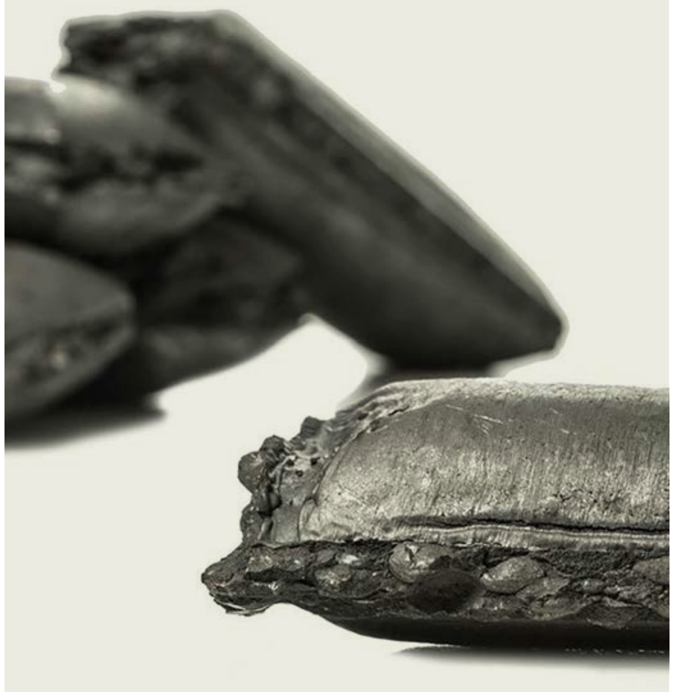
We have long been a driver of economic growth and development and having operated for more than 130 years, we are one of Sweden's oldest industrial companies. Yet we are also open and inclined to change, with a long history of innovation and bold technology shifts.

Even so, I would venture to say that our time is now. This is an incredibly exciting time to be part of LKAB – an opinion I think I share with our more than 4,500 colleagues. For although our goals are long-term and the transformation will take many years, it is now that we are taking action.

Luleå, 29 March 2022

Jan Moström, President and CEO

During the year we updated our strategic goals for sustainable value creation – see page 20 for a presentation of the goals.



Technology for producing fossil-free sponge iron proven

In June 2021, in partnership with Vattenfall and SSAB, LKAB was able to present the world's first hydrogen-reduced sponge iron produced in the HYBRIT pilot plant in Luleå. This first sponge iron was then used to produce the first fossil-free steel.

This is a crucial milestone towards creating an entirely fossil-free value chain from mine to finished steel. The next step is to industrialise the technology, with a first HYBRIT plant for industrial-scale production ready in Malmberget in 2026.

Our value chain

We impact

- the industries that use our products
- local, national and global climate transition
- our local community and the reindeer herding in the region
- the local environment and biodiversity
- corporate social responsibility in the industry as a whole by setting high standards for safety, human rights and ethics

We are impacted by

- our suppliers
- our customers' ambitions
- interaction with local communities
- environmental permits and access to land
- decision-makers at international, national and local level

More than 95 percent of our emissions are attributable to suppliers and customers. It is therefore essential that we work in partnership throughout the value chain to achieve our goals. We need to reduce our own emissions while at the same time creating the conditions for our customers and suppliers to reduce theirs. Social responsibility, resource efficiency and greater utilisation of residual products are very much in focus – locally, nationally and globally.

Suppliers

LKAB works in partnership with strategic suppliers to increase sustainability, productivity and cost efficiency. As a significant purchaser, we have influence and the opportunity to make an impact. In total we have around 4,800 suppliers around the world.

Exploration

Exploration secures the supply of iron ore in the long term. As well as geological expertise, we need access to land areas that potentially contain ore. For this we need to respect the surrounding area, take responsibility for the environment and cooperate with local businesses.

Mining

Every day around 145,000 tonnes of crude ore is mined in our underground mines and open-pit mines in Kiruna, Malmberget and Svappavaara. The mining impacts the landscape and it is essential that we cooperate with authorities and local communities.

Processing

All 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 take 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 45 percent of the freight on Swedish railways – which demands a world-class logistics system in terms of capacity and sustainability.

Customers

The iron ore products we supply are an input material for steelmakers that have high requirements of 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: machinery, tools, cars, mobile phone masts, wind turbines, railways, bridges and buildings.

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 GGBS, a more sustainable alternative to cement.

We contribute to development and prosperity

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. From exploration to steel recycling and the utilisation of residual products along the value chain, we create value for many different stakeholders.

Customers

Our upgraded iron ore products contribute to increasing steelmakers' productivity, profitability and sustainability. LKAB's products reduce customers' fuel consumption and thereby contribute to lowering carbon emissions per tonne of steel produced when compared with competing products. Industrial minerals complement the offering and create value for various customer segments outside of the steel industry.

Employees

Our technological development and innovativeness allow us to offer many interesting career and development opportunities. Our ambition as an employer is to enable work/life balance and a secure and inclusive work environment characterised by diversity. Strong employeeship and leadership contribute to engagement and motivation.

Suppliers

LKAB is a significant purchaser, contributing to jobs and revenue at our suppliers. We conduct extensive strategic development projects in close partnership with a number of suppliers. We monitor our suppliers from a sustainability perspective and influence how our suppliers develop through the requirements we set.

Communities

Access to metals and minerals is essential for manufacturing everything from mobile phones and computers to wind turbines and solar panels. LKAB accounts for 90 percent of Europe's iron ore production and is a growing supplier of industrial minerals. We are significant as an export company for Sweden and as an employer in our operating locations, and contribute actively to creating attractive communities with good residential environments, schools and social functions. Our work also contributes to the UN Sustainable Development Goals.

Owner

Our ambition is to be one of the most responsible and sustainable mining and minerals companies in the world. Innovative and resource-efficient production combined with effective risk management help produce a good return for our owner, the Swedish state. By collaborating on fossil-free steelmaking and the transition to carbon-free processes and products we seek to contribute to Sweden's climate goal of net zero emissions by 2045.

Our contribution to Agenda 2030

LKAB conducts activities that contribute to several of the UN Sustainable Development Goals. We focus our efforts where we have the most opportunity to make a difference.

Read more on page 43

approx. 4,500	MSEK 4,475	4,800	MSEK 14,249	MSEK 5,480	MSEK 12,430
Average number of employees	Paid in wages, salaries and employee benefit expenses	Suppliers	Payments to suppliers	Taxes	Proposed dividend to owner, the Swedish state

Goal progress

In 2015 LKAB's Board of Directors established goals for the Group, for which we are now reporting the results. During autumn 2021 the Board of Directors adopted updated strategic goals for sustainable value creation and these are presented on page 20.

Economic sustainability

	Goal for 2021	Result in 2020	Result in 2021
Profitability Return on equity shall exceed 12 percent over an economic cycle.	>12%[1]	21	39
Capital structure Net debt/equity ratio of 0–30 percent.	0–30%[1]	-3	-24
Dividend to the owner, the Swedish state The ordinary dividend shall amount to 40–60 percent of profit for the year.	40–60%	60	55

Social sustainability

		Goal for 2021	Result in 2020	Result in 2021
Safety Reduce accidents leading to absence from work to a rate of 3.5 per million hours worked by 2021.		3.5	6.3	8.2
Diversity and equal opportunity The proportion of women/female managers in the company shall reach at least 25 percent by 2021.	Percentage of female	>25%	25	25
	Percentage of female managers	>25%	23	27
Social responsibility and cooperation Compliance with LKAB's Code of Conduct and well-functioning dialogue with stakeholders.	Percentage that have completed training	n/a[2]	87%	82%
	Dialogue according to plan	n/a[2]	Yes	Yes

Environmental sustainability

		Goal for 2021[3]	Result in 2020	Result in 2021
Emissions Reduce carbon emissions by at least 12 percent per tonne of finished product by 2021 and at the same time reduce emissions of nitrogen to air (NOx).	Carbon emissions	24 kg/t	25	25
	Nitrogen to air	<158 g/t	140	161
Reduce emissions of nitrogen to water by at least 20 percent per tonne of finished product by 2021.		21 g/t	20	22
Reduce emissions of dust into the air from treatment facilities by at least 40 percent by 2021.		10 mg/m^3ntg	29	18
Energy intensity Reduce energy intensity (kWh per tonne of finished product) by at least 17 percent by 2021.		138 kWh/tonne	159	165

1) The goals for return on equity and the debt/equity ratio were updated at an extraordinary general meeting in October 2021. The updated goals are presented on page 20.
2) The goal is monitored as the percentage of employees that completed training in the Code of Conduct as well as monitoring that dialogue is taking place with stakeholders according to plan.
3) The goals refer to the decrease by 2021 taking 2015 as a baseline.

The accident rate increased compared with the previous year and was 8.2 (6.3). Safe, healthy workplaces are of the highest priority and there is a major focus on measures to turn around the negative trend; read more on page 40.

The percentage of women was 25 percent, which is in line with the goal for 2021, and the percentage of female managers exceeded the goal at 27 percent.

Total carbon emissions decreased, which is a positive effect of ongoing trials to replace fuel oil with tall oil at one of the pelletising plants in Malmberget. For the transition to carbon-free processes and products, read more about our strategy on pages 14–21.

The increased emissions of nitrogen to air are largely due to the trials involving tall oil at the pelletising plant in Malmberget. Tall oil is efficient and has a positive impact on emissions except for nitrogen, which tall oil generates more of than fuel oil. Methods to reduce the generation of nitrogen oxides are being developed.

At the end of the year dust emissions were at an increased level in Kiruna and Narvik, with measures planned during subsequent maintenance shutdowns. Continued work to improve systematic maintenance of the plants has the potential to reduce levels further.

The energy intensity has increased compared with the previous year, which among other things is a result of an increased number of unplanned shutdowns and lower production volumes. Volumes were particularly affected by extended maintenance shutdowns associated with measures to prevent the spread of Covid-19.

Strategy

A changing world

Global greenhouse gas emissions need to decrease substantially, and within a short period of time. The focus is therefore on the transformation required.

To get to grips with the climate problem a transformation is required – a significant challenge since energy consumption in the world is strongly linked to fossil fuels. System changes are needed, which take time and demand considerable cooperation between industry and decision-makers.

Rising cost of greenhouse gas emissions

In recent years there has been greater understanding that climate neutrality is only possible if entire value chains transform. More and more organisations are mapping their value chains to understand how emissions are generated and how they can be reduced.

Manufacturing industry, spearheaded by the automotive industry, is working with the steel industry and other industries to decrease its climate footprint and ensure long-term competitiveness. End-users and consumers are expected to demand more of products and the cost of greenhouse gas emissions will increase substantially, which may affect the competitiveness of those who do not act sufficiently quickly.

Ways to tax carbon dioxide are expected to be introduced around the world, but at a varying pace. The EU was early to introduce a system in which energy-intensive industries are gradually made to pay for a higher share of carbon emissions over the coming 10 years. A taxation system is also expected to be introduced for greenhouse gas emissions from materials used in imported products.

Good conditions for Swedish iron and steel industry

Demand for steel is expected to increase as the world's population grows and as society develops and transforms. The steel industry is expected to switch from using coal and other fossil fuels to electrified steelmaking, in which the supply of renewable electricity is of great importance – a change that seems to be happening faster in Europe than in the rest of the world. Conditions in Sweden and the Nordic region are good, with the share of renewables already high, and the region where we operate has a cluster of companies with expertise in developing the solutions and technology of the future.

In electrified steelmaking, recycled steel is combined with a new iron raw material. Demand for high quality scrap for producing the products our customers manufacture will increase substantially. This increased demand can be partly satisfied by increased recycling, but substantial volumes of newly produced iron ore in the form of sponge iron will still be needed. Producing sponge iron is an energy-intensive process in which a long-term supply of renewable energy at a reasonable cost is a significant competitive advantage.

LKAB well positioned

The high quality ore that we mine is processed into products that are priced at a premium compared with the standard grade on the market. This puts us in a competitive position even though we are in a high-cost region of the world.

As steelmakers change their production processes we will gradually replace deliveries of iron ore pellets with high-grade sponge iron. We can take advantage of the supply of renewable electricity and cost-efficiently produce a sponge iron that allows existing and new customers to use a raw material that is produced without fossil fuels.

Global forces

A growing world

More than half of the world's population live in cities and this is expected to increase to nearly 70 percent by 2050[1]. This brings about a need for infrastructure investments – which in turn drives demand for steel and iron ore products.

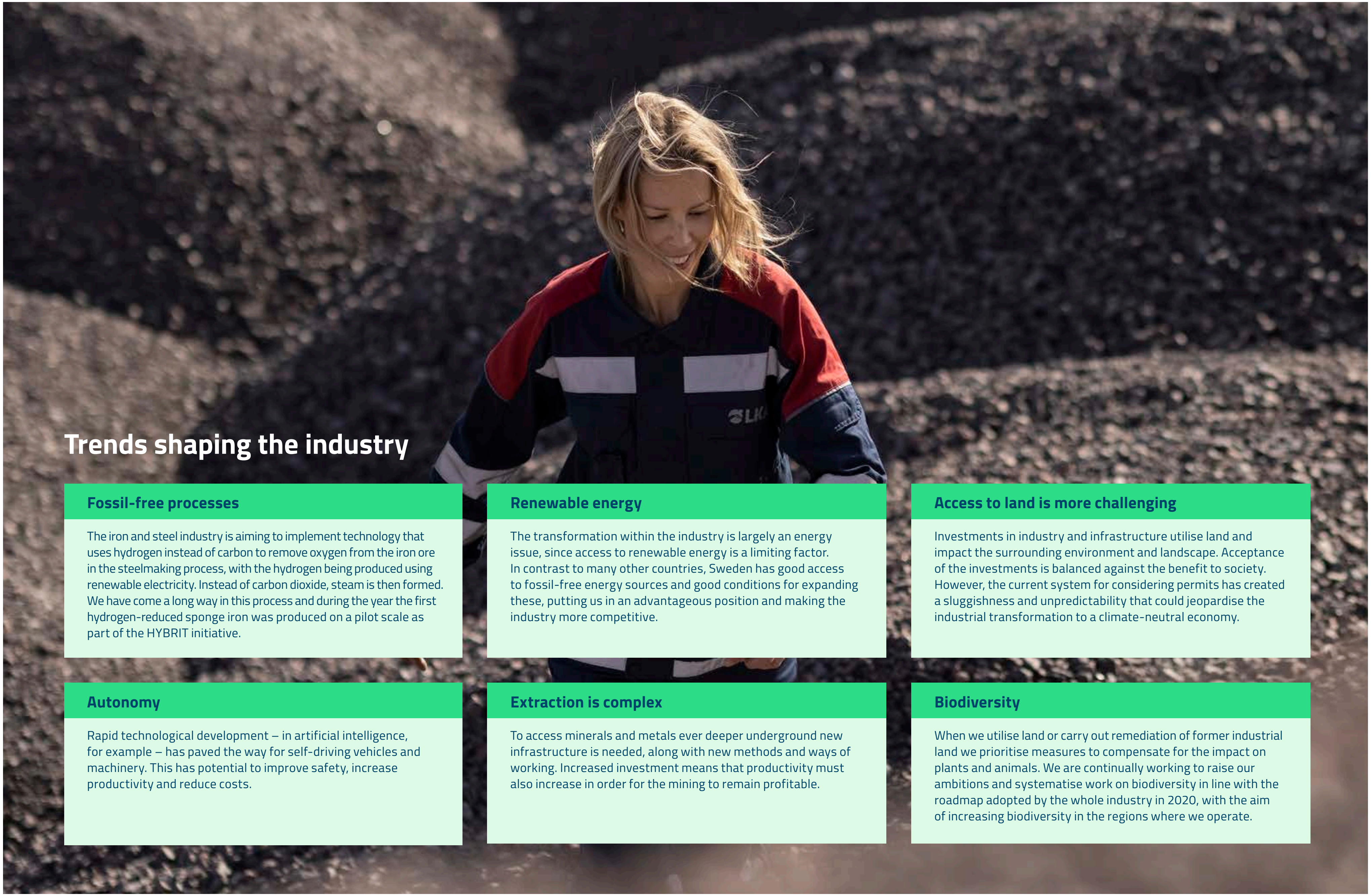
Focus on decreasing carbon emissions

Awareness is growing that forceful measures need to be taken to combat climate change and as legislation and policies on carbon emissions are introduced, demand for cleaner, fossil-free value chains increases.

Circular economy

There is increased interest in utilising residual products along the value chain and a greater incentive to do so. Better resource utilisation enhances profitability and creates new business opportunities.

1) The Brookings Institution. https://www.brookings.edu/blog/future-development/2019/10/09/double-tipping-points-in-2019-when-the-world-became-mostly-rich-and-largely-old/.



Trends shaping the industry

Fossil-free processes

The iron and steel industry is aiming to implement technology that uses hydrogen instead of carbon to remove oxygen from the iron ore in the steelmaking process, with the hydrogen being produced using renewable electricity. Instead of carbon dioxide, steam is then formed. We have come a long way in this process and during the year the first hydrogen-reduced sponge iron was produced on a pilot scale as part of the HYBRIT initiative.

Renewable energy

The transformation within the industry is largely an energy issue, since access to renewable energy is a limiting factor. In contrast to many other countries, Sweden has good access to fossil-free energy sources and good conditions for expanding these, putting us in an advantageous position and making the industry more competitive.

Access to land is more challenging

Investments in industry and infrastructure utilise land and impact the surrounding environment and landscape. Acceptance of the investments is balanced against the benefit to society. However, the current system for considering permits has created a sluggishness and unpredictability that could jeopardise the industrial transformation to a climate-neutral economy.

Autonomy

Rapid technological development – in artificial intelligence, for example – has paved the way for self-driving vehicles and machinery. This has potential to improve safety, increase productivity and reduce costs.

Extraction is complex

To access minerals and metals ever deeper underground new infrastructure is needed, along with new methods and ways of working. Increased investment means that productivity must also increase in order for the mining to remain profitable.

Biodiversity

When we utilise land or carry out remediation of former industrial land we prioritise measures to compensate for the impact on plants and animals. We are continually working to raise our ambitions and systematise work on biodiversity in line with the roadmap adopted by the whole industry in 2020, with the aim of increasing biodiversity in the regions where we operate.

Strategy for the LKAB of the future

Our strategy sets out the path we are taking to reach zero carbon emissions from our own processes and products by 2045 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 fossil-free mining and minerals industry of the future. Three important areas will lead the transformation.

New world standard for mining operations

Mining iron ore profitably and safely at greater depths, and moreover by carbon-free processes, demands new mining methods. Extensive work is therefore under way to develop a new world standard for mining through digitalisation, automation, electrification and new ways of working. In doing so we are building a foundation for our new value chain with further processing into sponge iron.

Activities and progress in 2021

- We have taken further steps towards a machinery fleet powered by renewable fuels, with new ways of working being developed. The aim is to increase both safety and productivity and to enable the carbon-free LKAB of the future to become a reality.
- A new mining method has been tested in the mine in Kiruna. In contrast to the current method of sub-level caving, the new method – raise caving – makes it possible to mine the ore by working up from below, rather than from above downwards. The mining sequence is therefore reversed and this technology shift brings several gains, not least in terms of safety.

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. This strengthens our position in the value chain, increases the value of our products and enables carbon emissions to be significantly lowered, which creates value both for the steel industry and its customers and for the end-user of the products.

Activities and progress in 2021

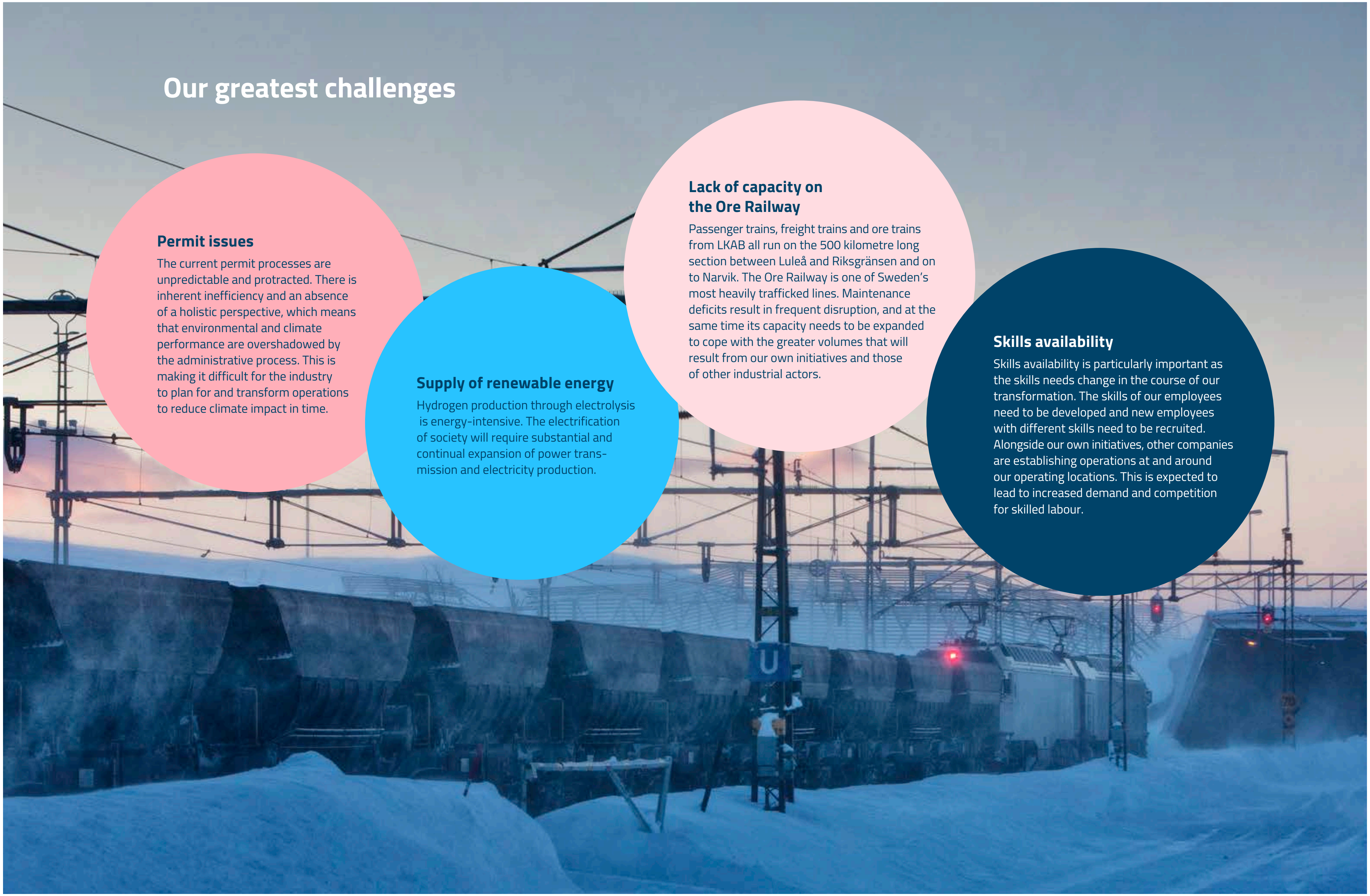
- The world's first hydrogen-reduced sponge iron was produced on a pilot scale – a technological breakthrough that reduces emissions by around 90 percent in conjunction with steelmaking.
- The world's first fossil-free steel made with sponge iron was rolled and delivered, providing confirmation that the technology for a fossil-free value chain works.
- The location for industrialisation of the technology developed within the HYBRIT initiative was decided: a plant for fossil-free sponge iron will be built next to LKAB's existing operations in Malmberget/Gällivare.
- Construction began on a hydrogen storage facility connected to the HYBRIT plant in Luleå, where the technology for storing hydrogen will be developed.

Critical minerals

Strategically valuable earth elements and phosphorus are to be extracted from our existing raw materials flows. This means we are moving into new markets for minerals use. The earth elements are used within technically advanced applications such as permanent magnets. Phosphorus is needed in mineral fertiliser within agriculture.

Activities and progress in 2021

- Exploration results confirmed the potential for production of phosphorus mineral fertiliser and rare earth elements. So long as we carry on producing iron ore there will be opportunity to produce phosphorus from ongoing production.
- A cooperation agreement was signed with Boliden to investigate the possibility of extracting pyrite concentrate from waste at the Aitik mine, which LKAB will then process into fossil-free sulphuric acid. The sulphuric acid will be used in the processes for extracting rare earth elements and phosphorus, among other things, from LKAB's mine waste.



Our greatest challenges

Permit issues

The current permit processes are unpredictable and protracted. There is inherent inefficiency and an absence of a holistic perspective, which means that environmental and climate performance are overshadowed by the administrative process. This is making it difficult for the industry to plan for and transform operations to reduce climate impact in time.

Supply of renewable energy

Hydrogen production through electrolysis is energy-intensive. The electrification of society will require substantial and continual expansion of power transmission and electricity production.

Lack of capacity on the Ore Railway

Passenger trains, freight trains and ore trains from LKAB all run on the 500 kilometre long section between Luleå and Riksgränsen and on to Narvik. The Ore Railway is one of Sweden's most heavily trafficked lines. Maintenance deficits result in frequent disruption, and at the same time its capacity needs to be expanded to cope with the greater volumes that will result from our own initiatives and those of other industrial actors.

Skills availability

Skills availability is particularly important as the skills needs change in the course of our transformation. The skills of our employees need to be developed and new employees with different skills need to be recruited. Alongside our own initiatives, other companies are establishing operations at and around our operating locations. This is expected to lead to increased demand and competition for skilled labour.

Competitiveness today is crucial for the future

Implementing our strategy fully will require extensive investments spread across a long period of transformation. This transformation will take place gradually and will primarily be financed by our own cash flow and at times by increased debt, in which each step must contribute to strengthening our financial capacity to build further. In addition, investments in the expansion of renewable electricity and hydrogen will be needed to enable the transformation.

For the foreseeable future we will be dependent on the existing market for iron ore and iron ore pellets, and we need to continue improving the existing operations in parallel in order to maintain our competitiveness. The focus therefore remains on exploration, on increased productivity and on work to ensure that we are a safe workplace where people can develop.

"Once the transformation is complete we will have eliminated not just our own 700,000 tonnes of carbon emissions per year, but also our customers' carbon emissions – corresponding to at least 35 Mt globally. That is equivalent to 2/3 of Sweden's carbon emissions."

Basic plan

Optimise existing operations

- Exploration: secure sufficient mineral resources and mineral reserves at existing mines
- Production increase: secure profitability by fully utilising capacity

Extensive investments over a period of 15–20 years

Trans-formation plan

LKAB in 2045: Carbon-free processes and products

- Productivity increase of 40–50 percent with a new world standard for mining operations
- More than double sales with switch to carbon-free sponge iron
- Business broadened through extraction of critical minerals from mining waste

Focus areas

There are three cornerstones to our strategy: sustainability, innovation and skills. These are key factors individually, but also a requirement for each other. Our future business, including our profitability and financial sustainability, our licence to operate and our efforts to minimise negative impact on people and the environment, require ambitious sustainability work. Innovation is essential for establishing a sustainable business and attracting the right skills. And the right skills – both existing skills and new ones – are essential if we are to succeed with our journey into the future.

Read more on pages 27–46

New strategic goals

During the year the Board of Directors set out new strategic goals for sustainable value creation over the period 2022–2030 in support of our vision to lead the transformation of our industry toward a sustainable future. The financial goals were determined by our owner, the Swedish state, at an extraordinary general meeting in October 2021.

Stable and efficient operations

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

	Current status in 2021	Updated goal
Capital structure	▪ The transformation will involve periods of increased debt ▪ The previous goal was a net debt/equity ratio[1] of 0–30 percent	▪ Net debt/equity ratio[1] <60 percent
Profitability	▪ The transformation will involve increased investments over the coming 15–20 years ▪ The previous goal was for the return on equity[2] to exceed 12 percent	▪ Return on equity[2] shall exceed 9 percent
Dividend	▪ Ordinary dividend shall amount to 40–60 percent of profit for the year	▪ Ordinary dividend shall amount to 40–60 percent of profit for the year (unchanged)

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.

	Current status in 2021	Goal for 2030
Health and safety	▪ 8.2 lost time accidents per million hours worked ▪ Long-term sickness absence 0.63 percent[3]	▪ Fewer than 2 lost time accidents per million hours worked (interim goal for 2026: fewer than 4) ▪ Long-term sickness absence of max 0.8 percent[3] (interim goal for 2026: max. 0.8 percent)
Diversity and equal opportunity	▪ Women make up at least 25 percent of the workforce, representing an increase from 2015 of 5 percentage points ▪ 27 percent of managers are female, representing an increase of 9 percentage points compared with 2015	▪ 60/40 gender balance in management teams (interim goal for 2026: 30 percent women in the workforce and 30 percent female managers)

Climate-efficient, sustainable transformation

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

	Current status in 2021	Goal for 2030
Carbon emissions	▪ Since 2015 we have increased our total carbon emissions by 1.5 percent ▪ At the same time, carbon intensity has decreased by 7.4 percent compared with 2015 and amounts to 25 kg carbon dioxide per tonne of finished product	▪ Decrease carbon emissions by 25 percent in our own operations (scope 1–2) compared with 2020, in line with the Paris Agreement of well below two degrees (interim goal for 2026: decrease of 15 percent)
Energy use	▪ Total energy consumption has increased by 8.4 percent since 2015 ▪ Energy consumption per tonne of finished product amounted to 165 kWh, which represents a decrease of 1 percent compared with 2015	▪ Decrease energy use by 10 percent (kWh per tonne of finished product) in current production structure (interim goal for 2026: decrease of 5 percent)
Biodiversity	▪ We have guidelines for land use with the ambition that the operations shall not cause any net loss of biodiversity; this ambition is not currently being achieved ▪ Work is in progress on planning for and restoring the environment after operations have ended and creating attractive industrial areas, and biodiversity is a part of this	▪ LKAB shall contribute to increased biodiversity in the regions where we operate (interim goal for 2026: implemented methods and monitoring)

1) Defined as financial net indebtedness/equity
2) Defined as profit for the year/average equity
3) Defined as percentage of the workforce per quarter

The pace of transformation

We have already come some way, but the journey to a carbon-free future is a long one and our transformation is taking place step by step.

2030

Our new strategic goals for 2030 are milestones along the way to our long-term goal of carbon-free processes and products by 2045.

To achieve our long-term goals we must take a decision on going deeper in the mines in time – which, among other things, requires that the necessary permits are in place.

Products crucial for a carbon-free future

Highly upgraded iron ore products, industrial minerals and special products → Sponge iron, industrial minerals, including critical minerals, and special products

Decrease carbon footprint of our operations

Carbon emissions reduced by 84 percent from 1960 to today's pellet production → Improvements in existing operations – phasing out of fossil fuels → Technology shift – transition to carbon-free processes

Increase resource efficiency and circularity in the value chain

Focus on business development based on increased recycling and reuse along the value chain → Established industrial park for extraction of critical minerals

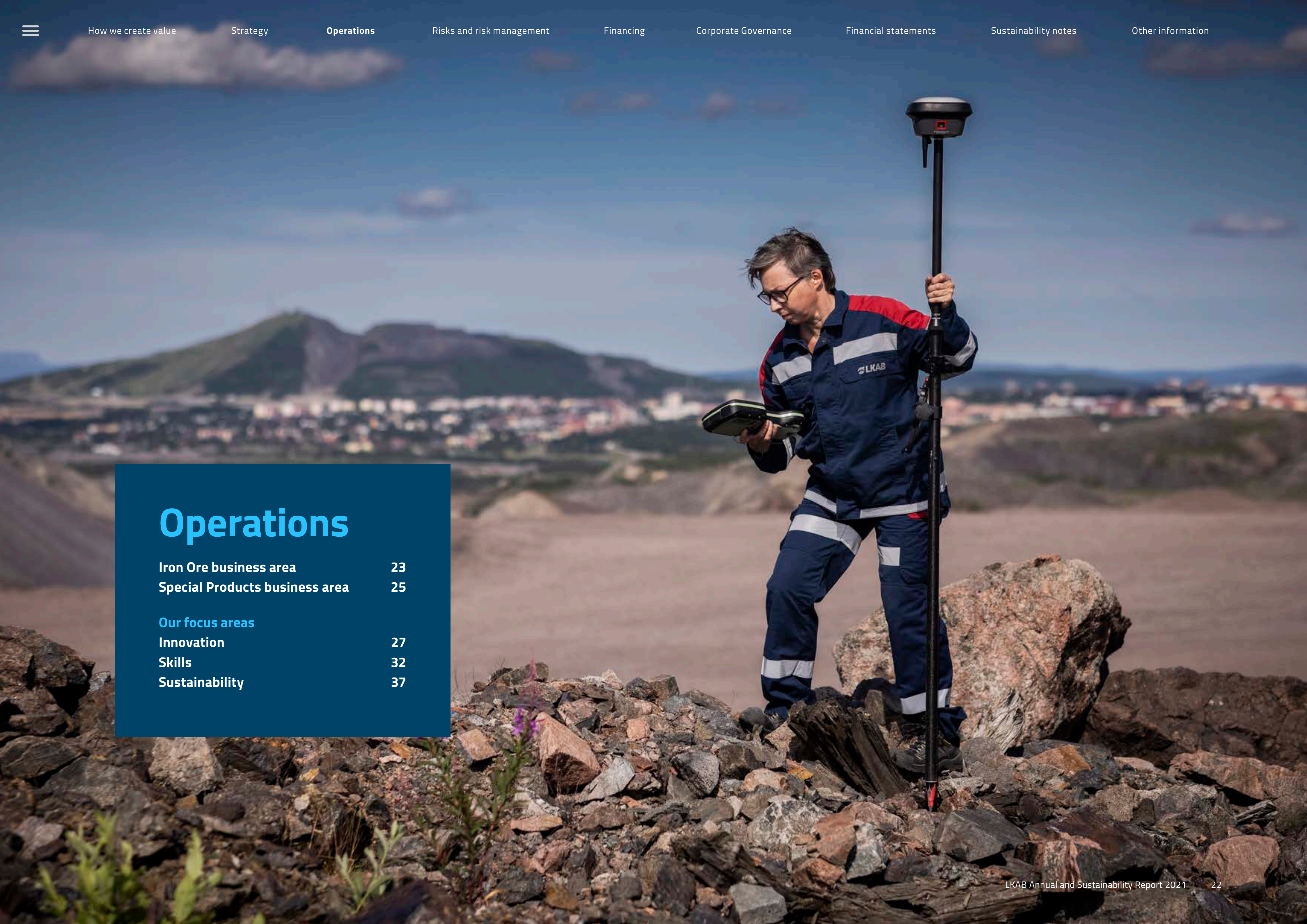
Carbon-free processes and products in 2045

Collaboration to decrease carbon emissions throughout the value chain

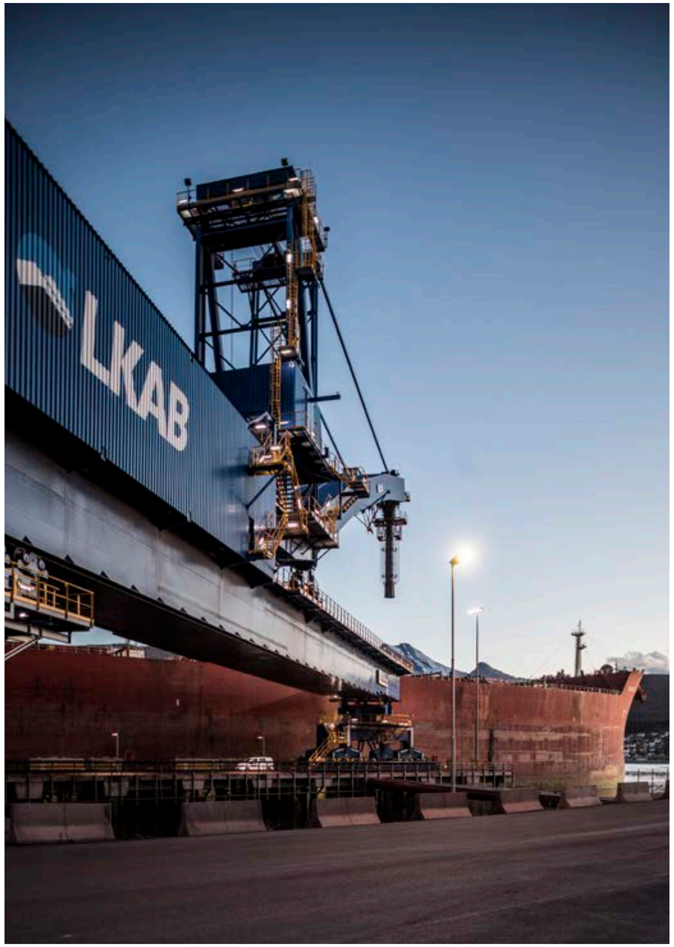
History of innovation and technical progress with a focus on the customer →
– Vattenfall and SSAB within the HYBRIT initiative
– Sandvik, Epiroc, Combitech and ABB

Fossil-free value chain for steel

2020 | 2025 | **2030** | 2035 | 2040



Operations



26.7 Mt

Iron ore products produced

2021	26.7
2020	27.1
2019	27.2

27.0 Mt

Iron ore products delivered

2021	27.0
2020	28.5
2019	24.9

Iron ore for the steel industry

The Iron Ore business area mines and upgrades iron ore to produce climate-efficient products that are supplied to customers in the steel industry. The operations include mines and processing plants in Kiruna, Svappavaara and Malmberget, as well as rail freight services and ports in Luleå and Narvik.

Market and position

On the global iron ore market LKAB is a relatively small operator, but has a strong niche position as a quality and technology leader. It is a position that we have established through our access to magnetite ore with a consistently high iron content that is upgraded into iron ore products for steel customers with high requirements of quality and sustainability. We are the world's second-largest supplier of highly upgraded iron ore pellets on the seaborne market. Europe and the Middle East/North Africa (MENA) are our largest markets.

Market development in 2021

Market conditions during the year were good, with stable demand and at times historically high prices. Customers' steel production picked up speed when Covid-19 restrictions were eased and industries opened up. Increased demand for steel resulted in rising prices. Despite good demand and historically high steel prices, customers' margins were squeezed – initially partly by the high iron ore prices, and thereafter by increased freight costs and energy prices.

Halfway through the year restrictions were imposed on steel production in China as a result of the Chinese government's directive to reduce the environmental impact of the industry. Challenges in global supply chains as a result of the pandemic also meant that some production was temporarily halted within manufacturing industry. As a result of these restrictions the underlying spot price for iron ore fell.

Continued high production in pellet-based steel markets in Europe and MENA, combined with a limited supply of highly upgraded pellets on the seaborne market, contributed to premiums remaining high.

The average global spot price for iron ore products was USD 160 per tonne, which was USD 51 higher than in the previous year. China's decision to regulate its steel production caused iron ore prices to decrease from July onwards. At the end of the year the price level was USD 119 per tonne. Quoted pellet premiums during the year were at levels that were more than twice as high as in the previous year. The outlook for long-term demand for LKAB's iron ore products remains good and we still have a situation in which demand for our products exceeds production capacity.

Deliveries and production

LKAB delivered 27.0 (28.5) Mt of iron ore products in 2021, 83 (84) percent of which were pellets. Volumes were affected mainly by lower production volumes and lower inventory levels compared with the previous year.

The production volume decreased somewhat and was particularly affected by extended maintenance shutdowns associated with measures to curb the spread of infection, which resulted in a lower average level of capacity utilisation in the processing plants. Despite this, production of 26.7 (27.1) Mt was achieved. Production of crushed ore continued to be affected by the substantial seismic event in the Kiruna mine in spring 2020. The supply of crushed ore to the processing plants was secured by redirecting crushed ore between production sites, but this increased costs.

Operational excellence, focusing on production stability and continuous improvement, is key for the business; read more about our work during the year on page 27.

Urban transformation

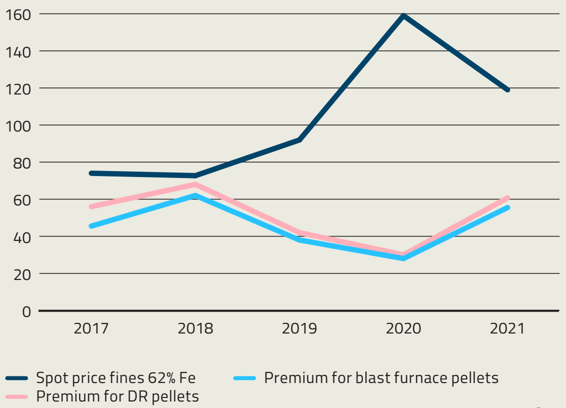
The extensive changes in the communities in recent years as a result of the mining in Kiruna and Malmberget have taken place gradually and the majority of residents have been affected in some way. While changes can be demanding of those involved, future mining operations are the best way to ensure that the communities remain attractive and vibrant. Read more on page 151 and at samhallsomvandling.lkab.com/en/.

Operations summary

MSEK	2021	2020	2019
Net sales	46,135	31,727	28,725
Operating profit/loss	28,432	12,756	12,439

Development of iron ore price and pellet premium

(USD per tonne)

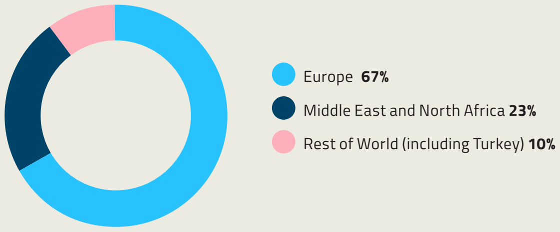


Source: PLATTS

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, upgrading, freight costs and various premiums or penalties. For LKAB, which has a consistently high iron content and higher processing costs, it is essential that the products are sold at a premium.

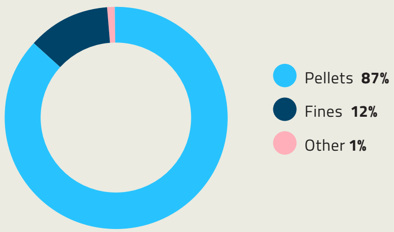
Sales by region

Percentage of sales (MSEK)



Sales by product area

Percentage of sales of iron ore products (MSEK)



Facts

- The Iron Ore business area mines and processes iron ore products in Kiruna, Svappavaara and Malmberget.
- In Kiruna, mining takes place in an underground mine with a current main haulage level 1,365 metres below ground. The ore is processed above ground in three concentrating and pelletising plants.
- In Svappavaara ore is mined in the Leveäniemi open-pit mine. The ore is processed in a concentrating and pelletising plant in Svappavaara.
- Malmberget's underground mine consists of around 20 orebodies, of which around 10 are currently mined. The ore is processed above ground in a concentrating plant and two pelletising plants.
- The business area produces both blast furnace pellets and pellets for steelmaking via direct reduction (DR pellets), as well as fines.
- The iron ore products are transported along the Malmbanan and Ofotbanen ore railway to the ports of Luleå and Narvik for shipment to steel customers around the world.

Provisions for and costs of the urban transformations

LKAB's provisions for urban transformations in the Swedish orefields amounted to MSEK 14,423 (14,272) at year-end. The costs of provisions for the urban transformations in 2021 amounted to MSEK 372 (1,396); see also Note 32. Disbursements totalled MSEK 2,681 (4,191).

Industrial minerals and strategic products and services

The Special Products business area develops and supplies products and services that either make our iron ore operations more competitive or create value in other markets.

1/3

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

30%

LKAB has the potential to supply the EU with up to 30 percent of its current imports of rare earth elements

The business area accounts for around seven percent of the Group's sales, but has a clear mandate to grow. The operations are run mainly through wholly owned subsidiaries and consist of four divisions within the areas: industrial minerals; products and services for the mining and construction industries; and a development division which brings together business involving critical minerals.

Market and position

LKAB has a leading position in certain segments of the industrial minerals market, particularly in Europe. Today the portfolio includes around 30 industrial minerals, but the business is to concentrate on a smaller number of significant minerals and will increasingly be based on our own mineral resources that are developed or acquired. Our industrial minerals business is aimed primarily at the following market segments:

- Agriculture: mineral fertilisers, soil improvers, 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

Subsidiaries that develop and sell services and products for the mining and construction industries are strategic suppliers to LKAB's iron ore operations and have a key role in both the existing business and in the transformation, as well as selling on an external market.

LKAB Berg & Betong is one of the world's largest producers of sprayed concrete. LKAB Wassara sells water-powered drilling technology that it has developed itself to customers globally that need long, straight holes or are seeking a sustainable alternative that can also be used in sensitive environments. The Wassara hammer is being used in the major redevelopment of Slussen in central Stockholm, for example. The external sales improve resource utilisation as well as generate revenue.

Market development in 2021

The largest business is magnetite, for which LKAB has its own mineral resources in the mines in Kiruna and Malmberget. In 2021 magnetite accounted for 33 (29) percent of sales. Demand is driven by several industries including the production of iron powder, heavy concrete and water treatment.

The magnetite sold to the industrial minerals market consists of both primary products and by-products which are processed and adapted to the requirements in each market. Iron ore prices were high during the year, which affects competitiveness relative to alternative materials with lower price levels. LKAB has been able to keep its customers despite a period of high prices, although margins have been affected somewhat.

Lower than planned steel production at British Steel meant lower volumes of blast furnace slag to process into the cement substitute GGBS, which was compensated for by increased imports into the UK. The minerals huntite and mica continued to develop well. A concentration of the minerals business in the UK took place, with many low-margin products for refractory applications being phased out.

Growth and business development

Potential and plans exist for growth throughout the business area. The focus is on developing and acquiring our own mineral reserves and the areas of use for these. We will also continue to develop sales of the minerals that we already extract while simultaneously evaluating opportunities for new circular business models based on increased resource utilisation along the value chain. The cement substitute GGBS, which is made of blast furnace slag from steel-making, is an example of an important product based on secondary material flows. Read more about our work on page 31.

The subsidiaries that provide rockwork and engineering services as well as water-based drilling technology will secure access to expertise and sufficient resources in important areas for building up the future LKAB. This is to be done both through organic growth and via acquisitions.

The need for resources and expertise within rockwork contracting, for example, increases as we develop the mining at greater depths. During the year the subsidiary LKAB Berg & Betong reinforced the organisation, while market presence towards external customers was broadened through the acquisition of Bergteamet AB.

Operations summary

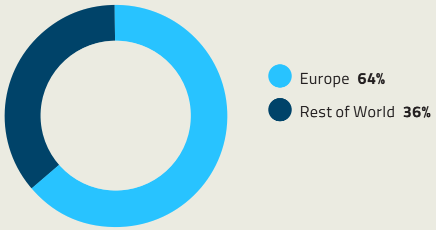
MSEK	2021	2020	2019
Net sales	5,633	4,362	4,732
Operating profit/loss	380	261	343

MSEK **5,633**

Net sales for the Special Products business area during the year, of which MSEK 3,750 (2,818) were external sales

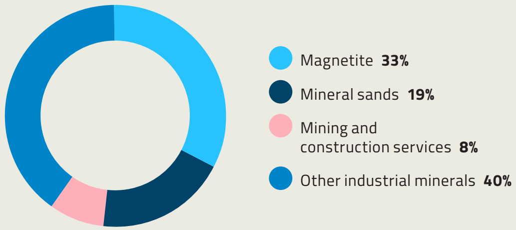
Sales by region

Percentage of external sales (MSEK)



Sales by product area and service area

Percentage of external sales (MSEK)



Facts

The Special Products business area covers the subsidiaries LKAB Minerals, LKAB Wassara, LKAB Berg & Betong, LKAB Kimit, LKAB Mekaniska, Bergteamet AB and LKAB Trading Shanghai.

- 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. Customers are located throughout the world.
- LKAB Berg & Betong and Bergteamet AB are 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 in Shanghai conducts purchasing operations in Asia and helps to secure a sustainable supplier base and value chain through audits and supplier development.

Focus area: Innovation

Our transformation requires production stability and continual improvements in existing operations while at the same time investing in technological advances and new business.

Exploration provides the foundation

One of the aims of the intensified exploration efforts in recent years has been to secure production after the current main haulage levels are expected to be mined out. This provides future cash flow while giving us time to develop our next-generation production system.

Since 2018 LKAB has invested SEK 1.2 billion in exploration, and in 2021 alone we test-drilled the equivalent of 200 kilometres and completed 0.8 kilometres of exploratory drifts. Mineral resources were already expanded considerably in 2020 and increased further in 2021, amounting in total to nearly 2.8 billion tonnes. The goal to secure mineral resources of at least 1,000 Mt in Kiruna, 500 Mt in Malmberget and 250 Mt in Svappavaara has thereby been achieved, putting us in a good position for production up to 2060. The results of the investigations provide a basis for, among other things, decisions on future investments in mining at even greater depths in Kiruna and Malmberget.

LKAB plans to extract apatite concentrate from a residual product of iron ore mining, which will then be processed into phosphorous mineral fertiliser. Rare earth elements, fluorine and gypsum will also be extracted in the process. The results of the exploration also confirm the potential for this; see pages 160–166 for more information.

Basic plan and transformation plan

The mining industry works according to long-term plans known as Life of Mine Plans (LoMP), an economic assessment that takes into consideration all circumstances from the present time until the mine is expected to close.

Taking mineral reserves and mineral resources as a basis, the plan aims to optimise mining and processing over the life of the mine. LKAB works in parallel with a basic plan that centres mainly on the reserves for the existing operations and a transformation plan centred on the mineral resources for the mines and processing of the future.

The transformation plan describes how LKAB can achieve its long-term goals, including the transition to carbon-free operations, increased productivity and a move forward in the value chain by producing sponge iron. For the plan to be implemented, the operational life of the existing mines must be able to be extended – in other words, continued mining must be possible, profitable and competitive.

Operational excellence

Operational excellence means safe, stable and efficient production processes and minimal impact on the environment and climate. The focus in the basic operations is on production stability and maximum capacity utilisation in the processing plants. Stoppages and disruptions do not just affect production volumes, but also our environmental performance such as energy efficiency. To achieve our strategic goals for sustainable value creation we need to maintain consistently high production.

Strategic maintenance

Maintaining the facilities is central to minimising the number of stoppages and ensuring consistently stable production. We plan and implement maintenance work so that the facilities are improved and can be used efficiently until we gradually move over to new production structures for carbon-free sponge iron.

Maintenance work has continued to be affected by the pandemic. Measures to minimise the spread of infection have led to planned stoppages being deferred and extended to minimise the number of people on site.

Flexible supply of crushed ore

A supply of crushed ore from the mines is essential for consistently high production. LKAB needs more flexible logistics that allow crushed ore to be redirected between the production sites and bottlenecks to be avoided. In addition, the open-pit mine in Mertainen was temporarily taken into operation in October. The plan is for the mine to produce a million tonnes over around six months as a reserve of crushed ore for use as needed.

Logistics

Shortage of capacity and operational disruption on the Ore Railway remains a challenge. At the end of the year the Swedish Transport Administration presented a proposal for a national infrastructure plan that included various measures on the Ore Railway. The measures proposed – including double tracks on parts of the line and more passing places – are a step in the right direction, but we do not consider them sufficient given the industrial initiatives that both we and others are planning.

Alongside measures on the Ore Railway, we still have a significant need for capacity at the ports in Luleå and Narvik. The facilities here will need to be adapted as our transformation takes place and the transition is made to handling sponge iron rather than pellets as the main product.

New technology and working methods

Intensive development work is taking place in a number of different areas. This work is closely linked to the operations, with working methods and new technology from the development projects being gradually introduced into the regular operations.

Next-generation production systems feature enhanced decision support through digitalisation, as well as efficient and sustainable flows from ore to finished product. Flexibility, shorter lead times and the ability to adapt the system and future product mix are key factors.

Strategic partnerships with suppliers

LKAB sees great advantages in working closely with strategically important suppliers, not least for our development projects. Our shared ambition is to identify innovative products and solutions that contribute to improved sustainability, productivity and cost efficiency. Consolidating the work to fewer suppliers and establishing long-term relationships allows us to develop together in areas such as the work environment, safety and quality.

Drones and robot dogs underground

Drones have become a familiar sight in our underground mines. They are equipped with advanced scanner technology and are used to map specific areas of the mine with great precision. We are also testing out how we can use a robot dog in our work. The data recorded by drones and the robot dog is stored and used to discover changes in structures, for example.

Changes in Malmberget are starting now

The first HYBRIT plant for the production of sponge iron is to be built next to LKAB's operations in Malmberget. Already in 2022 LKAB expects to start preparatory work in the industrial area for the future transformation.

This is where the process developed as part of the HYBRIT initiative – in which iron ore pellets are reduced to sponge iron using hydrogen produced with renewable energy – is to be tested on an industrial scale. The plant will be ready to produce 1.3 Mt of fossil-free sponge iron in 2026, provided that all the permits are obtained in time. Thereafter the plan is to scale up production of sponge iron in Malmberget to 2.7 Mt by 2030 and then to increase capacity further.

The first plant alone represents an investment of more than SEK 10 billion and is expected to create nearly 200 new jobs. It will kick off a continuous period of construction work, with thousands of jobs being created for many years to come.

Malmberget is well positioned for measures such as electrification of the existing pellet processes.

Continued transformation will require a further expansion of electricity production capacity in order to secure a supply of electricity at reasonable prices.

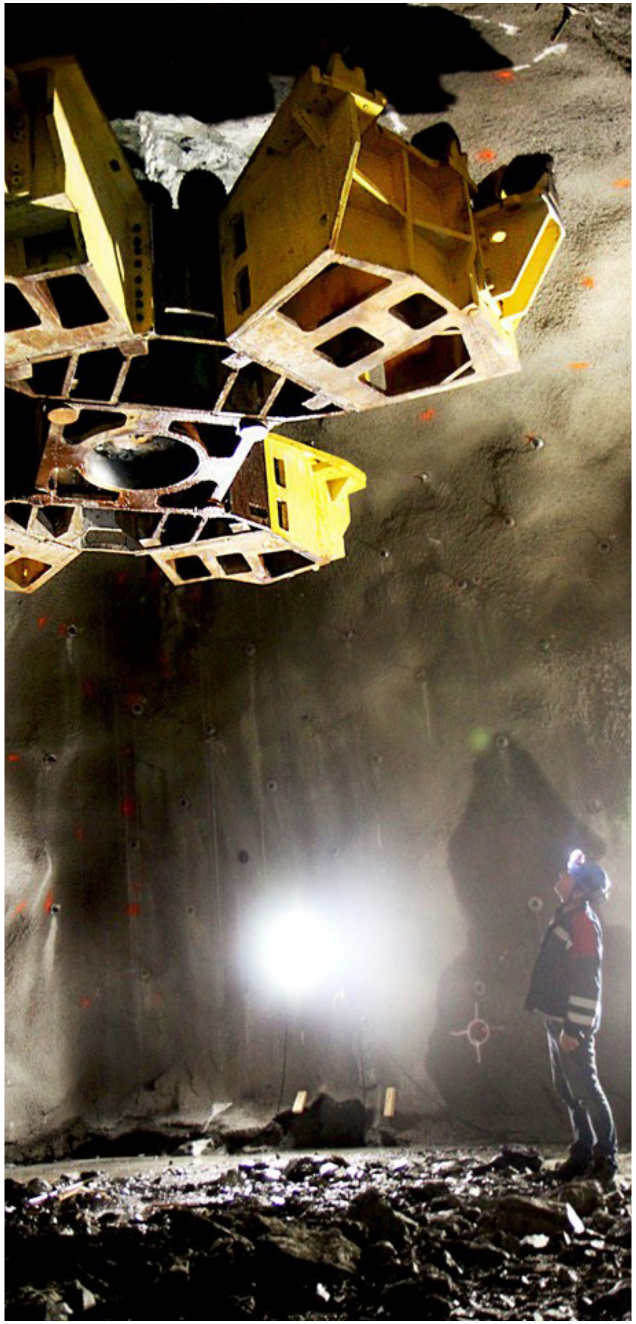
Permit issues are crucial

Work on an application for a new, joint production permit for Malmberget has been going on to some extent since 2018, but entered a new intensive phase during the year. In autumn 2021 the Group began consulting with authorities, the general public and other stakeholders with the aim of having an application submitted by the end of 2022. The application covers continued and expanded production in existing plants, but must also include the new HYBRIT plant.

"This permit is incredibly important for both the short and the long term. In the short term, it is essential for securing continued operation. But it is also necessary in order to implement our climate transformation," says Mårten Fäldner, project manager for the permit application.

New mining design required

Full expansion in Malmberget, as at other production locations, also requires us to go deeper in the mines while still mining on a large scale. There is no other mine in the world doing this at present. We need to show that it is possible to mine at a depth of nearly two kilometres while maintaining profitability and safety.



New mining method is tested

Raise caving, developed by LKAB's mining engineering team, is a new method that addresses some of the challenges of mining at great depths. It is now to undergo full-scale tests.

"Our exploration results are extremely promising and open the way for mining under our current main levels far into the future, beyond 2060. But this also demands new technology that is adapted for new conditions," says Matthias Wimmer, section manager in the department of mining engineering at LKAB in Kiruna.

"There are some mines with production at extreme depths, down to as much as 4,000 metres. However, mines that use large-scale caving – as LKAB does – have not yet reached such depths. And there is a lot of uncertainty as to whether they can maintain viable production volumes in the longer term. Based on that insight, the idea of raise caving was born," says Matthias Wimmer.

In contrast to sublevel caving, raise caving is a method that enables mining of the orebody from bottom to top instead of from top to bottom. This technology shift has several advantages, not least in terms of safety.

"Rock stresses can never be eliminated in a mine, but with this method we are able to influence where seismic events occur, far from the active infrastructure. This means that we allow events, but in specially predetermined locations," says Matthias Wimmer.

In addition, this upside-down method provides good conditions for controlling the flow, mining more ore and for significantly less waste rock, since dilution is avoided. As the infrastructure and drifting – i.e. developing new roads in the mine – can be reduced, it also provides the conditions to improve efficiency considerably.

New mining layout

Raise caving is based on constructing shafts directly in the orebody through raise boring. This means that mining starts in the raises and is not done horizontally and conventionally by means of so-called drifts.

"Concurrently with development of the raise caving method, we have worked on machine development. This is a highly automated machine that can both drill and charge via the raises," says Matthias Wimmer.

Rock stresses are controlled through a system of de-stressing slots. Intermediate pillars will initially withstand high pressure, enabling the development of further slots. Mining can therefore proceed in a stress-reduction zone, thanks to this method. The geometry of the pillars changes gradually as a result of the mining, which means that they become deformed and the high stresses within the pillars are relieved. This also makes it possible to subsequently mine out the pillars.

LKAB needs to make decisions as soon as 2025 on how the underground mines will be mined below the current levels. In addition to raise caving, therefore, other possible ways forward and downward through the rock are being investigated.

Turning today's waste into tomorrow's resources

Recycling and innovation secure critical raw materials from a European source for use in clean technology and food production.

In autumn 2021 the European Raw Materials Alliance (ERMA) released its action plan for securing access to rare earth elements for European industry. This states that 95 percent of all electric vehicles use rare earth elements in their motors, and that Europe does not have its own extraction industry for rare earth elements. LKAB wants to change that.

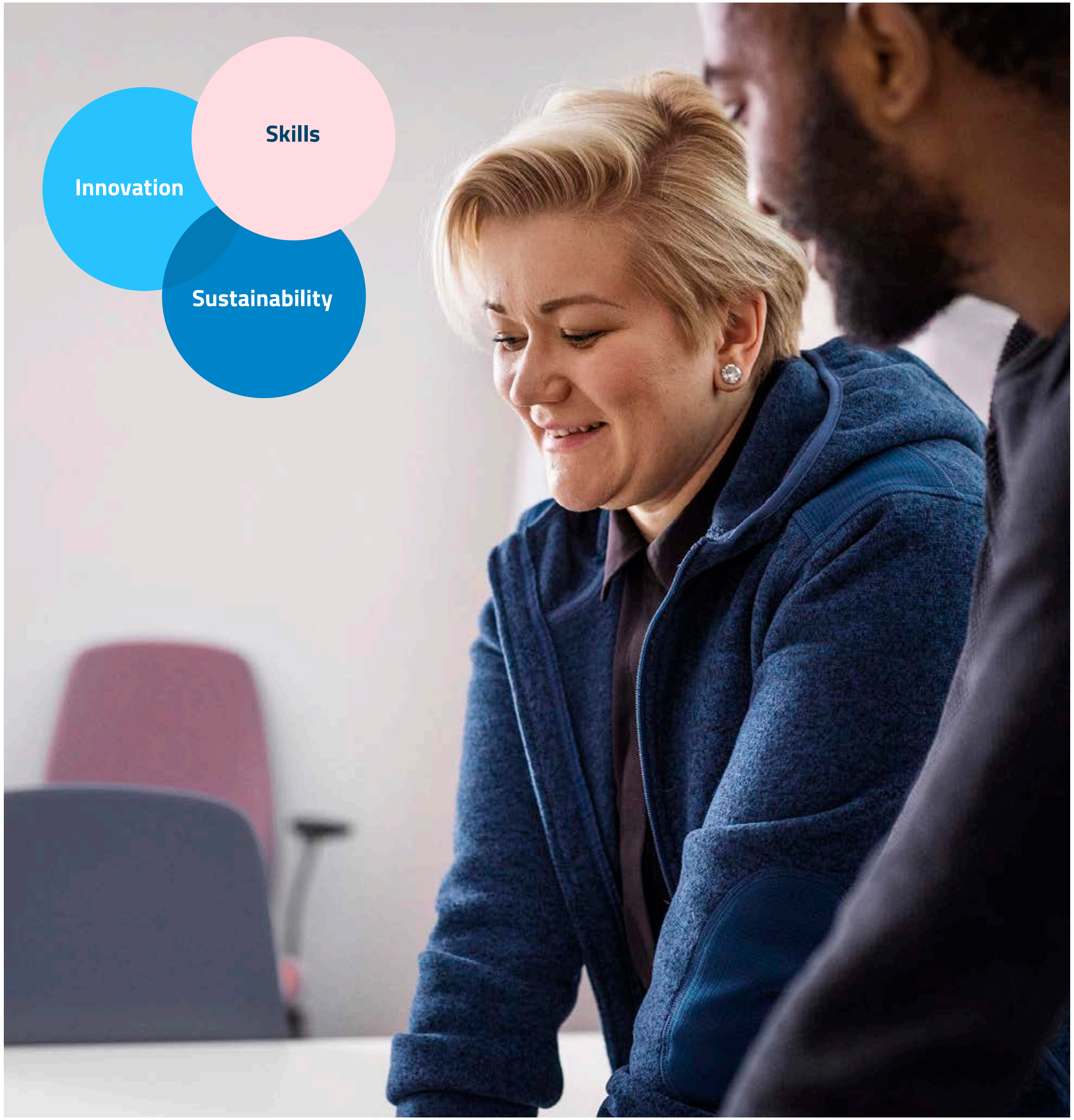
In our exploration we now also report the phosphorus content, but our ores also contain other critical minerals and metals such as rare earth elements and vanadium. As a first step, we plan to take tailings from the mines in Kiruna and Malmberget and convert them into apatite concentrate. The concentrate is then processed further into phosphorus mineral fertiliser and in the process rare earth elements, fluorine and gypsum are also extracted.

The project includes facilities for producing apatite concentrate in Kiruna and Malmberget as well as further processing in a new industrial park. Hydrochemical processes using sulphuric acid are used to produce rare earth elements, fluorosilicic acid/hydrofluoric acid, phosphoric acid, mineral fertiliser and gypsum from apatite concentrate. Using hydrogen and electrified processes will mean that the processing is almost entirely free from carbon emissions.

The aim is to be able to start production in 2027. The initiative will create more than 500 jobs and investments are expected to amount to SEK 10 billion.

Timeline

2021	2022	2023–2026	2027
Preliminary study	Pre-planning	Planning and industrialisation	Production



Focus area: Skills

Ensuring access to the skills needed to lead the transformation and develop innovative solutions for the mining of the future is crucial to our success.

LKAB is embarking on an exciting transformation. We need to deliver here and now, while at the same time developing for the future and for coming generations. Our transformation will require investments in our development projects and the facilities that are to be built and taken into operation. It will mean new jobs, and skills availability is one of our most important strategic issues. Initiatives are required at multiple levels and we need to work together with other companies, authorities and actors in the region.

New roles call for new skills

As we prepare for the production of the future, the ways we work and the roles available are both changing – which in turn calls for new skills. That means we need to provide the conditions for skills development and lifelong learning among our existing colleagues alongside recruiting new employees. During the year we have seen growing interest in the job openings we have advertised.

We are continually recruiting electrical engineers, automation engineers, rockwork/mining engineers, mechanical engineers, maintenance engineers and environmental engineers, but to achieve our transformation there is also an increased need for strategic expertise in areas such as permit processes and innovation projects. Development areas such as hydrogen, hydrometallurgy and chemical production are new to us and we therefore need to ensure that we have the right expertise to drive this development.

Each area of operations is working to identify current and future skills requirements and conducting activities to secure skills availability.

Strategic skills development

Alongside recruiting employees with new skills, it is equally important to fully utilise the potential that exists among our existing colleagues and to ensure that everyone is able to develop their skills as the transformation takes place.

At LKAB there are many different roles and we have worked actively to clarify the opportunities and career paths that are available within the organisation. This allows colleagues to develop in their position in a series of stages, whether as an engineer, economist, project manager or geologist. There are clear criteria for each career stage.

We work in various ways to give our employees the opportunity to transform their skills for new areas. The implementation of a new learning platform in 2022 will increase access to development, particularly digitally. During the year pilot courses with elements of gamification, VR and AR technology were evaluated and several of the courses are ready to be developed further and implemented.

There is a focus on leadership. During the year the operations in Kiruna have worked intensively on leadership development through networking groups and a preparatory programme for managers. Other operating locations have also begun working according to the same structure.

Attractive employer

To recruit and retain employees we need to be an attractive employer. The pace of change is fast and our employees have great freedom and are trusted to be part of developing the business. The work environment suits employees who are driven by curiosity, who like challenges and who have a strong desire to develop.

Offering competitive compensation and good employment conditions is a fundamental requirement and we review these areas on an ongoing basis. We are also committed to being a workplace where everyone is able to thrive and develop, regardless of gender, sexual orientation or background. Read more about our diversity work on page 42.

Our colleagues feel they can be involved and have an influence – as confirmed by the fact that more than 90 percent of those who took part in our 2021 employee survey responded that they feel their work is important for the company's results. The survey is based on questions in four areas: LKAB as an employer, In my workplace, My line manager, and Myself as an employee. The results of the survey showed an improvement in all of these areas, the greatest increase being noted within "LKAB as an employer". Read more about the results on page 148.

Our offering to employees

A clear employer offering is an important part of our work to secure our future and long-term competitiveness.

We need to attract and retain skills, but also build up pride and ambassadorship among our colleagues.

In a series of messages we have summarised what we offer our employees, what we stand for and what we expect of everyone who works at LKAB. More than 100 employees from Sweden, Norway, the UK and Germany have contributed their experience and views what it is like to work here and what makes LKAB stand out as an employer.

Together we arrived at six key messages to employees:

- We shall lead the transformation to a carbon-free industry
- Together we play a major role for people and communities
- We provide the world with tomorrow's resources
- You will be given confidence and freedom to develop and grow
- You are at the very heart of our culture
- You will have an exciting day-to-day job in an exciting world

Attractive operating locations

Attractive communities are an important component in attracting new employees and ensuring that existing colleagues will want to stay here. We invest in our operating locations, and in partnership with municipalities and other actors we work to achieve good community services such as access to housing and good schools.

In the Swedish orefields LKAB is building homes with recruitment in mind that will be ready to move into in 2021–2022 and the construction of new homes will continue during the transformation. Another ambition is to be able to offer students temporary accommodation in conjunction with summer jobs and internships.

Through the LKAB Academy foundation, we contribute to supporting preschools, elementary schools and upper secondary schools in the Swedish orefields and in Narvik with the aim of increasing interest in science and technology among children and young people.

Working with academic institutions

To ensure that the engineers of the future have the right skills we work in partnership with various academic institutions.

LKAB has collaborated with Luleå University of Technology (LTU) and other industry partners to produce an international BSc in sustainable minerals extraction that will start in autumn 2022. A course focusing on health and safety officers has also been created.

Final courses within the KUL 4.0 project (Course development for lifelong learning in primary industry), a collaboration between LKAB, LTU and the University of Gävle, also took place during the year. The purpose of these courses is to assist with the transition to more digital ways of working.

Current course content for transforming skills is being reviewed jointly with LTU. New intakes for “Mechanic to Technician” and “Electrician to Instrument Technician”, which aim to develop colleagues’ skills further, are planned during 2022. Some LKAB colleagues have also completed studies through Bergsskolan’s remote learning course in minerals engineering.

We reached out to students during the year in various ways, such as by taking part in digital careers fairs aimed at certain universities. We also participated in a project aimed at strengthening cross-border collaboration, with Finns as the target group.

During the year we donated SEK 200 million to a newly established foundation for the purpose of promoting research and education at Luleå University of Technology, focusing on a sustainable mining industry.

Trainee programme provides an important recruitment base

LKAB’s trainee programme is an important source for recruiting key competencies. The nine-month long programme provides both work experience and training with a clear focus on the future needs of the operations. In the autumn an inventory of needs was drawn up and a new trainee programme will start in 2022.

Religia Shaliha, research engineer, Malmberget

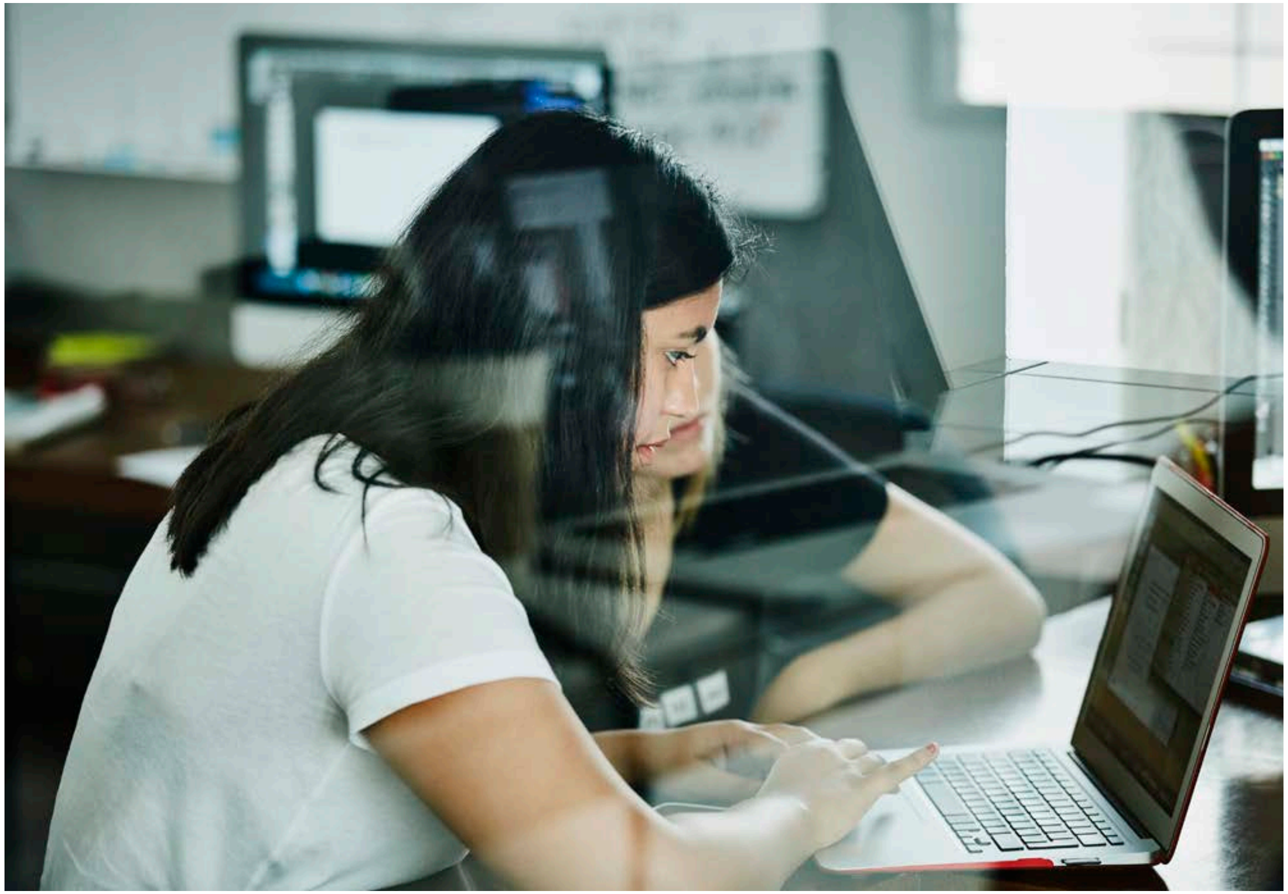
“I spent time at Luleå University of Technology in conjunction with completing my masters in chemical process engineering, which is when I found out about the HYBRIT initiative. I applied for LKAB’s 2020-2021 trainee programme and today I work within product and process development as a research engineer. We are at the heart of a massive industrial transformation. The opportunity to make a real difference, despite being at the beginning of my career, is also what attracted me to LKAB.”

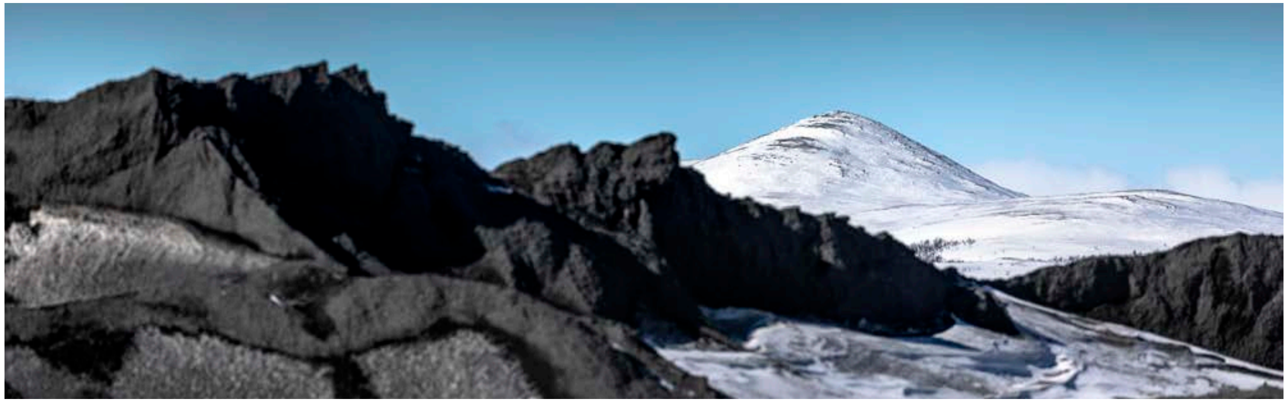
Marie Lundgren, sustainability strategist, Malmberget

“I’ve been given the chance to work in various positions in lots of exciting areas, both in Sweden and internationally. I spent four years at LKAB’s purchasing office in Shanghai and I’ve also worked at LKAB Minerals in Essen, Germany. For me, LKAB is a company that is taking responsibility here and now for its employees, for its surrounding environment and for the communities where we operate. But it’s also a company that is at the forefront of driving the transformation to a better future.”

Simon Ahlnander Barsk, electrician, Kiruna

“As an electrician, industry has always appealed to me because there are great opportunities to develop and very varied tasks to work on. Being able to work shifts is also a big plus, both financially and because I’m a bit of a night owl. I think the main things that characterise our workplace are flexibility and the fact that we stick together. I recently became a parent and I’m also involved in trade union work, both of which can be demanding – but LKAB and my colleagues have been incredibly accommodating.”





Partnership will attract 25,000 new residents to northern Sweden

Attracting skilled employees is a challenge that LKAB shares with other companies in the region. Various industrial initiatives are in taking place in parallel and we are working together across companies to attract 25,000 people to Norrbotten and Väster-botten within five years.

Sweden's great green transformation is taking place in the north of the country and with investments in the order of SEK 1,000 billion the need for workers is expected to increase enormously. Recruiting the right expertise is a great challenge, however, as the region has a low level of unemployment and a high average age due to people moving away in the past.

Project T-25 is a collaboration between Luleå University of Technology (LTU) and companies including Boliden, Northvolt, Skellefteå Kraft, SSAB, Vattenfall and LKAB to secure the talent needed for the future. Municipalities and other companies are also involved.

Through T-25 we will provide information about a region that is a future powerhouse, with a high level of industrial activity and cutting-edge technology and which is playing a leading role in the climate transition. It is also about working to build attractive communities that offer great places to live, good services and a wide range of cultural activities for the whole family to enjoy.

Among other things, the collaboration is aimed at increasing the number of engineering students at LTU and getting new graduates to stay in the region and take up employment here. Those looking for a job can register their interest through a shared database for the various companies taking part in T-25. The MindDig platform provides job seekers with information about the various companies and municipalities as well as about the region.

One in three Swedes is open to moving north

The industrial initiatives in northern Sweden depend on more people being prepared to move to the region or spend periods here.

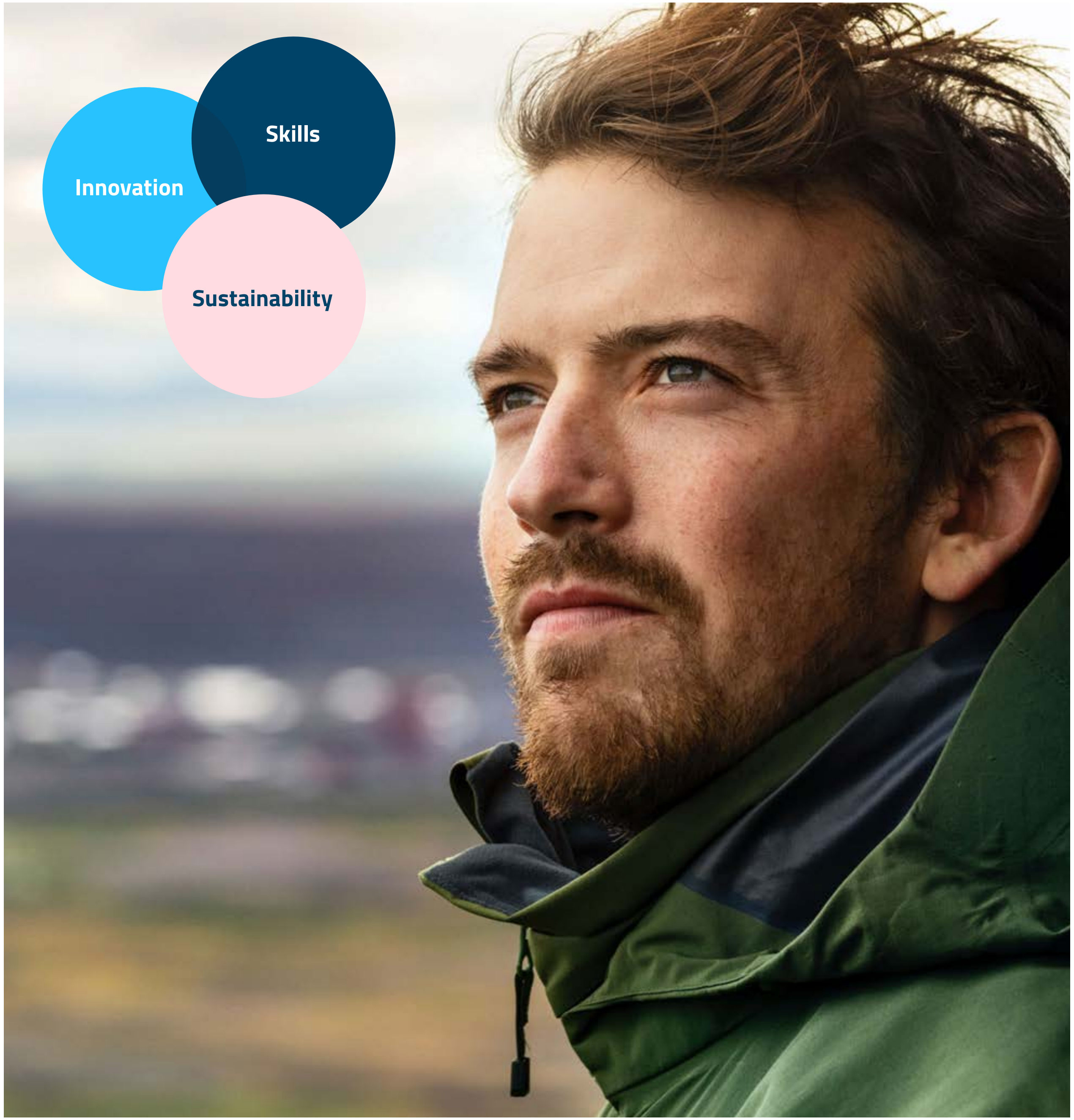
For a better understanding of what drives people to move and what stops them from doing so, we commissioned analysis and survey company Novus to ask 1,000 Swedes their views of the region and their attitude towards moving here.

The survey shows that people's ideas about Sweden's northern regions are changing. Having previously been characterised by closures and depopulation, many people believe that the area is now going to become stronger and a clear majority – 63 percent – think the population will increase. When asked about the possibility of making the move it emerged that 31 percent were willing to consider moving north. The 18–29 age group was the most positive, with a full 42 percent being able to conceive of doing so.

Closeness to nature, a higher quality of life and active leisure opportunities were among the factors mentioned by those who were open to moving. Those who could not imagine making the move mentioned a lack of any relationship with the region and the great distance as the main barriers.

Values-driven culture

LKAB's culture is key to ensuring a business that drives improvement, development and innovation. Employeeship and leadership means creating a common culture characterised by team spirit and respect in which employees develop both themselves and the business. Everything is always based on our values: **committed**, **innovative** and **responsible**.



Focus area: Sustainability

As a leader of the transformation of our industry we take responsibility and set an example in our sector. We do this not just to secure our own future and competitiveness, but also for the sake of the world around us and for future generations.

A clear and sustainable plan for the future

We have been working to minimise our impact for a long time and now that we are transforming our operations, our sustainability ambitions are even higher. We are part of a climate problem and we want to be part of the solution.

In setting a new world standard for mining we are creating a safe, healthy and stimulating workplace. We will also contribute to a circular economy and better global resource management by processing iron ore and minerals into climate-efficient new products.

To be able to act in a sustainable way throughout the business and at each stage in the value chain, in 2021 we produced a road-map for our work. This shows the concrete steps we must take in the period up to 2030 to achieve a climate-efficient and sustainable transformation and to realise the Group's strategy for the period up to 2045.

Code of Conduct guides us

Our work takes place in consensus with various stakeholders, and to ensure ethical action throughout the value chain we have an internal Code of Conduct for our employees and an external Supplier Code of Conduct.

The Codes of Conduct are based on recognised declarations and conventions such as the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, UNICEF's Children's Rights and Business Principles, and the Code to Prevent Corruption in Business (the Business Code). We also joined the UN Global Compact in 2019 and Transparency International in 2020.

Environmental sustainability

LKAB aims to be one of the most resource-efficient and environmentally efficient mining and minerals companies in the world. Our business has an environmental impact and we work on a broad front to minimise this. Transitioning to carbon-free processes and products is the main thing we in Sweden can do for the climate.

We strive for resource-efficient water and energy use without emissions that impact our surroundings. We also make efforts to ensure that our business is not run at the expense of biodiversity in the areas where we operate. To look after our shared resources better we develop circular business models in which resources are used, reused and recycled.

Resource use and environmental impact

Our operations are energy-intensive and an important goal is therefore to reduce our energy intensity by 10 percent per tonne of finished product by 2030. Historically, hydroelectric power and fossil fuels such as oil and coal have been our main energy source, but fossil fuels will be phased out and replaced with more electricity produced using wind, water or nuclear power.

Large quantities of water are used in the mining and processing. The surplus water can impact ecosystems in neighbouring lakes and watercourse when it is discharged. Water treatment is therefore a focus area and we are working together with researchers to develop innovative methods in this area. We are investigating treatment methods for sulphate, nitrate and uranium.

Alongside efforts to reduce the volumes of waste and residual products that arise, we are working to increase circularity and to ensure that waste and residual products are turned into useful products, reused and recycled. We have long been using waste rock from the mines to produce ballast for the construction industry, for example, while waste heat from our plants is used for district heating. Work to enable a circular and resource-efficient production and value chain is taking place in partnership with our customers and suppliers. Read more on page 31, among others.

In our environmental work we maintain a close dialogue with our stakeholders and work in partnership with them. We want our employees to be involved in the work, so in 2021 we launched new mandatory environmental and energy training. The training looks at LKAB's environmental and energy work and also covers various environmental aspects over the lifecycle of the mine, as well as chemicals, waste and dam safety.

Transformation of the mine area in Svappavaara

Mining will continue in Svappavaara for some years to come, but the transformation and remediation of the area began already in 2021 with sights set on adding ecological value.

LKAB has always had an obligation to restore the land we utilise when it is handed back. We have raised the bar, however, and our ambition is not simply to restore the land – we also want to increase its biodiversity. The transformation must be adapted to the unique circumstances that exist at each operating location.

"In this work we take many different interests into consideration. We want people to be able to go mushroom picking, fishing, hunting or bird-watching by a lake, and we want animals and plants to thrive in the area," says Niddi Ögren, departmental manager at LKAB in Svappavaara.

By focusing on ecosystem services – i.e. the interaction between organisms and their environment – we can create the conditions for increasing biodiversity.

"We can create the conditions for an abundance of wildlife by planting mosses and lichens, or by putting out dead wood to increase insect life. We also want to see how we can use deposited material in a creative way – such as making a sledding hill or a nest site for sand martins," says Niddi Ögren.

Environmental permits are crucial and challenging

LKAB's operations require permits under the Environmental Code. The environmental permit process has to decide whether an operation is being conducted in the best possible way for people and the environment and is thus permissible from an environmental perspective. These permits are crucial for our future – so that we are able to maintain production and make the necessary investments and environmental improvements. The legislation and its application in the permit processes, as well as our own requirements of a sustainable business, are continually changing. The applications are therefore wide-ranging, complex and resource-intensive.

LKAB has long worked actively to take environmental aspects into consideration when developing the business. However, the design of the permit processes tend to restrict rather than encourage development. Unpredictable and protracted permit processes are a major challenge for Swedish mining industry. Together with industry organisation Svemin, LKAB is continuing to draw attention to this issue. We are calling for clarity and predictability in permit processes, and also for a holistic approach in which consideration is given to socioeconomic interests as well as environmental and climate impacts in a broader perspective.

Biodiversity

Biodiversity loss poses a great threat to our wellbeing. We utilise land for our operations, sometimes in natural areas that are particularly worthy of protection, and we can see that the need for land will increase further as our transformation and development take place.

Biodiversity has therefore long been a priority issue for LKAB, and through the years we have built up solid experience of developing methods and making innovations in this area. We want to be a pioneer – both by retaining and restoring natural values, and also by increasing biodiversity. This work is based on the mitigation hierarchy: to avoid, reduce, restore and compensate for our impact.

During the year we reviewed our systematic work. We formulated a goal for 2030 to achieve a biodiversity net gain in the regions where we operate, in accordance with the industry-wide roadmap produced by Svemin with LKAB playing an active role.

Methods to create added ecological values are being tested in and around our operations. North of the Mertainen mine, for example, we are carrying out mire haymaking to favour more plant species. The area involved will be gradually increased to 50 hectares in 2025. We are also participating in external projects to develop methods of measuring biodiversity.

Permits

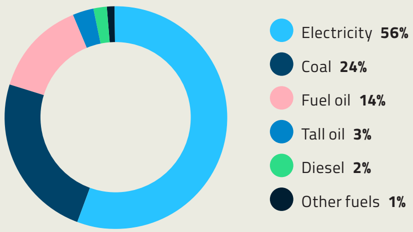
Our operations, including the impact that LKAB has on its surroundings, are regulated by Swedish and European legislation and by the permits in force for each part of the operations. In 2021 the following major permit events took place.

- In summer 2018 an application was submitted to the Land and Environment Court in respect of a new production permit for the operations in Kiruna. Work on the requested supplements to the application began in 2019 and was able to be completed in autumn 2020. In autumn 2021 the application was rejected with reference to shortcomings in a notice of consultation. LKAB has appealed the ruling to the Land and Environment Superior Court and notification of leave to appeal is expected in 2022.
- In Malmberget we were granted permission during the year to deposit waste rock in a new cavity and to expand the capacity of an existing tailings pond. In parallel with this, work on a new comprehensive production permit for all the operations was intensified. This will cover both existing operations and some new activities, such as the production of sponge iron using the HYBRIT method and apatite extraction in an apatite plant. Both are important steps in our transformation towards sustainability and improved resource management.

Alongside these major matters LKAB is dependent on bringing about minor changes in order for the operations to continue, such as changes relating to rock piles and the use of crushed ore.

Energy consumption

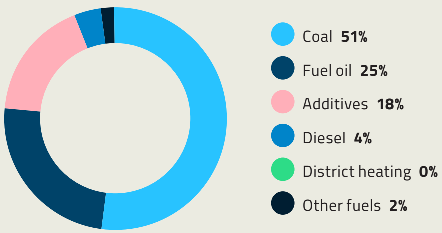
Percent



Energy intensity increased compared with the previous year, partly due to an increased number of unplanned shutdowns and lower production volumes. Volumes were particularly affected by extended maintenance shutdowns associated with measures to prevent the spread of Covid-19.

Carbon emissions

Percent



Total carbon emissions reduced during the year, which is a positive effect of ongoing trials to replace fuel oil with tall oil at one of the pelletising plants in Malmberget.

165 kWh/tonne

Energy intensity per tonne of product (159 kWh/tonne)

25 kg/tonne

Carbon emissions per tonne of products (25 kg/tonne)

Social sustainability

High business ethics and far-reaching responsibility for the impact of the operations on people form the basis of our social sustainability efforts. Clear procedures for sustainability throughout the value chain, including respect for human rights, boost our competitiveness.

We conduct proactive and inclusive dialogue with various stakeholders about our development and transformation, with the aim of helping to create long-term social acceptance of our operations.

In relation to our employees our focus is on creating good working conditions and putting safety first, and on ensuring a healthy, values-driven culture that promotes both diversity and equal opportunity.

We will also continue to play an active part in developing attractive communities with good places to live, so that people want to move here and want to stay. Here we work in partnership with local and national actors to make the locations more attractive.

A safe, healthy and stimulating workplace

LKAB offers an exciting, forward-looking environment where our employees are trusted and given the freedom to contribute to sustainable development. A safe, healthy and stimulating work environment is essential so that people feel secure, thrive and do a good job. Read more about our work on skills development and the results of our employee survey on pages 32–34 and page 148. Safety work has the highest priority and we work continuously and for the long term to develop a culture of participation in which employees take responsibility for the safety of both themselves and others. Since the "Safety first!" approach was introduced in 2006 we have seen a clear improvement in the accident rate, but the trend has flattened out and the goal of 3.5 accidents per million hours worked has not been achieved.

During 2021 things moved in the wrong direction and the rate increased to 8.2 (6.3) lost time accidents per million hours worked. In 2020 we recorded the lowest accident rate in our history. Accidents relate mainly to slipping/tripping and falls on the same level, with sprains and strains being the most common consequences, but more serious incidents have also occurred – for example, accidents involving vehicles.

Stepping up health and safety efforts

To turn around this trend we are focusing fully on intensifying our work to strengthen the safety culture and on systematic and proactive health and safety work. Leadership and employeeship are an important starting point, with our managers having a key role in upholding the culture, ensuring the right behaviours, analysing risks and providing orientation for new employees.

In adopting updated goals we have also raised our ambition for 2030 to fewer than 2 lost time accidents per million hours worked, with an interim goal of fewer than 4 accidents for 2026. To achieve these goals we need to make proactive efforts in a number of areas.

"Safety first!" was updated during the year to clarify the management of and frameworks for health and safety – see fact box on next page. The new guidelines were adopted by Group management in January 2022 and their introduction will be supported by an information campaign to spread the word as well as other activities.

Safety efforts in the workplace

Safety work within LKAB is largely focused on the workplace itself, particularly within mining operations where the risks are greatest. There is a major focus on plant safety that incorporates training as well as preventive work and risk assessments.

During the year a number of projects were carried out in Sweden and Norway to improve maintenance, including preparations for introducing standardised ways of working in a more proactive way. A project is also in progress to introduce data-driven maintenance that will provide a better documentary basis for prioritising various elements, resulting in the longer term in safer plant.

Accidents among our suppliers are included in the statistics and during the year we continued working with our suppliers of mechanical services, focusing on maintenance of our plant. Limiting the number of suppliers and building long-term relationships gives us more opportunity to develop together in important areas such as safety and quality.

There has been further focus on safety as part of the development work to achieve a new world standard for mining. More automation and digitalisation change not only how we work in the operations, but also our communications and other activities to encourage greater safety.

Psychosocial work environment
To promote health and wellbeing it is important to have a culture that enables a feeling of participation and control over the work situation. The psychosocial work environment is just as important as the physical environment, and work is in progress to produce a clearer strategy for preventive work in this area. Proactive work that encompasses wellbeing and inclusion can also have a positive effect on accident statistics.

In 2021 managers completed digital training in the organisational and social work environment, which included learning how to communicate effectively in order to bring about change in their team. Various initiatives have also taken place at our operating locations such as leaders forums, workshops and training in diversity and equal opportunity.

New monitoring tool
To facilitate proactive work environment initiatives we need to understand what lies behind the trend in health and safety. During the year we launched a work environment index called "Safe and healthy work environment" – our tool for monitoring in this area. The index is based on responses in employee surveys and weighs up four areas: safety, health, inclusion and wellbeing. It visualises key indicators for how we are doing in each area. All employees can access a work environment report on the results for the various areas, as well as the underlying categories and factors that affect the outcome.

Diversity and equal opportunity
To ensure that LKAB is innovative and can access the skills it needs, it is crucial that the Group is characterised by diversity and inclusion. We work actively to reinforce our values-driven culture and we take a zero tolerance approach to discrimination.

Safety first!

"Safety first!" describes how LKAB works to improve health, safety and the work environment. Setting out clear frameworks for this area, it details how our business areas are to ensure that the guidelines are complied with and that we achieve our goals. "Safety first!" was introduced in 2006 but was updated in 2021 to reflect our new strategy, organisation and approach.

In the updated version the "golden rules" that previously applied in some areas of the company were adopted throughout LKAB. These rules show clearly what behaviour encourages a safe and healthy work environment. A sixth rule – "talk about it" – has also been added, relating to the psychosocial work environment.

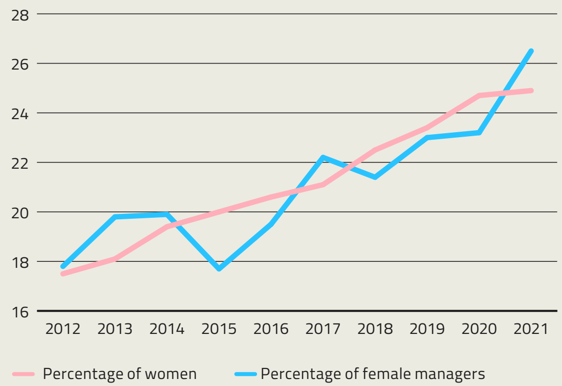
Employees in 2021
The total number of employees in 2021, including part-time and fixed-term workers, was 4,469 (average).

- At year-end there were 4,825 permanent employees, of whom 1,796 were white-collar workers and 3,029 were employed under collective agreements
- 15 people worked part-time
- 444 were fixed-term employees

For more information on the number of employees and on remuneration, see Note 7 on pages 96–97.

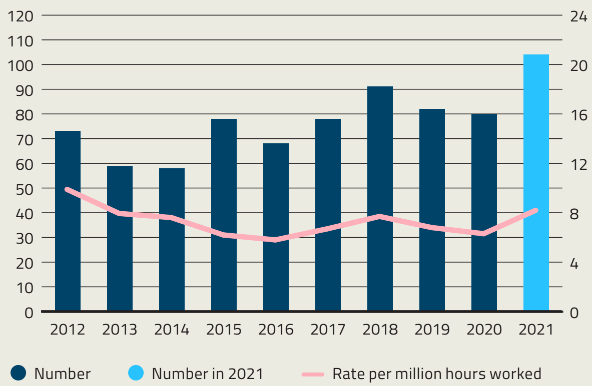
Sick leave
Sick leave amounted to 4.19 (4.35) percent, with long-term sick leave accounting for only 0.63 (0.58) percent.

Percentage of women at LKAB
Percent



Women make up an increasing share of LKAB's employees. At the end of the year the number of permanent employees was 4,825 (4,555), of whom 25 (25) percent were women and 75 (75) percent men.

Lost time accidents, LKAB Group
Number



The accident trend gives us cause to review our approach, suggesting potential to develop both leadership and systematic work environment efforts in this respect. The increase in 2021 was partly due to some routines being affected by the coronavirus pandemic, such as maintenance being delayed or reduced. The pandemic also restricted opportunities for physical meetings, which are needed to maintain the dialogue that is important for promoting and developing the safety culture.

We want to recruit more women, more employees with an international background and more young people, and a diversity perspective is therefore integrated into each new recruitment. For example, LKAB partners with Female Tech Engineer – a programme that links up female engineering students with Swedish industry – with the aim of reaching more female engineers and attracting them to tech-heavy positions within LKAB.

Women make up 25 (25) percent of the Group's employees and 27 (23) percent of the Group's managers. The goal for 2021 was for women to make up 25 percent of both employees and managers. In our updated goals for 2030 we have expanded our ambition to a 60/40 gender split in management teams, with an interim goal that women make up 30 percent of our workforce and managers by 2026.

Impact of the coronavirus pandemic

The pandemic continued to affect us in 2021. Our focus was on general measures to reduce the risk of infection and individual measures to protect workers in risk groups. The basic principle was to follow the directives from the authorities, supplemented by local measures adapted to each workplace. However, we also needed to remain flexible and be prepared to adapt quickly to specific situations such as cluster outbreaks.

In the first half of the year the infection rate in Norrbotten was generally high, requiring measures to be adjusted on an ongoing basis. The majority of major maintenance shutdowns were significantly affected, being reduced in scope or extended in duration. The preventive maintenance that was not carried out reduced the production capacity of the processing plants in Kiruna during the autumn.

From the summer onwards LKAB helped speed up the vaccination rate in the region by financing extra nurses at vaccination clinics in Gällivare and Kiruna via the corporate healthcare provider Previa.

Respect for human rights

As a state-owned company we have a duty to act in an exemplary manner and to ensure that our employees and business partners respect human rights throughout the value chain. Our work is based on the Global Compact's Ten Principles for sustainable enterprise covering human rights, labour, the environment and anti-corruption. The focus here is on our social impact from mining and on our operations and production in high-risk countries.

As a global purchaser we have a significant impact on the world around us. Our work on sustainable purchasing practices is based on a risk perspective in which suppliers are classified as regards geographic risk, industry/product risk and other factors. Suppliers' work on human rights, health and safety, the environment and business ethics/anti-corruption is given specific priority. We do not buy materials containing conflict minerals, the extraction of which supports armed conflicts and can result in serious violations of human rights.

In accordance with the requirements of the UK Modern Slavery Act 2015, which applies to companies with operations in the UK, each year LKAB publishes a statement describing the steps we take to ensure that no form of modern slavery, human trafficking, forced or compulsory labour occurs within our operations and supply chain. Read more about our work in this area on page 147.

LKAB's priority sustainability topics 2022–2030

Climate sustainability – how we become part of the solution	Environmental sustainability – how we minimise our negative impact	Social sustainability – how we take responsibility	Economic sustainability – how we create sustainable value
▪ A greater degree of fossil freedom and reduced carbon emissions	▪ Biodiversity ▪ Sustainable management of water and waste ▪ Secure energy supply and efficient energy use ▪ Circularity and resource efficiency	▪ Safety first ▪ Local social responsibility and engagement ▪ Diversity and equal opportunity	▪ Financial strength ▪ High business ethics and sustainable value chain

Read more about climate and economic sustainability in the strategy section on pages 15–21. For in-depth sustainability information see the sustainability notes on pages 138–158.

Dialogue is central to cooperation

Acting in consensus with and with respect for local stakeholders and livelihoods is central for acceptance of the operations. Here the Sami people and the Sami communities have a special position because of their status as indigenous peoples. To minimise our impact on the Sami communities and reindeer herding, LKAB has established cooperation agreements with the three Sami communities that have reindeer grazing pastures adjacent to the operations. The agreements provide a basis for the forums and ways of working required for sharing information, making decisions and ongoing consultation. They are based on the principle of Free Prior and Informed Consent (FPIC) as expressed in international law on the rights of indigenous peoples. We work actively to increase knowledge among our employees of what the agreements mean.

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.

Affordable and Clean Energy

The magnetite ore that we mine has an advantage over our competitors' hematite ore. When being processed into pellets magnetite gives off heat, and energy consumption is therefore lower. Central to the transition to the production of sponge iron is the development of processes based on renewable energy, for a fossil-free value chain for steelmaking.

We are also working to phase out fossil fuels in our existing plants. Successful trials have taken place, including a switch to biofuel in one of the pelletising plants in Malmberget.

Already today surplus heat from our pellet production is used for district heating in Kiruna, thereby reducing the city's need for fossil fuels for heating.

Decent Work and Economic Growth

Safety work has the highest priority and we work to develop a culture characterised by participation, in which employees take responsibility for the safety of both themselves and others.

We are a significant purchaser and have more than 4,800 suppliers in 35 countries. That brings risks in respect of human rights, forced and indebted labour, health, safety, and living and working conditions.

We actively work to set an example in terms of acting ethically, anti-corruption, respect for human rights and non-discrimination. These matters have a high priority and are ensured by means of various governing documents, among other things. Through our Supplier Code of Conduct we set requirements of our suppliers and monitor that they are ensuring decent working conditions and safe workplaces.

Industry, Innovation and Infrastructure

Mining employs many people, directly and indirectly, and is an important driver of economies and development. Cooperation and dialogue with the stakeholders in our operating locations, as well as with regional, national and global partners, ensures that we seize any opportunities for improvement. The development projects we carry out together with customers and suppliers are examples of this.

The expansion of an infrastructure for hydrogen production is essential for the industry's climate transition, and as a stakeholder LKAB is driving this development. The industrial initiatives also require investment in expanding and improving the Ore Railway.

Responsible Production and Consumption

Our mining and ore processing generate large volumes of residual materials in the form of waste rock and tailings. Alongside actions to reduce the volume of waste, we try to ensure that as much as possible of the material mined finds a use – for both financial and environmental reasons. The tailings contain phosphorus, rare earth elements and fluorine. We are working to develop technology that allows us to utilise these mineralisations and thereby turn waste into valuable resources.

Despite a high degree of water recirculation in our ore processing, a large surplus of water arises that is discharged into surrounding lakes and watercourses. This is problematic from a treatment point of view, but active work is in progress to identify possible treatment methods. Examples of other development work to minimise waste and increase utilisation include reducing wet waste through thickening and looking at how stockpiles of waste rock can be designed for a more natural-looking landscape.

We are also working to increase our overall resource efficiency in the value chain – e.g. for indirect materials, transport and energy – and see clear advantages in developing partnerships with suppliers, customers and other actors.

Life on Land

Our operations utilise land, some of which is in areas specially designated for protection. Biodiversity has therefore long been a priority and we have clear guidelines on how this issue is to be addressed. In recent years we have ramped up our efforts to add ecological value and our long-term objective is to achieve a biodiversity net gain.

Together with industry organisation Svemin, LKAB has produced a roadmap for increased biodiversity. The goal is that by 2030 the mining and minerals industry will contribute to a biodiversity net gain in all locations where mining takes place. We are planning and creating conditions not just for how we work to develop biodiversity in our day-to-day operations, but also how we will restore areas and shape the landscape in the future.

Gender Equality

To be an attractive employer, improve our recruitment base and retain skills within the company, we need to provide a secure and inclusive workplace.

- We have therefore set targets for safe and healthy workplaces and for increasing the percentage of women and female managers in our operations.
- We need to recruit more women, more employees with an international background and more young people. Our trainee programme is one opportunity for doing this. We also implement targeted efforts jointly with colleges and universities.

Sustainable Cities and Communities

Efforts to enhance our local communities and to develop the region into an innovation hub for the global mining and minerals industry strengthen our competitiveness.

- "Development before phase-out" is a basic principle of the urban transformations. New homes, premises and key social functions must be in place or under construction before the earlier built environment is phased out.
- To minimise the mining's negative impacts on the Sami communities and reindeer herding, LKAB has established various forms of cooperation with the three Sami communities directly affected by the operations.

Climate Action

LKAB will deliver the carbon-free iron that is needed to build the cars, wind turbines and electric motors required for a global transition to a carbon-free future.

- The ambition is a fossil-free value chain for steelmaking in which hydrogen is used instead of carbon.
- Intensive development work is also in progress to establish a new world standard for mining that is autonomous, carbon-free and offers the highest conceivable level of safety.

Partnerships for the Goals

Working in partnership with external competencies nationally and internationally produces synergies for sustainable development while also enhancing our own competitiveness. Some examples:

- Collaboration with other companies, for example through our development projects.
- Our work with Svemin on the "Road map for diversity net gain" and with TraceMet (traceability of metals and minerals).
- We are part of the UN's Leadership Group for Industry Transition and a member of the UN Global Compact, Transparency International, CSR Sweden and other organisations.

More information on our risks and opportunities, including TCFD reporting, can be found in the section on risk on pages 47–55.

Risks and risk management

LKAB is exposed to various types of risk that could have a material impact on our ability to achieve our goals in both the short and long term. It is vital to identify and act on risks and opportunities that impact our competitiveness so that we can deliver on our strategic priorities and add value for our stakeholders.

Securing the future

LKAB operates in a capital-intensive industry with a planning horizon that extends across several decades. We have to consider risks and opportunities that have a bearing on the business as it is today and also as it will be in a decade or more from now.

The world around us is changing and we need to equip ourselves for the transition. Competitiveness is essential for our ability to invest in the future. The global climate threat means that the iron and steel industry will need to change fundamentally – which brings opportunities, but also risks, for LKAB.

In view of this, and in line with state ownership policy, during the year we took further steps towards reporting according to TCFD[1] standards. Work to analyse, manage and report both risks and opportunities from a climate perspective is important for securing our resilience and adaptability to the ongoing climate change.

Respect for human rights is central in all risk prevention work: in dialogue with stakeholders such as indigenous peoples, in the urban transformations and in relationships with employees and suppliers, for example.

An active Group-wide risk management process creates transparency and awareness of the biggest risks, which helps provide a better basis for prioritising and decisions. Our work to identify and manage risks is coordinated with the strategy and business planning process, and is decentralised in accordance with how the Group is governed. The risks are broken down into market and external risks, business risks and financial risks.

On the following pages a summary of our main risk areas is presented, along with how these are managed at an overall level.

1) The Task Force on Climate-related Financial Disclosures (TCFD) initiative includes guidelines on climate-related financial risk reporting linked to the impact of climate change over time and of potential instruments to limit carbon emissions.

Actions taken in 2021

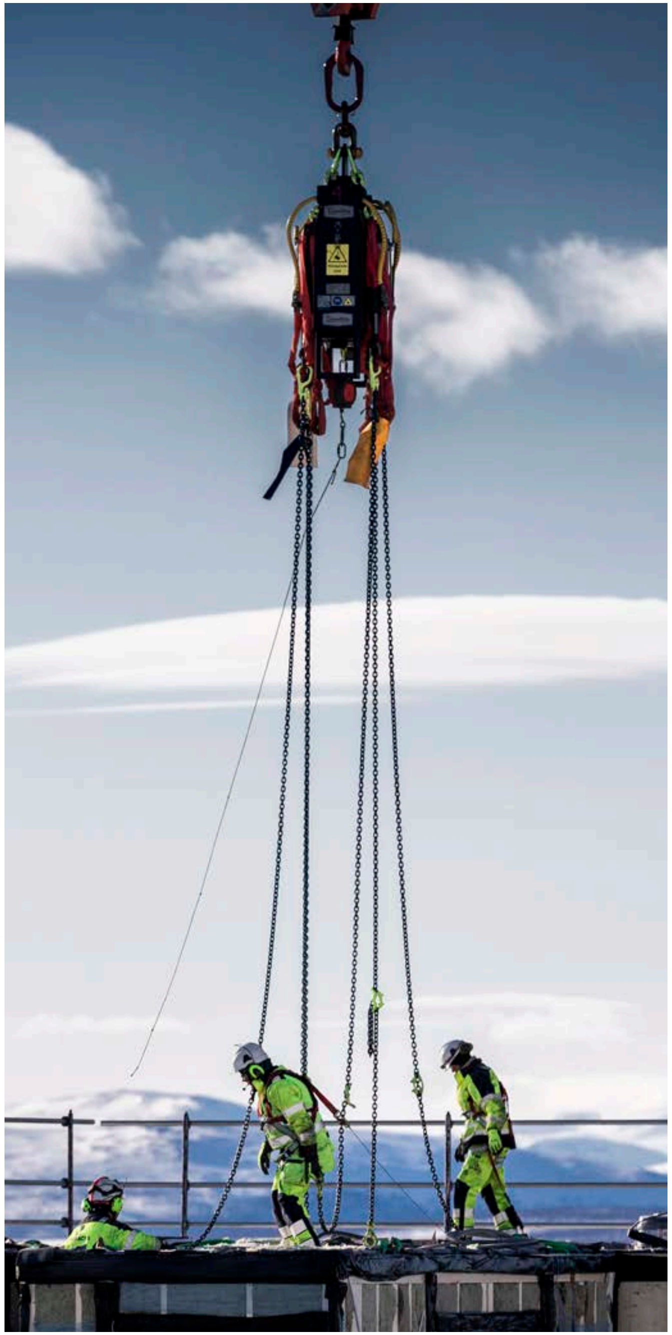
In 2021 revised Group-wide governing documents were established, setting out clearly how we are governed overall. In addition, the governance of the business areas was developed and clarified. As part of this work a new risk management policy was established by the Board of Directors in February, setting out the framework for risk prevention work throughout the Group.

Implementation of the policy within the strategic planning process was begun straight away and remained in focus throughout 2021. Feedback on critical risk management measures was provided each quarter, both to the Board and to Group management.

A separate working group was appointed to develop processes and reporting of climate-related risks and opportunities in accordance with TCFD standards. The climate risks identified within the context of this work will be incorporated into the strategic risk management process where they are considered to be of a strategic nature.

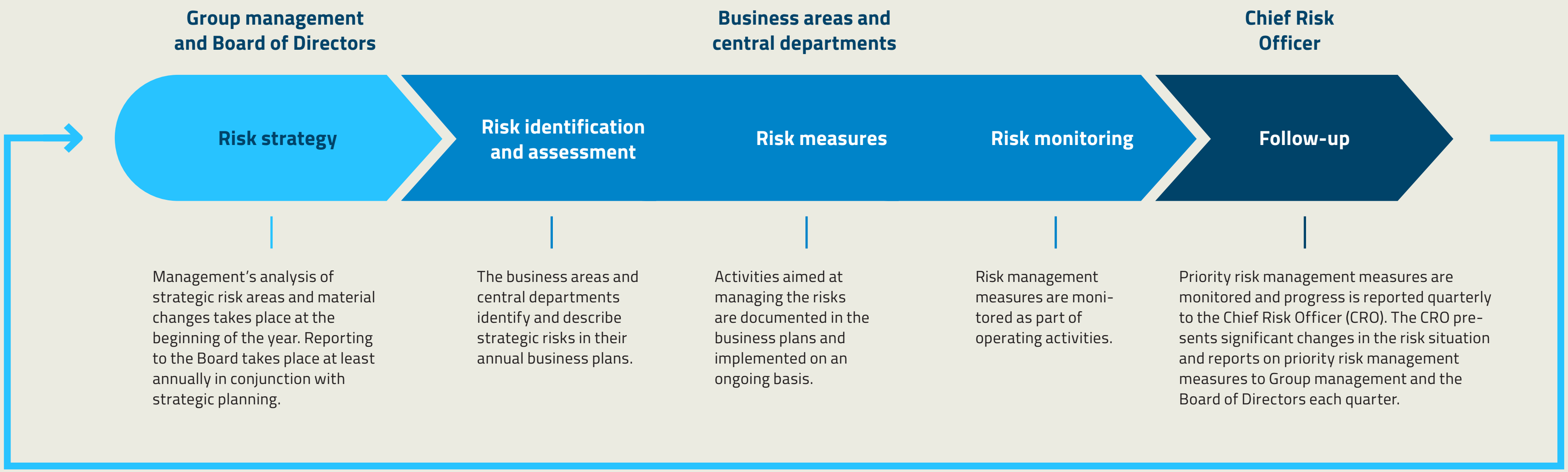
Planned actions in 2022

The focus in 2022 will initially be on implementing the scenario analysis set out in the TCFD recommendations. The results of this analysis will then be dealt with within the annual strategy and business planning process. The goal is to take further steps towards complete reporting in accordance with TCFD's 11 recommendations during 2022.



Integrated risk management

Our risk management process is integrated with the strategy and business planning process. Risks are identified, assessed, managed and monitored as part of operating activities.



Market and external risks

LKAB's business is sensitive to economic fluctuations and is exposed to a number of external risks that are difficult to influence. We manage these through business intelligence and scenario analysis, by building long-term customer relationships and by having a flexible customer and product portfolio.

Market risks

One significant market risk is price fluctuation in the global iron ore market, which has a direct impact on earnings and cash flow. The price is affected partly by the underlying market price of iron ore (IODEX 62 percent Fe CFR North China) and partly by the quality premiums added on for high-grade iron ore products. While the iron ore price is set daily, the premiums are a combination of the market price and negotiations with customers.

Significant changes in iron ore supply and demand that change the foundations of the industry and that have a long-term negative impact on the iron ore market are also a strategic market risk. This situation could arise, for example, as a result of game changers in the iron ore and/or steel industry. All changes that involve transitions or challenges for iron ore customers also increase the risk of negative impact. The global iron ore and steel market is made up of a small number of players. This concentration gives each individual player great influence and results in considerable interdependence.

The countries in which our customers operate have varying degrees of political and commercial stability. Political risk is the risk that turbulence in a country or region where customers operate becomes sufficient to force LKAB to stop working with these in view of the guidelines and policies governing us, for example as regards human rights and corruption.

Market risks also include risk associated with negative changes in the supply of or price of commodities, materials and equipment that are critical to production. There are climate-related risks within this area associated with volatility in the supply and price of fossil fuels, driven by production cutbacks in oil and coal, for example. A shortage of "green electricity" is a particularly key risk associated with the implementation of our strategy, which involves a transition to carbon-free processes and products.

Management of the risk area

Ensuring flexibility in our product portfolio, customer portfolio and in production and logistics systems makes us better prepared for sudden fluctuations in the economy. LKAB strives to offer consistently high product quality and reliable delivery in order to create competitive advantages.

LKAB works in partnership with customers on technical matters, which adds value and strengthens its relationship with selected customers as well as its own long-term stability. The Special Products business area has a more diversified customer base, which helps dampen economic fluctuations since different geographical regions, segments and minerals have different economic cycles.

Under the Group's finance policy LKAB does not normally hedge price risk, except in exceptional cases such as binding contracts. However, cash flow is analysed on an ongoing basis and in conjunction with this, sensitivity analysis is also performed based on changes in the outside world such as prices. In periods where there are expected to be high outgoing payments, longer hedging of the iron ore price may be considered.

To date it has proved to be unlikely that the need for iron ore will be replaced by any other material. Re-use of scrap for steelmaking may replace iron ore to some extent, but so long as the industrialisation of the world continues and the world's population continues to grow the need for iron ore will remain. LKAB actively monitors customers' technological development to ensure that the products we produce accord with customers' future needs. One example is the HYBRIT initiative aimed at developing fossil-free steel. The transformation of the steel industry (to reduce carbon emissions) is an example of how a climate risk can also be an opportunity, if managed well.

LKAB actively monitors the outside world in order to analyse and manage political risk, and works in partnership with national and international industry organisations. Existing and potential customers are analysed based on political, geographical and commercial risk diversification. Potential customers that could be brought in if an existing customer should be lost, for example because of political unrest, are continually monitored.

Vulnerability within the supply chain is continually analysed in order to ensure that in the event of an interruption of supply, deliveries of critical inputs and equipment can be ensured by means of alternative supply channels. LKAB's ambition to achieve fully carbon-free operations is an important risk-mitigating factor for reducing dependence on fossil fuels.

Risk of a lack of efficient, legally secure processes

LKAB's business depends in several ways on permits and other decisions by authorities. It is vital that processes for environmental permits, licences and planning matters are efficient, predictable and legally secure in order to be able to plan and drive operations forward, particularly at a time when various extensive transitions need to be made.

Management of the risk area

The Group works actively with authorities and other stakeholders, focusing on the importance of what is required to secure the current operations and at the same time allow the transformation that is ahead of LKAB. Understanding among decision-makers – owner, national and local political bodies, authorities and courts – is essential for reducing risk in this area. Clear strategies and roadmaps have been produced in this area, as well as processes for follow-up and self-monitoring. The credibility of LKAB's sustainability work is also important in this context.

Business risks

Our business exposes us to risks relating to production facilities, environmental impact, employees etc. Risks associated with the ability to ensure safe, stable and resource-efficient production need to be managed in parallel with those associated with long-term competitiveness and the transition to carbon-free processes and products.

Risk of insufficient mineral reserves/mineral resources

To secure the mineral reserves, continued access to mineable iron ore is required – either in existing mines or in new deposits. To obtain the necessary information about future geological conditions for mining it is necessary to maintain a planning horizon of around 20 years, from exploration until the start of production mining, including the permits required. Insufficient advance planning of the exploration work would have serious consequences for the company's future.

Management of the risk area

LKAB conducts a centralised exploration programme that mainly focuses on exploration close to the existing mines. The supply risk associated with a shortage of mineral resources and mineral reserves reduced considerably in both Kiruna and Malmberget in 2021. A great deal of drilling remains to be done, but the results of exploration to date are promising. In Svappavaara work on geophysical surveys and drilling needs to be intensified in the coming years to get a better assessment of the mineral resources and mineral reserves.

Risk of negative environmental impact

This risk area includes potential negative effects on future environmental permits if existing limit values for emissions are not achieved. Exceeding the permitted limits also has a negative impact on public confidence in LKAB, which in turn affects LKAB's licence to operate. There is also a risk that environmental requirements will drive high transition costs, which could put LKAB at a competitive disadvantage.

Another important risk is the negative effects that arise from inefficient energy use. The energy issue – in terms of both the type of energy and energy efficiency – is strongly linked to the goal of carbon-free processes and products by the year 2045. A transition to carbon-free operations is an important strategic matter for the future, partly to reduce the risks of negative environmental impact but also to manage the climate risks arising from a future continued dependence on fossil fuels (see also under market risks).

Linked to the issue of carbon is also a significant risk relating to the current system of trading in emission allowances. Carbon emissions are up to 10 times higher when European steelmakers sinter iron ore, i.e. lump together finely ground ore for their blast furnaces, compared with the use of LKAB's sintered iron ore pellets. The products' basic function in the blast furnaces is comparable, but the European Commission has nonetheless decided not to treat them equally. As a result, the steelmakers that currently have the highest carbon emissions are given more free emission allowances. LKAB, which has the lowest emissions, is penalised by being given a lower allocation. The lower allocation is also a competitive disadvantage as compared with competitors outside the EU Emissions Trading System. The introduction of carbon border taxes in the EU in 2026 also represents a risk to competitiveness.

As with other mining companies, there is a risk that LKAB could suffer a dam failure. LKAB has dams constructed according to what is known as the inward method, which has demonstrated an increased risk of breaches. A dam failure would have major negative consequences for the company's operations and for the environment, but also for neighbouring communities. Moreover, it is important that remediation is carried out for all discontinued operations in an ecologically sustainable way.

Management of the risk area

Various types of emission levels are measured systematically and through external audits to ensure that environmental impacts are within authorised levels. Research and development are also carried out with a view to reducing emission levels further, which is also important as preparation for potentially stricter requirements in the future.

The switch to non-fossil fuels and a gradual transition to carbon-free processes and products is largely bound up with the issue of energy, since energy consumption and the type of energy decide the levels of carbon emissions. A management structure for energy matters is being developed within the Iron Ore business area with a view to securing progress on the energy issue. An energy management team has also been appointed that works across the Group. In the longer term the goal is to achieve carbon-free processes and products.

To achieve the EU's and Sweden's long-term climate targets through the necessary investments in continued reductions in carbon emissions, the free allocation of emission allowances needs to continue. In view of this, LKAB has appealed the European Commission's decision to reject its application to be admitted to the same benchmark group as pellet and sinter production at steelworks to the European Court of Justice.

The introduction of carbon border taxes in 2026 increases the risk of decreased competitiveness. In view of this, active information and advocacy efforts will continue to be conducted in the area at both national and EU level.

LKAB works proactively and systematically on dam safety according to the industry's safety directive GruvRIDAS. LKAB also holds dam liability insurance for losses among third parties in the event of a dam failure. In 2020 a new international standard on dam safety was published: the Global Industry Standards on Tailings Management. In 2021 a review of dam safety was carried out by an independent panel of international experts (TAB). Some minor nonconformances with the global standard were identified, but generally procedures and methods comply well with global dam safety requirements.

Future alternative depositing methods are also being investigated. For remediation of the industrial areas, an industry-wide roadmap has been produced focusing on biodiversity. Internal guidelines on land use have also been produced.

Risk of not being sufficiently competitive

LKAB's production consists largely of continuous processes where unplanned stoppages can quickly have a big impact on deliveries. Unplanned stoppages can also impact product quality and emissions to air and water. Changes in climate conditions may also have a direct impact on production, e.g. water shortages, heavy rain, avalanches or storms.

Important matters for the future include switching production to non-fossil fuels as well as more efficient mining methods under ground, which are crucial for long-term sustainable operations. Since many of our competitors mine ore in open-pit mines, it is all the more important for LKAB to be at the forefront of innovations in order to find cost-effective and sustainably competitive solutions in the production chain.

Mining at greater depths in the underground mines also increases the risk of seismic activity and subsidence in the rock; an example of this is the subsidence that occurred in the Kiruna mine in May 2020.

Management of the risk area

Efficient, safe, uninterrupted production is based on being large-scale and on continuous efficiency improvements. Good maintenance planning and clarity regarding ownership are important. Audits of the facilities are carried out annually, with so-called interruption studies to assess the likelihood and impact of unplanned events. Decisions on action are taken based on these processes. Preventive work within fire safety is a priority matter in view of previous events. In addition, there is insurance cover for the risks of damage to property and subsequent production losses.

Identifying efficiencies in the mining is an important issue for the future. This work is being conducted within the framework of the development project for a new world standard for mining. The HYBRIT initiative, which aims to develop fossil-free steel, is a further example of strategic action to address climate challenges and improve the efficiency of the production process.

A new mining method, raise caving, was developed during the year and is a step towards a safer and more efficient mine. In contrast to sublevel caving, raise caving makes it possible to mine ore from the bottom up instead of from the top down. This method has several benefits, not least in terms of safety. However, extensive work remains to be done to test the method. In addition, there has been increased focus on rock mechanical conditions in mine planning and production management.

Risk of accidents and illness

Employees and contractors are sometimes exposed to situations which may involve increased risk of accidents and/or illness. For LKAB to be an employer with safe and healthy workplaces where employees thrive and feel secure is an important strategic matter.

Management of the risk area

This risk is managed primarily through the Group's systematic work environment efforts, which include risk analysis as well as reporting and follow-up of risks, near-misses and accidents. It also involves strengthening the safety culture through increased focus on health and safety as part of the management philosophy, but also making sure that everybody feels included in work environment efforts. Active work on standards and ground rules based on LKAB's values is continually ongoing. High priority is likewise given to continual assurance of the status of our facilities in order to minimise the accident risk.

Risk of insufficient diversity and skills

Attracting and retaining employees is a very important prerequisite for long-term competitiveness. An important parameter for succeeding in this is to ensure a work environment where employees feel secure and included, and where diversity is seen as an asset. It is also important to identify at an early stage which key skills will be needed at a time of rapidly changing technology and automation.

Management of the risk area

LKAB has a long history of collaboration with universities and colleges and is involved with the local elementary schools and upper secondary schools in its operating locations. This work, but also broadening the recruitment base geographically and from a diversity perspective, increases the opportunities to recruit the necessary competencies. In addition, there are initiatives to develop and transform the skills of existing employees.

Examples of other activities include building homes in the Swedish orefields and increased efforts to attract more applicants through clearer communication. The development project for a new world standard for mining includes finding new ways of working as new technology is tested and developed.

Within LKAB, active work takes place based on the management philosophy, Code of Conduct and diversity plan to develop the culture, promote diversity and make us more attractive as an employer.

Risk of losing credibility

Acting ethically and for the long term is crucial for creating confidence among LKAB's customers, suppliers, owner, employees and other stakeholders. LKAB condemns all forms of corruption and fraud and demands transparency, integrity and honesty throughout the value chain. LKAB is totally opposed to all forms of discrimination and to any other violations of human rights. A lack of credibility would have serious consequences for us as a business with operations that require permits, as a state-owned company and as a significant member of the community in Norrbotten. Given the company's size, there is a risk that one of the company's ethical principles could be breached.

Management of the risk area

Good credibility is ensured by, among other things, the Group's Code of Conduct and sustainability policy. Noncompliance could have consequences under labour law. The Code of Conduct covers not just employees, but also partners such as suppliers and consultants. Compliance is ensured by both internal and external audits, and also by an effective leadership system and a "whistleblower function". The Group-wide governing documents are revised annually. In 2020 a special review was conducted of LKAB's anti-corruption programme and training was provided in identifying the risk of child labour among suppliers. The entire operations were also examined in respect of the risk of negative impacts on human rights. In 2021 Group-wide anti-corruption guidelines were developed, which the Board approved in February 2022.

Risk of external intrusion and damage

Digitalisation means that an ever increasing proportion of the activities in the Group, and also its contacts with various stakeholders, are dependent on networks and information systems. As a result of this, data security and cybersecurity risks are increasing. Threats and risks in the area of information technology range from less extensive risk at an individual level to well-planned and precisely targeted attacks on critical parts of the company's functions.

In view of previous events in the world around us, the risk that a targeted attack – whether a cyberattack or a physical attack – could knock out an industrial company's production system, involving significant costs for loss of production, is a reality that LKAB must address by taking various measures to prevent it from happening.

Management of the risk area

Systematic data protection and cybersecurity work is conducted with a view to ensuring data security within the Group. In 2021 Group-wide information security guidelines were established. The security work includes continual risk and vulnerability analysis, penetration tests and careful monitoring of external developments in this area. In addition, there are activities to increase awareness among individual users of LKAB's IT systems and to improve their capabilities in order to reduce the risk associated with the "human factor". Cybersecurity work is continually reviewed, developed and adjusted as attackers' methods change.

LKAB's industrial areas have perimeter protection as appropriate for the different parts of the operations, to protect the facilities from various kinds of trespass and damage.

Financial risks

The financial risks are mainly associated with fluctuations in global iron ore prices and in the USD/SEK exchange rate. Together these factors could have a major impact on the company's income statement, balance sheet and cash flow.

Financial risks

LKAB is exposed to various types of currency risk. The main exposure stems from sales of iron ore where market pricing is in USD; this risk is known as transaction exposure. Currency risks also arise in the translation of foreign subsidiaries' assets and liabilities to the Parent Company's functional currency; this risk is known as translation exposure.

Financing risk is the risk that the Group cannot meet its commitments due to lack of liquidity or the inability to obtain external loans for operating activities. This matter is of particular importance since the Group is embarking on a transformation that requires extensive investments to be made. The Group's ability to manage its transformation to more sustainable operations and to climate-smart products is an important factor for securing access to external financing in a financing market that is focusing more and more on sustainability and climate issues.

Financial risks also include credit risks associated with accounts receivable, derivatives and current investments.

Management of the risk area

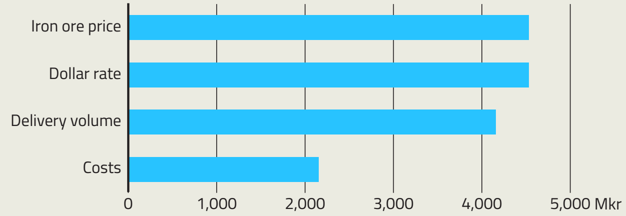
Under the Group's finance policy LKAB normally only hedges currency risk for accounts receivable. Cash flow is analysed on an ongoing basis and, in conjunction with this, sensitivity analysis is also performed based on changes in the outside world such as exchange rates. In periods where there are expected to be high outflows, longer currency hedging may be considered. The foreign companies within the Group mainly operate in their local currencies in order to reduce currency exposure. Translation exposure is not normally hedged within LKAB.

The Group's finance policy defines the financing needs in the form of operating capital, needs caused by fluctuations in cash flow, and planned expenditure for commitments within urban transformation, pensions and remediation, as well as investments in the transition to carbon-free processes and products. Financing is to be long-term, and is to cover these financing needs as a minimum. In 2021 work was carried out to adapt the finance policy to the new strategy. The transformation will require a greater degree of forward planning of liquidity. A revised finance policy was approved by the Board in February 2022.

The finance policy contains rules on rating new and existing customers as well as rules on other credit risks. Monitoring of compliance with the finance policy and monitoring of external circumstances take place continuously, including in ongoing reporting to the Audit Committee. The finance policy is reviewed at least annually.

Sensitivity analysis

The sensitivity analysis below summarises LKAB's earnings sensitivity to a hypothetical change in volumes, prices and currencies. Changes in the SEK/USD exchange rate, market prices and delivery volumes have the greatest impact on earnings. In this analysis the delivery and price analysis refers to the Parent Company, and the remaining factors to the entire Group.



Group	Change %	Exposure, 2021	Currency	Effect on operating profit, 2021 (MSEK)	Exposure, 2020	Currency	Effect on operating profit, 2020 (MSEK)
Iron ore price	10	45,520	MSEK	4,532	31,419	MSEK	3,188
Dollar rate	10	5,295	MUSD	4,533	3,494	MUSD	3,183
Delivery volume	10	27.0	Mt	4,160	28.5	Mt	2,796
Costs	10	21,542	MSEK	2,154	20,864	MSEK	2,086

Climate-related financial risks and opportunities

LKAB supports the Task Force on Climate-related Financial Disclosures initiative (TCFD), a market-driven initiative that has developed recommendations for voluntary and consistent reporting of climate-related financial risks and opportunities.

Governance, strategy and risk management

Efforts to prevent climate change and reduce the world's carbon emissions through industrial transformation are the basis of LKAB's long-term strategy. The risks and opportunities that climate change presents to the operations are therefore already to a large extent integrated into our business processes.

By developing our reporting in accordance with TCFD recommendations, however, LKAB sees an opportunity to strengthen our position as a driving force for the transformation of our industry while also increasing transparency to our stakeholders. Work has taken place during the year to map specific risks and opportunities brought by changes associated with the transition to a carbon-free economy, as well as the physical effects of a changed climate on our assets and our operations. The next step is to perform what is known as scenario analysis and to quantify the effect of different scenarios on our financial key figures.

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

Risks

Transition risks

Regulatory and political
- Insufficient supply of green electricity could jeopardise our transformation and/or result in increased costs
- Uncertainty regarding prices for trading in emission allowances
- Carbon border taxes could affect demand for steel
- More stringent sustainability requirements could have a negative impact on external financing options

Brand risk
- If our transformation were to fail, both our brand and our credibility could be damaged

Market risk
- Demand could be affected by customers' preferences changing from "brown" to "green" steel (fossil-free), driven by political instruments and legislative changes
- Rising demand for fossil-free energy meets an increasingly inelastic supply, bringing a risk of price volatility
- Increased demands for a circular economy could have a negative effect on demand for virgin steel

Technology risk
- Green hydrogen is an unproven technology as regards large-scale production and storage, and there is some uncertainty concerning the price level in the event of full-scale implementation
- Technical risks in the transition from fossil energy to fossil-free energy, mainly relating to sintering and reduction

Physical risks

Systematic risk
- Increased risk of extreme weather could have a negative impact on water management associated with dams and infrastructure as well as in the logistics chain

Opportunities

Products and services
- Changed customer preferences are essential for the implementation of our strategy and an important opportunity for the future
- A successful transformation will strengthen the brand and increase credibility

Markets and resilience
- Our transformation provides opportunity for green financing
- Increased demand for "green" steel in the expansion of renewable energy

Resource efficiency
- Increased demand for a circular economy drives demand for projects such as that for extracting critical minerals from mine waste

Energy sources
- Production and storage of green hydrogen enables a transition from fossil energy, flexibility in power requirements and balancing of energy costs

Financing

Favourable conditions in the market resulted in very strong cash flow for LKAB in 2021, putting us in a stronger position from which to lead the transformation of the iron and steel industry.

LKAB is sensitive to economic fluctuations and when cash flow slows in connection with changes in the global iron ore price or the dollar exchange rate, we still need to be well prepared. We have significant commitments associated with the impact of mine production and secure these through buffer capital for urban transformation, pensions and remediation, and for investments in the transition to a fossil-free value chain for steelmaking.

LKAB has had financial instruments listed for trading on Nasdaq Stockholm since 2014. To secure access to financing, in addition to credit facilities, LKAB has various borrowing programmes – both MTN programmes and commercial paper programmes. These mean we are well prepared for temporary fluctuations in financing needs in the short term, while also securing long-term funding.

Financial risks and finance policy

LKAB Group Treasury is the Group's central finance function, tasked with securing financing in accordance with the company's business plan. Management of financing risk is regulated in the finance policy, which forms a framework for financing activities. The finance policy defines the financing needs in the form of operating capital, as well as buffer capital to cover requirements caused by fluctuations in cash flow as well as planned expenditure for commitments within urban transformation, pensions, remediation and investments in the transformation.

Financing during the year

At year-end the net debt/equity ratio was -24.5 (-3.0) percent, mainly thanks to strong cash flow from operations. In July a revolving credit facility (RCF) of SEK 5 billion was replaced by a five-year facility with an option to extend for a further two years for the same amount. In June a bond loan of SEK 1 billion matured and was not refinanced. Strong operating cash flow and high liquidity have reduced the need for short-term financing. Use of the commercial paper programme ended during the year.

The requirement of buffer capital, in accordance with the finance policy, means that over time LKAB manages extensive financial assets. The basic principle is that the financial assets shall have a duration and return that tracks developments in the commitments and that a future reduction in financial assets matches the scheduled pay-outs.

Management of financial assets

In 2021 the financial assets resulting from the buffer capital requirements were managed in three portfolios. The liquidity portfolio contains fixed-income securities at banks or short-term liquid fixed-income securities in Swedish kronor. The portfolios for the urban transformation commitments and for the remediation and pension commitments have fixed-interest investments with a longer duration and include investments in equities and mutual funds. From 2022 a portfolio is also being managed for transformation investments[1].

Asset management takes place within the framework of restrictions set out in investment guidelines approved by the Board's Audit Committee. The guidelines are issued per portfolio and asset class with limit values for deviation from a normal portfolio. Credit exposure and foreign currency exposure are permitted within set frameworks. Management is assessed against relevant reference indexes for each asset class and management result, and any deviations from investment guidelines are reported to the Board's Audit Committee on an ongoing basis.

Managed financial capital at the beginning of the year amounted to SEK 22.8 billion and at year-end to SEK 36.8 billion.

Deviation from the finance policy

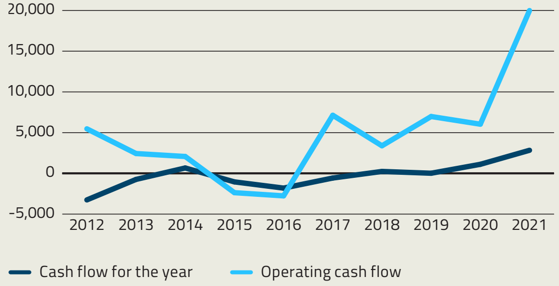
In 2021 there was no significant deviation from the finance policy. A few minor deviations, for example a small amount of overfinancing, were notified in advance by the Group management to the Audit Committee; potential deviations were approved by the committee and followed up at subsequent meetings.

Net debt/equity ratio	31 Dec 2021	31 Dec 2020
Net financial indebtedness, MSEK	-16,553	-1,470
Equity, MSEK	67,565	48,412
Net debt/equity ratio, %	**-24.5**	**-3.0**

1) In 2021 work was carried out to adapt the finance policy to the new strategy. A revised finance policy was approved by the Board in February 2022.

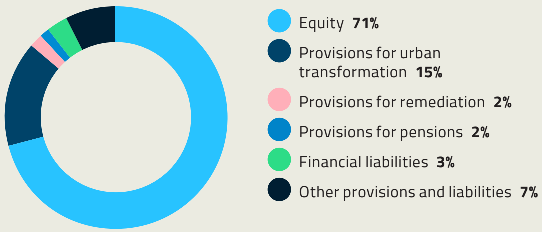
Cash flow

(MSEK)



LKAB's capital structure

Percent

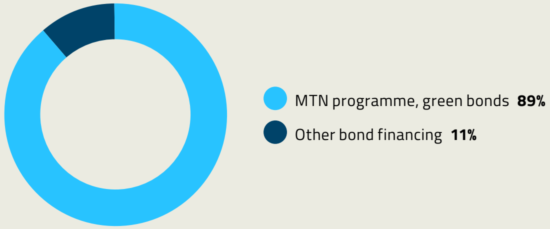


Sources of financing as at 31 December 2021

MSEK	Loan framework	Utilised	Available
Commercial paper programme, maturing within one year	5,000	0	5,000
Bond programmes	7,000		5,000
– Maturing March 2025 (green bonds)		2,000	
Other bond financing, maturing 2022	250	250	0
Credit facility	**5,000**	**0**	**5,000**

Breakdown of interest-bearing loan liabilities as at 31 December 2021

Percent



Framework for green financing

In November 2019 LKAB issued green bonds for the first time, raising SEK 2 billion in total. The bonds have a term of 5.25 years and allow investors to be part of the transformation of an industry that is of great significance for the sustainable development of society, including in a global perspective.

At the end of 2021 LKAB had allocated around SEK 1.9 billion to a total of 11 projects that are expected to have a long-term positive impact on the environment. Around SEK 0.8 billion of the allocated funds have been invested in initiatives to reduce carbon emissions, including the development projects for production of carbon-free sponge iron, and the remainder in increased resource efficiency and contributions to a more circular economy, clean transport, renewable energy and green buildings. The entire amount financed in November 2019 will have been paid out in March 2022.

The bonds were issued under LKAB's MTN programme, with reference to LKAB's framework for green bonds, and are listed on Nasdaq Stockholm's Sustainable Bond List. For further information see LKAB's Green Bond Impact Report 2021 at lkab.com.

MTN programme

LKAB has a programme for issuing corporate bonds, known as Medium Term Notes (MTN), up to a maximum amount of SEK 7 billion. Within the framework of the programme LKAB can issue corporate bonds in Swedish kronor or euros with a minimum term of one year. Within the framework of its MTN programme LKAB has established a framework for green bonds.

Commercial paper programme

LKAB has a programme for issuing commercial paper up to a maximum amount of SEK 5 billion. Under this programme LKAB can issue commercial paper in Swedish kronor or euros with a term of up to one year.

EU taxonomy for sustainable investments

The financial market has an important role to play in movement towards a sustainable society. The European Commission has therefore been working for a number of years to produce rules for steering investments in a sustainable direction. The EU Taxonomy Regulation is a tool that, among other things, classifies investments as to whether or not they are environmentally sustainable, thereby providing common guidelines on which investments can be described as being "green". At present the taxonomy's technical criteria cover a number of sectors, which do not include the mining industry. Work on criteria for the mining industry is in progress and these are expected to be established by the EU during 2022. This means that LKAB's iron ore activities are not currently covered by the taxonomy and therefore investments and costs related to ongoing transformation projects, as described on pages 27–31, are not included either. Only small elements such as activities within logistics, real estate and recycling of residual products are covered. The proportion of the LKAB Group's economic activities covered by the EU Taxonomy Regulation for 2021 is shown in the table below.

	Note	LKAB Group Total, MSEK	Proportion of economic activities covered by the taxonomy, %[4]	Proportion of economic activities not covered by the taxonomy, %
Turnover[1]	2, 3, 5	49,077	3%	97%
Operating expenditure[2]		5,177	8%	92%
Capital expenditure[3]	14, 15, 36	4,556	14%	86%

1) Turnover: external net sales and the portion of other operating income that relates to rental income from properties.
2) Operating expenditure: costs of development, maintenance and repair, renovation and other direct costs required to maintain the function of property, plant and equipment.
3) Capital expenditure: additions to intangible assets and property, plant and equipment before depreciation and amortisation, revaluations including impairment losses, with the exception of changes in fair value. The amounts include assets added through business combinations.
4) Analysis of which economic activities are covered by the Taxonomy Regulation was carried out on a company-by-company basis using definitions of sectors, via NACE codes, that are described in the technical criteria.

Corporate Governance Report

Comments by the Chairman of the Board

It is hard to imagine a more intensive and successful year than that which LKAB has just completed: from historically strong financial performance to transformational strategic matters that are of local, regional, national and global significance.

In several respects 2021 was a year like no other. Firstly, the pandemic continued to affect us to the very highest degree, not least as regards how we worked in our mines and processing plants and how we organised ourselves in a situation where we needed to limit the spread of infection. LKAB's employees tackled these challenges admirably and we were able to maintain production. The accident rate, in contrast, moved in the wrong direction. My hope is that we will get to grips with this by returning to our routines after the pandemic and through a continued strong focus on the safety culture throughout the organisation.

Secondly, during the year we achieved exceptional financial results. This was made possible by a combination of good work in mines and processing plants to maintain production, and by a period of particularly strong prices on the world market. Production is within our control and we have every reason to be proud in that respect. World market prices are beyond our control, but the favourable market situation puts LKAB in a stronger position going forward.

The third thing for which this year was noteworthy, and which characterised the Board's work, consists of the big questions of the future that LKAB is working on and that are of significance not just for the company but also for the world around us. One of these is the moving of our operating locations Malmberget and Kiruna as a result of the mining. It is our ambition that the new communities that emerge will be of the highest standard – communities to be proud of – and so far it looks extremely promising. There are also the major projects for developing the mines so that we can mine more ore at deeper levels and secure the mining for the coming 30–40 years. Exploration is key if we are to understand the conditions underground, and the indications we have had are good. And in many ways LKAB will be the engine for the renewal of industrialisation in northern Sweden because we are sitting on the raw material that will be used to produce fossil-free steel. Future generations will also need to develop their communities, but they will demand that it is done in a way that does not jeopardise the climate. An industrial transformation also brings the truly critical infrastructure issues to the fore – not least the electricity supply, which is essential for a fossil-free future.

Looking ahead, the outlook remains promising for LKAB. Hopefully we will soon come out of the pandemic. Over the coming year I also hope that we will gain even greater clarity as regards the extent of our ore deposits. That would provide greater security for our investments going forward. At the same time we are continuing to make progress on our development projects – not least the Hybrit initiative and the renewal of the steel industry, with the mine as a driver.

Our work in the coming years takes place against the background of a new and dramatic security situation. What the consequences may be for our business is too early to assess at present.

Luleå, 29 March 2022

Göran Persson
Chairman of the Board

"In many ways LKAB will be the engine for the renewal of industrialisation in northern Sweden because we are sitting on the raw material that will be used to produce fossil-free steel."

Corporate governance structure

LKAB's owner, the Swedish state, is ultimately responsible for making decisions on corporate governance. At the Annual General Meeting the owner (shareholder) appoints Board members, the Chairman of the Board and an auditor. The Board is responsible to the owner for the company's organisation and the administration of its affairs. The diagram below summarises how governance and control are organised at LKAB. The company functions are described in more detail on pages 60–67 of the corporate governance report.

1. Annual General Meeting
The AGM is LKAB's highest decision-making body and the forum at which the shareholder formally exercises its influence. Among other things, the AGM resolves on adoption of the income statement and balance sheet, discharge from liability of the Board, the election of Board members and the auditor, financial goals, the remuneration of Board members and the auditor, and guidelines for the remuneration of senior executives.

2. Board nominations
LKAB does not have a nomination committee. The preparation of decisions on the nomination of Board members instead takes place through a Board nomination process in accordance with the state's ownership policy. The work is coordinated by the Ministry of Enterprise and Innovation. See deviations from Code rules on page 61.

3. Auditor
The auditor reports to the shareholder at the AGM and provides an audit report on the Annual Report and the Board's administration of the company. The auditors regularly report verbally and in writing to the Audit Committee on how the audit was conducted and on the auditor's assessment of order and control at the company. A summary of the annual audit is also submitted to the full Board.

4. Board of Directors
The Board of Directors is responsible for the company's organisation and manages the company's affairs on behalf of the owner. The work of the Board includes continuously monitoring the company's financial situation and ensuring that the company is organised so that its bookkeeping, asset management and other financial circumstances are controlled in a satisfactory manner. The Board also appoints the President.

5. Remuneration Committee
The Remuneration Committee is involved in preparing the Board's proposed guidelines for remuneration of senior executives and the company's remuneration report, prepares decisions on the President's terms of employment and supports the President's work on determining the salaries of senior executives. The committee also works on succession planning.

6. Strategy and Urban Transformation Committee
The committee prepares and follows up matters relating to the company's strategy and the long-term conditions for mining operations, and monitors that the company is managing the urban transformation efficiently and appropriately.

7. Audit Committee
The Audit Committee oversees financial reporting by reviewing all critical accounting matters and other factors that could affect the quality of financial reporting content. The committee also monitors compliance with LKAB's finance policy, including the company's liquidity management, financing and hedging.

8. President
The President is appointed by the Board of Directors. Besides instructions from the Board, the President is subject to the Swedish Companies Act and various other laws and regulations relating to the company's accounting, asset management and operational control.

Governing documents, guidelines and regulations

Basic regulations

The basis for corporate governance at LKAB is Swedish legislation, the Swedish Corporate Governance Code (the Code), the state's ownership policy and internal steering documents. In the state's ownership policy and principles for state-owned companies, the government describes missions and objectives, applicable frameworks and its position on important matters of principle related to corporate governance in state-owned companies; see also www.government.se.

Code of Conduct

The Code of Conduct describes how we at LKAB are to conduct ourselves towards each other, towards our business partners and towards the community around us. It is based on LKAB's values – Committed, Innovative and Responsible (CIR) – and on international guidelines and our wish to set an example both in business and in the community. The Code of Conduct is to be complied with by all employees of LKAB and also by our business partners. We want our suppliers to also lead the field when it comes to ethics, the work environment, equality and diversity, and therefore we require that they comply with both our Basic Requirements and our Supplier Code of Conduct.

Policy documents

Sustainability Policy
LKAB's mission is to utilise iron ore and mineral resources in a responsible way and to secure lasting competitiveness and long-term value creation. Our goal is a business that is sustainable in the long term, in which diversity is an asset. We will get there through zero accidents and illness, by showing respect for human rights and by minimising negative impact and energy consumption.

Risk Management Policy
Through effective risk management work we create the best conditions for achieving our strategic goals. We understand and are well equipped to identify, prioritise, manage and monitor our risks.

Finance Policy
The policy shall ensure that all the Group's financial risks are identified and managed according to risk appetite, and that financing activities support the adopted business plan. The policy sets out the overall framework for financing activities as well as how responsibility for the activity is allocated and good internal control ensured.

Insider Policy
LKAB shall manage insider information correctly and ensure that insider trading does not occur.

LKAB's values and policies are described in more detail on our website lkab.com.

Deviations from the Code

In accordance with the state's ownership policy, LKAB applies the Swedish Corporate Governance Code (the Code). LKAB's governance for the 2021 financial year differs from the requirements contained in the Code on the following points.

Code rule	Deviation and explanation/comment
Item 1.1 Publication of information on shareholder's right of initiative.	The purpose of this rule is to give shareholders the opportunity to prepare for the AGM in a timely manner and to have a matter included in the notice of the AGM. At wholly state-owned companies there is no reason to apply this rule and therefore no information is published concerning the shareholder's right of initiative.
Item 2 The company shall have a nomination committee that represents the company's shareholders.	Due to its ownership structure, LKAB does not have a nomination committee. The Board nomination process follows the policies outlined in the state's ownership policy and is coordinated by the Ministry of Enterprise and Innovation. Proposals for the election of the auditor and for auditor's fees are presented by the Board and adopted by the company, applying the EU Audit Regulation. Accordingly, the references to the nomination committee in items 1.2, 1.3, 4.6, 8.1 and 10.2 of the Code are not applicable.
Item 10.2 The corporate governance report shall contain information that indicates whether Board members are independent of major shareholders.	This provision is aimed primarily at protecting minority shareholders in companies with dispersed ownership. At wholly state-owned companies there is no reason to apply this rule.

Shareholders and Annual General Meeting

Shareholders

LKAB is wholly owned by the Swedish state. The Government Offices of Sweden administers companies through the special organisation for administration of state-owned companies that is part of the Ministry of Enterprise and Innovation.

To achieve active and professional company administration the owner has developed a corporate governance model that includes a number of tools and processes. In the state's ownership policy the government describes missions and objectives, applicable frameworks and important matters of principle related to corporate governance in state-owned companies. The state's ownership policy also contains principles for external reporting as well as principles for remuneration and other terms of employment for senior executives.

Establishing and monitoring financial objectives is another important governance tool that the state has as owner. The owner set out new financial goals for LKAB at an Extraordinary General Meeting held in October 2021. The goals relate to profitability, capital structure and dividend (see goals and goal progress on pages 13 and 20).

General meetings in 2021

LKAB's Annual General Meeting took place on 22 April 2021. Due to the spread of coronavirus the meeting was not open to the public. The owner was represented by Anna Magnusson of the Ministry of Enterprise and Innovation. Chairman of the meeting was Board Chairman Göran Persson.

Resolutions passed at the Annual General Meeting included the following:

- A dividend of SEK 8,357 per share, representing a total of SEK 5,850,000,000.
- Re-election of Board members Göran Persson, Gunnar Axheim, Eva Hamilton, Bjarne Moltke Hansen, Lotta Mellström, Ola Salmén, Gunilla Saltin and Per-Olof Wedin. Catrin Fransson was elected as a new member.
- Re-election of Göran Persson as Chairman of the Board.
- Remuneration of SEK 680,000 to the Chairman of the Board and SEK 303,000 to the other Board members elected at the AGM. Remuneration is not paid to Board members who are employed at the Government Offices, nor to employee representatives.
- Re-election of the registered accounting firm KPMG AB as auditor for a period of one year.
- Resolution on unchanged guidelines for remuneration and other terms of employment for senior executives.

On 27 October 2021 an Extraordinary General Meeting was held at which the owner set out new financial goals for LKAB. The meeting was held digitally.

The minutes of the Annual General Meeting and the Extraordinary General Meeting held in 2021 and of recent years' general meetings are available on LKAB's website at lkab.com.

Board nominations

Instead of having a nomination committee, the election of Board members is prepared in accordance with the state's ownership policy. The work is coordinated by the Ministry of Enterprise and Innovation. LKAB's expertise requirements are analysed based on the company's operations, position and future challenges. Diversity aspects such as ethnic and cultural background are among the factors considered. The government aims for gender balance both on individual company boards and at portfolio level. In order to be considered for a Board position, a person must have a high level of expertise relevant to current business operations, business development, industry expertise, financial matters, sustainable enterprise or in other relevant areas. They must also have a high level of integrity and the ability to act in the best interests of the company.

Auditor

On behalf of the owner, the auditor independently reviews the administration by the Board and President as well as the company's annual report and accounts. The auditor also performs a review of the company's interim report for the third quarter and of the company's sustainability report. The auditor is elected by the AGM. The work of the auditor is evaluated annually.

At the Annual General Meeting on 22 April 2021 KPMG AB was re-elected as auditor for a period of one year. Authorised public accountant Helena Arvidsson Älgne is the chief auditor. The remuneration paid to the auditor is specified in Note 8 on page 97 of the Annual Report.

Board of Directors

Composition and division of duties of the Board of Directors

LKAB's Articles of Association state that the company's Board of Directors shall consist of no fewer than six and no more than eleven AGM-elected members, excluding deputies. The Board consists of nine AGM-elected members. Employees are represented by three members and three deputies in accordance with the Board Representation (Private Sector Employees) Act. Board members have broad and extensive business experience, and most maintain other duties as members of the boards of large companies. The Board's composition is shown in the presentation of the Board on pages 68–70.

The Board annually establishes rules of procedure for the Board, instructions for the President and instructions for financial reporting. These documents define the basic divisions of responsibility and powers between the Board, Board committees, the Chairman and the President.

Chairman of the Board

The duties of the Chairman are subject to the Swedish Companies Act, the Code and the ownership policy. They are further specified in the Board's rules of procedure. The Chairman's duties include organising and leading the work of the Board, ensuring that the Board fulfils its duties and that its decisions are implemented effectively, and that the Board evaluates its own work annually.

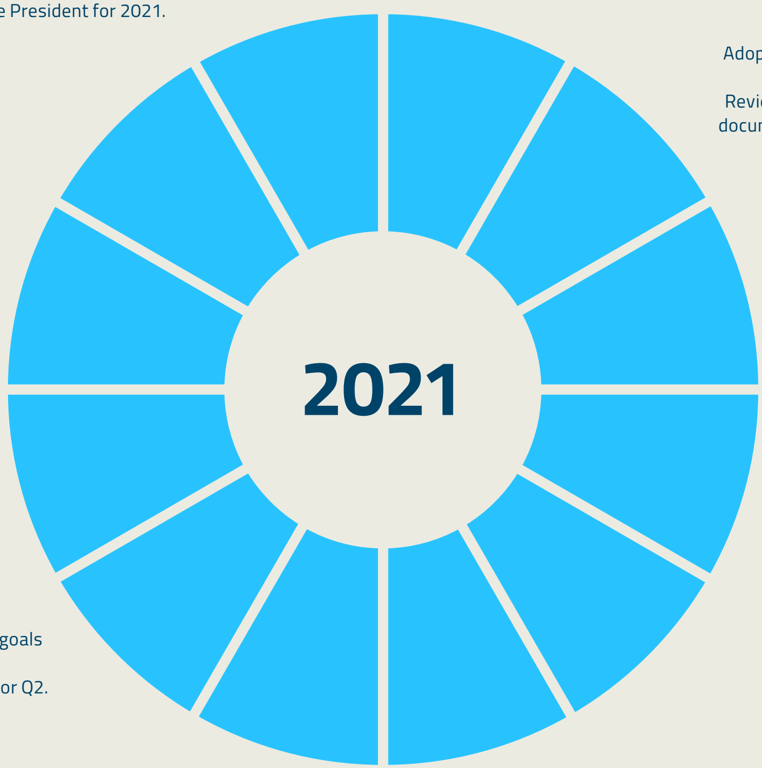
Coordination responsibility is a special task assigned to the chairpersons of state-owned companies. This responsibility means that, through the Chairman, the Board is to coordinate its views in writing with representatives of the owner when the company faces important decisions such as substantial strategic changes in the company's operations, major acquisitions, mergers or disposals, or decisions which involve significant changes to the company's risk profile or balance sheet.

The work of the Board of Directors in 2021

In 2021 the Board held 12 meetings, including three extra Board meetings and one constituent Board meeting. Due to the coronavirus pandemic all the Board meetings were held by telephone or video, apart from the October meeting which was held in Stockholm. The meetings follow a set agenda to ensure the Board's information needs are met. The first meeting of the year is usually an annual accounts session attended by the auditor. At this meeting, the Board deliberates with the company's auditors without the presence of the President or others from executive management. At the second Board meeting the Annual and Sustainability Report is discussed. The third to seventh meetings tend to be devoted to operational, strategic and personnel matters and to market developments, among other things. At the last Board meeting of the year decisions are made on the business plan and budget for the coming year.

In 2021 the Board of Directors adopted new strategic goals for sustainable value creation over the period 2022–2030 in support of the vision to lead the transformation of the mining industry toward

The work of the Board of Directors in 2021



December
Decisions on business plan and budget for 2022.
Review of evaluation of the Board of Directors and of the President for 2021.

February
Adoption of the year-end report.
Review of 2021 audit.
Review of the Group's governing documents and decisions on new policy documents.

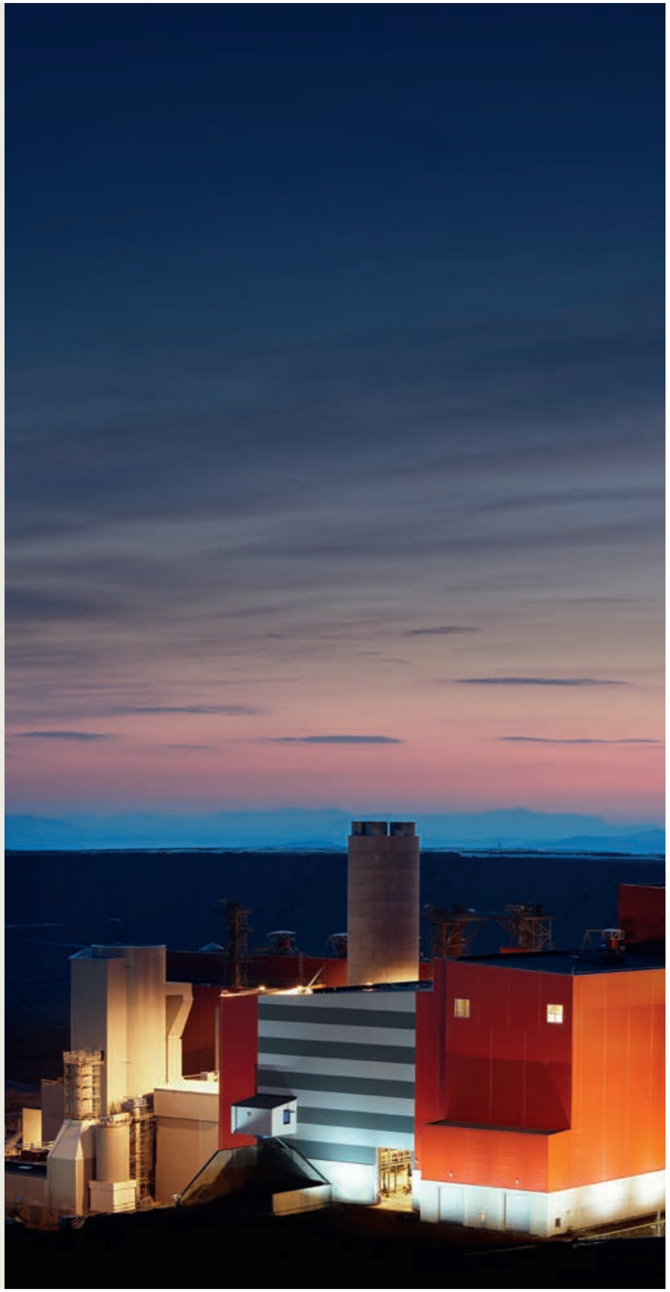
March
Approval of Annual and Sustainability Report.

April
Adoption of interim report for Q1.
Annual General Meeting, including decision on dividend of SEK 5.85 billion.
Constituent Board meeting.

June
Decisions on updated strategy.
LKAB increases its shareholding in SSAB, becoming the largest shareholder in the company.

August
Decisions on new strategic goals for the period 2022–2030.
Adoption of interim report for Q2.

October
Decisions on new financial goals at Extraordinary General Meeting.
Adoption of the interim report for Q3.



Board meetings 2021

	12/2	16/3	26/3	22/4	Const.	27/4	5/5	14/6	12/8	24/8	27/10	10/12
Göran Persson	■	■	■	■	■	■	■	■	■	■	■	■
Gunnar Axheim	■	■	■	■	■	■	■	■	■	■	■	■
Anders Elenius	■	■	■	■	■	■	■	■	—	■	■	■
Catrin Fransson					■	■	—	■	■	■	■	■
Eva Hamilton	■	■	■	■	■	■	■	■	■	■	■	■
Bjarne Moltke Hansen	■	—	■	■	■	■	■	■	■	■	■	■
Tomas Larsson	■	■	■	■	■	■	■	■	—	■	—	■
Lotta Mellström	■	■	■	■	■	■	■	■	■	■	■	■
Ola Salmén	■	■	■	■	■	■	■	■	■	■	■	■
Gunilla Saltin	■	■	■	■	■	■	■	■	■	■	■	■
Per-Olof Wedin	■	■	■	■	■	■	■	■	■	■	■	■
Björn Åström	■	■	■	■	■	■	■	■	■	■	■	■
Peter Nordström	■	■	■	—	—	—	—	—	—	—	—	■
Emil Lantto	■	■	■	■	■	■	■	■	■	■	■	■
Stefan Tallfjärd	■	■	■	■	■	■	■	■	■	■	■	■

Audit Committee 2021

	8/2	22/3	19/4	28/4	10/6	9/8	21/10	7/12
Ola Salmén	■	■	■	■	■	■	■	■
Catrin Fransson				■	■	■	■	■
Lotta Mellström	■	■	■	■	■	■	■	■
Per-Olof Wedin	■	■	■	■	■	■	■	■
Björn Åström	■	■	■	■	■	■	■	■

Strategy and Urban Transformation Committee 2021

	2/2	12/4	3/5	1/6	12/8	21/10	1/12
Göran Persson	■	■	■	■	■	■	■
Gunnar Axheim	■	■	■	■	■	■	■
Eva Hamilton	■	■	■	■	■	■	■
Bjarne Moltke Hansen	■	■	■	■	■	■	■
Anders Elenius	■	■	■	■	■	■	■

Remuneration Committee 2021

	15/9	2/11
Göran Persson	■	■
Lotta Mellström	■	■
Gunilla Saltin	■	■
Tomas Larsson	■	■

a sustainable future. In cooperation with the company's owner, new financial goals were produced relating to profitability, capital structure and dividend, which were approved by the owner at an Extraordinary General Meeting in October. LKAB's governing documents have been reviewed for the purpose of ensuring robust internal governance and control and to make the structure and content of the Group's governing documents clearer. Following this, the Board adopted the following policy documents: Code of Conduct, Insider Policy, Finance Policy, Sustainability Policy and Risk Management Policy. During the year the Board also increased its focus on risks and risk management, including climate-related financial risks (TCFD), to put the Group in the best possible position to achieve its strategic goals. In June LKAB increased its shareholding in SSAB by 5.5 percent to 16 percent of the votes and 10.5 percent of the capital. This makes LKAB the largest shareholder in SSAB. Through its increased influence in SSAB, LKAB intends to take responsibility and ensure that the company continues to have a clear industrial shareholder influence at a time when the steel industry is facing a substantial transformation.

Various other important matters on the Board's agenda in 2021 were associated with LKAB's transformation for the future. Together with the Swedish industry, the goal is to be at the forefront of the global transition to sustainable development and reduced climate impact. The intention is to move a step forward in the value chain and replace pellets with sponge iron (DRI/HBI) produced using carbon-free hydrogen. In addition, competitive mining at greater depths is to be ensured through automation, digitalisation and new technology solutions, and the business is to be broadened by the extraction of valuable by-products such as rare earth elements and phosphorous.

The urban transformation in Kiruna and Malmberget is in an intense phase, resulting in a number of matters relating to urban transformation being put on the Board's agenda. Other important matters in 2021 included good cost control, stable production and systematic maintenance, legally secure and efficient environmental permit processes, management of the consequences of the pandemic for LKAB's operations, and work to reinforce the safety culture and reduce the accident rate throughout the LKAB Group.

Deputies to employee representatives participate in Board meetings. The President is not a Board member, but participates in Board meetings. Board member attendance at 2021 Board and committee meetings is shown in the table on page 64.

Committees

According to the state's ownership policy, it is the Board's responsibility to assess the need for establishing special committees. LKAB's Board has established an Audit Committee, a Strategy and Urban Transformation Committee, and a Remuneration Committee. Committee work is of a preparatory and advisory nature. However, in special cases the Board may delegate decision-making powers to the committees. Committee members and chairpersons are appointed at the constituent Board meeting that follows the AGM each year.

Audit Committee

The Audit Committee has five members: Ola Salmén (chair), Catrin Fransson, Lotta Mellström, Per-Olof Wedin and Björn Åström. The meetings are also attended by the head of Treasury, the Chief Financial Officer and the company's auditor. The committee is tasked with quality assurance of LKAB's financial reporting and with ensuring that the company has appropriate risk management, complies with established principles for financial reporting and internal control, and that LKAB undergoes a qualified, effective and independent audit. The Audit Committee is responsible for purchases of audit services and prepares a reasoned proposal for the election of an auditor that is put to the annual general meeting for approval, and also prepares the Board's proposal for the appropriation of earnings for the financial year. The committee's duties also include monitoring that the company's liquidity management, financing and hedging activities for currency (USD), the iron ore price and the electricity price comply with the finance policy passed by the Board, reviewing current investment matters and otherwise preparing financial matters that require Board approval. In addition, in 2021 the Audit Committee's work included matters associated with the EU taxonomy and climate-related financial risk (TCFD), the elaboration of new financial goals and strategic goals for sustainable value creation, and updating of the Group's Finance Policy.

In the course of the year the Audit Committee held eight meetings.

Strategy and Urban Transformation Committee

The Strategy and Urban Transformation Committee has five members: Göran Persson (chair), Gunnar Axheim, Eva Hamilton, Bjarne Moltke Hansen and Anders Elenius. The meetings are also attended by the President and the Senior Vice President of Urban Transformation. The duties of the Strategy and Urban Transformation Committee include monitoring the company's strategy work and its progress on priority activities, discussing in greater depth the conditions for creating a company that is sustainable and competitive in the long term, monitoring the company's management of matters of particular strategic importance for mining, such as access to land and efficient and legally secure permit processes, as well as preparing matters relating to urban transformation and monitoring the company's management in this area. Among other things, in 2021 the committee worked on producing new strategic goals for sustainable value creation and on relevant M&A matters, such as for the increase in the company's shareholding in SSAB and LKAB's acquisition of 75 percent of the shares in Bergteamet AB.

The committee held seven meetings during the year.

Remuneration Committee

The Remuneration Committee has four members: Göran Persson (chair), Lotta Mellström, Gunilla Saltin and Tomas Larsson. The Senior Vice President of Human Resources also attends the meetings.

The Remuneration Committee's duties include preparing and evaluating the remuneration and other terms of employment for the President and other members of Group management, participating in the preparation of the Board's proposed guidelines for remuneration to senior executives and the company's remuneration report, monitoring the company's process for succession planning and talent management, and annually evaluating the company's employee incentive programme.

The Remuneration Committee held two meetings during the year.

Evaluation

Evaluation of the Board of Directors

The Board's work is evaluated once a year with questions on how the Board as a whole and the Board members individually fulfil their duties. This evaluation is used in the Board's internal work. The Chairman is responsible for following up the results so that they can form a basis for discussions and improvements. In 2021 a survey was used for the evaluation. The results and analysis of the evaluation were presented to the entire Board at its meeting in December 2021. The Chairman of the Board notifies the owner of relevant results of the evaluation ahead of work related to the election of new Board members.

Evaluation of the President

The evaluation of the President's performance is a fundamental task of the Board of Directors. The Board continually assesses the President's work and has regular deliberations at Board meetings where executive management are not present. In 2021 a survey was used for the evaluation. The results and analysis of the evaluation were presented to the entire Board at its meeting in December 2021.

Remuneration principles

Guidelines

The 2021 AGM approved remuneration levels for Board members and auditors, and also adopted guidelines for remuneration of senior executives which accord with the government's principles for compensation and other employment terms for senior executives at state-owned companies dated 27 February 2020. The total remuneration is based on fixed remuneration, benefits and pension. No variable remuneration is paid to senior executives in Group management. The guidelines passed by the AGM for 2021 and reporting on the remuneration paid to senior executives can be found in Note 7 on pages 96–97. LKAB has also published a separate remuneration report, which is available on its website at lkab.com.

The Board is proposing that the AGM on 28 April 2022 adopts unchanged guidelines for remuneration of senior executives, these being in accordance with the government's principles for compensation and other employment terms for senior executives at state-owned companies dated 27 February 2020. The Board's proposal is designed to ensure that LKAB can offer Group management remuneration that is competitive, capped, reasonable and appropriate. The total remuneration package is to be moderate and well-balanced, and must contribute to good ethics and a good corporate culture. The guidelines cover both LKAB and all its subsidiaries.

Remuneration to the Board of Directors

Total fees to the Board members elected by the AGM amounted to SEK 3,086,000 in 2021. See Note 7 on pages 96–97.

Incentive programme

LKAB's incentive programme covering 2021 is designed to support the Group's strategic plan and overall objectives. Input parameters include monitoring performance against targets for accident rates, production and delivery volumes, costs and profitability.

The maximum bonus is SEK 40,000 per person and year. The incentive programme only applies if the LKAB Group reports a profit for the year. Senior executives are not included in the incentive programme.

LKAB's management

Group management and Group management structure

The President, who is also the Chief Executive Officer of the LKAB Group, is responsible for day-to-day management in accordance with the Swedish Companies Act. General responsibilities are stated in the President's instructions and the Board's rules of procedure.

During the first quarter of 2022 the following changes have been made to LKAB's Group Management: the former HR and Sustainability unit has been split into an HR unit and an Environment and Sustainability unit. To strengthen the CEO Staff's focus on the strategy going forward, the former Market and Technology unit and the former Exploration, Strategy and Business Development unit have been moved out of Group Management and included in the CEO Staff.

For overall management of the Group, the CEO has established a Group management team that focuses on the overall direction of the Group. Group management meets monthly to address matters of importance to the Group and to prepare matters that are to be dealt with by the Board. The CEO also has monthly operational follow-up meetings with each business area and Group function to discuss matters such as results, forecasts, investments, progress towards targets set, significant events and current challenges. The CEO also has a more in-depth follow-up meeting with the management team of each business area three times a year.

Information on members of Group management can be found on page 70.

Internal control over financial reporting

The Board's responsibility for internal control over financial reporting is regulated by the Swedish Companies Act, Annual Accounts Act and Corporate Governance Code. The Board has overall responsibility for financial reporting, and its rules of procedure govern the internal division of duties of the Board and Audit Committee. Work on internal control over financial reporting within LKAB is based on the five internal control components below.

Control environment

LKAB's internal control structure is based on a defined division of responsibilities between the Board, Board committees and the President. The internal control structure is also based on the Group's organisation and the way business is run, including well-defined roles and responsibilities, delegation of powers, governing documents such as policies, guidelines and instructions and clearly defined management processes. The Board and management review the Group's governing documents each year for the purpose of ensuring good internal governance and control and ensuring that the structure and content of the Group's governing documents are clear. In 2021 the Board adopted a new Risk Management Policy, among other things. The most important elements of the control environment for financial reporting are dealt with in the Group's governing documents for accounting, financial transactions and regulation of the division of authority. Group instructions and systems for the presentation and consolidation of the Group's financial statements aim to ensure the accuracy of its financial reporting.

Risk assessment

In the first quarter 2021 the Board adopted a new Risk Management Policy. Under this policy a comprehensive risk analysis is carried out annually for financial reporting at Group level and for each business area. Based on the comprehensive risk analysis, priority processes are identified and worked on in a structured way through process mapping, including documenting risks and controls. The purpose of this is to ensure ongoing management and monitoring of risks identified. In 2021 a number of priority areas were identified, including accounting for ore revenues, remediation, and property, plant and equipment.

Control activities

In addition to the Board and its Audit Committee, the management teams in the Group are also general control bodies. The business processes are designed to ensure that any deviations in the financial reporting are prevented or detected and rectified by controls built into the processes. Control activities include everything from review of performance outcomes at management team meetings to specific account reconciliation and analysis at various levels in the day-to-day processes for financial reporting.

Information and communication

Information on steering documents such as policies, guidelines and instructions is available on LKAB's intranet. Changes to instructions for financial reporting are updated regularly and communicated to the functions and operations concerned. The Group's central accounts function is tasked with ensuring the application of Group-wide instructions for financial reporting and with identifying and communicating on weaknesses and areas for improvement in financial reporting processes.

Monitoring activities

Business processes that are judged to have a material impact on financial reporting are monitored continually, for example by performing risk analysis or based on previously identified weaknesses or deviations. The results of reviews performed are fed back to the operations concerned and actions decided on are monitored on an ongoing basis.

LKAB has an internal control function that is responsible for the framework for internal control over financial reporting. The function reports to the Chief Financial Officer and presents matters relating to internal governance and control at the meetings of the Audit Committee.

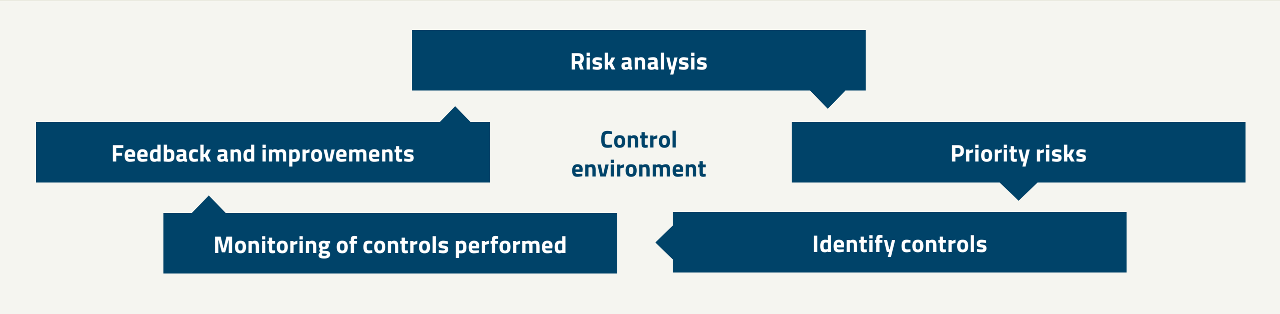
The structure for monitoring internal control that currently exists at LKAB is deemed to meet the Board's requirements, and consequently no separate internal audit function has been established. The decision on internal audits is reconsidered annually by the Board.

Luleå, 29 March 2022

The Board of Directors, through the Chairman

Göran Persson

Internal control – financial reporting



Board of Directors

1. GÖRAN PERSSON

Chairman of the Board

Board member since: 2017

Education: Studied sociology and political science at Örebro University College 1969–1971

Born: 1949

Background: Prime Minister of Sweden 1996–2006, chairman of the Council of the EU 2001, Swedish Finance Minister 1994–1996, Swedish Minister for Schools 1989–1991, leader of the Swedish Social Democratic Party 1996–2007, Chairman of the Board at Sveaskog AB 2008–2015, board member at Ålandsbanken 2015–2019.

Other directorships: Chairman of the Board at Swedbank AB, Scandinavian Biogas Fuels International AB and GreenGold Group AB.

2. GUNNAR AXHEIM

Board member

Position: President of Axheimconsult AB

Board member since: 2017

Education: MSc Engineering, Luleå University of Technology

Born: 1951

Background: Head of BU Vattenfall Hydro and President Vattenfall Vattenkraft 2007–2013. Head of BU Vattenfall Tjänster 1998–2007. Managerial positions at Boliden 1989–1998, Holmen 1986–1989 and LKAB 1976–1986.

Other directorships: Chairman of the Board at Svenska Kraftnät Gasturbiner AB and GeoVista AB.

3. CATRIN FRANSSON

Board member

Board member since: 2021

Education: MBA, Luleå University of Technology, Senior Executive Programme, London Business School

Born: 1962

Background: CEO Svensk Exportkredit (Swedish Export Credit Corporation) 2014–2021. Swedbank 1997–2014, including in senior positions such as head of the Swedish Banking Division and Group Products Division.

Other directorships: Chairman of the Board at Almi Stockholm Sörmland AB.

4. EVA HAMILTON

Board member

Board member since: 2015

Education: Dag Hammarskiöld College, Economics, University of Uppsala 1974, Bachelor's Programme in Journalism, Stockholm University 1976

Born: 1954

Background: Chairman of the Board at Radiotjänst i Kiruna 2006–2015. Previous directorships at Fortum Oyj 2015–2021, Lindex 2015–2019 and Stockmann 2019–2021. CEO at SVT 2006–2014. Head of SVT Fiction 2004–2006. Head of SVT News and Sport 2000–2004. Journalist at Sydsvenska Dagbladet, Sundsvalls Tidning, Aftonbladet, SvD, Dagens Industri and Rapport/SVT. Brussels correspondent 1993–1996.

Other directorships: Chairman of the Board at Luleå University of Technology, the Swedish Film & TV Producers' Association and Nexiko Media AB. Board member at Bonnier News AB, Bonnier News Local AB and Expressen/Life Style AB.

5. LOTTA MELLSTRÖM

Board member

Position: Senior advisor and corporate administrator within the department for state-owned companies at the Ministry of Enterprise and Innovation.

Board member since: 2018

Education: MBA, Lund University

Born: 1970

Background: At the Swedish Government Offices since 2001. Analyst within the department for state-owned companies at the Ministry of Enterprise and Innovation/ Ministry of Finance 2001–2008 , management consultant Resco AB 2000–2001, controller Sydkraft Försäljning AB 1998–2000, management trainee and controller positions within the ABB group 1993–1998.

Other directorships: Board member at Swedavia AB and Jernhusen AB.

6. BJARNE MOLTKE HANSEN

Board member

Board member since: 2016

Education: BSc Engineering

Born: 1961

Background: Group Executive Vice President (Koncern-direktør) FLSmidth & Co. 2002–2017, President Aalborg Portland Holding A/S 2000–2002, President Cembrit Holding A/S 1995–2000, various managerial positions at Unicon A/S 1984–1995.

Other directorships: Chairman of the Board at Aalborg Portland Holding A/S, Bladt Industries A/S, RMIG A/S, Pindstrup Mosebrug A/S and Randers Tegl A/S. Board member at PPC Ltd, Odico A/S and Danish SGD Invest-ment Fund, Investment Committee.

7. OLA SALMÉN

Board member

Board member since: 2016

Education: MBA, Stockholm University

Born: 1954

Background: CFO Sandvik AB, Vin & Sprit AB and Adcore AB. Finance Director Handelsbanken Markets. Senior positions in finance and controlling within the groups Swedish Match and Stora.

Other directorships: Board member at Arla Plast AB.

8. GUNILLA SALTIN

Board member

Position: CEO Uncoated Fine Paper, Mondi Group

Board member since: 2017

Education: MSc in Chemical Engineering KTH Royal Institute of Technology, Stockholm, PhD Chemical Engineering University of Idaho, MBA Stockholm School of Economics

Born: 1965

Background: Södra Group 2000–2019, including as Executive Vice President Södra Cell and Site Manager Södra Cell Värö. Research engineer and process engineer MoDo 1994–2000.

Other directorships: –

9. PER-OLOF WEDIN

Board member

Board member since: 2018

Education: MSc in Engineering, KTH Royal Institute of Technology, Stockholm

Born: 1955

Background: President and CEO Sveaskog AB 2011–2019, CEO Svevia 2008–2011, head of Stora Enso's Uncoated Magazine Papers and Pulp division and its Transport and Distribution department 2001–2008, CEO Stora Enso Grycksbo AB 1998–2001. Senior positions within SCA and Modo 1982–1998.

Other directorships: Board member at Inlandsbanan AB, Envigas AB, Skogssällskapet and High Coast Distillery AB.

Board of Directors cont.

10. ANDERS ELENIUS

Employee representative,
full member

Position: Production driller
Board member since: 2018
Education: Upper secondary school
Born: 1965
Background: Employed by LKAB since 1990.
Other directorships: Chairman of the union club Gruv 12:an, IF Metall Malmfälten.

11. TOMAS LARSSON

Employee representative,
full member

Position: Scaler
Board member since: 2018
Education: Upper secondary school
Born: 1983
Background: Employed by LKAB since 2003.
Other directorships: Chairman of the union club Gruv 4:an, IF Metall Malmfälten.

12. BJÖRN ÅSTRÖM

Employee representative,
full member

Position: Project manager
Board member since: 2020 (deputy member 2017–2020)
Education: Four-year technical stream at upper secondary school, Technical Officer and BTech Project Engineering
Born: 1972
Background: Technical Officer at Ing 3, Project Coordinator at LKAB, General Manager Terminals LKAB Malmtrafik, Project Manager at Transportation & Logistics Technology LKAB, Project Manager for Strategic Production Development LKAB, Project Manager Process and Product Development LKAB.
Other directorships: Chairman of the Board at Akademikerföreningen Kiruna/Svappavaara.

13. EMIL LANTTO

Employee representative,
deputy member

Position: Operating mechanic
Deputy member since: 2020
Education: Upper secondary school
Born: 1984
Background: Employed by LKAB since 2011.
Other directorships: Chairman of the union club IF Metall Klubb Svartöstaden, board member at the Mine Workers' Industry Forum and at the foundation Stiftelsen Ellen och Harald Björnlunds Hem för Gamla i Luleå.

14. PETER NORDSTRÖM

Employee representative,
deputy member

Position: Rock worker
Deputy member since: 2020
Education: Upper secondary school, trade union training
Born: 1963
Background: Employed by LKAB since 2010.
Other directorships: Chairman of the union club 135:an, IF Metall Malmfälten, Chairman of the Board at Vittangi Alltjänst AB.

15. STEFAN TALLFJÄRD

Employee representative,
deputy member

Position: Production manager
Deputy member since: 2020
Education: Within building and construction
Born: 1971
Background: Employed at LKAB since 1998 in various departments, all underground in Malmberget.
Other directorships: Formerly chairman and now board member at Ledarna Malmberget/Luleå/Stockholm, board member at Ledarna Process Industry.

AUDITOR AND SECRETARY

Auditor
KPMG
Helena Arvidsson Älgne
Authorised Public Accountant

Secretary
Malin Sundvall
General Counsel, LKAB
Secretary of the Board since 2008

Group management[1)]

1. JAN MOSTRÖM[2)]

President and CEO of LKAB

Education: Mining Engineer, Bergsskolan Filipstad 1983
Year employed: 2015
Born: 1959
Other engagements: Chairman at GAF (Association of Mining Employers), Deputy Chairman at Svemin (industry association of mining, mineral and metal producers), board member at Industriarbetsgivarna (Swedish Association of Industrial Employers) and at the Royal Swedish Academy of Engineering Sciences (IVA).
Background: Boliden 2000–2015, Skellefteå Municipality 1998–2000, Boliden 1979–1998.

2. LEIF BOSTRÖM

Senior Vice President,
Special Products business area

Education: MBA, Luleå University of Technology 1990.
Year employed: 1992
Born: 1959
Background: NCC 1980–1992.

3. PETER HANSSON

Chief Financial Officer

Education: MBA, Luleå University of Technology 2000.
Year employed: 2016
Born: 1970
Background: Boliden 2002–2015, Riksskatteverket (National Tax Board) 2000–2002, Skatteverket (Swedish Tax Agency) 1991–2000.

4. NIKLAS JOHANSSON

Senior Vice President,
Communication and Climate

Education: MBA, Stockholm School of Economics 1998.
Year employed: 2020
Born: 1970
Background: Ministry for Foreign Affairs 2019, Ministry of Enterprise and Innovation 2016–2019, Opcon AB 2007–2016, Prime Minister's Office 2003–2006, Government Offices 1996 and 1997–2003, European Parliament 1994–1995.

5. ÅSE JUHLIN

Acting Senior Vice President,
HR

Education: Graduated from Mid Sweden University in 1998 with a bachelor's degree specialising in psychology (human resources management), supplementary studies in commercial law and economics.
Year employed: 1998
Born: 1967
Background: LKAB 1998–

6. PIA LINDSTRÖM

Senior Vice President,
Environment and Sustainability

Education: Bachelor's degree in Environmental and Health Protection, Umeå University 1994, Executive Programme in Industrial Management, KTH Royal Institute of Technology, Stockholm 2017–2018 and supplementary studies in, among other things, inorganic chemistry.
Year employed: 2022
Born: 1970
Background: Boliden 1998–2022, Norsjö Municipality 1996–1998.

7. MICHAEL PALO

Senior Vice President,
Iron Ore business area

Education: MSc in Engineering, Luleå University of Technology 2004.
Year employed: 2018
Born: 1977
Background: Boliden 2011–2018, Pon Equipment 2010–2011, LKAB 2005– 2010.

CHANGES TO GROUP MANAGEMENT

After year-end 2021 Grete Solvang Stoltz left her position as Senior Vice President, HR and Sustainability. During the first quarter of 2022: the former HR and Sustainability unit has been split into an HR unit and an Environment and Sustainability unit. Maria Reinholdsson will take up the position of Senior Vice President, HR later in 2022. The former Market and Technology unit and the former Exploration, Strategy and Business Development unit have been moved out of Group Management and included in the CEO Staff.

1) For remuneration to Group Management in 2021 see Note 7 on pages 96–97.

2) Neither the CEO nor any natural person or legal entity related to him has any significant shareholdings or partnerships in companies with which LKAB has significant business relationships.

Group overview

Group

For management and follow-up, the operations are split into two business areas: the Iron Ore business area and the Special Products business area. Group-wide functions are monitored under Other Segments, which includes departments such as HR, communications, finance, strategic R&D and exploration.

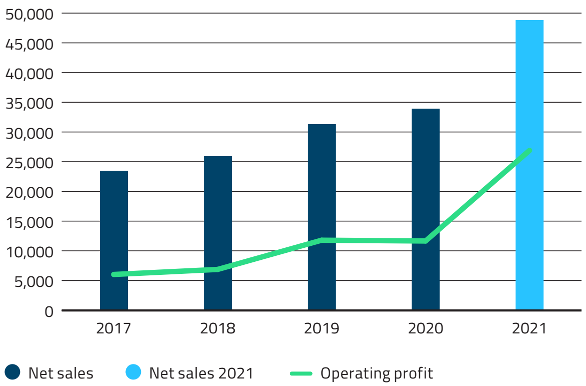
The Group's earnings and the breakdown of earnings between operating segments are described below and in Note 2 and Note 3 on pages 91–94.

Financial overview

The Group in summary

MSEK	2021	2020
Net sales	48,812	33,914
Operating profit/loss	26,898	11,654
Net financial income/expense	1,484	797
Profit/loss before tax	28,382	12,452
Profit/loss for the year	**22,604**	**9,757**

Net sales and operating profit
(MSEK)



Analysis of change in operating profit

MSEK	2021
Operating profit 2020	11,654
Iron ore prices incl. hedging	18,786
Currency effect, iron ore incl. hedging of accounts receivable	-2,614
Volume and mix, iron ore	-404
Volume, price and currency, industrial minerals	70
Costs for urban transformation provisions	1,025
Depreciation	3
Other income and expenses	-1,622
Operating profit 2021	**26,898**

Sales for 2021 were 44 percent higher than in the previous year, with higher iron ore prices partly offset by a lower dollar exchange rate. The average spot price for iron ore for the year was USD 160 (109) per tonne. Quoted pellet premiums were on average USD 34 per tonne higher than in the previous year. The cost level – excluding provisions for urban transformation and volume effects – was higher than in the previous year, partly because of higher energy prices, extended maintenance shutdowns, the seismic event in the mine in Kiruna in 2020 and increased rock reinforcement. Increased investments for the future relating to exploration and development programmes, as well as a new ERP system and a donation to a foundation for research also contributed to higher costs for the year. Operating profit for the year amounted to MSEK 26,898 (11,654).

Net financial income/expense for the year was MSEK 1,484 (797), with the increase mainly relating to a higher return on financial investments.

Financial position

Net financial indebtedness

MSEK	2021	2020
Loans payable	2,684	3,608
Provisions for pensions	1,396	1,741
Provisions, urban transformation	14,423	14,272
Provisions, remediation	1,775	1,736
Less:		
Cash and cash equivalents	-6,289	-3,406
Current investments	-30,141	-19,073
Financial investments	-400	-348
Net financial indebtedness	**-16,553**	**-1,470**

Net debt/equity ratio

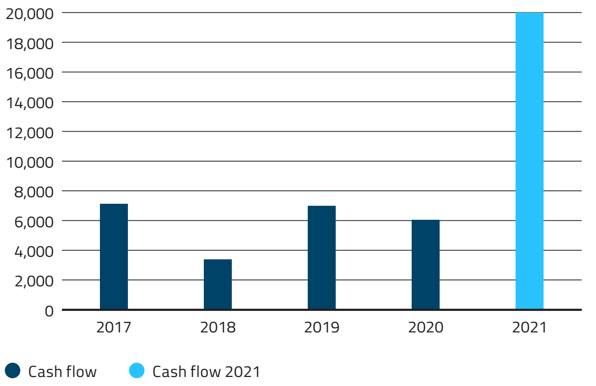
MSEK	2021	2020
Net financial indebtedness	-16,553	-1,470
Equity	67,565	48,412
Net debt/equity ratio, %	**-24.5**	**-3.0**

The net debt/equity ratio was -24.5 (-3.0) percent, which is mainly due to positive cash flow at a historically high level.

Group

Operating cash flow and investments

Operating cash flow
(MSEK)



Operating cash flow

MSEK	2021	2020
Cash flow from operating activities before expenditure on urban transformation and changes in working capital	25,207	13,707
Expenditure on urban transformation	-2,681	-4,191
Cash flow from operating activities before changes in working capital	22,526	9,516
Change in working capital	959	-553
Capital expenditures (net)	-3,217	-2,693
Acquisition of subsidiaries	-150	–
Acquisition/divestment of financial assets	-130	-232
Operating cash flow	**19,988**	**6,038**

Operating cash flow for the year amounted to MSEK 19,988 (6,038). Higher operating profit, lower expenditure for urban transformation and a decrease in working capital tied up in accounts receivable had positive effects compared with 2020. Cash flow was negatively affected by increased capital expenditure.

Capital expenditure, total and by business area

MSEK	2021	2020
Group	**3,359**	**2,763**
Iron Ore business area	3,154	2,472
Special Products business area	147	145
Other segments	58	147

Capital expenditure for the year amounted to MSEK 3,359 (2,763), the majority of which relates to investments to secure future production capacity. Capital expenditure for replacing LKAB's own properties in connection with the urban transformation amounted to MSEK 599 (294). The year's capital expenditure on environmental protection and dam facilities amounted to around MSEK 650 (440).

Parent Company

The Parent Company LKAB consists of the majority of the Iron Ore business area and the group-wide functions reported under Other segments. The Parent Company includes most of LKAB's operating activities as well as the Group's financial activities.

Parent Company in summary

MSEK	2021	2020
Net sales	46,103	31,743
Operating profit/loss	**26,431**	**11,196**
Costs for urban transformation provisions	-372	-1,396
Capital expenditure on property, plant and equipment	3,068	2,481
Depreciation	-2,464	-2,384
Deliveries of iron ore, Mt	27.0	28.5
Production of iron ore, Mt	26.7	27.1

Outlook for 2022

Demand for LKAB's highly upgraded iron ore products remains good. Iron ore prices and premiums remained at a high level during the early part of 2022. Developments in the coronavirus pandemic are still being monitored and adjustments may be made to the operations if needed.

LKAB is also closely monitoring developments in the situation in Ukraine. The direct impact on the company is limited at present, but it is difficult to assess what the longer term consequences of the new security situation may be.

LKAB is continuing its transformational journey towards becoming a future supplier of sponge iron, with the aim of being able to provide our customers with the raw materials for fossil-free steel.

The urban transformation work is in an intensive phase, with the result that expenditure will remain high in 2022. Gällivare Municipality has still not approved the necessary zoning plan amendment for eastern Malmberget, which risks delaying the schedule for the phase-out area and thus limiting future production.

Sustainability work plays a central part in LKAB's strategy and development work for the next generation of LKAB is continuing according to plan. Securing access to ore when the current main haulage levels are expected to be mined out is the basis for the next generation of LKAB, which is why exploration work continues to have a high priority. The exploration efforts have been successful, and updated mineral resources and mineral reserves are presented on pages 160–166.

Business areas

Iron Ore business area

The Iron Ore business area mines and processes iron ore products in Kiruna, Svappavaara and Malmberget. The business area produces blast furnace pellets and pellets for steelmaking via direct reduction (DR pellets), as well as fines. The upgraded iron ore products are transported via the Ore Railway to the ports of Narvik and Luleå for shipment to steelworks customers around the world.

MSEK	2021	2020
Net sales	46,135	31,727
Operating profit/loss	**28,432**	**12,756**
Costs for urban transformation provisions	-372	-1,396
Capital expenditure on property, plant and equipment	3,154	2,472
Depreciation	-2,835	-2,864
Deliveries of iron ore products, Mt	27.0	28.5
Proportion of pellets, %	83	84
Production of iron ore products, Mt	26.7	27.1

Sales for 2021 were higher than last year, mainly as a result of higher prices for highly upgraded iron ore products. A lower dollar exchange rate and lower delivery volumes had a negative effect.

Operating profit for the year amounted to MSEK 28,432 (12,756). Higher energy prices, extended maintenance shutdowns, measures to secure the supply of crushed ore and increased rock reinforcement resulted in increased costs for the year. Lower costs for urban transformation provisions as well as lower delivery volumes had a positive effect on costs compared with 2020.

Special Products business area

The Special Products business area encompasses LKAB Minerals AB, which sells minerals for industrial use, LKAB Wassara AB, which sells drilling technology systems for the mining and construction industries, as well as LKAB Berg & Betong AB, Bergteamet AB, LKAB Kimit AB and LKAB Mekaniska AB, which provide contracting and rockwork services, concrete, explosives and engineering services.

MSEK	2021	2020
Net sales	5,633	4,362
Operating profit/loss	**380**	**261**
Capital expenditure on property, plant and equipment	147	145
Depreciation	-216	-192

Net sales for the year increased by 28 percent when compared year on year. All the operating segments contributed to the increase, but the greatest impact was from higher selling prices and from improved sales volumes for industrial minerals. In August LKAB acquired 75 percent of the shares in Bergteamet AB, which contributed MSEK 55 to the year's sales. Operating profit for the business area for the year amounted to MSEK 380 (261).

Capital expenditure on property, plant and equipment increased during the year, as did depreciation, which is partly an effect of the acquisition of Bergteamet AB.

Other segments

Other segments covers supporting operations such as group-wide functions and certain operations that take place in subsidiaries. Other segments also covers financial operations, including transactions and gains or losses relating to financial hedging for iron ore prices, currencies and the purchase of electricity.

MSEK	2021	2020
Net sales excl. hedging	97	83
Net sales hedging	-126	-36
Total net sales	-29	47
Operating profit/loss	**-1,758**	**-1,291**
Capital expenditure on property, plant and equipment	58	147
Depreciation	-79	-78

For 2021 operating profit was affected mainly by higher costs as a result of expenses relating to ongoing installation of a new ERP system, and also by a donation to a newly established foundation for research into the sustainable transition of the mining and minerals industry. Exploration and development projects were also greater in extent, which increased costs compared with the previous year. A lower result for hedging activities had a negative effect for the year. Capital expenditure for the year is affected by expenses for the ongoing installation of a new ERP system.

Under LKAB's hedging strategy, price and currency risk in the Group's forecast sales are not normally hedged. Currency effects on outstanding accounts receivable are hedged, however.

Financial statements

FINANCIAL STATEMENTS – THE GROUP

FINANCIAL STATEMENTS – PARENT COMPANY

NOTES

Consolidated income statement

1 January – 31 December

MSEK	Note	2021	2020
	1		
Net sales	2, 3	48,812	33,914
Cost of goods sold	14, 15, 16, 32	-19,996	-20,918
Gross profit/loss		**28,816**	**12,996**
Selling expenses		-157	-144
Administrative expenses		-704	-587
Research and development expenses		-1,175	-652
Other operating income	5	537	413
Other operating expenses	6	-286	-301
Share of profit of joint ventures		-133	-72
Operating profit/loss	2, 7, 8, 9	**26,898**	**11,654**
Financial income		1,892	1,197
Financial expense		-408	-399
Net financial income/expense	10	**1,484**	**797**
Profit/loss before tax		**28,382**	**12,452**
Tax	12	-5,778	-2,695
Profit/loss for the year		**22,604**	**9,757**
Profit/loss for the year attributable to:			
Parent company shareholders	13	22,603	9,757
Non-controlling interests	13	1	–
Earnings per share before and after dilution (SEK)	13	32,291	13,938
Number of shares		700,000	700,000

Consolidated statement of comprehensive income

1 January – 31 December

MSEK	Note	2021	2020
Profit/loss for the year		**22,604**	**9,757**
Other comprehensive income			
Items that will not be reclassified to profit/loss for the year			
Remeasurement of defined-benefit pension plans		273	-21
Tax attributable to actuarial gains and losses		-56	4
Changes for the year in the fair value of equity instruments measured at fair value through other comprehensive income	27	2,019	-472
		2,236	**-488**
Items that have been or may be reclassified subsequently to profit/loss for the year			
Translation differences on translation of foreign operations for the year	27	186	-273
Changes in fair value of cash flow hedges for the year	27	1	0
Changes in fair value of cash flow hedges transferred to profit/loss for the year	27	0	-10
Tax attributable to components of cash flow hedges	27	0	3
Total items reclassified to profit or loss		187	-281
Other comprehensive income for the year		**2,423**	**-769**
Comprehensive income for the year		**25,027**	**8,988**
Comprehensive income for the year attributable to:			
Parent company shareholders		25,026	8,988
Non-controlling interests		1	–

Consolidated statement of financial position

MSEK	Note	31 Dec 2021	31 Dec 2020
Assets	1, 18, 34, 35, 36, 37, 39		
Non-current assets			
Intangible assets	14	1,738	1,349
Property, plant and equipment for operations	15	31,047	30,515
Property, plant and equipment for urban transformation	16	10,419	7,954
Interests in associates and joint ventures	17	287	297
Financial investments	21	5,726	3,285
Non-current receivables		102	102
Deferred tax assets	12	10	12
Total non-current assets		**49,329**	**43,514**
Current assets			
Inventories	24	4,924	4,226
Accounts receivable	3, 25	2,074	3,313
Prepaid expenses and accrued income	26	192	155
Other current receivables	3, 23	1,696	1,583
Current investments	21, 42	30,141	19,073
Cash and cash equivalents	42	6,289	3,406
Total current assets		**45,316**	**31,755**
Total assets		**94,645**	**75,269**

MSEK	Note	31 Dec 2021	31 Dec 2020
Equity and liabilities			
Equity	27, 45		
Share capital		700	700
Reserves		1,947	-259
Profit brought forward including profit for the year		64,885	47,971
Equity attributable to Parent Company shareholders		**67,532**	**48,412**
Non-controlling interests		33	–
Total equity		**67,565**	**48,412**
Non-current liabilities			
Non-current interest-bearing liabilities	28	2,366	2,544
Other non-current liabilities		56	–
Provisions for pensions and similar commitments	30	1,396	1,741
Provisions, urban transformation	31, 32	11,444	11,081
Other provisions	31	1,560	1,617
Deferred tax liabilities	12	1,636	1,560
Total non-current liabilities		**18,458**	**18,542**
Current liabilities			
Current interest-bearing liabilities	28	318	1,064
Trade payables		1,794	1,746
Tax liabilities		657	207
Other current liabilities	3	689	327
Accrued expenses and deferred income	33	1,662	1,458
Provisions, urban transformation	31, 32	2,979	3,191
Other provisions	31	523	323
Total current liabilities		**8,622**	**8,315**
Total liabilities		**27,080**	**26,857**
Total equity and liabilities		**94,645**	**75,269**

Consolidated statement of changes in equity

2020 MSEK	Equity attributable to Parent Company shareholders Share capital	Translation reserve	Fair value reserve	Hedging reserve incl. hedging cost reserve	Retained earnings incl. profit/loss for the year	Total	Non-controlling interests	Total equity
Opening equity 1 Jan 2020	700	-54	540	7	44,335	45,528	–	45,528
Profit/loss for the year	–	–	–	–	9,757	9,757	–	9,757
Other comprehensive income for the year	–	-273	-472	-7	-17	-769	–	-769
Comprehensive income for the year	–	-273	-472	-7	9,740	8,988	–	8,988
Dividend	–	–	–	–	-6,104	-6,104	–	-6,104
Closing equity 31 Dec 2020	**700**	**-327**	**68**	**0**	**47,971**	**48,412**	**–**	**48,412**

See Note 27.

2021 MSEK	Equity attributable to Parent Company shareholders Share capital	Translation reserve	Fair value reserve	Hedging reserve incl. hedging cost reserve	Retained earnings incl. profit/loss for the year	Total	Non-controlling interests	Total equity
Opening equity 1 Jan 2021	700	-327	68	0	47,971	48,412	–	48,412
Profit/loss for the year	–	–	–	–	22,604	22,604	-1	22,603
Other comprehensive income for the year	–	186	2,019	1	217	2,423	–	2,423
Comprehensive income for the year	–	186	2,019	1	22,821	25,027	-1	25,026
Dividend	–	–	–	–	-5,850	-5,850	–	-5,850
Call option	–	–	–	–	-56	-56	–	-56
Acquisition of part-owned subsidiary, non-controlling interest	–	–	–	–	–	0	33	33
Closing equity 31 Dec 2021	**700**	**-141**	**2,087**	**1**	**64,886**	**67,533**	**32**	**67,565**

See Note 27.

Consolidated statement of cash flows

1 January – 31 December

MSEK	Note	2021	2020
Operating activities	1, 42		
Profit/loss before tax		28,382	12,452
Adjustment for items not included in cash flow		2,182	3,743
Income tax paid		-5,339	-2,479
Expenditures, urban transformation	31, 32	-2,681	-4,191
Expenditures, other provisions	31	-18	-9
Cash flow from operating activities before changes in working capital		**22,526**	**9,516**
Cash flow from changes in working capital			
Increase (+)/Decrease (-) in inventories		-698	566
Increase (+)/Decrease (-) in operating receivables		1,000	-1,363
Increase (+)/Decrease (-) in operating liabilities		657	244
Change in working capital		**959**	**-553**
Cash flow from operating activities		**23,485**	**8,963**
Investing activities			
Acquisition of property, plant and equipment	15	-3,359	-2,763
Government investment grants		137	5
Disposal of property, plant and equipment		5	65
Acquisition of subsidiaries		-150	–
Acquisition of other financial assets – operating		-130	-232
Acquisition of other financial assets – non-operating		-358	-2,666
Disposals/acquisitions (net) in current investments		-9,960	4,446
Cash flow from investing activities		**-13,815**	**-1,146**

1 January – 31 December

MSEK	Note	2021	2020
Financing activities			
Repayments/borrowing, repurchase agreements		-986	-173
Repayments/borrowing		76	-348
Repayment of lease liabilities		-76	-79
Dividends paid to Parent Company shareholders	27	-5,850	-6,104
Cash flow from financing activities		**-6,836**	**-6,705**
Cash flow for the year		**2,834**	**1,112**
Cash and cash equivalents at start of year		3,406	2,312
Exchange difference in cash and cash equivalents		49	-19
Cash and cash equivalents at end of year		**6,289**	**3,406**
Consolidated operating cash flow			
Cash flow from operating activities		**23,485**	**8,963**
Acquisition of property, plant and equipment		-3,359	-2,763
Government investment grants		137	5
Disposal of property, plant and equipment		5	65
Acquisition of subsidiaries		-150	–
Acquisition of other financial assets – operating		-130	-232
Operating cash flow (excluding current investments)		**19,988**	**6,038**
Acquisition of other financial assets – non-operating		-358	-2,666
Disposals/acquisitions (net) in current investments		-9,960	4,446
Cash flow after investing activities		**9,670**	**7,817**
Cash flow from financing activities		-6,836	-6,705
Cash flow for the year		**2,834**	**1,112**

Income statement – Parent Company

1 January – 31 December

MSEK	Note	2021	2020
	1, 39		
Net sales	2, 3	46,103	31,743
Cost of goods sold	15, 16, 32	-18,113	-19,624
Gross profit/loss		**27,990**	**12,119**
Selling expenses		-39	-29
Administrative expenses		-434	-365
Research and development expenses		-1,129	-619
Other operating income	5	61	112
Other operating expenses	6	-18	-21
Operating profit/loss	7, 8, 9	**26,431**	**11,196**
Earnings from financial items:			
Income from interests in Group companies		–	614
Income from other securities and receivables held as non-current assets		384	113
Other interest income and similar profit/loss items		393	425
Interest expense and similar profit/loss items		-102	-475
Profit/loss after financial items	10	**27,106**	**11,874**
Appropriations	11	943	838
Profit/loss before tax		**28,049**	**12,712**
Tax	12	-5,679	-2,598
Comprehensive income for the year[1]		**22,370**	**10,114**

1) Profit/loss for the period corresponds to comprehensive income for the period.

Balance sheet – Parent Company

MSEK	Note	31 Dec 2021	31 Dec 2020
Assets	1, 34, 35, 36, 37		
Non-current assets			
Intangible assets	14	451	194
Property, plant and equipment for operations	15	25,778	25,341
Property, plant and equipment for urban transformation	16	10,419	7,954
Financial assets			
Interests in subsidiaries	40	1,832	1,680
Interests in associates and jointly controlled entities	19	498	380
Receivables from Group companies	20, 39	3,202	3,043
Other non-current securities	22	3,238	2,869
Other non-current receivables	23	196	206
Deferred tax asset	12	1,467	1,394
Total financial assets		**10,433**	**9,571**
Total non-current assets		**47,081**	**43,059**
Current assets			
Inventories	24	4,167	3,471
Current receivables			
Accounts receivable	3, 25	1,558	3,013
Receivables from subsidiaries	39	419	264
Other current receivables	3, 25	1,617	1,439
Prepaid expenses and accrued income	26	137	114
Total current receivables		**3,731**	**4,830**
Current investments	42	27,645	17,398
Cash and bank balances	42	5,522	3,083
Total current assets		**41,065**	**28,782**
Total assets		**88,146**	**71,841**

MSEK	Note	31 Dec 2021	31 Dec 2020
Equity and liabilities	1, 34, 35, 36		
Equity	27, 45		
Restricted equity			
Share capital (700,000 shares)		700	700
Statutory reserve		697	697
Non-restricted equity	41		
Profit/loss brought forward		29,838	25,573
Profit/loss for the year		22,370	10,114
Total equity		**53,605**	**37,084**
Untaxed reserves	41	11,577	12,202
Provisions			
Provisions, urban transformation	31, 32	11,444	11,081
Other provisions	30, 31	1,525	1,537
Total provisions		**12,969**	**12,618**
Non-current liabilities			
Bond loans	29	1,995	2,241
Liabilities to credit institutions		–	10
Total non-current liabilities		**1,995**	**2,251**
Current liabilities			
Bonds and commercial papers		260	1,000
Liabilities to credit institutions	29	–	–
Trade payables		1,374	1,243
Liabilities to Group companies	39	587	409
Current tax liabilities		630	184
Other current liabilities		501	222
Accrued expenses and deferred income	33	1,158	1,116
Provisions, urban transformation	31, 32	2,979	3,191
Other provisions	31	511	320
Total current liabilities		**8,000**	**7,685**
Total equity and liabilities		**88,146**	**71,841**

Statement of changes in equity – Parent Company

2020 MSEK	Restricted equity Share capital	 Statutory reserve	Non-restricted equity Profit/loss brought forward	 Profit/loss for the year	 Total equity
Opening equity 1 Jan 2020	700	697	31,677	–	33,074
Profit/loss for the year	–	–	–	10,114	10,114
Dividend	–	–	-6,104	–	-6,104
Closing equity 31 Dec 2020	**700**	**697**	**25,573**	**10,114**	**37,084**

See Note 27.

2021 MSEK	Restricted equity Share capital	 Statutory reserve	Non-restricted equity Profit/loss brought forward	 Profit/loss for the year	 Total equity
Opening equity 1 Jan 2021	700	697	35,687	–	37,084
Profit/loss for the year	–	–	–	22,370	22,370
Dividend	–	–	-5,850	–	-5,850
Closing equity 31 Dec 2021	**700**	**697**	**29,837**	**22,370**	**53,604**

See Note 27.

Cash flow statement – Parent Company

1 January – 31 December

MSEK	Note	2021	2020
Operating activities	1, 42		
Profit/loss after financial items		27,106	11,874
Adjustment for items not included in cash flow		2,547	4,017
Income tax paid		-5,308	-2,303
Expenditures, urban transformation	31, 32	-2,681	-4,191
Expenditures, other provisions	31	-18	-9
Cash flow from operating activities before changes in working capital		**21,646**	**9,388**
Cash flow from changes in working capital			
Increase (+)/Decrease (-) in inventories		-696	607
Increase (+)/Decrease (-) in operating receivables		1,224	-1,596
Increase (+)/Decrease (-) in operating liabilities		343	-540
Change in working capital		**871**	**-1,529**
Cash flow from operating activities		**22,517**	**7,859**
Investing activities			
Acquisition of property, plant and equipment		-3,068	-2,481
Government investment grants		81	5
Disposal of property, plant and equipment		17	60
Change in financial assets		-554	-2,345
Disposals/acquisitions (net) in current investments		-9,960	3,758
Cash flow from investing activities		**-13,484**	**-405**

1 January – 31 December

MSEK	Note	2021	2020
Financing activities			
Repayments/borrowing, repurchase agreements		-986	-173
Borrowing, other interest-bearing liabilities		-10	-350
Group contributions received		488	472
Dividends paid to Parent Company shareholders		-5,850	-6,104
Cash flow from financing activities		**-6,358**	**-6,155**
Cash flow for the year		**2,675**	**1,299**
Cash and cash equivalents at start of year		3,173	1,803
Exchange difference in cash and cash equivalents		49	-19
Cash and cash equivalents at end of year		**5,897**	**3,173**

Note 1 Significant accounting policies

1 Compliance with standards and laws

The consolidated financial statements were prepared in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) as adopted by the EU. The Swedish Financial Reporting Board's Recommendation RFR 1 Supplementary Rules for Consolidated Financial Statements was also applied.

The Parent Company applies the same accounting policies as the Group, except where stated below in the Parent Company's accounting policies section.

The Annual Report and consolidated financial statements were approved for issue by the Board of Directors and President on 25 March 2022. The consolidated income statement, consolidated statement of comprehensive income and statement of financial position and the Parent Company's income statement and balance sheet are subject to approval at the Annual General Meeting on 28 April 2022.

2 Measurement bases applied in preparing the financial statements

Assets and liabilities are recognised at historical cost, apart from certain financial assets and liabilities that are measured at fair value. Financial assets and liabilities measured at fair value consist of derivatives, financial instruments with mandatory measurement at fair value through profit or loss, as well as debt and equity instruments at fair value through other comprehensive income.

A defined-benefit pension liability/asset is recognised as the net of the fair value of plan assets and the present value of the defined-benefit liability, adjusted for any asset restrictions.

3 Functional currency and presentation currency

The functional currency of the Parent Company is the Swedish krona (SEK), which is also the presentation currency for both the Parent Company and the Group. This means that the financial statements are presented in SEK. Unless otherwise stated, all amounts are rounded off to the nearest million SEK.

4 Assessments and estimates in the financial statements

Preparing the financial statements in accordance with IFRS requires company management to make assessments, estimates and assumptions that affect the application of accounting policies and the recognised amounts of assets, liabilities, income and expenses. Actual outcomes may diverge from these estimates and assessments.

These estimates and assumptions are reviewed regularly. Changes in estimates are recognised in the period in which the change is made if the change only affects that period, or the period in which the change is made and future periods if the change affects both current and future periods.

Assessments made by company management when applying IFRS that have a significant effect on the financial statements and estimates made that may lead to significant adjustments in the following year's financial statements are described in more detail in section 28, Significant estimates and assessments.

5 Significant accounting policies applied

The following consolidated accounting policies were applied consistently to all periods that are presented in the consolidated financial statements, unless otherwise stated. The consolidated accounting policies were applied consistently in the presentation and consolidation of the Parent Company, subsidiaries and joint ventures.

6 Changes for 2021

6.1 Accounting policies changed due to new or amended IFRS

Changed accounting policies applied by the Group with effect from 1 January 2021 are described below. IFRS changes that are effective as of 1 January 2021 have had no material effect on the consolidated financial statements.

6.1.1 Configuration or Customisation Costs in a Cloud Computing Arrangement

In April 2021 the IFRS Interpretations Committee published an agenda decision concerning how companies are to account for costs of configuring or customising a supplier's application software in a Software as a Service (SaaS) arrangement. Each arrangement is assessed in terms of whether a system/software is to be regarded as an intangible asset, a lease or a service contract for the purposes of accounting for configuration and customisation costs.

If the implementation costs do not meet the criteria for recognition as an intangible asset, the costs are recognised as an expense when the implementation services are performed in accordance with the contract. If the implementation services are judged to be distinct and separately identifiable from the actual access to the software, as is generally the case, the costs are expensed as they are incurred. If, however, they are judged to be inseparable from the customer's right to receive access to the supplier's application software, the costs are recognised as an expense when the supplier provides access to the application software over the contract term. Where LKAB pays in advance for a service, an asset is recognised in the form of a prepaid expense. The IFRS Interpretations Committee's agenda decision has had no retrospective effect on the consolidated financial statements.

7 New standards and interpretations effective from or after calendar year 2022

New and amended standards and interpretations that enter into force for financial years starting on or after 1 January 2022 are not expected to have any material impact on the consolidated financial statements.

8 Classification etc.

Non-current assets and liabilities consist essentially of amounts that are expected to be recovered or paid more than 12 months after the end of the reporting period. Current assets and liabilities essentially consist of amounts that are expected to be recovered or paid within 12 months of the end of the reporting period.

9 Operating segment reporting

An operating segment is a part of the Group that engages in business operations from which it may generate income and incur expenses and for which independent financial information is available. An operating segment's earnings are also monitored by the company's chief operating decision-maker, which is Group management, to assess its performance and to allocate resources to the operating segment. See Note 2 for a more detailed description of the classification and presentation of operating segments.

10 Principles of consolidation and business combinations

10.1 Subsidiaries

Subsidiaries are companies that operate under the control of the Parent Company. Control exists if the Parent Company has influence over the object of investment, is exposed to or has rights to variable returns from its involvement and can use its influence over the investment to affect returns. In assessing whether control exists, potential voting shares and whether de facto control exists are taken into account.

Subsidiaries are recognised according to the acquisition method. This method means that acquisition of a subsidiary is regarded as a transaction whereby the Group indirectly acquires the subsidiary's assets and assumes its liabilities. The purchase price allocation determines the fair value on the date of acquisition of acquired identifiable assets and assumed liabilities and any non-controlling interest. Transaction costs incurred are recognised in profit or loss for the year.

Upon acquisition the Group chooses either to recognise non-controlling interests in the acquired company at fair value – in other words, goodwill is included in non-controlling interests – or as a proportion of the identifiable net assets. For acquisitions made in 2021 the Group has chosen to recognise non-controlling interests as a proportion of the identifiable net assets.

In the case of business combinations where the transferred consideration, any non-controlling interest and the fair value of a previously owned participating interest (in the case of step acquisitions) exceed the fair value of the assets acquired and liabilities assumed, the difference is recognised as goodwill. When the difference is negative – a so-called low-cost acquisition – this is recognised directly in profit or loss for the year.

10.2 Associates

Associates are companies in which the Group has a significant but not controlling influence over operating and financial governance, normally by means of a shareholding of between 20 and 50 percent of votes. Interests in associates are accounted for using the equity method, which means that the carrying amount of the Group's interests in associates corresponds to the Group's share of the associates' equity. The Group's share of associates' profit or loss after the acquisition is recognised in operating profit.

Note 1 continued

10.3 Joint ventures
Joint ventures are companies where the Group has a shared controlling interest through cooperation agreements with one or more parties and where the Group has rights to the net assets, rather than having direct rights to assets and obligations for liabilities. Interests in joint ventures are recognised according to the equity method; see above regarding associates.

10.4 Joint operations
Joint operations are cooperation arrangements where the Group and one or more partners have rights to all the economic benefits related to the operations' assets. The settlement of the operations' liabilities depends on the parties' purchase of output from the operations or capital contributions to the operations. Joint operations are accounted for using the proportionate consolidation method, which means that each party in the joint operations reports their share of assets, liabilities, revenues and expenses.

10.5 Transactions that are eliminated on consolidation
Intra-group receivables and liabilities, income or expenses, and unrealised gains or losses arising from intra-group transactions between Group companies are eliminated entirely when preparing the consolidated financial statements.

11 Foreign currency
11.1 Foreign currency transactions
Foreign currency transactions are translated into the functional currency at the exchange rate in effect on the transaction date. The functional currency is the currency of the primary economic environment where the companies conduct their operations. Monetary assets and liabilities in foreign currencies are translated into the functional currency at the exchange rate in effect at the end of the reporting period. Exchange rate differences that arise on translation are recognised in profit or loss for the year. Non-monetary assets and liabilities that are recognised at historical cost are translated at the exchange rate in effect on the transaction date. Non-monetary assets and liabilities recognised at fair value are translated to the functional currency at the rate in effect on the date of measurement at fair value.

11.2 Financial statements of foreign entities
Assets and liabilities in foreign operations, including goodwill and other group-related surpluses and deficits, are translated from the foreign operations' functional currencies to SEK, the Group's presentation currency, at the exchange rate in effect at the end of the reporting period. Income and expenses in a foreign operation are translated to SEK at an average exchange rate that constitutes an approximation of the exchange rates that applied when the transactions occurred. Translation differences that arise from currency translation of foreign operations are recognised in other comprehensive income and accumulated in a separate component in equity called the translation reserve.

When control of a foreign operation ceases, the accumulated translation differences attributable to the operation are realised, at which point they are reclassified from the translation reserve in equity to profit or loss for the year.

11.3 Net investment in a foreign subsidiary
Monetary non-current receivables from and liabilities to a foreign operation for which settlement is not planned or is unlikely to take place within the foreseeable future are in practice part of the company's net investment in the foreign operation. An exchange rate difference that arises on the monetary non-current receivable or liability is recognised in other comprehensive income and accumulated in a separate component in equity called the translation reserve.

12 Revenue
12.1 Performance obligations and revenue recognition policies
Revenue is measured based on the compensation specified in the contract with the customer. The Group recognises revenue when control over goods or services transfers to the customer. Information on how and when performance obligations in contracts with customers are fulfilled and the associated policies for revenue recognition are summarised below.

12.1.1 Sales of iron ore
Iron ore trading is conducted in US dollars. LKAB prices iron ore mainly according to a variable pricing model, with an index-linked price based on the spot price.

The variable pricing model mainly uses quarterly prices, which means that the price is determined subsequently after the end of the quarter. The price is substantially affected by the current quarter's average for 62%/65% sinter fines CFR in China. During the quarter, income is based on a preliminary price. At the end of the quarter a price adjustment is recognised based on the established quarterly prices. There are also other pricing models with the same structure where the final price is determined and adjusted subsequently. The variable pricing model also uses monthly prices, determined as the previous month's price.

In the case of fixed price sales, negotiated prices apply.

The customer gains control over the goods when the goods have been delivered in accordance with the terms of sale. Invoices are issued and recognised on this date. Translation is at the current exchange rate. If sales are hedged by forward exchange contracts translation is at the hedged rate. Ongoing reservations are made for discounts granted and these decrease net sales.

Costs relating to delayed loading of vessels, known as demurrage, also affect the transaction price and are recognised within net sales.

12.1.2 Sales of industrial minerals
The Minerals group trades in a number of different minerals, both minerals in its own possession such as magnetite, huntite and mica, and external minerals that are either further processed within the Group or sold on in unchanged form to the end customer. Trade in industrial minerals occurs either in the country's local currency or in a major currency such as USD or EUR.

The customer gains control over the goods when the goods have been delivered in accordance with the agreed terms of sale. Invoicing usually takes place upon delivery and the revenue is recognised on this date. Where applicable, ongoing reservations are made for discounts granted and these decrease net sales.

12.2 Government grants
Government grants are recognised in the statement of financial position as deferred income when there is reasonable assurance that the grant will be received and the Group will comply with the terms associated with the grant. Grants are accrued systematically in profit for the year in the same way and over the same periods as the costs for which the grants are intended to compensate. Government grants related to assets are recognised as a reduction in the asset's carrying amount. For government grants see Note 5.

13 Leases
When an agreement is entered into the Group assesses whether the agreement is, or includes, a lease. An agreement is, or includes, a lease if the agreement conveys a right to use an identified asset for a period of time in exchange for consideration.

At the start of the lease or on reassessment of a lease containing various components – lease and non-lease components – the Group allocates the consideration set out in the agreement to each component based on the standalone price. In the case of leases for buildings and land, fixed amounts paid are mainly reported as a single lease component.

Leases where the Group is the lessee
The Group reports a lease liability and a right-of-use asset when the lease begins.

The lease liability is initially measured at the present value of remaining lease payments during the assessed term of the lease. The term of the lease is the non-cancellable period plus additional periods in the lease if, at the time the lease commences, it is considered reasonably certain that such options will be exercised.

The lease payments are discounted using the Group's incremental borrowing rate, which refers to the Group's borrowing cost based on a reference interest rate for interest rate swaps. In addition to the Group's credit risk, the rate reflects the term of each lease and the currency of the underlying asset.

The lease liability includes fixed payments, variable lease payments that depend on an index or a rate, and amounts expected to be paid in accordance with residual value guarantees. Variable lease payments that do not depend on an index or a rate are expensed in the period to which they relate.

The value of the liability is increased by the interest expense for the period concerned and reduced by the lease payments made. The interest expense is calculated as the value of the liability multiplied by the discount rate.

The right-of-use asset is measured initially at cost, consisting of the initial value of the lease liability plus lease payments that were made on or before the start date as well as any initial direct expenses. The right-of-use asset is depreciated on a straight-line basis from the start date to the end of the lease term.

Note 1 continued

If rent for premises is index-linked, the liability is adjusted by a corresponding adjustment of the carrying amount of the right-of-use asset. Similarly, the values of the liability and asset are adjusted in conjunction with reassessment of the lease term.

The Group includes right-of-use assets in property, plant and equipment for operations in the statement of financial position, which is the same line in which the assets would have been recognised had they been owned. Lease liabilities are included in interest-bearing liabilities in the statement of financial position.

No right-of-use asset or lease liability is recognised for leases with a term of 12 months or less, or where the underlying asset is of low value. Lease payments for these leases are expensed on a straight line basis over the term of the lease.

Leases where the Group is the lessor

Where the Group is the lessor, it is established at the start date of each lease whether the lease is to be classified as a finance lease or an operating lease. The leases where the Group is the lessor are recognised as operating leases.

The Group recognises lease payments from operating leases as revenue on a straight-line basis over the term of the lease on the line for Other operating income.

14 Financial income and expense

Financial income includes interest income on invested funds, dividends, gains on financial assets measured at fair value through profit or loss, the return on plan assets and gains on hedging instruments that are recognised in net financial income/expense.

Financial expense includes interest expense on borrowings, provisions, lease liabilities and defined-benefit pension obligations, losses on financial assets measured at fair value through profit or loss, impairment of financial assets and losses on hedging instruments that are recognised in net financial income/expense.

Exchange gains/losses on financial assets and financial liabilities including currency derivatives are recognised net.

Interest income and interest expense are recognised using the effective interest method. Dividends are recognised when the right to payment is established.

The effective interest rate is the rate that discounts estimated future cash flows over the expected fixed interest term to the carrying amount of the financial asset or amortised cost of the financial liability. The calculation includes all fees paid or received by the contracting parties that are part of the effective interest rate, transaction costs and all other premiums or discounts.

15 Taxes

Income tax consists of current tax and deferred tax. Income tax is recognised in profit or loss for the year except when the underlying transaction is recognised in other comprehensive income or equity, in which case the associated tax effect is recognised in other comprehensive income or equity.

Current tax is tax to be paid or received for the current year, applying the tax rates that were set or for all practical purposes were set at the end of the reporting period, as well as adjustment of current tax attributable to prior periods.

Deferred tax is calculated according to the balance sheet method, based on temporary differences arising between the carrying amount of assets and liabilities and their value for tax purposes. Temporary differences are not taken into consideration in Group goodwill. Temporary differences attributable to interests in subsidiaries and associates that are not expected to be reversed in the foreseeable future are also not taken into consideration.

The measurement of deferred tax is based on how the carrying amount of assets or liabilities is expected to be realised or settled. Deferred tax is calculated by applying the tax rates and tax regulations enacted or substantively enacted at the end of the reporting period.

Deferred tax assets relating to deductible temporary differences and loss carryforwards are only recognised to the extent that it is probable they will be utilised. The value of deferred tax assets is reduced when it is no longer deemed probable that they can be utilised.

16 Financial instruments

16.1 Financial assets

Financial assets include financial investments, current investments, cash and cash equivalents, loans receivable, accounts receivable and derivatives.

Accounts receivable and debt instruments issued are recognised upon being issued. Other financial assets are recognised when the Group becomes a party to the contractual terms of the instrument.

On initial recognition a financial asset is measured at fair value. In the case of financial instruments not measured at fair value through profit or loss, transaction costs directly attributable to the acquisition or issue are included. Receivables are measured at the transaction price. How they are reported subsequently depends on how the asset is classified.

A financial asset is derecognised in the statement of financial position when the contractual rights to the cash flows from the financial asset cease.

On initial recognition a financial asset is classified as measured at fair value through profit or loss, at amortised cost or at fair value through other comprehensive income – equity investment.

Financial assets are not reclassified after initial recognition unless the Group changes its business model for managing financial assets, in which case all the financial assets affected are reclassified as at the first day of the first reporting period after the change in business model.

For debt instruments the classification is based on two criteria: the company's business model for managing the financial asset and the instrument's contractual cash flows.

16.1.1 Financial assets measured at fair value through profit or loss

Holdings in this category are current investments and derivatives.

Debt instruments held for trading or managed and where the result will be assessed based on fair value are measured at fair value through profit or loss. This is determined at portfolio level, since this best reflects how such business is managed and how information is given to management. The information taken into consideration includes established policies and objectives of the portfolio, and how the business model's results are assessed and reported to Group management.

In the case of equity instruments (shares) the general rule is that these are measured at fair value through profit or loss. This category is used for all holdings except for holdings where the Group has irrevocably elected to present changes in value through other comprehensive income; see section 16.1.3 below. This decision is made on an investment-by-investment basis.

Net gains and losses, including interest and dividend income, are recognised in profit or loss. Derivatives contracted for operating items are recognised in operating profit, while derivatives of a financial nature are recognised in net financial income/expense. However, see also Note 35 regarding derivatives identified as hedging instruments.

16.1.2 Financial assets measured at amortised cost

Holdings in this category are accounts receivable, loans receivable, and cash and cash equivalents.

A financial asset is measured at amortised cost if it fulfils both of the following conditions and has not been identified as measured at fair value through profit or loss:

- it is held within a business model whose objective is to hold assets in order to collect contractual cash flows, and
- the agreed terms of the financial asset give rise to cash flows on specified dates that consist only of payments of principal and interest on the outstanding principal.

Amortised cost is determined using the effective interest rate calculated on the date of acquisition. The amortised cost is reduced by impairment losses. Interest income, exchange gains and losses, impairment losses and gains or losses on derecognition are recognised in profit or loss.

16.1.3 Equity instruments measured at fair value through other comprehensive income

Holdings in this category are equity instruments (shares) classified in this category on initial recognition.

The Group may irrevocably elect to recognise subsequent changes in the fair value of an investment in an equity instrument that is not held for trading through other comprehensive income. This decision is made on an investment-by-investment basis.

Changes in value, both realised and unrealised, are recognised in other comprehensive income and accumulated in the fair value reserve, and are never reclassified to profit or loss. Dividends are recognised as income in profit or loss.

16.2 Financial liabilities

Financial liabilities include loan liabilities, accounts payable and derivatives. Financial liabilities are reported when the Group becomes a party to the contractual terms of the instrument.

On initial recognition a financial liability is measured at fair value. In the case of financial instruments not measured at fair value through profit or loss, transaction costs directly attributable to the acquisition or issue are included. How they are reported subsequently depends on how the liability is classified.

Note 1 continued

When the obligations stated in the contract are satisfied, cancelled or expire, the financial liability is derecognised in the statement of financial position.

On initial recognition a financial liability is measured at fair value through profit or loss or at amortised cost.

16.2.1 Financial liabilities measured at fair value via profit or loss

A financial liability is classified at fair value through profit or loss if it is held for trading purposes, is a derivative or was identified as such on initial recognition.

Financial liabilities in this category are derivatives. Net gains and losses, including interest expense, are recognised in profit or loss. However, see also Note 35 regarding derivatives identified as hedging instruments.

16.2.2 Financial liabilities measured at amortised cost

Financial liabilities measured at amortised cost are loan liabilities and accounts payable.

Loan liabilities are measured initially at fair value, net after transaction costs, and subsequently at amortised cost. Amortised cost is determined using the effective interest rate calculated on the date the liability was assumed. This means that surpluses and deficits, as well as direct issue costs, are allocated across the term of the liability.

Accounts payable are measured initially at fair value and subsequently at amortised cost.

Interest expense and exchange gains and losses are recognised in profit or loss. Gains or losses on derecognition are also recognised in profit or loss.

16.3 Offsetting

Financial assets and financial liabilities are offset and recognised as a net amount in the statement of financial position only when the Group has a legally enforceable right to offset the recognised amounts and intends to settle the items on a net basis or to realise the asset and settle the liability at the same time.

17 Derivatives and hedge accounting

The Group holds financial derivatives in order to financially hedge a portion of the cash flow risks to which the Group is exposed: exchange rate exposure and changes in energy prices.

Derivatives are measured at fair value on initial recognition. Thereafter they are measured at fair value and changes in value are recognised as described below.

When the Group initially identifies hedging relationships, the risk management objectives and the strategy are documented with the hedge. The Group also documents the economic relationship between the hedged item and the hedging instrument, including whether changes in the cash flow of the hedged item and the hedging instrument are expected to cancel each other out.

17.1 Receivables and liabilities in foreign currency

Hedge accounting is not applied to hedging of foreign currency risk since financial hedging is reflected in the accounts by the fact that both the underlying receivable or liability and the hedging instrument are recognised at the exchange rate on the closing date and the translation differences are recognised in profit for the year.

Exchange rate changes related to operating receivables and liabilities are recognised in operating profit, while exchange rate changes related to financial receivables and liabilities are recognised in net financial income/expense.

17.2 Cash flow hedging

When a derivative is identified as a cash flow hedging instrument, the effective portion of changes in the fair value of the derivative is recognised in other comprehensive income and accumulated in the hedging reserve.

In the case of forward foreign exchange contracts, the Group only identifies changes in fair value in the spot element as hedging instruments in the cash flow hedging relationship. Fair value changes in the forward component of the forward foreign exchange contract (forward points) are reported as a hedging cost reserve and recognised in the hedging reserve in equity.

When the hedged expected cash flow affects earnings, the hedging instrument's cumulative change in value in the hedging reserve and hedging cost reserve is reclassified to profit or loss. This means that gains and losses relating to hedges are recognised in profit or loss for the year at the same time as gains and losses for the items hedged.

18 Property, plant and equipment

18.1 Owned assets

Property, plant and equipment is carried at cost less accumulated depreciation and any impairment. Cost includes the purchase price and costs directly attributable to the asset to put it in place in working order for use in accordance with the intended purpose. The cost of self-constructed non-current assets includes expenditures for materials, expenditures for employee benefits, and other fabrication costs directly attributable to the asset where applicable.

Property, plant and equipment that consists of parts with different useful lives are treated as separate components.

The carrying amount of a property, plant and equipment item is derecognised from the statement of financial position when the asset is disposed of or retired. The gain or loss arising from the disposal or retirement of an asset is the difference between the selling price and the asset's carrying amount less direct selling expenses. Gains and losses are recognised as other operating income/expense.

18.2 Exploration and evaluation expenditures

Greater knowledge of the extent of the iron ore deposits is necessary to secure access to more ore and ensure the future development of operations. The orebody is surveyed and defined by means of exploration drilling, mainly via drifts adjacent to it. Ore deposit exploration in both existing and future mining areas is expensed. This principle is also applied in the exploration of areas outside existing mines.

18.3 Underground facilities

Underground facilities from which iron ore is extracted can be divided into waste rock mining (development phase) and iron ore mining (production phase).

Waste rock mining consists of work done to expose the orebody in conjunction with the construction of a new main haulage level, facilities pertaining to transport and maintenance functions such as railways, roads, drifts, shafts, inclined drifts (a system of access for vehicle traffic from surface level to the work site underground), and facilities for service and electrical and air supply. Expenditures for facilities intended for use over a period of more than one year are capitalised in the statement of financial position. Depreciation occurs systematically over the useful life of the main haulage level concerned.

Iron ore mining mainly consists of development, cave drilling and loading, haulage and hoisting of the ore. Expenditures for these activities have a useful life of at most one year, which is why they are expensed as they are incurred.

18.4 Open-pit mines

Iron ore mining above ground takes place in what are known as open-pit mines. Stripping is carried out to expose the orebody, and such things as moraine and barren rock are removed. This is called barren rock mining.

During the development phase expenditures are capitalised as part of the cost of the mine and depreciation occurs systematically over the useful life of the mine.

Expenditure on barren rock mining during the production phase that provides improved access to ore for future mining is recognised under assets and depreciated according to the production-based method.

18.5 Remediation

Future expenditure on dismantling and removing assets and restoring sites or areas where they are located (remediation costs) as relates to ongoing operations are capitalised. Capitalised amounts consist of the present value of estimated expenditures that are simultaneously recognised as provisions.

18.6 Subsequent expenditures

Subsequent expenditures are added to the cost only when it is probable that future economic benefits associated with the asset will flow to the company and the cost can be measured reliably. All other subsequent expenditures are recognised as expenses in the period in which they arise.

A subsequent expenditure is added to the cost if the expenditure relates to the replacement of identified components or parts thereof. In cases where a new component is created, the expenditure is also added to the cost. Any undepreciated carrying amounts for replaced components, or parts thereof, are retired and expensed in conjunction with the replacement. Repairs are expensed as incurred.

Note 1 continued

18.7 Amortisation principles

Depreciation is on a straight-line basis over the asset's estimated useful life; land is not depreciated. Leased assets are depreciated over their estimated useful life or, if shorter, over the contractually agreed lease term. The Group applies component depreciation, which means that the estimated useful life of the components is used as the basis for depreciation. Facilities and equipment used in open-pit mines are normally depreciated over the lesser of the expected useful life and the useful life of the mine to which they relate.

The following periods of use are applied to property, plant and equipment including future remediation costs:

Properties used in operations, rental properties	15–100 years
Plant and machinery, open-pit mining	Production-based
Other plant and machinery	5–20 years
Equipment, tools, fixtures and fittings	5–20 years
Underground installations	12–20 years
Surface mining facilities	As ore is extracted
Capitalised remediation costs	Estimated useful life of present production structure.

Properties used in operations are mainly classified as buildings, land improvements and land. Buildings and land improvements consist of several components that are classified on the basis of function, such as roads, surfacing, service facilities, processing plants etc.

Rental properties consist of several components with varying useful lives. The main classifications are buildings and land. Buildings are divided into several components whose useful lives vary.

The following main groups of components have been identified and form the basis for depreciation of rental properties.

Frames, foundations and interior walls	100 years
Water, sewage, electrical and heating systems	50 years
Exterior facades	40 years
Windows	30 years
Interior finishing and appliances	15 years

Depreciation methods, residual values and useful life are assessed annually and adjusted as necessary.

18.8 Urban transformation

18.8.1 Acquisition of properties

When property is acquired as part of urban transformation, the cost is divided into a building component and a mine component. The distinction is based on the assumption that the building can be used for temporary rental for a limited period from acquisition until evacuation. The building component is calculated as the present value of the net cash flows from the rental. The mine component is defined as the property's total cost less the building component.

The building component is expensed in the period in which the building is expected to be utilised.

The mine component is expensed using the production-based method, which means that the cost is calculated on the basis of ore extracted relative to the estimated total volume for the current main haulage level.

For a further description of urban transformation accounting policies, see policy 28.1.1.

18.8.2 Mine assets

For provisions that relate to commitments outside the existing impact boundary (the boundary of the impact of mining to date for which compensation is payable), a mine asset relating to future mining is recognised. The mine asset is expensed using the production-based method, which means that the cost is calculated on the basis of ore extracted relative to the estimated total volume for the current main haulage level.

Mine assets related to future mining are recognised for Kiruna.

For a further description of urban transformation accounting policies, see policy 28.1.1.

18.8.3 Replacement properties

Two compensation options are offered to owners of rental properties and small houses: a replacement property equivalent to the existing property or financial compensation. For those choosing the replacement property option, all the costs of building the replacement property are recognised under property, plant and equipment. When the property is handed over the amount is deducted from provisions for the commitment – see also Note 32. Where the option of financial compensation has been chosen, the compensation paid is deducted from provisions for the commitment.

19 Intangible assets

19.1 Goodwill

Goodwill is measured at cost less any accumulated impairment losses. Goodwill is allocated to cash-generating units and tested annually for impairment; see accounting policies in section 21.1.

19.2 Research and development

Expenditures on research aimed at gaining new scientific or technical knowledge are expensed as incurred.

Expenditures on development, where research findings or other knowledge are applied to produce new or improved products or processes, are recognised as an asset in the statement of financial position, provided that the product or process is technically and commercially feasible and the company has sufficient resources to complete development and then use or sell the intangible asset The value includes directly attributable expenditures such as goods and services and employee benefits. If the above criteria are not met, the expenditures are reported as a cost. Because no such development expenditures have met these criteria thus far, LKAB expenses all expenditures for development as incurred.

19.3 Other intangible assets

Other intangible assets acquired by the Group consist mainly of mining rights, favourable purchasing contracts, customer relationships and software; see Note 14 for a more detailed breakdown. The assets are reported at cost less accumulated amortisation and any impairment losses.

Also included are emission allowances, which are recognised as described below.

19.3.1 Emission allowances

LKAB participates in the EU's system for trade in emission allowances, which grants the right to emit carbon dioxide. Allowances are allocated across the European market. The emission allowances are recognised as intangible assets and deferred income on allocation, since the company has not qualified for any allowances at the time of issue. They are measured at cost, which in the case of allocated allowances corresponds to the market price on allocation.

Qualification is at the same rate as actual emissions, when a liability to surrender emission allowances also arises. A cost of emissions and a provision for emission allowances are recorded. At the same time, a corresponding amount is transferred from deferred income to income for emission allowances. Measurement is at the average cost of allocated emission allowances.

When emission allowances are reported the corresponding number of emission allowances must be surrendered. Thus the intangible non-current asset is exhausted and the provision for discharged emissions is settled. Where a liability to supply emission allowances exceeds the remaining allocation of emission allowances, the surplus amounts are carried as a liability measured at the current market value of the number of emission allowances necessary to settle the commitment. For information on amounts see Note 31.

19.4 Subsequent expenditures

Subsequent expenditures on capitalised intangible assets are recognised as assets in the statement of financial position only when they increase the future economic benefits of the specific asset to which they relate. All other expenditures are expensed as incurred.

Note 1 continued

19.5 Amortisation principles

Amortisation is recognised in profit or loss for the year on a straight-line basis over the estimated useful life of intangible assets. Useful life is reviewed annually. Intangible assets that can be amortised are amortised from the date they are available for use. The estimated useful lives are:

Mining rights	30–50 years
Purchasing contracts	11 years
Customer relationships	15 years
Software in own IT environment	5 years

20 Inventories

Inventories are measured at the lower of cost or net realisable value. The cost of inventories is calculated using the first-in, first-out (FIFO) principle and includes expenditures incurred in acquiring the inventory items and bringing them to their existing location and condition. For finished goods and work in progress, cost includes an appropriate share of overheads based on normal operating capacity.

Net realisable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and selling expenses.

21 Impairments

The Group's recognised assets are assessed at the end of each reporting period to determine whether there is any indication of impairment. IAS 36 is applied to the impairment of assets that are not dealt with by any other IFRS standard.

21.1 Impairment of property, plant and equipment, intangible assets and interests in associates and joint ventures

If impairment is indicated, the recoverable amount of the asset is calculated.

The recoverable amount for goodwill is also calculated annually. If it is not possible to ascertain essentially independent cash flows for an individual asset, the assets are grouped at the lowest level at which it is possible to identify essentially independent cash flows (a so-called cash-generating unit).

The recoverable amount is the higher of fair value less selling expenses or value in use. When calculating value in use, future cash flows are discounted using a discount factor that reflects risk-free interest and the risk associated with the specific asset.

An impairment loss is recognised when the carrying amount of an asset or cash-generating unit exceeds its recoverable amount. Impairment losses are charged to profit for the year. Once impairment has been identified for a cash-generating unit, the impairment loss is initially allocated to goodwill, after which other assets in the unit are proportionally impaired.

21.2 Reversal of impairment

An impairment of assets included in the scope of IAS 36 is reversed if there is an indication that the impairment no longer exists and there has been a change in the assumptions underlying the calculation of the recoverable value when the asset was impaired. However, impairment of goodwill is never reversed. Impairment is reversed only to the extent that the asset's carrying amount after reversal does not exceed the carrying amount that would have been recognised, less amortisation if appropriate, if no impairment had been recognised.

21.3 Impairment of financial assets

Impairment testing of financial assets largely relates to accounts receivable. A simplified method is applied in which the loss allowance is calculated based on lifetime expected credit losses.

When calculating expected credit losses consideration is given to historical, current and forward-looking factors. The loss allowance is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows.

Impairment of accounts receivable is recognised as a decrease in the asset's carrying amount and in operating costs.

22 Capital payments to shareholders

Dividends are recognised as liabilities once they have been approved at the Annual General Meeting.

23 Earnings per share

The calculation of earnings per share is based on consolidated profit for the year attributable to the Parent Company shareholders and on the weighted average number of shares outstanding during the year.

24 Employee benefits

24.1 Defined-contribution pension plans

Defined-contribution pension plans are those for which the company's obligation is limited to the amount that it agrees to pay. In such cases the size of the employee's pension depends on the contributions the company pays to the plan or to an insurance company and the return on capital generated by the contributions. Consequently it is the employee who bears the actuarial risk (that benefits will be lower than expected) and investment risk (that the invested assets will be insufficient to meet expected benefits). The company's obligations for defined-contribution plans are recognised as an expense in profit for the year as they are earned by the employees performing services for the company over a given period.

24.2 Defined-benefit pension plans

Defined-benefit plans are plans for post-employment benefits other than defined-contribution plans. The Group's net obligation in respect of defined-benefit pension plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned through their service in current and prior periods. This benefit is discounted to a present value. The discount rate is the rate at the end of the reporting period on a high-quality corporate bond, including mortgage bonds, with a maturity corresponding to the Group's pension obligations. When there is no viable market for such corporate bonds, the market rate for government bonds with a similar maturity is used instead. The calculation is performed by a qualified actuary using the Projected Unit Credit Method. The fair value of any plan assets is also calculated at the reporting date.

The Group's net obligation is the present value of the obligation, less the fair value of plan assets adjusted for any asset restrictions.

Net interest expense/income on the defined-benefit obligation/asset is recognised in profit or loss for the year under net financial income/expense. Net interest income is based on the interest that arises when discounting the net obligation; that is, interest on the obligation, plan assets and the effect of any asset restrictions. Other components are recognised in operating profit.

Revaluation effects consist of actuarial gains and losses, the difference between the actual return on plan assets and the amount included in net interest income and any changes in the effects of asset restrictions (excluding interest included in net interest income). Actuarial gains and losses arise either because the actual outcome deviates from previous assumptions or the assumptions change. Revaluation effects are recognised in other comprehensive income.

When the calculation leads to an asset for the Group, the carrying amount of the asset is restricted to the lower of the surplus in the plan or the asset restriction calculated using the discount rate. The asset restriction is the present value of the future economic benefits in the form of reduced future contributions or a cash refund. In calculating the present value of future reimbursements or payments, any minimum funding requirement is taken into account.

Changes to or reductions in a defined-benefit plan are recognised on the earliest of the following dates: a) when the change in the plan or reduction occurs, or b) when the company recognises related restructuring costs and termination benefits. The changes/reductions are recognised directly in profit or loss for the year.

The special employer's contribution is part of the actuarial assumptions. Special employer's contributions related to the difference between how the pension obligation is determined in a legal entity and in the Group are recognised as part of the net obligation. Provisions and receivables are not calculated to present value. In a legal entity, the part of the special employer's contribution that is calculated based on the Pension Obligations Vesting Act is recognised for simplicity's sake as an accrued expense rather than as part of the net obligation/asset.

24.3 Short-term benefits

Short-term employee benefits are calculated without discounting and recognised as an expense when the related services are received.

A current liability is recognised for the expected cost of profit-sharing and bonus payments when the Group has a present legal or constructive obligation to make such payments as a result of services rendered by employees and the obligation can be estimated reliably.

Note 1 continued

24.4 Termination benefits

Benefits associated with the termination of employment are expensed at the earlier of the date that the company can no longer withdraw the offer to the employee or the date that the company recognises restructuring costs.

25 Provisions

A provision differs from other liabilities because there is uncertainty about the date of payment or the amount required to settle the provision. A provision is recognised in the statement of financial position when there is a present legal or constructive obligation as a result of a past event and it is probable that an outflow of economic resources will be required to settle the obligation and a reliable estimate of the amount can be made.

Provisions are made at the amount which is the best estimate of the expenditure required to settle the present obligation at the end of the reporting period. Where the effect of payment timing is important, provisions are determined by discounting the expected future cash flow at a pre-tax rate that reflects current market assessments of the time value of money and, if appropriate, the risks specific to the liability.

25.1 Provisions for urban transformation

See section 28.1.1 below.

25.2 Provisions for remediation

See section 28.1.2 below.

26 Contingent liabilities

A disclosure concerning a contingent liability is made when there is a possible commitment arising from past events whose existence is confirmed only by one or more uncertain future events beyond the company's control, or when there is a commitment that is not recognised as a liability or provision because it is not probable that an outflow of resources will be required or this cannot be measured with sufficient reliability.

27 Parent Company accounting policies

The Parent Company has prepared its annual report according to the Swedish Annual Accounts Act (1995:1554) and the Swedish Financial Reporting Board's recommendation RFR 2 Accounting for Legal Entities. The Swedish Financial Reporting Board's recommendations for listed companies are also applied. RFR 2 states that in the annual report for the legal entity, the Parent Company shall apply all IFRS and interpretations adopted by the EU as far as possible within the framework of the Annual Accounts Act, Pension Obligations Vesting Act and considering the relationship between accounting and taxation. The recommendation states the exceptions from and additions to IFRS that must be made.

27.1 Differences between Group and Parent Company accounting policies

The differences between Group and Parent Company accounting policies are detailed below. The specified accounting policies for the Parent Company were applied consistently to all periods presented in the Parent Company's financial statements.

27.2 Changed accounting policies in 2021

Unless otherwise stated below, the Parent Company's accounting policies in 2021 changed in accordance with what is stated above for the Group. The amendments have had no impact on the Parent Company's financial statements.

27.3 Upcoming changes in accounting policies

Upcoming changes to RFR 2 are expected to have no material impact on the Parent Company's financial statements on initial application.

27.4 Classification and presentation

The Parent Company uses the terms income statement, balance sheet and cash flow statement for the reports that in the Group are called consolidated income statement, statement of financial position and statement of cash flows respectively. The income statement and balance sheet for the Parent Company are presented in accordance with the Annual Accounts Act, while the corresponding Group reports are based on IAS 1 Presentation of Financial Statements and IAS 7 Statement of Cash Flows. The most significant differences from the consolidated statements relate primarily to recognition of financial income and expenses, financial assets and equity, and the fact that provisions are recognized under a separate heading in the balance sheet.

27.5 Subsidiaries and associates

Shares in subsidiaries, associates and jointly controlled entities are recognised in the Parent Company using the cost method. This means that transaction costs are included in the carrying amount of interests in subsidiaries, associates and jointly controlled entities.

27.6 Expanded investment

Exchange rate differences on monetary items that form part of the Parent Company's net investment in a foreign operation are recognised in profit or loss.

27.7 Financial instruments and hedge accounting

The Parent Company has chosen not to apply IFRS 9 to financial instruments. However, some of the principles of IFRS 9 are still applicable – such as those relating to impairment losses, recognition/derecognition, criteria for applying hedge accounting and the effective interest method for interest income and interest expense.

In the Parent Company non-current financial assets are measured at cost less any impairment losses.

Current financial assets are measured at the lower of cost or market. Interest-bearing securities, shares and alternative investments or commodity derivatives are measured at portfolio level. This means that for instruments in the same portfolio, unrealised gains are offset against unrealised losses. Excess losses are recognised as a reduction in interest income under other interest income and similar items. Excess gains are not recognised.

Financial liabilities are measured at amortised cost.

Derivatives used for hedging forecast cash flows to which hedge accounting is applied are not carried in the balance sheet. Changes in the value of derivatives are recognised in the same period as the hedged cash flows.

Derivatives with a negative value that are not part of a securities portfolio or to which hedge accounting is not applied are recognised as financial liabilities (other current liabilities) and measured at the amount most favourable to the company upon settlement or transfer of the obligation at the end of the reporting period.

When currency-hedging receivables in foreign currency relating to iron ore sales using forward contracts, the forward exchange rate is used to measure the hedged receivable. The forward points in the forward foreign exchange contract are recognised in net sales.

27.8 Financial guarantees

The Parent Company's financial guarantees mainly consist of security provided for subsidiaries. Financial guarantees mean that the company is committed to reimbursing the holder of a debt instrument for losses it incurs because a specified debtor fails to make payment when due according to the contractual terms. The Parent Company applies one of the reliefs permitted by the Financial Reporting Board compared with the rules of IFRS 9 in its recognition of financial guarantee agreements issued on behalf of subsidiaries. The Parent Company recognises financial guarantees as provisions in the balance sheet when the company has a commitment for which payment will probably be required to settle the commitment.

27.9 Anticipated dividends

Anticipated dividends from subsidiaries are recognised in cases where the Parent Company is solely entitled to decide on the size of the dividend and has decided on the size of the dividend before publishing its financial statements.

27.10 Operating segments

The Parent Company does not report segments with the same breakdown and to the same extent as the Group, but instead discloses the breakdown of net sales by the Parent Company's business streams.

27.11 Property, plant and equipment

With reference to RFR 2, IAS 16 (4), estimated future expenditures for dismantling and removing assets and restoring sites or areas where they are located (remediation costs) in legal entities are not capitalised. Instead, the provision for these expenditures is made gradually over the useful life.

Note 1 continued

27.12 Leased assets
The Parent Company does not apply IFRS 16, in accordance with the exemption in RFR 2. As lessee, lease payments are expensed on a straight-line basis over the term of the lease and therefore right-of-use assets and lease liabilities are not reported in the balance sheet. Leases where the Parent Company is the lessor are reported as operating leases.

27.13 Intangible non-current assets
27.13.1 Research and development
All research and development expenditures are recognised as expenses in the Parent Company income statement.

27.14 Employee benefits – defined-benefit pension plans
Where a pension premium is paid to an insurance company, the Parent Company recognises a defined-benefit plan as a defined-contribution plan.

The Parent Company applies policies other than those described in IAS 19 when estimating defined-benefit plans. The Parent Company complies with the provisions of the Pension Obligations Vesting Act and the regulations issued by Finansinspektionen, Sweden's financial supervisory authority, since this is a prerequisite for tax deductibility. The most significant differences from IAS 19 are how the discount rate is determined, that estimation of the defined-benefit obligation is based on current salary levels without consideration of future salary increases and that all actuarial gains and losses are recognised in the income statement.

Pension obligations secured by transfer of funds to a pension fund are recognised as a provision in the Parent Company only if the fair value of the fund assets is less than the amount of the obligations. No asset is recognised if the fund assets are greater than the obligations. The value of the company's obligations in respect of future pension payments is to be calculated in accordance with the second paragraph above.

27.15 Taxes
In the Parent Company balance sheet, untaxed reserves are recognised without dividing these into equity and deferred tax liabilities, in contrast to the Group. Similarly, the Parent Company does not allocate any part of appropriations to deferred tax in the income statement.

27.16 Group and shareholder contributions
Group contributions are recognised as appropriations.

Shareholder contributions paid are reported by the giver as an increase in Interests in Group companies and in Interests in associates and jointly controlled entities respectively.

28 Significant estimates and assessments
The preparation of financial statements requires management and the Board of Directors to make assessments and assumptions that affect recognised assets, liabilities, income and expenses and other information provided, such as contingent liabilities.

Listed below are the estimates and assessments that are considered most important for an understanding of the financial statements. Conditions for LKAB's operations change gradually, which means that these assessments also change.

28.1 Provisions resulting from mining operations
28.1.1 Provisions for urban transformation
The techniques used in ore mining in underground mines lead to deformations in the form of fissures in the ground where mining is conducted. The deformations are already or will become so extensive that it is necessary to gradually move parts of Kiruna and Malmberget.

Although there are many similarities between conditions in Kiruna and Malmberget, the geological conditions differ. In Kiruna there is a gradual spread of deformations with continuous fissuring, while in Malmberget there is widespread undermining of the ground in the city centre. The deformations are a direct result of mining operations.

LKAB has already had, and will continue to have, significant expenses related to these urban transformations. For instance, LKAB will incur expenses for the acquisition of properties and municipal infrastructure such as electricity, water and sewage systems in the affected areas. The expenditures arise from LKAB's mandatory obligation to compensate damage resulting from its mining activities.

Provisions for the damage caused by the deformations are made for damage already confirmed and damage not yet confirmed but that will occur a year or so later as a result of mining.

LKAB recognises a provision:
1. where there is an agreement or a clear constructive obligation to an external party that defines a commitment relating to future impact areas,
2. as a result of past events,
3. which is expected to result in an outflow of economic resources from the company at settlement, and
4. a reliable estimate of the amount can be made.

For those provisions that relate to commitments outside the existing impact boundary (the boundary of the impact of mining to date for which compensation is payable), a mine asset relating to future mining is recognised.

The amount of the provision is calculated on the basis of objective valuation methods for each type of asset (residential properties, land, infrastructure etc.) and a present value is assigned.

For Kiruna, provisions are recognised for all assessed commitments within the impact area of the current main haulage level according to the current deformation forecast.

Where Malmberget is concerned, environmental conditions were laid down in a ruling by the Land and Environment Court. The impact area from the mining of several different orebodies has essentially encircled central Malmberget, which means that it is no longer able to function as a normal city centre. Provisions have been made and costs expensed for the entire area that will be phased out, in accordance with the current deformation forecast.

All damage/compensation claims that are within the area impacted by mining to date are calculated and recognised as an expense in the income statement, in light of the fact that LKAB consumed the economic benefits that the mining generated.

The mine component and mine asset relating to future mining are expensed using a production-based method. This means that the cost is calculated on the basis of ore actually extracted relative to the estimated total volume for the current main haulage level. Expensing for the year is usually based on the mine asset/mine component at the start of the year. Significant events may result in the basis being adjusted during the current year.

The impact will continue for many years ahead and there will be uncertainty regarding geological consequences, assumptions about market values, demolition and waste disposal costs, etc. The uncertainty in the estimates made so far will decrease as the experience gained is taken into account in future estimates.

Provisions for urban transformation at year-end amounted to MSEK 14,423 (14,272).

28.1.2 Provisions for remediation
Obligations for remediation, dismantling and decontamination as a result of mining operations arise mainly as a result of legal environmental requirements. The Group recognises provisions for remediation costs for all legal and constructive obligations.

Future expenditures for remediation are those resulting from closed operations and ongoing operations. The company collaborates with regulatory authorities to devise long-term plans for remediation of the mining areas. Provisions for ongoing operations are based on these remediation plans.

The amount of the provision is calculated based on acreage and an assessment of future expenditures based on present day technology and other circumstances. The provision is assigned a present value. Future expenditures for ongoing operations are capitalised and depreciated over their useful life. For discontinued operations the costs have been expensed.

Provisions are reviewed and updated as needed when the mine assets' estimated useful life, costs, technical conditions, regulations or other conditions change.

The uncertainty in the estimates made so far will decrease as the experience gained is taken into account in future estimates.

Provisions for remediation at year-end amounted to MSEK 1,775 (1,737).

28.2 Impairment testing of property, plant and equipment
The Group reports significant values in the balance sheet in respect of property, plant and equipment. Property, plant and equipment are tested for impairment in accordance with the accounting policies described in section 21.1 above.

The recoverable amounts of cash-generating units are established by calculating value in use. Value in use is based on estimates of expected future cash flows from the mining of the mineral reserves, and thus on assumptions concerning factors such as long-term iron ore prices, the USD/SEK exchange rate and levels of capital expenditure. The calculation of value in use is very sensitive to changes in the assumptions.

The Group has reported no impairment losses for 2021 or 2020.

28.3 Useful life and depreciation method for property, plant and equipment

Depreciation periods for main haulage levels, facilities and equipment in mines is dependent on future ore extraction and the mine's useful life. It is essential that changes in production and the ore base are reflected in the applied depreciation method and useful life, which is of particular importance when deciding on new main haulage levels. To achieve this, the useful lives and depreciation methods must be continuously reassessed. Changes in assessments could have a material impact on consolidated earnings and financial position.

The carrying amount of property, plant and equipment at year-end amounted to MSEK 31,047 (30,515). Depreciation for the year amounted to MSEK 2,982 (2,984).

28.4 Retirement benefits

Several assumptions are important components in the actuarial methods used to calculate pension provisions, which may have a significant impact on the recognised net obligation and annual pension cost. The discount rate and expected return on plan assets are two critical assumptions used in the calculation of pension cost for the year and the present value of pension obligations. These assumptions are assessed annually for each pension plan in each country.

The discount rate enables the measurement of future cash flows to present value on the measurement date. This rate must correspond to the yield on either high-quality corporate bonds including mortgage bonds or, if there is no viable market for such bonds, government bonds. A lower discount rate increases the present value of the pension provision and the annual cost.

To determine the expected return on plan assets, LKAB considers the current and anticipated categories of the assets as well as historical and expected returns on the various categories of assets.

Several factors do not change as often, such as personnel turnover and retirement age. For financial and other reasons, actual outcomes often differ from actuarial assumptions.

Provisions for pensions at year-end amounted to MSEK 1,396 (1,741).

28.5 Taxes

Significant assessments are made to determine current tax assets and liabilities as well as deferred tax assets and liabilities. LKAB must assess the likelihood that deferred tax assets will be utilised to offset future taxable profits. Actual outcomes may differ from the estimates, for instance due to changed tax legislation or the outcome of final reviews of tax returns by tax authorities and tax courts.

A deferred net tax liability of MSEK -1,626 (-1,548) was recognised at year-end. The corresponding amount for current tax was a net tax liability of MSEK -642 (-202).

28.6 Disputes

LKAB is occasionally involved in disputes and legal proceedings in the ordinary course of business. Management consults with legal counsel on matters related to litigation and other experts both within and outside the company on matters concerning the ordinary course of business. Management's considered opinion is that neither the Parent Company nor any subsidiaries is currently involved in any legal or arbitration proceedings that are expected to have a material effect on the business, its financial position or earnings.

Note 2 Segment reporting

Segment information

The Group's business is divided into operating segments based on the parts of the business monitored by the Group's chief operating decision maker. This is known as a management approach. Group management follows up on the results of the operations and decides how resources are to be allocated based on the products that the Group produces and sells, and these operations form the Group's operating segments. Each operating segment is headed by a person with day-to-day responsibility for the operations who reports regularly to Group management on the results of the operating segment's performance and the resources needed. The Group's internal reporting is structured so as to allow Group management to follow up on the operating segments' performance and results. An operating segment's results, assets and liabilities include items directly attributable to that segment and items which can be allocated to that segment in a reasonable and reliable way. Intra-group prices between segments are based on the arm's length principle; that is, between parties that are independent of each other, well-informed and with an interest in completing transactions. In the income statement, all items other than net financial income/expense and tax expense have been allocated to operating segments. Assets that have been allocated are property, plant and equipment; other assets have not been allocated. As regards liabilities, provisions for urban transformation and remediation and for lease liabilities have been allocated and other liabilities have not been allocated. All tangible investments are included in the segments' capital expenditures on property, plant and equipment.

The Group comprises the following operating segments:

Iron Ore business area

The Iron Ore business area mines and processes iron ore products in Kiruna, Malmberget and Svappavaara. The business area produces blast furnace pellets and pellets for steelmaking via direct reduction, known as DR pellets. The business area also produces fines. Included in the business area are logistics activities for the iron ore operations.

Special Products business area

The Special Products business area covers LKAB Minerals, LKAB Wassara, LKAB Berg & Betong, LKAB Kimit, LKAB Mekaniska and Bergteamet. The business area develops and markets industrial minerals, drilling technology and full service solutions for the mining and construction industries.

Other segments

Other segments covers group-wide functions such as HR, communication and finance, as well as strategic R&D and exploration. Other segments also covers financial operations, including transactions and gains/losses relating to financial hedging of iron ore prices, foreign currency effects and purchases of electricity.

Note 2 continued

Operating segment

Group	Iron Ore business area		Special Products business area		Other segments		Total		Group-related adjustments and eliminations[1]		Group	
MSEK	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
External income	45,335	31,123	3,570	2,818	-93	-26	48,812	33,915	–	–	48,812	33,914
Internal income	800	604	2,063	1,544	64	73	2,927	2,221	-2,927	-2,221	0	0
Total income	**46,135**	**31,727**	**5,633**	**4,362**	**-29**	**47**	**51,739**	**36,136**	**-2,927**	**-2,221**	**48,812**	**33,914**
Operating profit/loss	**28,432**	**12,756**	**380**	**261**	**-1,758**	**-1,291**	**27,054**	**11,726**	**-156**	**-72**	**26,898**	**11,654**
Net financial income/expense											1,484	797
Profit/loss before tax											**28,382**	**12,452**
Tax											-5,778	-2,695
Profit/loss for the year											**22,604**	**9,757**
Significant non-cash items												
Depreciation of property, plant and equipment	-2,835	-2,864	-216	-192	-79	-78	-3,130	-3,134	-2	-2	-3,132	-3,136
Costs for urban transformation provisions	-372	-1,396	–	–	–	–	-372	-1,396	–	–	-372	-1,396
Assets	38,437	36,262	1,046	843	1,983	1,364	41,466	38,469	–	–	41,466	38,469
Unallocated assets											53,179	36,800
Total assets											**94,645**	**75,269**
Investments in property, plant and equipment	3,154	2,472	147	145	58	147	3,359	2,763	–	–	3,359	2,763
Liabilities	16,366	16,206	151	128	23	29	16,540	16,363	–	–	16,540	16,363
Unallocated liabilities											10,540	10,494
Total liabilities											**27,080**	**26,857**

1) Refers to intra-group transactions and group-related adjustments, including those based on adjustment of the consolidated pension liability under IAS 19 and internal gains.

Note 2 continued

Geographic areas

The vast majority of Group sales are made essentially from Sweden and in the Swedish companies. The Group's products are made almost exclusively in Sweden. Capital expenditures have mainly been made in Sweden. The carrying amount of assets by country/region is based on where the assets are located, and the income for the Group is recognised based on where the customers are located.

Group	Sweden		Rest of Europe		Middle East & North Africa		Rest of World		Group	
MSEK	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
External income	8,232	4,944	24,365	14,180	10,427	7,040	5,788	7,750	48,812	33,914
Property, plant and equipment	38,363	35,479	3,086	2,968	–	–	17	22	41,466	38,469

Information about major customers

Under IFRS 8, the company must disclose information about major customers. The LKAB Group has three major customers which each represent more than 10 percent of Group sales. Sales to these customers accounted for 25 (20) percent, 13 (10) percent and 12 (9) percent of sales and are recognised in the Iron Ore business area.

Parent Company	Iron Ore business area		Other segments		Parent Company total	
MSEK	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
Net sales	46,095	31,669	8	74	46,103	31,743

Parent Company	Europe		Middle East & North Africa		Rest of World		Parent Company	
MSEK	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
Net sales by geographic market	31,186	17,904	10,418	7,035	4,499	6,804	46,103	31,743

Note 3 Revenue

Breakdown of revenue from contracts with customers

The breakdown of revenue from contracts with customers into major product and service areas and into main geographic markets is summarised below.

The table also includes a reconciliation between the revenue breakdown and the Group's total external income for operating segments according to Note 2.

Group	Iron Ore business area		Special Products business area		Other segments		Group	
MSEK	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
Product/service area								
Pellets	39,336	27,185	–	–	–	–	39,336	27,185
Fines	5,406	3,491	–	–	–	–	5,406	3,491
Magnetite	–	–	1,191	822	–	–	1,191	822
Mineral sands	–	–	670	526	–	–	670	526
Other industrial minerals	–	–	1,418	1,227	–	–	1,418	1,227
Mining and construction services	–	–	291	242	–	–	291	242
Other	593	447	–	–	33	10	626	457
Total	**45,335**	**31,123**	**3,570**	**2,818**	**33**	**10**	**48,938**	**33,950**
Region								
Europe	30,418	17,284	2,272	1,865	33	10	32,723	19,159
MENA	10,418	7,035	9	5	–	–	10,427	7,040
Rest of World	4,499	6,804	1,289	947	–	–	5,788	7,751
Total	**45,335**	**31,123**	**3,570**	**2,818**		**10**	**48,938**	**33,950**
Revenue from contracts with customers	45,335	31,123	3,570	2,818	33	10	48,938	33,950
Other income – financing activities	–	–	–	–	-126	-36	-126	-36
Total external income	**45,335**	**31,123**	**3,570**	**2,818**	**-93**	**-26**	**48,812**	**33,914**

Contract balances

Disclosures concerning contract liabilities from contracts with customers that are summarised below.

Group

MSEK	**31 Dec 2021**	**31 Dec 2020**
Contract liabilities included in Other current liabilities	141	117

The contract liability balance of MSEK 117 that was reported at the beginning of the period was recognised as revenue in 2021.

Note 4 Business combinations

On 2 August 2021 the Group acquired 75 percent of the shares in Bergteamet AB. The purchase consideration was MSEK 150 and was paid in cash. Bergteamet has its head office in Boliden and provides underground contracting services for mining and infrastructure in Sweden and the wider Nordic region, particularly within the tunnel and shaft segment. As part of the Group's strategic focus on mining at great depths in underground mines, a great need is seen for specialised rockwork contracting for a long time to come. The acquisition is expected to expand the Group's expertise, resources and market presence in the rockwork contracting segment. Bergteamet was already a major provider of underground contracting services to LKAB before the acquisition and will continue operating under its existing brand. In the period between acquisition and 31 December 2021 the subsidiary contributed MSEK 55 to consolidated income and MSEK 4 to consolidated profit after tax. Had the acquisition taken place as of 1 January 2021, management estimates that consolidated revenue would have increased by around MSEK 106 and profit for the year by around MSEK 18.

Acquisition-related costs amount to around MSEK 3 and relate to consultants' fees. These costs have been recognised as administrative expenses in the condensed income statements.

Purchase price allocation
The acquired company's net assets at the acquisition date:

MSEK	2021
Intangible assets	38
Property, plant and equipment	182
Financial assets	5
Inventories	18
Trade and other receivables	59
Cash and cash equivalents	30
Interest-bearing liabilities	-146
Accounts payable and other operating liabilities	-45
Deferred tax liability	-12
Net identifiable assets and liabilities	**129**
Non-controlling interests	-32
Consolidated goodwill	53
Consideration transferred	**150**

The value for goodwill includes synergies from merging the acquired operations with existing operations. No portion of the value for goodwill is expected to be tax-deductible.

Note 5 Other operating income

	Group		Parent Company	
MSEK	**2021**	**2020**	**2021**	**2020**
Rental income, properties	265	248	–	–
Gain on sale of non-current assets	5	23	1	21
Exchange gain on receivables/liabilities related to operations	29	58	7	22
Government grants	208	29	42	26
Damages	24	26	–	35
Other	6	29	11	8
Total	**537**	**413**	**61**	**112**

Note 6 Other operating expenses

	Group		Parent Company	
MSEK	**2021**	**2020**	**2021**	**2020**
Property costs	251	231	6	–
Loss on sale of non-current assets	3	11	–	–
Exchange loss on receivables/liabilities related to operations	29	53	12	19
Other	3	6	–	2
Total	**286**	**301**	**18**	**21**

Note 7 Employees, employee benefit expenses and remuneration of senior executives

Average number of employees

Parent Company	2021	Of which women	Of which men	2020	Of which women	Of which men
Sweden	3,168	27%	73%	3,352	25%	75%
Total Parent Company	**3,168**	**27%**	**73%**	**3,352**	**25%**	**75%**
Subsidiaries						
Sweden	772	19%	81%	635	22%	78%
China	20	30%	70%	21	24%	76%
Netherlands	22	32%	68%	21	33%	67%
Norway	208	14%	86%	195	14%	86%
United Kingdom	232	24%	76%	261	23%	77%
Germany	11	45%	55%	12	50%	50%
Other countries	36	32%	68%	38	38%	62%
Total subsidiaries	**1,301**	**23%**	**77%**	**1,183**	**22%**	**78%**
Total Group	**4,469**	**25%**	**75%**	**4,535**	**24%**	**76%**

Gender distribution in company management as at 31 December

	31 Dec 2021		**31 Dec 2020**	
Parent Company	Percentage women	Percentage men	Percentage women	Percentage men
Board of Directors	33%	67%	27%	73%
Other senior executives	13%	87%	13%	87%

Salaries and other remuneration of senior executives and other employees along with social security costs in the Parent Company

	2021			**2020**		
Parent Company **MSEK**	Senior executives (19 persons)	Other employees	Total	Senior executives (19 persons)	Other employees	Total
Salaries and other remuneration						
Sweden	32	2,216	2,248	31	2,105	2,136
Total Parent Company	**32**	**2,216**	**2,248**	**31**	**2,105**	**2,136**
Social security costs			1,059			1,043
of which pension costs			*442*			*392*

Remuneration of senior executives

Senior executives refers to Board members, the President and the other members of Group management.

Guidelines for the remuneration of senior executives

The remuneration of the Chairman of the Board and Board members is decided at the AGM. The 2021 AGM approved remuneration of SEK 680,000 to the Chairman of the Board and SEK 303,000 to the other Board members elected by the AGM. Serving on the Audit Committee is remunerated with a fee of SEK 75,000 for the chair and SEK 50,000 for other committee members. Serving on the Strategy and Urban Transformations Committee is remunerated with a fee of SEK 71,500 for the chair and SEK 49,500 for other committee members. Serving on the Remuneration Committee is remunerated with a fee of SEK 30,000 for the chair and SEK 20,000 for other committee members. Remuneration is not paid to Board members who are employed at the Government Offices, nor to employee representatives.

The 2021 AGM adopted guidelines for remuneration and other terms of employment for senior executives. The guidelines were prepared in accordance with the government's principles for compensation and other employment terms for senior executives at state-owned companies dated 27 February 2020.

Preparation and decision-making processes for determining the remuneration of senior executives

Remuneration and other employment terms for the President and salary-setting principles for Group management are prepared by a remuneration committee appointed by the Board of Directors. Four board members make up the committee. The committee is chaired by the Chairman of the Board. The Board takes decisions based on committee proposals. The Chairman of the Board approves the annual salary reviews of other Group management executives.

Principles for the remuneration of senior executives

The President and other Group management executives are paid fixed salaries. The salaries are pensionable.

President Jan Moström's monthly salary in 2021 was SEK 695,000. Retirement age for the President is 65. The President's pension plan is a defined-contribution plan whereby LKAB makes a yearly provision of 30 percent of the President's current fixed annual salary for a pension plan chosen by the President, which may include the ITP plan. The portion of the premium allowance that is not used to cover premiums for the ITP plan can be used by the President for a complementary pension plan. The retirement age for other senior executives is 65. They have a defined-contribution pension plan to which LKAB allocates 30 percent of annual fixed salary.

The mutual notice period for termination of employment in the case of senior executives with contracts signed prior to the 2017 AGM is six months. Severance pay equivalent to 18 monthly salaries is paid when notice of termination is given by the company. For contracts signed since the 2017 AGM a mutual notice period of six months applies. Severance pay equivalent to 12 monthly salaries is paid when notice of termination is given by the company.

For further information, see the table Remuneration and other benefits to members of Group management in 2021.

Note 7 continued

Remuneration and other benefits to the Board, accrued

SEK thousand	2021 Board fees	2020 Board fees
Chairman of the Board Göran Persson[1,4]	769	735
Board member Gunnar Axheim[1]	347	335
Board member Catrin Fransson[3]	235	–
Board member Eva Hamilton[1]	347	335
Board member Lotta Mellström[2]	–	–
Board member Bjarne Moltke Hansen[1]	347	335
Board member Ola Salmén[3]	374	365
Board member Gunilla Saltin[4]	319	303
Board member Per-Olof Wedin[3]	349	340
Total	**3,086**	**2,748**

1) The fee also includes remuneration for work on the Strategy and Urban Transformations Committee.
2) No board fees are paid to representatives of the Ministry of Enterprise and Innovation.
3) The fee also includes remuneration for work on the Board's Audit Committee.
4) The fee also includes remuneration for work on the Board's Remuneration Committee.

Remuneration and other benefits to members of Group management in 2021

SEK thousand	Basic salary	Other benefits[1]	Pension cost	Total
President Jan Moström	9,233	176	2,544	11,953
SVP Leif Boström	2,891	102	849	3,842
SVP Peter Hansson	2,865	159	842	3,866
SVP Pierre Heeroma	2,754	150	801	3,705
SVP Niklas Johansson	2,652	88	850	3,590
SVP Michael Palo	3,382	177	990	4,549
SVP Markus Petäjäniemi[2]	2,962	105	808	3,875
SVP Grete Solvang Stoltz	2,454	99	717	3,270
Acting SVP Roger Hahne[3]	1,258	4	484	1,746
Total	**30,451**	**1,060**	**8,885**	**40,396**

1) Other benefits include a company car, subsistence allowances, life insurance and medical insurance.
2) Markus Petäjäniemi was a member of the Group management team until 28 February 2021. During the period 1 March to 31 October he served as senior advisor.
3) Roger Hahne joined the Group management team as Acting SVP from 1 March 2021. Pension is payable in accordance with LKAB's pension rules for salaried employees.

Remuneration and other benefits to members of Group management in 2020

SEK thousand	Basic salary	Other benefits[1]	Pension cost	Total
President Jan Moström	7,564	307	2,269	10,140
SVP Leif Boström	2,866	113	834	3,813
SVP Peter Hansson	2,804	170	825	3,799
SVP Pierre Heeroma	2,677	243	787	3,707
SVP Niklas Johansson[2]	2,047	47	656	2,750
SVP Michael Palo	3,197	175	952	4,324
SVP Markus Petäjäniemi	3,118	133	931	4,182
SVP Grete Solvang Stoltz	2,354	97	703	3,154
SVP Magnus Arnkvist[3]	3,053	80	909	4,042
Total	**29,680**	**1,365**	**8,866**	**39,911**

1) Other benefits include a company car, subsistence allowances, life insurance and medical insurance.
2) From March 2020.
3) 1 January – 30 June 2020: reported to Michael Palo. During the period 1 July 2020 up to and including 31 December 2020 severance pay was paid monthly in the form of the salary and benefits effective when employed. Any salary or other remuneration received from parties other than LKAB during the period is to be deducted. No deduction was applicable.

Note 8 Auditors' fees and reimbursements

	Group		Parent Company	
MSEK	**2021**	**2020**	**2021**	**2020**
KPMG				
Audit engagements	7	6	4	3
Other auditing	1	1	1	1
Tax consulting	0	0	0	0
Other services	0	0	0	0
Other auditors				
Audit engagements	0	0	–	–

Audit engagements refers to statutory auditing of annual and consolidated financial statements and bookkeeping as well as the Board's and President's administration of the company, along with audits and other reviews performed as agreed upon or contracted.

This includes other tasks that are incumbent on the company's auditor to perform, as well as consultancy or other assistance occasioned by observations during such reviews or the performance of such other tasks.

Note 9 Operating expenses by type

	Group		Parent Company	
MSEK	**2021**	**2020**	**2021**	**2020**
Employee benefit expenses	4,478	4,247	3,425	3,257
Materials etc.	2,868	2,848	3,348	3,235
Energy	2,366	1,791	2,082	1,563
Transport	819	1,018	2,014	2,488
Provisions for urban transformation	372	1,396	372	1,396
Depreciation, amortisation and impairment	3,132	3,136	2,464	2,384
Other operating expenses	8,416	8,238	6,028	6,335
Total	**22,451**	**22,674**	**19,733**	**20,658**

Note 10 Net financial income/expense

Group

MSEK	**2021**	**2020**
Financial income		
Assets at fair value through profit or loss		
– Interest-bearing securities – net gain	–	258
– Shares and alternative investments – net gain	1,339	807
– Commodities portfolio – net gain	0	–
Other interest income, financial assets at amortised cost	2	6
Return on plan assets	39	50
Gain/loss on sale of shares	280	–
Exchange rate fluctuations including foreign exchange derivatives (net)	232	–
Other financial income	0	76
Total financial income	**1,892**	**1,197**

Group

MSEK	**2021**	**2020**
Financial expense		
Assets at fair value through profit or loss		
– Interest-bearing securities – net loss	-225	–
– Shares and alternative investments – net loss	–	–
– Commodities portfolio – net loss	–	-17
Interest expense, financial liabilities at amortised cost		
– Interest-bearing liabilities	-32	-36
– Provision for remediation costs	-50	-39
– Other interest expense	-2	-4
Interest expense, defined-benefit pension obligations	-56	-73
Exchange rate fluctuations including foreign exchange derivatives (net)	–	-124
Interest expense, lease liabilities	-7	-12
Fees for loan facility	-13	-12
Other financial expense	-23	-82
Impairment of interests in associates	–	–
Total financial expense	**-408**	**-399**
Net financial income/expense	**1,484**	**797**

Exchange rate differences refer mainly to the remeasurement of receivables in foreign currency as well as shares and alternative investments including related foreign exchange derivatives.

Other financial expense refers primarily to transaction costs for derivatives and to banking and administration expenses.

Parent Company	Income from interests in Group companies		Income from interests in associates	
MSEK	**2021**	**2020**	**2021**	**2020**
Dividend	–	302	–	–
Income from divestment of interests	–	312	–	–
Total	**–**	**614**	**–**	**–**

Note 10 continued

Parent Company	Income from other securities and receivables held as non-current assets		Other interest income and similar profit/loss items	
MSEK	**2021**	**2020**	**2021**	**2020**
Gain/loss on disposal of shares	280	–	–	–
Interest income, Group companies	104	113	6	8
Interest income, other	–	–	1	3
Return on shares and alternative investments	–	–	–	215
Return on commodities portfolio	–	–	8	–
Exchange rate fluctuations including foreign exchange derivatives (net)	–	–	378	–
Other financial income	–	–	0	199
Total	**384**	**113**	**393**	**425**

Exchange rate differences refer mainly to the remeasurement of receivables in foreign currency and to shares and alternative investments including related foreign exchange derivatives.

Parent Company	Interest expense and similar profit/loss items	
MSEK	**2021**	**2020**
Interest expense, Group companies	-1	-2
Interest expense, interest-bearing liabilities	-32	-37
Interest expense, remediation costs	-32	-29
Interest expense, other	-1	-2
Return on shares and alternative investments	-1	–
Exchange rate fluctuations including foreign exchange derivatives (net)	–	-311
Fees for loan facility	-13	-12
Other financial expense	-22	-82
Total	**-102**	**-475**

Return on shares and alternative investments includes a return on interest-bearing securities of MSEK -185 (211).
Other financial expense refers primarily to transaction costs for derivatives and to banking and administration expenses.

Note 11 Appropriations

Parent Company		
MSEK	**2021**	**2020**
Difference between recognised depreciation and depreciation according to plan:		
Land and buildings	–	–
Plant and equipment	625	-300
Tax allocation reserve, reversal for the year	–	650
Group contributions received	318	488
Group contributions paid	–	–
Total	**943**	**838**

Note 12 Taxes

Recognised in the income statement

Group

MSEK	2021	2020
Current tax expense (-)		
Tax expense for the year	-5,777	-2,689
Adjustment of tax attributable to prior years	-1	15
	-5,778	**-2,674**
Deferred tax expense (-)/tax income (+)		
Deferred tax on temporary differences	0	-21
	0	**-21**
Total recognised Group tax	**-5,778**	**-2,695**

Parent Company

MSEK	2021	2020
Current tax expense (-)		
Tax expense for the year	-5,753	-2,529
Adjustment of tax attributable to prior years	2	14
	-5,751	**-2,515**
Deferred tax expense (-)		
Deferred tax on temporary differences	72	-83
	72	**-83**
Total recognised Parent Company tax	**-5,679**	**-2,598**

Reconciliation of effective tax

Group

MSEK	2021 (%)	2021	2020 (%)	2020
Profit/loss before tax		**28,382**		**12,452**
Tax as per effective tax rate for Parent Company	20.60%	-5,847	21.40%	-2,665
Non-deductible expenses	0.10%	-28	0.10%	-11
Non-taxable income	-0.20%	59	-0.10%	3
Tax attributable to prior years	0.00%	-1	-0.10%	15
Standard interest on tax allocation reserve and investment fund	0.10%	-4	0.10%	-5
Upward adjustment of tax allocation reserve	0.00%	0	0.00%	-4
Tax effect, reclassification of impairment losses	0.00%	-3	0.10%	-12
Other	-0.20%	46	0.10%	-16
Recognised effective tax	**20.40%**	**-5,778**	**21.60%**	**-2,695**

Parent Company

MSEK	2021 (%)	2021	2020 (%)	2020
Profit/loss before tax		**28,049**		**12,712**
Tax as per effective tax rate for Parent Company	20.60%	-5,778	21.40%	-2,720
Non-deductible expenses	-0.20%	-45	0.00%	-3
Non-taxable income	0.20%	58	-1.00%	131
Tax attributable to prior years	0.00%	2	-0.10%	15
Standard interest on tax allocation reserve and investment fund	0.00%	-4	0.00%	-5
Upward adjustment of tax allocation reserve	0.00%	0	0.00%	-4
Tax effect, reclassification of impairment losses	0.00%	-3	0.10%	-12
Other	-0.30%	91	–	–
Recognised effective tax	**20.30%**	**-5,679**	**20.40%**	**-2,598**

Tax attributable to other comprehensive income

Parent Company

MSEK	2021	2020
Cash flow hedges incl. hedging cost reserve	0	2
Remeasurement of defined-benefit pension plans	-56	4
Total	**-56**	**6**

Note 12 continued

Recognised in the statement of financial position and balance sheet
Recognised deferred tax assets and liabilities. Deferred tax assets and liabilities are attributable to the following:

Group	Deferred tax asset		Deferred tax liability		Net	
MSEK	**31 Dec 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**
Intangible assets	–	–	-133	-103	-133	-103
Property, plant and equipment	407	499	-2,461	-2,844	-2,054	-2,345
Current investments	–	–	-590	-364	-590	-364
Tax allocation reserve	–	–	–	–	–	–
Contingency reserve	–	–	–	–	–	–
Pension provisions	227	320	–	–	227	320
Provisions, urban transformation	923	910	–	–	923	910
Other provisions	0	38	–	–	0	37
Cash flow hedges	–	–	–	–	–	–
Loss carryforwards	1	1	–	–	1	1
Other	–	0	–	-5	–	-5
Tax assets/liabilities	**1,558**	**1,768**	**-3,184**	**-3,316**	**-1,626**	**-1,548**
Offset	-1,548	-1,756	1,548	1,756	–	–
Tax assets/liabilities, net	**10**	**12**	**-1,636**	**-1,560**	**-1,626**	**-1,548**

Parent Company	Deferred tax asset		Deferred tax liability		Net	
MSEK	**31 Dec 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**
Property, plant and equipment	408	342	–	–	408	342
Pension provisions	108	111	–	–	108	111
Provisions, urban transformation	923	910	–	–	923	910
Other	28	31	–	–	28	31
Tax assets/liabilities	**1,467**	**1,394**	**–**	**–**	**1,467**	**1,394**

Change in deferred tax on temporary differences and loss carryforward.

Note 12 continued

Group **MSEK**	Opening balance 1 Jan 2020	Recognised in profit or loss	Recognised in other compre-hensive income	Business combina-tions	Other changes	Closing balance, 31 Dec 2020
Intangible assets	-125	22	–	–	–	-103
Property, plant and equipment	-2,312	-43	–	–	10	-2,345
Current investments	-192	-172	–	–	–	-364
Tax allocation reserve	-139	139	–	–	–	0
Contingency reserve	-80	80	–	–	–	0
Pension provisions	314	2	4	–	–	320
Provisions, urban transformation	932	-22	–	–	–	910
Other provisions	64	-27	–	–	–	37
Cash flow hedges	-2	–	2	–	–	0
Loss carryforwards	1	–	–	–	–	1
Other	-5	0	–	–	0	-5
Total	**-1,544**	**-21**	**6**	**–**	**10**	**-1,548**

Group **MSEK**	Opening balance 1 Jan 2021	Recognised through profit or loss	Recognised in other compre-hensive income	Business combina-tions	Other changes	Closing balance, 31 Dec 2021
Intangible assets	-103	-10	–	-20	–	-133
Property, plant and equipment	-2,345	291	–	–	–	-2,054
Current investments	-364	-226	–	–	–	-590
Tax allocation reserve	0	–	–	–	–	0
Contingency reserve	0	–	–	–	–	0
Pension provisions	320	-37	-56	–	–	227
Provisions, urban transformation	910	13	–	–	–	923
Other provisions	37	-37	–	–	–	0
Cash flow hedges	0	–	–	–	–	0
Loss carryforwards	1	–	–	–	–	1
Other	-5	5	–	–	–	0
Total	**-1,549**	**-1**	**-56**	**-20**	**–**	**-1,626**

Parent Company **MSEK**	Opening balance 1 Jan 2020	Recognised in income statement	Closing balance, 31 Dec 2020
Property, plant and equipment	394	-53	342
Pension provisions	117	-6	111
Provisions, urban transformation	932	-21	911
Other	34	-3	31
Total	**1,478**	**-83**	**1,394**

Parent Company **MSEK**	Opening balance 1 Jan 2021	Recognised in income statement	Closing balance 31 Dec 2021
Property, plant and equipment	342	66	408
Pension provisions	111	-3	108
Provisions, urban transformation	911	12	923
Other	31	-3	28
Total	**1,395**	**72**	**1,467**

Changed tax rate

Effective from 1 January 2019 the corporate tax rate in Sweden is 21.4 percent for companies with financial years beginning on or after 1 January 2019.

The tax rate was lowered to 20.6 percent for financial years beginning on or after 1 January 2021.

Note 13 Earnings per share

The number of shares amounted to 700,000 in both 2021 and 2020. Earnings attributable to Parent Company shareholders are MSEK 22,603 (9,757) and earnings per share are thus SEK 32,291 (13,938). There are no options or potential ordinary shares, so there is no dilution.

Note 14 Intangible assets

All of the Group's intangible assets are acquired.

Group **MSEK**	Goodwill	Mining rights	Purchasing contracts	Customer relationships	Other	Total
Cost of acquisition						
Opening balance, 1 Jan 2020	606	281	421	457	83	1,848
Change in emission allowances	–	–	–	–	125	125
Disposals and retirements	–	–	–	–	–	–
Exchange rate differences	-49	–	-38	-42	-7	-136
Closing balance, 31 Dec 2020	**557**	**281**	**383**	**415**	**201**	**1,837**
Opening balance, 1 Jan 2021	557	281	383	415	201	1,837
Business combinations[1)]	53	–	–	28	10	91
Change in emission allowances	–	–	–	–	257	257
Disposals and retirements	–	–	–	–	–	–
Exchange rate differences	49	–	37	40	55	181
Closing balance, 31 Dec 2021	**659**	**281**	**420**	**483**	**523**	**2,366**
Amortisation						
Opening balance, 1 Jan 2020	-11	-181	-42	-32	-15	-281
Amortisation for the year	–	–	-37	-30	–	-67
Exchange rate differences	–	-2	7	4	6	15
Closing balance, 31 Dec 2020	**-11**	**-183**	**-72**	**-58**	**-9**	**-333**
Opening balance, 1 Jan 2021	-11	-183	-72	-58	-9	-333
Amortisation for the year	–	–	-37	-30	-1	-68
Exchange rate differences	-3	-2	-9	-6	-53	-73
Closing balance, 31 Dec 2021	**-14**	**-185**	**-118**	**-94**	**-63**	**-474**
Impairment						
Opening balance, 1 Jan 2020	-62	-93	–	–	–	-155
Disposals and retirements	–	–	–	–	–	–
Exchange rate differences	–	–	–	–	–	–
Closing balance, 31 Dec 2020	**-62**	**-93**	**–**	**–**	**–**	**-155**
Opening balance, 1 Jan 2021	-62	-93	–	–	–	-155
Disposals and retirements	–	–	–	–	–	0
Exchange rate differences	1	–	–	–	–	1
Closing balance, 31 Dec 2021	**-61**	**-93**	**–**	**–**	**–**	**-154**
Carrying amount						
At 1 Jan 2020	533	7	379	425	68	1,412
At 31 Dec 2020	**484**	**5**	**311**	**357**	**192**	**1,349**
At 1 Jan 2021	484	5	311	357	192	1,349
At 31 Dec 2021	**584**	**3**	**302**	**389**	**460**	**1,738**

1) For further information see Note 4 Business combinations.

Note 14 continued

Amortisation is included in the following lines of the income statement

Group

MSEK	2021	2020
Cost of goods sold	-68	-67

Parent Company MSEK	Mining rights	Other	Total
Cost of acquisition			
Opening balance, 1 Jan 2020	161	78	239
Change in emission allowances	–	125	125
Closing balance, 31 Dec 2020	**161**	**203**	**364**
Opening balance, 1 Jan 2021	161	203	364
Change in emission allowances	–	257	257
Closing balance, 31 Dec 2021	**161**	**460**	**621**
Depreciation			
Opening balance, 1 Jan 2020	-161	-9	-170
Closing balance, 31 Dec 2020	**-161**	**-9**	**-170**
Opening balance, 1 Jan 2021	-161	-9	-170
Closing balance, 31 Dec 2021	**-161**	**-9**	**-170**
Carrying amount			
At 1 Jan 2020	–	69	69
At 31 Dec 2020	**–**	**194**	**194**
At 1 Jan 2021	–	194	194
At 31 Dec 2021	**–**	**451**	**451**

Goodwill specification

MSEK	31 Dec 2021	31 Dec 2020
LKAB Minerals Ltd	511	465
Bergteamet AB	53	–
Units without significant goodwill value, combined	20	19
Total	**584**	**484**

Impairment testing of cash-generating units containing goodwill

Impairment testing is performed annually, or on an ongoing basis during the year if there is any indication of impairment, and is based on estimated value in use. This value is derived from cash flow forecasts using an annual budget and five-year strategic plan established by executive management for the Special Products business area. The cash flow forecast beyond the planning horizon includes the assumption of perpetual 1 percent growth. The expected cash flows were discounted to present value using an individual discount rate in line with the market (WACC). Important assumptions in the five-year business plan are expected growth in the market and assessment of future margins.

The value in use of the LKAB Minerals Ltd cash-generating unit exceeds the carrying amount by MSEK 223 and consequently there is judged to be no impairment loss. The discount rate before tax is 7.96 percent.

The value in use of the cash-generating unit would equal the carrying amount if the perpetual growth rate were to change from 1 percent to -0.18 percent or the discount rate from 7.96 percent to 8.86 percent.

Note 15 Property, plant and equipment for operations

Group **MSEK**	Buildings and land	Underground installations	Plant and machinery	Equipment, tools, fixtures and fittings	Construction in progress	Total
Cost of acquisition						
Opening balance, 1 Jan 2020	12,821	8,125	44,556	7,565	5,673	78,740
Acquisitions	96	45	247	53	2,322	2,763
Capitalisation of remediation	245	–	–	–	–	245
Reclassifications	184	163	1,037	113	-1,497	0
Disposals and retirements	-12	-11	-138	-83	-127	-371
Exchange rate differences	-253	–	-134	-13	-21	-421
Closing balance, 31 Dec 2020	**13,081**	**8,322**	**45,568**	**7,635**	**6,350**	**80,956**
Opening balance, 1 Jan 2021	13,081	8,322	45,568	7,635	6,350	80,956
Business combinations[1]	1	–	251	7	–	259
Acquisitions	184	20	448	48	2,659	3,359
Capitalisation of remediation	13	–	–	–	–	13
Reclassifications	1,006	71	1,541	170	-2,788	0
Disposals and retirements	-338	-18	-207	-92	-151	-806
Exchange rate differences	205	–	160	10	9	384
Closing balance, 31 Dec 2021	**14,152**	**8,395**	**47,761**	**7,778**	**6,079**	**84,165**
Depreciation						
Opening balance, 1 Jan 2020	-5,090	-5,114	-23,897	-5,187		-39,288
Depreciation for the year	-455	-266	-1,919	-344		-2,984
Disposals and retirements	11	11	131	72		225
Exchange rate differences	89	–	126	12		227
Closing balance, 31 Dec 2020	**-5,445**	**-5,369**	**-25,559**	**-5,447**		**-41,820**
Opening balance, 1 Jan 2021	-5,445	-5,369	-25,559	-5,447		-41,820
Business combinations[1]	0	–	-129	-6		-135
Depreciation for the year	-519	-268	-1,905	-290		-2,982
Disposals and retirements	282	18	205	93		598
Exchange rate differences	-71	–	-100	-8		-179
Closing balance, 31 Dec 2021	**-5,753**	**-5,619**	**-27,488**	**-5,658**		**-44,518**

1) For further information see Note 4 Business combinations.

Note 15 continued

Group **MSEK**	Buildings and land	Underground installations	Plant and machinery	Equipment, tools, fixtures and fittings	Construction in progress	Total
Impairment						
Opening balance, 1 Jan 2020	-1,676	-864	-4,423	-576	-1,496	-9,035
Impairment for the year	–	–	–	–	–	–
Reclassifications	–	–	-55	-2	57	0
Disposals and retirements	–	–	–	–	78	78
Closing balance, 31 Dec 2020	**-1,676**	**-864**	**-4,478**	**-578**	**-1,361**	**-8,957**
Opening balance, 1 Jan 2021	-1,676	-864	-4,478	-578	-1,361	-8,957
Impairment for the year	–	–	–	–	–	0
Reclassifications	-81	–	-36	-4	121	0
Disposals and retirements	27	–	–	–	1	28
Closing balance, 31 Dec 2021	**-1,730**	**-864**	**-4,514**	**-582**	**-1,239**	**-8,929**
Carrying amount						
At 1 Jan 2020	6,055	2,147	16,236	1,802	4,177	30,417
At 31 Dec 2020	**5,960**	**2,089**	**15,531**	**1,610**	**4,989**	**30,179**
At 1 Jan 2021	5,960	2,089	15,531	1,610	4,989	30,179
At 31 Dec 2021	**6,669**	**1,912**	**15,759**	**1,538**	**4,840**	**30,718**

Group **MSEK**	**2021**	**2020**
Owned assets including favourable leases from business combinations	30,718	30,179
Leased assets	329	336
Total	**31,047**	**30,515**

Capitalised remediation costs amount to MSEK 1,202 (1,205), while cumulative depreciation and impairment losses amount to MSEK -820 (-752).

Of the net amount of MSEK 382 (453), MSEK 270 (329) is recognised as land and buildings and MSEK 112 (125) as plant and machinery.

Depreciation and impairment are included in the following lines of the income statement:

Group **MSEK**	**2021**	**2020**
Cost of goods sold	-2,959	-2,963
Selling expenses	-2	-2
Administrative expenses	-4	-4
Research and development	-8	-6
Other operating expenses	-9	-9
Total	**-2,982**	**-2,984**

Disclosures concerning government grants in the Group

During the year government grants amounting to MSEK 137 (5) were received, which reduced the cost of acquisition of the assets.

Note 15 continued

Parent Company **MSEK**	Buildings and land	Underground installations	Plant and machinery	Equipment, tools, fixtures and fittings	Construction in progress	Total
Cost of acquisition						
Opening balance, 1 Jan 2020	8,388	8,125	41,814	1,526	5,342	65,195
Acquisitions	87	45	204	24	2,116	2,476
Reclassifications	131	163	939	29	-1,262	0
Disposals and retirements	-1	-11	-118	-28	-123	-281
Closing balance, 31 Dec 2020	**8,605**	**8,322**	**42,839**	**1,551**	**6,073**	**67,390**
Opening balance, 1 Jan 2021	8,605	8,322	42,839	1,551	6,073	67,390
Acquisitions	149	20	410	32	2,457	3,068
Reclassifications	988	71	1,442	70	-2,571	0
Disposals and retirements	-240	-18	-207	-34	-133	-632
Closing balance, 31 Dec 2021	**9,502**	**8,395**	**44,484**	**1,619**	**5,826**	**69,826**
Depreciation						
Opening balance, 1 Jan 2020	-3,373	-5,114	-22,299	-1,135		-31,921
Depreciation for the year	-246	-266	-1,779	-93		-2,384
Disposals and retirements	1	11	117	28		157
Closing balance, 31 Dec 2020	**-3,618**	**-5,369**	**-23,961**	**-1,200**		**-34,148**
Opening balance, 1 Jan 2021	-3,618	-5,369	-23,961	-1,200		-34,148
Depreciation for the year	-357	-269	-1,741	-97		-2,464
Disposals and retirements	190	19	199	33		441
Closing balance, 31 Dec 2021	**-3,785**	**-5,619**	**-25,503**	**-1,264**		**-36,171**
Impairment						
Opening balance, 1 Jan 2020	-1,242	-864	-4,287	-90	-1,496	-7,979
Reclassifications	-1	–	-55	-2	58	0
Disposals and retirements	–	–	–	–	78	78
Closing balance, 31 Dec 2020	**-1,243**	**-864**	**-4,342**	**-92**	**-1,360**	**-7,901**
Opening balance, 1 Jan 2021	-1,243	-864	-4,342	-92	-1,360	-7,901
Reclassifications	-81	–	-36	-4	121	0
Disposals and retirements	24	–	–	–	–	24
Closing balance, 31 Dec 2021	**-1,300**	**-864**	**-4,378**	**-96**	**-1,239**	**-7,877**
Carrying amount						
At 1 Jan 2020	3,773	2,147	15,228	301	3,846	25,295
At 31 Dec 2020	**3,744**	**2,089**	**14,536**	**259**	**4,713**	**25,341**
At 1 Jan 2021	3,744	2,089	14,536	259	4,713	25,341
At 31 Dec 2021	**4,417**	**1,912**	**14,603**	**259**	**4,587**	**25,778**

Note 15 continued

Disclosures concerning government grants in the Parent Company
During the year government grants amounting to MSEK 81 (5) were received, which reduced the cost of acquisition of the assets.

Depreciation and impairment are included in the following lines of the income statement:

Parent Company

MSEK	2021	2020
Cost of goods sold	-2,454	-2,377
Administrative expenses	-2	-1
Research and development	-8	-6
Total	**-2,464**	**-2,384**

Note 16 Property, plant and equipment for urban transformation

Group and Parent Company

MSEK	Buildings and land	Construction in progress	Total
Opening balance, 1 Jan 2020	10,318	624	10,942
Capitalisation	530	–	530
Acquisitions	–	926	926
Reassessment upon acquisition	-903	–	-903
Sales	–	–	–
Retirements	–	–	–
Investment grants	–	2	2
Adjustments, replacement properties	–	-130	-130
Closing balance, 31 Dec 2020	**9,945**	**1,422**	**11,367**
Opening balance, 1 Jan 2021	9,945	1,422	11,367
Capitalisation	1,696	1,222	2,918
Acquisitions	–	–	–
Reassessment upon acquisition	-7	–	-7
Sales	–	–	–
Retirements	-12	–	-12
Investment grants	–	–	–
Adjustments, replacement properties	–	-136	-136
Closing balance, 31 Dec 2021	**11,622**	**2,508**	**14,130**

Group and Parent Company

MSEK	Buildings and land	Construction in progress	Total
Expensing			
Opening balance, 1 Jan 2020	-2,801	–	-2,801
Expensing of mine asset and mine component	-229	–	-229
Closing balance, 31 Dec 2020	**-3,030**	**–**	**-3,030**
Opening balance, 1 Jan 2021	-3,030	–	-3,030
Expensing of mine asset and mine component	-297	–	-297
Closing balance, 31 Dec 2021	**-3,327**	**–**	**-3,327**

MSEK	Buildings and land	Construction in progress	Total
Impairment			
Opening balance, 1 Jan 2020	-384	–	-384
Closing balance, 31 Dec 2020	**-384**	**–**	**-384**
Opening balance, 1 Jan 2021	-384	–	-384
Closing balance, 31 Dec 2021	**-384**	**–**	**-384**
Carrying amounts			
Opening balance, 1 Jan 2020	7,133	624	7,757
Closing balance, 31 Dec 2020	**6,531**	**1,422**	**7,954**
Opening balance, 1 Jan 2021	6,531	1,422	7,954
Closing balance, 31 Dec 2021	**7,911**	**2,508**	**10,419**

Expensing is included in the following lines of the income statement:

Group and Parent Company

MSEK	2021	2020
Cost of goods sold	-297	-229
Total	**-297**	**-229**

The balance sheet item includes the following assets:

Group and Parent Company

MSEK	31 Dec 2021	31 Dec 2020
Mine asset	7,658	6,256
Replacement properties	2,508	1,422
Other property acquisitions	253	275
Total	**10,419**	**7,954**

Regarding reporting of replacement properties refer to Note 1 section 18.8.3. See also Note 32 for an overall picture of items associated with urban transformation.

Note 17 Interests in associates and joint ventures

Group
Summary financial information for holdings in joint ventures is detailed below. The Group has a stake in the Swedish unlisted joint venture company Hybrit Development AB, which is mainly engaged in research and development of methods for making iron and steel. The Group has rights to the net assets of the company and reports its holding according to the equity method.

MSEK	31 Dec 2021	31 Dec 2020
Share of assets	302	343
Share of liabilities	-40	-67
Carrying amount (share of net assets)	**262**	**277**
Group's share of profit/loss after tax	-133	-72
Total comprehensive income	**-133**	**-72**

Associates
Summary financial information for holdings in associates is detailed below. The Group has holdings in the companies Norrskenet AB and Hsafety AB[1]. The holdings are recognised according to the cost model.

MSEK	31 Dec 2021	31 Dec 2020
Carrying amount	25	20
Group's share of profit/loss after tax	–	–
Total comprehensive income	**–**	**–**

1) Hsafety AB is 25 percent owned by the subsidiary Bergteamet AB.

Note 18 Holdings in joint operations

Group
The Group has a 50 percent co-ownership in the company Likya Minerals and its subsidiary Likya Minerals Export, whose main products are minerals with flame retardant properties (UltraCarb). Likya operates out of Turkey.

Likya is a separate company but co-ownership is still considered to be a joint operation. The assessment is based on the fact that the co-owners have a commitment to buy all services that Likya provides and consequently finances Likya's entire operation in order to settle its liabilities.

71 percent of Likya's sales relate to companies within the LKAB Group.

Note 19 Parent Company's interests in associates and jointly controlled entities

Parent Company	Associates		Jointly controlled entities	
MSEK	**31 Dec 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**
Accumulated acquisition value				
Opening balance	45	45	360	128
Capital contributions	–	–	118	232
Closing balance	**45**	**45**	**478**	**360**
Accumulated impairment				
Opening balance	-25	-25	–	–
Impairment for the year	–	–	–	–
Closing balance	**-25**	**-25**	**–**	**–**
Carrying amount	**20**	**20**	**478**	**360**

Specification of Parent Company's directly owned interests in associates and jointly controlled entities

Company / reg. no. / domicile	Number of shares	% of votes and capital	Carrying amount
2021			
Associates			
Norrskenet AB / 556537-7065 / Gällivare	2,500	33.3%	20
Jointly controlled entities			
Hybrit Development AB / 559121-9760 / Stockholm	500,000	33.3%	478
Total			**498**
2020			
Associates			
Norrskenet AB / 556537-7065 / Gällivare	2,500	33.3%	20
Jointly controlled entities			
Hybrit Development AB / 559121-9760 / Stockholm	500,000	33.3%	360
Total			**380**

Note 20 Receivables from Group companies and associates

Parent Company

MSEK	31 Dec 2021	31 Dec 2020
Accumulated acquisition value		
Opening balance	3,043	3,741
Lending	24	8
Repayments	-108	-399
Exchange rate fluctuation	244	-307
Closing balance	**3,202**	**3,043**

Note 21 Financial investments

Group

MSEK	31 Dec 2021	31 Dec 2020
Financial investments held as non-current assets		
Shares and interests at fair value through other comprehensive income	5,307	2,931
Shares and interests at fair value through profit or loss	19	7
Financial assets for funded pension obligations	400	347
Total	**5,726**	**3,285**
Financial investments held as current assets		
Interest-bearing securities at fair value through profit or loss – held for trading	20,421	11,219
Shares and alternative investments at fair value through profit or loss	9,707	7,812
Other derivatives	13	41
Total	**30,141**	**19,073**

Note 22 Other non-current securities

Parent Company

MSEK	31 Dec 2021	31 Dec 2020
Accumulated acquisition value		
Opening balance	2,869	203
Acquisitions	1,016	2,665
Disposal	-647	–
Closing balance	**3,238**	**2,869**

Parent Company

MSEK	31 Dec 2021		31 Dec 2020	
Specification of other non-current securities	Fair value	Carrying amount	Fair value	Carrying amount
SSAB	5,307	3,219	2,931	2,861
Other holdings	19	19	7	7
Total	**5,326**	**3,238**	**2,938**	**2,869**

Note 23 Non-current receivables and other receivables

Group

MSEK	31 Dec 2021	31 Dec 2020
Non-current receivables that are non-current assets		
Advance payments	100	100
Other	2	2
Total	**102**	**102**
Other receivables that are current assets		
Receivables, credit institutions	940	1,011
Recoverable VAT	293	251
Tax assets	15	5
Derivatives	16	79
PRI balance	23	22
Receivables from clients	10	17
Tax account	325	103
Receivables, collateral for derivatives	15	59
Advance payments to suppliers	26	21
Other	33	16
Total	**1,696**	**1,583**

Parent Company

MSEK	31 Dec 2021	31 Dec 2020
Non-current receivables		
Company-owned endowment insurance	94	104
Advance payments	100	100
Other	2	2
Total	**196**	**206**
Other current receivables		
Receivables, credit institutions	940	1,011
Recoverable VAT	286	234
PRI balance	22	21
Tax assets	3	–
Tax account	321	93
Receivables, collateral for derivatives	15	59
Other	30	21
Total	**1,617**	**1,439**

Parent Company

MSEK	31 Dec 2021	31 Dec 2020
Non-current receivables		
Accumulated acquisition value		
Opening balance	206	213
Advance payments	–	–
Other	-10	-7
Closing balance	**196**	**206**

Note 24 Inventories

Group

MSEK	31 Dec 2021	31 Dec 2020
Raw materials and consumables	3,747	3,017
Work in progress	5	3
Finished goods and goods for resale	1,172	1,206
Total	**4,924**	**4,226**

Parent Company

MSEK	31 Dec 2021	31 Dec 2020
Raw materials and consumables	3,135	2,442
Finished goods	1,032	1,029
Total	**4,167**	**3,471**

Note 25 Accounts receivable

Accounts receivable are recognised after taking into consideration expected credit losses. Credit losses that have arisen in the Group amount to MSEK 6 (5). Regarding credit risks in accounts receivable see Note 35 Financial risks and risk management.

Note 26 Prepaid expenses and accrued income

	Group		Parent Company	
MSEK	**31 Dec 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**
Prepaid insurance premiums	34	32	28	28
Prepaid expenses, fair value of derivatives	–	5	–	5
Accrued income, iron ore derivatives	–	4	–	4
Other prepaid expenses	101	91	87	68
Other accrued income	57	23	22	9
Total	**192**	**155**	**137**	**114**

Note 27 Equity

Specification of equity reserves

MSEK	**31 Dec 2021**	**31 Dec 2020**
Translation reserve		
Opening balance	-327	-54
Translations differences for the year	186	-273
Closing balance	**-141**	**-327**
Fair value reserve		
Opening balance	68	540
Available-for-sale financial assets:		
Changes in fair value	2,019	-472
Closing balance	**2,087**	**68**
Hedging reserve including hedging cost reserve		
Opening balance	0	7
Cash flow hedges and hedging costs		
Changes in fair value	1	0
Changes in fair value, transferred to profit for the year	0	-10
Tax attributable to revaluations for the year	0	3
Closing balance	**1**	**0**

MSEK	**31 Dec 2021**	**31 Dec 2020**
Total reserves		
Opening balance	-259	493
Change in reserves for the year:		
Translation reserve	186	-273
Fair value reserve	2,019	-472
Hedging reserve	1	-7
Closing balance	**1,947**	**-259**

Share capital
As at 31 December 2021, the registered share capital comprised 700,000 (700,000) ordinary shares. The share capital consists of only one type of share and all shares have equal rights. The shares are 100 percent owned by the Swedish state.

The shareholder is entitled to a dividend in accordance with the Group's dividend policy. Each share entitles the holder to one vote at the general meetings of shareholders. The quota value is SEK 1,000 per share.

Translation reserve
The translation reserve covers all exchange rate differences that arise in translating the financial statements of foreign entities whose financial statements were prepared in currencies other than the Group's reporting currency. The Parent Company and Group present their financial statements in SEK.

Also included in the translation reserve are exchange rate differences that arise when translating monetary non-current receivables and liabilities of foreign operations for which settlement is not planned. These form part of the company's net investment in the foreign operation.

Fair value reserve
The fair value reserve includes the accumulated net change in the fair value of equity instruments measured at fair value through other comprehensive income until such time as the assets are derecognised from the statement of financial position.

Hedging reserve
The hedge reserve includes the effective portion of the accumulated net change in the fair value of cash flow hedging instruments attributable to hedging transactions that have not yet occurred.

Hedging cost reserve
The hedging cost reserve reflects gains or losses attributable to the forward element of forward contracts. It is recognised initially in other comprehensive income and is reported in the same way as gains or losses in the hedging reserve.

Dividend
The Board proposes to the AGM that a dividend is paid to the owner as shown below. The AGM will be held on 28 April 2022.

MSEK	**2021**	**2020**
Ordinary dividend, SEK 17,757 per share	12,430	5,850
	12,430	**5,850**

The dividend proposed by the Board has been approved by the AGM in each of the past three years.

PARENT COMPANY
Restricted equity
Statutory reserve
The purpose of the statutory reserve is to save a portion of net profit that is not used to cover losses brought forward.

Non-restricted equity
Profit/loss brought forward
Profit/loss brought forward comprises retained earnings and profit/loss after deducting any dividend paid during the year.

Note 28 Interest-bearing liabilities

Group

MSEK	31 Dec 2021	31 Dec 2020
Non-current liabilities		
Issued corporate bonds	1,995	1,991
Other bond financing	–	250
Bank loans	87	12
Lease liabilities	284	291
Total	**2,366**	**2,544**
Current liabilities		
Issued corporate bonds	250	1,000
Bank loans	10	–
Current portion of lease liabilities	58	64
Total	**318**	**1,064**

Terms and payback periods

			31 Dec 2021		31 Dec 2020	
MSEK	Maturity	Interest rate %	Nominal value	Carrying amount	Nominal value	Carrying amount
Bonds – fixed interest	2021	1.600	–	–	1,000	999
Bonds – fixed interest	2022	1.4525	250	250	250	250
Bonds – fixed interest	2025	0.8750	1,450	1,445	1,450	1,442
Bonds – variable interest	2025	3m STIBOR +0.65	550	550	550	550
Bank loans	2022	3m STIBOR +0.91	10	10	12	12
Bank loans	2022	1m STIBOR +1.75	87	87	12	12
Lease liabilities	2027		341	341	355	355
Total			**2,688**	**2,683**	**3,617**	**3,608**

For more information about the company's exposure to interest rate risk see Note 35. The note also contains information on the maturity profile of lease liabilities.

Note 29 Non-current liabilities

Parent Company

MSEK	31 Dec 2021	31 Dec 2020
Non-current liabilities		
Issued corporate bonds	1,995	1,991
Other bond financing	–	250
Bank loans	–	10
Total	**1,995**	**2,251**
Current liabilities		
Issued corporate bonds	250	1,000
Bank loans	10	–
Total	**260**	**1,000**

Issued corporate bonds of MSEK– (–) mature more than five years after the closing date.

Note 30 Pensions

Defined-benefit pension plans

Group

MSEK	31 Dec 2021	31 Dec 2020
Present value of unfunded obligations	626	714
Present value of wholly or partially funded obligations	3,701	3,605
Present value of obligations	**4,327**	**4,319**
Fair value of plan assets	-3,331	-2,926
Net amount in statement of financial position	**996**	**1,393**
The net amount is recognised in the following items in the statement of financial position:		
Financial investments	-400	-348
Provisions for pensions, non-current liabilities	1,396	1,741
Net amount in statement of financial position	**996**	**1,393**

Defined-benefit pension plans
Most of LKAB's pension plans for employees in Sweden are defined-benefit plans, which means that LKAB guarantees pensions based on a percentage of salary. Pension commitments in Sweden are secured by the company via accrued provisions, of which most are secured through credit insurance from FPG (Försäkringsbolaget PRI Pensionsgaranti). In 2013 an internal company pension fund was started for vested defined-benefit pension plans. Promises of future retirement before the age of 65 are to a certain degree contingent upon working underground and are secured by the company via accrued provisions without credit insurance.

Note 30 continued

Commitments for retirement pensions and survivor benefits for salaried employees in Sweden are secured through insurance policies from Alecta. According to a statement from the Swedish Financial Reporting Board, UFR 10, this is a defined-benefit plan that involves several employers. The company has not had access to such information as is necessary for recognising this commitment as a defined-benefit plan. The ITP2 pension plan insured via Alecta is therefore recognised as a defined-contribution plan. The premium for the defined-benefit retirement and survivors' pension is individually calculated and depends on factors such as salary, previously earned pension and expected remaining years of service. Alecta's surplus can be distributed to the policyholders and/or the insured parties. At the end of 2021 Alecta's surplus in the form of its collective funding ratio was 172 (148) percent, which is within the normal range of 125–175 percent stated in Alecta's consolidation policy for these insurance policies.

The premium to Alecta is determined by assumptions about interest rates, longevity, operating expenses and yield tax, and is calculated so that constant payment of premiums until the retirement date is sufficient for the entire target benefit, which is based on the insured's current pensionable salary and which must be earned.

There is no set of fixed rules for how deficits that may arise should be handled, but losses should primarily be covered by Alecta's collective solvency capital and thus will not lead to increased expenses through higher contractual premiums. There are also no rules for how any surplus or deficit should be distributed when plans are terminated or a company withdraws from the plan.

In Norway, the UK and Germany LKAB has defined-benefit pension plans as a complement to local social insurance. In the UK pensions are secured via a company-managed pension fund and in Germany via internal accrued provisions combined with credit insurance. In Norway pensions are secured via a combination of a company-managed pension fund, internal accrued provisions and credit insurance. During the financial year the defined-benefit pension plans in Norway were closed to new entrants in favour of defined-contribution pension plans. The change was implemented in 2020, but the accounting effect has been reported in the 2021 financial year.

Changes in the present value of obligations for defined benefit plans

Group **MSEK**	**31 Dec 2021**	**31 Dec 2020**
Obligation for defined-benefit plans as at 1 January	4,319	4,417
Benefits paid	-202	-209
Cost of service, current period	76	86
Past service cost	-106	–
Interest expense	51	66
Remeasurements:		
- Actuarial gains and losses on changed demographic assumptions	4	-32
- Actuarial gains and losses on changed financial assumptions	-27	106
- Actuarial gains and losses on experience-based adjustments	56	67
Special employer's contributions, financial items, revaluations and service costs	1	-4
Other changes	27	-1
Exchange rate differences	128	-177
Obligation for defined-benefit plans as at 31 December	**4,327**	**4,319**

The present value of the obligations for the Swedish, Norwegian and UK companies, which make up 98 percent, breaks down as follows:

Group	Sweden		Norway		UK	
MSEK	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
Active members	54	54	27	32	26	23
Paid-up policy holders	16	13	19	17	27	27
Retirees	30	33	54	51	47	50

Changes in fair value of plan assets

Group **MSEK**	**31 Dec 2021**	**31 Dec 2020**
Fair value of plan assets at 1 January	2,926	2,942
Contributions	47	36
Benefits paid	-66	-65
Return	36	47
Other changes	11	0
Actuarial gain (+)/loss (-)	272	108
Exchange rate differences	105	-142
Fair value of plan assets at 31 December	**3,331**	**2,926**

Plan assets consist of the following:

Group **MSEK**	**31 Dec 2021**	**31 Dec 2020**
Shares	1,110	795
Interest-bearing assets including bonds	1,469	1,475
Alternative investments	752	656
Total	**3,331**	**2,926**

Note 30 continued

Costs recognised in profit or loss for the year:

Group

MSEK	31 Dec 2021	31 Dec 2020
Current service cost	76	86
Past service cost	-106	0
Interest expense on obligation	51	66
Return on plan assets	-36	-47
Total net cost in profit or loss for the year	**-15**	**105**

The above income statement items are reported excluding allocation of special employer's contributions for the Group. During the year there were changes to defined-benefit pension plans in the Norwegian companies which had a positive effect on profit.

The costs are recognised on the following lines in the income statement:

Group

MSEK	2021	2020
Cost of goods sold	-30	86
Financial income	51	66
Financial expense	-36	-47
Total	**-15**	**105**

The above income statement items are reported excluding allocation of special employer's contributions for the Group.

Costs recognised in other comprehensive income:

Group

MSEK	2021	2020
Remeasurements:		
Actuarial gains (-) and losses (+)	33	141
Difference between actual return and return according to discount rate on plan assets	-272	-108
Net recognised in other comprehensive income	**-239**	**33**

The above income statement items are reported excluding allocation of special employer's contributions for the Group.

Assumptions for defined-benefit obligations: the most significant actuarial assumptions at the end of the reporting period, assessed for each country but expressed as weighted averages, are given below.

Group

%	2021	2020
Discount rate as at 31 December	1.8	1.2
Return on plan assets as at 31 December	1.8	1.2
Future salary increase	2.7	2.1
Employee turnover	3.5	3.5
Future pension increase	2.7	2.1

Assumptions concerning future mortality are based on the standard DUS 14. The average life expectancy of an individual retiring at age 65 is 22 years for men and 24 years for women.

The actual return on plan assets for 2021 was 9.3 (5.3) percent.

Sensitivity analysis

The following table presents possible changes in actuarial assumptions at year-end, other assumptions being unchanged, and how these would affect the defined-benefit obligation. The calculation of the change in pension commitments includes the Swedish, Norwegian and UK commitments, which represent around 98 percent of Group commitments.

Group

MSEK	Increase in assumptions	Decrease in assumptions
+ (decrease)/- (increase) in liability		
Discount rate (0.5% change)	270	-311
Expected mortality (1-year change)	-127	125
Future salary increase (0.5% change)	-135	119
Future pension increase (0.5% change)	-197	183

At 31 December 2020 the weighted average duration of the obligation was 16 (16) years.

Historical information

Group

MSEK	2021	2020	2019	2018	2017
Present value of defined-benefit obligations	4,327	4,319	4,417	4,032	3,957
Fair value of plan assets	-3,331	-2,926	-2,942	-2,713	-2,618
Net obligations	996	1,393	1,475	1,319	1,339

The Group estimates that payments into funded and unfunded defined-benefit plans in 2021 will amount to MSEK 32 and that payments into the defined-benefit plans that are recognised as defined-contribution plans will amount to MSEK 53.

Net liability in balance sheet

Parent Company

MSEK	31 Dec 2021	31 Dec 2020
+ Present value of obligation (calculated according to Swedish principles) for wholly or partially funded pension plans	1,078	1,082
- Fair value at end of period for specifically separated assets (in pension funds and the like)	-1,535	-1,379
= Surplus in pension fund or the like (-)/net obligation (+)	**-458**	**-297**
+ Present value of obligations (calculated according to Swedish principles) for unfunded pension plans	428	435
= Net recognised for pension obligations	**428**	**435**

Note 30 continued

Changes in net liability

Parent Company

MSEK	31 Dec 2021	31 Dec 2020
Net liabilities at start of year for pension provisions	435	457
+ Cost of company-managed pension scheme excluding taxes as recognised in the income statement	96	92
- Pension payments	-103	-113
Net liabilities at year-end for pension commitments	**428**	**435**

Fair value of assets in trust by main category

Parent Company

MSEK	31 Dec 2021	31 Dec 2020
Shares	524	430
Bonds	479	520
Other interest-bearing assets	532	429
Total	**1,535**	**1,379**

Costs relating to pensions

Parent Company

MSEK	2021	2020
Company-managed pension schemes		
Cost	96	92
Cost of company-managed pension schemes	**96**	**92**
Pension through insurance policy		
Insurance premiums	256	217
Subtotal	**352**	**309**
Special employer's contribution on pension costs	89	82
Cost of credit insurance, administrative expenses, other	2	1
Recognised net cost attributable to pensions	**443**	**392**

Net pension cost is recognised on the following lines of the income statement:

Parent Company

MSEK	2021	2020
Cost of goods sold	443	392
Total	**443**	**392**

Assumptions for defined-benefit obligations: the most significant actuarial assumptions at the end of the reporting period (expressed as weighted averages) are given below.

Parent Company

%	2021	2020
Discount rate as at 31 December	3.8	3.8

Defined-contribution pension plans

In Sweden, the Group has defined-contribution pension plans for employees that are fully paid by the companies.

Outside of Sweden there are defined-contribution plans that are financed partly by the subsidiaries and partly by employee contributions.

Payments into these plans are made regularly in accordance with the terms of each plan.

	Group		Parent Company	
MSEK	**2021**	**2020**	**2021**	**2020**
Costs for defined-contribution pension plans	306	265	254	217

No retirement solutions were paid out through insurance plans in 2021 or 2020.

Note 31 Provisions

Group

MSEK	31 Dec 2021	31 Dec 2020
Provisions		
Urban transformation	14,423	14,272
Emission allowances for carbon dioxide	307	164
Remediation costs	1,775	1,736
Other	1	39
Total	**16,506**	**16,212**

Parent Company

MSEK	31 Dec 2021	31 Dec 2020
Provisions		
Urban transformation	14,423	14,272
Emission allowances for carbon dioxide	307	164
Remediation costs	1,207	1,116
Total	**15,937**	**15,552**

Note 31 continued

Group **MSEK**	Urban transformation	Emission allowances	Remediation costs	Other provisions	Total
Opening balance, 1 Jan 2020	16,873	53	1,350	17	18,293
Provisions for the year	704	–	–	38	742
Reassessment of previous years' provisions	90	–	356	-16	430
Utilised provisions	-3,395	–	-9	–	-3,404
Interest adjustment on liabilities for the year	–	–	39	–	39
Emissions for the year	–	164	–	–	164
Settlement of previous years' emissions	–	-53	–	–	-53
Closing balance, 31 Dec 2020	**14,272**	**164**	**1,736**	**39**	**16,212**
Less: expenditures for replacement properties	-1,423	–	–	–	-1,423
Closing balance, 31 Dec 2020 (net)	**12,849**	**164**	**1,736**	**39**	**14,789**
Of which to be paid out in 2021	*3,191*	*164*	*118*	*37*	*3,510*
Of which to be paid out 2022–2027	*7,498*	–	*278*	*1*	*7,777*
Of which to be paid out after 2027	*2,160*	–	*1,340*	*1*	*3,501*
Opening balance, 1 Jan 2021	14,272	164	1,736	39	16,212
Provisions for the year	553	–	–	–	553
Reassessment of previous years' provisions	1,193	–	6	–	1,199
Utilised provisions	-1,595	–	-17	-38	-1,650
Interest adjustment on liabilities for the year	–	–	50	–	50
Emissions for the year	–	307	–	–	307
Settlement of previous years' emissions	–	-164	–	–	-164
Closing balance, 31 Dec 2021	**14,423**	**307**	**1,775**	**1**	**16,506**
Less: expenditures for replacement properties	-2,508				-2,508
Closing balance, 31 Dec 2021 (net)	**11,915**	**307**	**1,775**	**1**	**13,998**
Of which to be paid out in 2022	*2,979*	*307*	*204*	*1*	*3,491*
Of which to be paid out 2023–2027	*7,614*	–	*259*	–	*7,873*
Of which to be paid out after 2027	*1,322*	–	*1,312*	–	*2,634*

Expenditures for replacement properties refers to expenses incurred which are reported as property, plant and equipment; see Note 16. The provisions and the property, plant and equipment asset are offset when the replacement property is handed over. For an overall picture of items related to urban transformation refer to Note 32.

Note 31 continued

Parent Company

MSEK	Urban transformation	Emission allowances	Remediation costs	Total
Opening balance, 1 Jan 2020	16,873	53	985	17,911
Provisions for the year	704	–	111	815
Reassessment of previous years' provisions	90	–	–	90
Utilised provisions	-3,395	–	-9	-3,404
Interest adjustment on liabilities for the year	–	–	29	29
Emissions for the year	–	164	–	164
Settlement of previous years' emissions	–	-53	–	-53
Closing balance, 31 Dec 2020	**14,272**	**164**	**1,116**	**15,552**
Less: expenditures for replacement properties	-1,423			-1,423
Closing balance, 31 Dec 2020 (net)	**12,849**	**164**	**1,116**	**14,129**
Of which to be paid out in 2021	*3,191*	*164*	*118*	*3,473*
Of which to be paid out 2022–2027	*7,498*	–	*278*	*7,776*
Of which to be paid out after 2027	*2,160*	–	*720*	*2,880*
Opening balance, 1 Jan 2021	14,272	164	1,116	15,552
Provisions for the year	553	–	76	629
Reassessment of previous years' provisions	1,193	–	–	1,193
Utilised provisions	-1,595	–	-17	-1,612
Interest adjustment on liabilities for the year	–	–	32	32
Emissions for the year	–	307	–	307
Settlement of previous years' emissions	–	-164	–	-164
Closing balance, 31 Dec 2021	**14,423**	**307**	**1,207**	**15,937**
Less: expenditures for replacement properties	-2,508			-2,508
Closing balance, 31 Dec 2021 (net)	**11,915**	**307**	**1,207**	**13,429**
Of which to be paid out in 2022	*2,979*	*307*	*204*	*3,490*
Of which to be paid out 2023–2028	*7,614*	–	*247*	*7,861*
Of which to be paid out after 2028	*1,322*	–	*756*	*2,078*

Note 32 Urban transformation

Net cost of urban transformation
The company's net cost consists of the following components:

Group and Parent Company

MSEK	2021	2020
Costs for urban transformation, current period	-297	-230
Effect of changed assumptions and assessments	-75	-1,166
Total	**-372**	**-1,396**

Due to the current level of interest rates, provisions for urban transformation are not discounted and hence no interest expense is recognised.

The net cost of urban transformation is recognised on the following line of the income statement:

Group and Parent Company

MSEK	2021	2020
Cost of goods sold	-372	-1,396
Total	**-372**	**-1,396**

Provisions for urban transformation
Provisions are recognised on the following lines of the balance sheet:

Group and Parent Company

MSEK	31 Dec 2021	31 Dec 2020
Current liabilities	2,979	3,191
Non-current liabilities	11,444	11,081
Total	**14,423**	**14,272**

LKAB's accounting policies for provisions state that a provision for urban transformation is reported where there is an agreement or a clear constructive obligation that defines a commitment relating to future impact areas. Provisions are recognised for all estimated remaining commitments in respect of the impact areas for the main haulage levels decided on. The parts of the provision that relate to commitments for areas that have not been impacted by mining to date are reported as a mine asset relating to future mining. The mine asset is expensed using a production-based method; see description in Note 1 section 18.8.

Since 2006 LKAB has paid out MSEK 16,017 relating to previous years' provisions. Pay-outs in 2021 amount to MSEK 1,459.

The recognised provision for urban transformation does not include LKAB's own need to replace properties affected by urban transformation. Capital expenditure up to and including 2021 for replacing LKAB's properties amounts to a total of around SEK 1.8 billion.

To finance future urban transformation payouts, funds are allocated in accordance with the finance policy approved by the Board from time to time. The purpose of such asset management is to ensure LKAB's ability to pay and that the return on allocated funds will cover inflation over time.

Property, plant and equipment for urban transformation
The balance sheet item includes the following assets:

Group and Parent Company

MSEK	31 Dec 2021	31 Dec 2020
Mine asset	7,658	6,256
Replacement properties	2,508	1,423
Other property acquisitions	253	276
Total	**10,419**	**7,954**

Replacement properties refers to expenditures for the construction of replacement properties for those property owners who have chosen this option. Commitments for replacement properties are recognised as a provision until handover of the replacement property. At this point, the provision is offset against expenditures for the replacement property.

Note 33 Accrued expenses and deferred income

	Group		Parent Company	
MSEK	**31 Dec 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**
Payroll and employee benefit expenses	902	907	698	739
Accrued trade payables	293	349	271	225
Accrued expenses, iron ore derivatives	–	28	–	28
Other	467	174	189	124
Total	**1,662**	**1,458**	**1,158**	**1,116**

Note 34 Valuation of financial assets and liabilities at fair value and categorization

Classification and fair value and level of measurement hierarchy

The following is a summary of the fair values of consolidated financial assets and liabilities with a breakdown by measurement category. Information is also provided about to which fair value level the respective financial assets and liabilities belong.

		Carrying amount						Fair value		
Group, 31 Dec 2021 **MSEK**	Note	Fair value – hedging instruments	Fair value through profit or loss	Fair value through other comprehensive income	Amortised cost	Other liabilities	Total	Level 1	Level 2	Total
Financial assets measured at fair value										
Shares, financial assets	21	–	7	5,307	–	–	5,314	5,307	7	5,314
Shares and alternative investments, short-term holdings	21	–	9,720	–	–	–	9,720	–	9,720	9,720
Interest-bearing, short-term holdings	21	–	20,796	–	–	–	20,796	–	20,796	20,796
Derivatives for hedging	23	–	–	–	–	–	0	–	–	–
Other derivatives	21	15	–	–	–	–	15	–	15	15
Total		**15**	**30,523**	**5,307**	**–**	**–**	**35,845**			
Financial assets not measured at fair value										
Non-current receivables	23	–	–	–	102	–	102	–	–	–
Accounts receivable		–	–	–	2,074	–	2,074	–	–	–
Other receivables	23	–	–	–	1,045	–	1,045	–	–	–
Accrued income	26	–	–	–	57	–	57	–	–	–
Cash and bank balances (cash and cash equivalents)	42	–	–	–	6,289	–	6,289	–	–	–
Total		**–**	**–**	**–**	**9,567**	**–**	**9,567**			
Financial liabilities not measured at fair value										
Issued bond loans	28	–	–	–	–	2,245	2,245	–	2,245	2,245
Other bond financing	28	–	–	–	–	–	0	–	–	–
Bank loans	28	–	–	–	–	97	97	–	–	–
Trade payables		–	–	–	–	1,794	1,794	–	–	–
Other liabilities		–	–	–	–	544	544	–	–	–
Accrued expenses	33	–	–	–	–	1,662	1,662	–	–	–
Total		**–**	**–**	**–**	**–**	**6,342**	**6,342**			

Note 34 continued

Group, 31 Dec 2020 **MSEK**	Note	Carrying amount Fair value – hedging instruments	Fair value through profit or loss	Fair value through other comprehensive income	Amortised cost	Other liabilities	Total	Fair value Level 1	Level 2	Total
Financial assets measured at fair value										
Shares, financial assets	21	–	7	2,931	–	–	2,938	2,938	–	2,938
Shares and alternative investments, short-term holdings	21	–	7,845	–	–	–	7,845	–	7,845	7,845
Interest-bearing, short-term holdings	21	–	11,219	–	–	–	11,219	–	11,219	11,219
Interest-bearing, cash and cash equivalents	42	–	90	–	–	–	90	-	90	90
Derivatives for hedging	23	–	–	–	–	–	–	–	–	–
Other derivatives	21	87	–	–	–	–	87	8	79	87
Total		**87**	**19,161**	**2,931**	**–**	**–**	**22,179**			
Financial assets not measured at fair value										
Non-current receivables	23	–	–	–	102	–	102	–	–	–
Accounts receivable		–	–	–	3,313	–	3,313	–	–	–
Other receivables	23	–	–	–	1,033	–	1,033	–	–	–
Accrued income	26	–	–	–	23	–	23	–	–	–
Cash and bank balances (cash and cash equivalents)	42	–	–	–	3,316	–	3,316	–	–	–
Total		**–**	**–**	**–**	**7,787**	**–**	**7,787**			
Financial liabilities not measured at fair value										
Issued bond loans	28	–	–	–	–	2,991	2,991	–	3,036	3,036
Other bond financing	28	–	–	–	–	250	250	–	256	256
Bank loans	28	–	–	–	–	12	12	–	–	–
Trade payables		–	–	–	–	1,746	1,746	–	–	–
Other liabilities		–	–	–	–	196	196	–	–	–
Accrued expenses	33	–	–	–	–	1,430	1,430	–	–	–
Total		**–**	**–**	**–**	**–**	**6,625**	**6,625**			

Note 34 continued

Disclosures concerning financial assets and liabilities measured at fair value are based on a fair value hierarchy with three levels. Level 1 means quoted prices in an active market, such as stock market listings. Level 2 means observable market data other than quoted prices, either direct (such as quoted prices) or indirect (derived from quoted prices). Level 3 means the fair value is determined using inputs that are not based on directly observable market data.

The measurement of fair value for current investments is based mainly on Level 2 inputs. The value of interest-bearing instruments is calculated using data from the interest-bearing securities market, obtained from Bloomberg. Shares and alternative investments are measured using inputs from the stock market or received directly from brokers.

Fair values for derivatives are calculated based on official listings from Bloomberg, with the exception of derivatives relating to the commodities portfolio which are based on quoted market prices.

For shares and non-current financial assets recognised at fair value through profit or loss the cost is considered to be an appropriate estimate of fair value.

For issued commercial papers and repurchase agreement liabilities the carrying amount is a reasonable approximation of fair value because of the short time to maturity.

The fair value of interest-bearing non-current liabilities has been calculated based on the interest rate that applied on the closing date for remaining terms.

The carrying amount of accounts receivable, other receivables, accrued income, cash and cash equivalents, trade payables, other liabilities and accrued expenses is a reasonable approximation of their fair value.

Parent Company

Measurement categories for assets and liabilities as shown below follow the above measurement categories for the Group's financial instruments.

Presented below are the assets and liabilities for which the carrying amount differs from their fair value.

Parent Company	31 Dec 2021		31 Dec 2020	
MSEK	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets at amortised cost				
Shares, financial assets	3,238	5,326	2,869	2,938
Current investments	27,645	30,516	17,398	19,163
Derivatives	12	16	47	79
Total	**30,895**	**35,858**	**20,314**	**22,180**
Financial liabilities at amortised cost				
Issued bond loans	-2,245	-2,252	-2,991	-3,036
Other bond financing	–	–	-250	-256
Total	**-2,245**	**-2,252**	**-3,241**	**-3,292**

Note 35 Financial risks and risk management

Framework for financial risk management

The Group's activities expose it to a variety of financial risks. LKAB's financial risk management is regulated by a finance policy established by the Board which provides a framework for financial activities within the LKAB Group. The LKAB Treasury Centre is the company's central treasury function, which manages the Group's overall financial risk and is also the Group treasury. Reporting takes place on an ongoing basis to the Board's Audit Committee, which is responsible for ongoing monitoring of compliance with the finance policy and with guidelines passed.

The Group's aim is that financing activities will at all times support the business plan adopted and ensure that financial risks are identified, quantified and managed.

The current finance policy was established in February 2017. A revised finance policy was approved in February 2022.

Cash flow risk in SEK

The LKAB Group's biggest financial risk is cash flow risk in SEK, which is mainly linked to fluctuations in the global iron ore price and exchange rates between USD and SEK. Together these factors could have a major negative impact on the company's income statement, balance sheet and cash flow. Another significant cash flow risk is energy price risk.

The finance policy provides guidelines for identifying and reporting the Group's total risk exposure as regards cash flow risk. Risk reporting is based on the cash flow forecast in the current business plan.

The finance policy also sets out frameworks for hedging activities. The basic rule is that the Group does not normally hedge future forecast cash flows other than confirmed flows relating to accounts receivable and trade payables. Some exceptions may be made; for example, prices may be hedged for individual commercial flows where a binding contract provides certainty. Also laid down in the finance policy are frameworks for hedging the transaction exposure of forecast net currency flows, the price components of iron ore deliveries and the price components of energy prices. The President or Chief Financial Officer decides the hedging strategy within these frameworks.

When carrying out hedging, the hedging strategy and effectiveness of the strategy are to be documented and the requirements of hedge accounting must be met; see also Note 1 Significant accounting policies, section 17 Derivatives and hedge accounting. At 31 December 2021, as also at 31 December 2020, there were no hedges meeting the requirements for hedge accounting.

For sensitivity analyses in respect of cash flow risks please refer to the Administration Report.

Price risk for iron ore products

Price volatility in the global iron ore market impacts LKAB's earnings and cash flows. The price of LKAB's products is affected both by the global price of iron ore and by the quality premiums added to high-quality iron ore products. The price of iron ore is established daily, while the premiums are a combined result of market price and negotiations with LKAB's customers.

As shown above, the basic rule in the Group's finance policy is that LKAB does not normally hedge forecast cash flows. In 2021 no deliveries to the spot price market were hedged in respect of iron ore prices. Price hedging relating to iron ore sales is included in net sales in the total amount of MSEK 0 (-299). At 31 December 2021, as also at 31 December 2020, there was no outstanding hedging relating to price risk for iron ore products.

Currency risk in iron ore sales

Currency risk exposure stems mainly from Group sales of iron ore where market pricing is in USD. The currency risk consists partly of the risk of fluctuations in the value of accounts receivable and partly of the currency risk in expected and contracted payment flows. These risks are known as transaction exposure.

As shown above, the basic rule in the Group's finance policy is that LKAB does not normally hedge forecast cash flows. Outstanding accounts receivable relating to iron ore sales are normally 100 percent hedged, however. At 31 December 2021 a total of 100 (100) percent of accounts receivable in USD were hedged.

The fair value of the forward contracts as at 31 December 2021 amounted to MSEK 12 (46), of which MSEK 12 (46) relates to currency hedging of accounts receivable recognised in profit for the current year. Transaction exposure in USD relating to sales of iron ore amounted to MUSD 5,295 (3,494) in 2021.

Exchange differences relating to iron ore sales are included in net sales in the total amount of MSEK 182 (-80), of which MSEK -125 (265) relates to hedges.

Note 35 continued

Energy price risk
Changes in energy prices form part of the Group's cash flow risk in SEK. The Group's energy costs correspond to 11 (8) percent of operating expenses. No financial hedging took place in 2021 to reduce this exposure.

Other currency risks
Currency risks also arise in the translation of foreign subsidiaries' assets and liabilities to the Parent Company's functional currency, known as translation exposure. LKAB does not normally hedge its translation exposure. Consolidated net foreign assets are divided into the following currencies (millions of local currency):

Maximum credit risk exposure

MSEK	2021	2020
EUR	10	9
GBP	72	62
USD	7	7
DKK	225	224
NOK	1,162	1,108
CNY	33	27
HKD	68	48
TRL	19	24

Other companies in the Group may also have price or currency exposure through purchases and sales in foreign currencies. The finance policy contains rules on the subsidiaries' reporting of currency risks to the LKAB Treasury Centre, which is responsible for the Group's overall management of currency exposure.

The Group also has currency risks in respect of current investments in foreign currency. Under the finance policy, currency derivatives may be used in the management of financial asset portfolios provided the currency exposure remains within specified limits.

Exchange rate differences for other currency risks are included in operating profit at MSEK 0 (5) and in net financial income/expense at MSEK 232 (-124).

Interest rate risk and share price risk
Interest rate risk refers to the risk of how the return on interest-bearing assets or interest expense on interest-bearing liabilities is impacted by a change in the interest rate. The level of interest rate risk is affected by changes in interest rates and by the amount of interest rate-sensitive capital. LKAB is mainly exposed to interest rate risk with regard to current investments and cash and cash equivalents. Exposure to interest rate risk among liabilities relates to bonds with variable interest rates; see Note 28 Interest-bearing liabilities for the Group.

Share price risk refers to the risk of a reduction in value due to changes in prices on the stock market.

LKAB's current investments and cash and cash equivalents are allocated to four portfolios: the liquidity portfolio, the urban transformation portfolio, the pension portfolio and the commodities portfolio. The liquidity portfolio is included in current investments and cash and cash equivalents, while the other portfolios are included in current investments.

For interest-bearing current investments the finance policy governs the maximum average duration in each asset portfolio. The frameworks are set in relation to each portfolio's commitments or purpose and in relation to a range of risk measures and restrictions. At 31 December 2021 interest-bearing investments amounted to MSEK 20,796 (11,309). The remaining term was 1,078 (1,176) days.

For shares and alternative investments the finance policy contains a number of guidelines and restrictions, including what current investments are permitted and the percentage of portfolio value.

Credit risks
Credit risk is the risk that a customer or counterparty in a financial instrument is unable to fulfil its commitments, thereby causing the Group a financial loss, and arises mainly from the Group's accounts receivable, derivatives and current investments.

Maximum credit risk exposure

MSEK	2021	2020
Derivatives	15	87
Interest-bearing instruments, short-term holding	20,421	11,219
Interest-bearing instruments, short-term holding (part of cash and cash equivalents)	375	90
Accounts receivable and other current receivables	3,013	4,325
Accrued income	57	23
Total	**23,882**	**15,744**

No impairment of financial assets is recognised in profit or loss for the year; see comments under each section below.

Credit risks in financial activities
The financial activities of the Group entail exposure to credit risks. This is primarily counterparty risks in conjunction with receivables from banks and other counterparties involved in the purchase of financial investments. The finance policy contains special counterparty rules stating the maximum credit exposure for various counterparties and for each designated asset portfolio. The Master Netting Agreement from the International Swaps and Derivatives Association (ISDA) is used for all counterparties in derivatives transactions.

The Group has no assets that have fallen due or have been impaired that resulted in credit losses. LKAB has not experienced any credit losses in current investments over the past five years.

Credit risks in accounts receivable
Commercial credit exposure arises in the ordinary course of LKAB's business primarily in the form of customer credit. Commercial credit risks are related to the customer's or counterparty's solvency; that is, their credit standing, the amount of credit granted and the credit period.

The Group's credit risk exposure is affected mainly by each customer's individual characteristics, but factors relating to the industry and the country where the customers operate are also taken into consideration. Information on concentration of revenue is given in Note 3.

The Group's finance policy contains a regulatory framework for credit rating that defines the criteria for evaluating new and existing customers from a credit risk perspective. The framework includes approval processes, credit limits and monitoring procedures. Monitoring is carried out on a quarterly basis by the Board's Audit Committee.

Based on historical customer losses and forward-looking information, LKAB assesses that no impairment of accounts receivable is necessary as at the closing date. The majority of the Group's customers have done business with the Group for many years and none of these customers' accounts had been written down or deemed to be credit-impaired as at the closing date.

The average collection period on accounts receivable was 34 days (33) in 2021.

Offsetting and similar contracts
Counterparty risk in derivative contracts is reduced through netting agreements; that is, netting of positive and negative values in all derivative contracts with one and the same counterparty. For exchange-traded derivatives there are clearing agreements that include netting. For all other counterparties in derivative transactions the Group enters into derivatives contracts under the International Swaps and Derivatives Association (ISDA) Master Netting Agreement, supplemented by an agreement on collateral for net exposures (Credit Support Annex, CSA).

These agreements give the Group a legal right to offset recognised amounts both in the ordinary course of business and in the case of a serious credit event. The items are also settled net in operating activities. Netting is applied to payments of obligations that are due at the same time, in the same currency, with the same counterparty and for the same type of instrument. Only the excess amount per instrument and currency is paid by the party that owes the most.

The table below presents disclosures about financial instruments that are covered by a legally binding framework agreement on netting or a similar agreement, along with details of any collateral provided.

Note 35 continued

Group, 2021

MSEK	Financial assets/ liabilities, gross	Offset amounts	Net amount in statement of financial position	Related amounts that are not offset: Financial instruments that are not offset	Related amounts that are not offset: Collateral provided	Related amounts that are not offset: Net amount
Financial assets						
Derivatives	26	-11	15	–	–	15
Financial liabilities						
Derivatives	-11	11	0	–	–	–
Total	**15**	**0**	**15**	**–**	**–**	**15**

Group, 2020

MSEK	Financial assets/ liabilities, gross	Offset amounts	Net amount in statement of financial position	Related amounts that are not offset: Financial instruments that are not offset	Related amounts that are not offset: Collateral provided	Related amounts that are not offset: Net amount
Financial assets						
Derivatives	79	-1	78	–	–	78
Financial liabilities						
Derivatives	-1	1	0	–	–	–
Total	**78**	**0**	**78**	**–**	**–**	**78**

Financing risk

Financing risk is the risk that the LKAB Group cannot meet its commitments due to lack of liquidity or the inability to raise external loans for operating activities.

The Group's finance policy defines the Group's financing needs, in the form of operating capital, needs caused by fluctuations in cash flow and planned expenditure for commitments within urban transformation, pensions and remediation. The Group's cash flow forecast is updated quarterly. Long-term financing is to cover these financing needs, as a minimum.

Guidelines on debt management in the Group's policy include target durations for external financing related to the requirement regarding net debt. Consolidated borrowing as at 31 December 2021 amounted to MSEK 2,250 (3,250). The remaining term for financial liabilities is 1,033 (903) days.

Credit facilities as at 31 December 2021 are shown below. All credit facilities are subject to 100 percent retention of title.

Credit facilities

MSEK	Nominal	Utilised (nominal)	Available
Commercial paper programme, maturing within one year	5,000		5,000
Bond programme	7,000		5,000
Maturing March 2025, green bonds		2,000	
Other bond financing, maturing 2022	250	250	
Credit facility	5,000		5,000
Total	**17,250**	**2,250**	**15,000**

Note 35 continued

Maturity profile of financial liabilities – undiscounted cash flows

	2021						2020					
MSEK	Total	<1 month	1–3 months	3 months –1 year	1–5 years	>5 years	Total	<1 month	1–3 months	3 months –1 year	1–5 years	>5 years
Commercial paper	–	–	–	–	–	–				–	–	–
Liability, repurchase agreements	–	–	–	–	–	–				–	–	–
Bond loans	2,245	250	–		1,995	–	3,241	–	–	1,000	2,241	
Bank loans	97	–	–	10	87	–	12	–	–	12		–
Derivatives	–	–	–	–	–	–	–	–	–	–	–	–
Lease liabilities	396	8	12	55	185	136	413	8	13	58	188	146
Trade payables	1,374	1,296	77	1	–	–	1,242	1,223	18	1	–	–
Other liabilities and accrued expenses	1,286	631	40	615	–	–	981	353	135	493	–	–
Total	**5,398**	**2,185**	**129**	**681**	**2,267**	**136**	**5,889**	**1,584**	**166**	**1,564**	**2,429**	**146**

The Group's maturity profile for trade payables, other liabilities and accrued expenses is considered to be similar to that of the Parent Company in all material respects. The above information is taken from the Parent Company.

Maturity profile of financial assets – undiscounted cash flows

	2021						2020					
MSEK	Total	<1 month	1–3 months	3 months –1 year	1–5 years	>5 years	Total	<1 month	1–3 months	3 months –1 year	1–5 years	>5 years
Interest-bearing securities	20,796	736	929	6,606	10,358	2,167	11,309	442	89	1,526	6,255	2,996
Derivatives	15	11	4	–	–	–	87	77	10	–	–	–
Accounts receivable	2,599	2,031	568	–	–	–	3,629	2,872	757	–	–	–
Total	**23,410**	**2,778**	**1,501**	**6,606**	**10,358**	**2,167**	**15,025**	**3,391**	**856**	**1,526**	**6,255**	**2,996**

The Group's maturity profile for accounts receivable is considered to be similar to that of the Parent Company in all material respects. The information above refers to the Parent Company.

Asset management

LKAB's financial risk management is regulated by a finance policy approved by the Board. The Board's finance committee is responsible for ongoing monitoring of compliance with the finance policy and with guidelines passed.

LKAB defines its managed assets as equity in the Group excluding unrealised changes in the value of derivatives that are recognised directly in equity. Assets under management amounted to SEK 67.5 (48.4) billion at the end of the reporting period.

The Group's aim as regards economic sustainability is to be financially strong in order to be an innovative and responsible company that contributes to prosperity. The financial targets relate to capital structure, profitability and dividend.

The capital structure target is since October 2021 a net debt/equity ratio below 60 percent. The net debt/equity ratio is defined as the net of interest-bearing liabilities and provisions as well as interest-bearing assets, divided by equity. The net debt/equity ratio was -24.5 (-3) percent at the end of the reporting period.

The profitability target for the Group is since October 2021 a return on equity of 9 percent over a business cycle. For 2021 the return was 39 (20.8) percent.

The Group's dividend policy states that the ordinary dividend to the shareholder is to be 40–60 percent of profit for the year. The proposed dividend of MSEK 12,430 represents 55 percent of the Group's profit.

Note 36 Leases

Lessee

The Group's property, plant and equipment consists of both owned and leased assets.

Group

MSEK	Note	2021	2020
Property, plant and equipment owned, including favourable leases from business combinations	15	30,718	30,178
Right-of-use assets	15	329	337
Total		**31,047**	**30,515**

Significant assets leased are tugboats, production premises and land, office premises and IT equipment.

Right-of-use assets

Group MSEK	Buildings and land	Plant and machinery	Equipment, tools, fixtures and fittings	Total
Depreciation during the year	39	4	39	82
Additions to right-of-use assets during the year	0	1	24	25
Closing balance, 31 Dec 2021	170	5	154	329

Group MSEK	Buildings and land	Plant and machinery	Equipment, tools, fixtures and fittings	Total
Depreciation during the year	34	4	47	85
Additions to right-of-use assets during the year	21	11	-18	14
Closing balance, 31 Dec 2020	156	8	173	337

Additions to right-of-use assets include the cost of rights of use acquired during the year, additional amounts following review of the lease term and exchange rate changes.

Lease liabilities

Group

MSEK	2021	2020
Current	58	64
Non-current	284	291
Lease liabilities included in the statement of financial position	**342**	**355**

For a maturity analysis of the lease liabilities see Note 35 Financial risks and risk management.

Amount recognised in profit or loss
IFRS 16

Group

MSEK	2021	2020
Depreciation of right-of-use assets	82	85
Interest on lease liabilities	7	12
Costs of short-term leases	77	29
Costs of low-value leases	19	17
Total	**185**	**143**

IAS 17/RFR 2 Non-cancellable lease payments

Parent Company

MSEK	2021	2020
Within one year	16	21
Between one and five years	11	17
Longer than five years	9	11
Total	**36**	**49**

IAS 17/RFR 2 Operating lease payments expensed

Parent Company

MSEK	2021	2020
Minimum lease payments	105	59

Amounts recognised in the statement of cash flows

Group

MSEK	2021	2020
Total cash outflow attributable to leases	185	143

The above cash outflow includes both amounts for leases recognised as lease liabilities and amounts paid for short-term and low-value leases

Note 36 continued

Lessor
Lease income from leases where the Group is the lessor is as follows.

	Group		Parent Company	
MSEK	**31 Dec 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**
Operating leases				
Lease income	283	260	56	46

Operating leases
The Group leases out properties; mainly residential properties. The leases are classified as operating leases because the leases do not transfer the significant risks and benefits associated with ownership of the underlying asset.
Presented below is a maturity analysis of lease payments showing the undiscounted lease payments that will be received after the closing date.

IFRS 16

	Group		Parent Company	
MSEK	**31 Dec 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**
Within one year	114	118	30	21
Between one and two years	40	45	–	–
Between two and three years	39	19	–	–
Between three and four years	27	20	–	–
Between four and five years	24	12	–	–
Later than five years	23	19	–	25
Total undiscounted lease payments	**267**	**233**	**30**	**46**

Note 37 Investment commitments

At year-end the Group had contractual commitments to acquire property, plant and equipment. The commitments are forecast at MSEK 3,613 (2,189), of which MSEK 2,819 (1,810) is expected to be settled in the following financial year. The commitments relate mainly to assured future production capacity within the Iron Ore business area and to the construction of new homes associated with the urban transformations in Kiruna and Malmberget/Gällivare. The Parent Company's commitments are forecast at MSEK 3,396 (2,117), of which MSEK 2,609 (1,764) is expected to be settled in the following financial year.

Note 38 Pledged assets and contingent liabilities

	Group		Parent Company	
MSEK	**31 Dec 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**
Assets pledged				
As pledged assets for own liabilities and provisions				
Company-owned endowment insurance	94	104	94	104
Deposit of cash and cash equivalents	112	112	112	112
Collateral provided, derivatives	288	212	288	212
Pledged assets, bonds – repurchase agreements	–	–	–	–
Total	**494**	**428**	**494**	**428**
Contingent liabilities				
Guarantees, FPG/PRI	17	16	17	16
Guarantees, GP plan	3	3	3	3
Guarantees, Swedish Tax Agency	63	63	63	63
Surety given for subsidiaries	–	–	121	111
Collateral, remediation	128	47	264 1)	59
Other surety	28	–	28	–
Other	–	–	–	–
Total	**239**	**130**	**496**	**252**

1) Amount changed compared with the year-end report.

Company-owned endowment insurance is intended to cover pension commitments for the President, former President and members of Group management under the old defined-benefit pension scheme.
Deposits of cash and cash equivalents are intended to cover future expenditures for remediation measures and other restoration measures at mines after mining activities cease.
Guarantees for PRI Pensionstjänst and Gruvplanen pensions corresponded to 2 percent of commitments on the closing date.

Note 39 Related parties

Relationships with related parties

The Group is under the controlling influence of the Swedish state. The Parent Company has a related party relationship with its subsidiaries; see Note 40 Group companies.

In addition, the Parent Company has a related party relationship with the jointly controlled company Hybrit Development AB, with Vattenfall AB and its group companies, and with the Swedish Transport Administration (Trafikverket).

Summary of related party transactions

Parent Company **MSEK**	Year	Sales of goods/services to related parties	Interest and dividends (net)	Purchases of goods/services from related parties	Related party receivables, 31 December	Liabilities to related parties, 31 December
Subsidiaries	2021	947	109	4,088	3,622	587
Subsidiaries	2020	720	421	3,713	3,307	409
Jointly controlled entities	2021	24	–	24	6	–
Jointly controlled entities	2020	9	–	16	9	–
Other related parties	2021	–	–	643	–	24
Other related parties	2020	–	–	526	–	32

Transactions with related parties are priced on market terms.

For remuneration paid to the Board of Directors and senior executives see Note 7.

Note 40 Group companies

Parent Company

MSEK	**31 Dec 2021**	**31 Dec 2020**
Accumulated acquisition value		
Opening balance	2,255	2,389
Business combinations	150	–
Disposal	–	-161
Capital contributions	2	27
Closing balance	**2,407**	**2,255**
Accumulated impairment		
Opening balance	-575	-575
Impairment losses reversed	–	–
Impairment for the year	–	–
Closing balance	**-575**	**-575**
Carrying amount	**1,832**	**1,680**

Note 40 continued

Specification of the Parent Company's and Group's holdings of shares in Group companies. The following table does not include dormant Group companies.

Subsidiary/registration number/domicile	Number of shares	Share in % 2021	Share in % 2020	31 Dec 2021 Carrying amount	31 Dec 2020 Carrying amount
Swedish subsidiaries					
LKAB Fastigheter AB / 556009-8849 / Kiruna	5,000	100	100	94	94
LKAB Wassara AB / 556331-8566 / Stockholm	20,000	100	100	32	32
LKAB Berg & Betong AB / 556074-8237 / Kiruna	24,000	100	100	316	316
LKAB Nät AB / 556059-9796 / Kiruna	10	100	100	1	1
LKAB Minerals AB / 556223-1786 / Luleå	1,600,000	100	100	209	207
LKAB Malmtrafik AB / 556031-4808 / Kiruna	208,000	100	100	257	257
LKAB EAF 1 AB / 559252-4879 / Kiruna	25	100	100	0	0
Bergteamet AB / 556524-0081 / Boliden	750	75	–	150	–
Foreign subsidiaries					
LKAB Norge AS / 918 400 184 / Narvik, Norway	300,000	100	100	763	763
LKAB Trading (Shanghai) Co., Ltd. / 91310000577478375G / Shanghai, China		100	100	10	10
Indirect holdings via the subsidiary LKAB Minerals AB					
LKAB Minerals B.V. / 24236591 / Breda, Netherlands		100	100	–	–
LKAB Minerals Inc / 02-0551509 / Cincinnati, USA		100	100	–	–
LKAB Minerals GmbH / HRB 16692 / Essen, Germany		100	100	–	–
LKAB Minerals Asia Pacific Ltd / 876455 / Hong Kong SAR, China		100	100	–	–
LKAB Minerals OY / 1934671-4 / Helsinki, Finland		100	100	–	–
LKAB Minerals AS / A/S277716 / Nuuk, Greenland		100	100	–	–
LKAB Minerals Tianjin Minerals Co / 70051551-5 / Dongli District Tianjin, China		100	100	–	–
LKAB Holdings Ltd (LKAB Minerals Limited) / 04621769 / Derby, UK		100	100	–	–
LKAB Minerals Ltd (Francis Flower (Northern) Ltd) / 03799817 / Derby, UK		100	100	–	–
Indirect holdings via the subsidiary LKAB Berg & Betong AB					
LKAB Mekaniska AB / 556013-3059 / Kiruna		100	100	–	–
LKAB Kimit AB / 556190-6115 / Kiruna		100	100	–	–
Indirect holdings via the subsidiary LKAB Malmtrafik AB					
LKAB Malmtrafikk AS / 974 644 991 / Narvik, Norway		100	100	–	–
Total Parent Company				**1,832**	**1,680**

Note 41 Untaxed reserves

Parent Company

MSEK	31 Dec 2021	31 Dec 2020
Accumulated depreciation in excess of plan:		
Plant and equipment		
Opening balance	12,202	11,902
Dissolution/depreciation in excess of plan for the year	-625	300
Closing balance	**11,577**	**12,202**
Carrying amount	**11,577**	**12,202**

Note 42 Specifications for statement of cash flows

Cash and cash equivalents – Group

MSEK	31 Dec 2021	31 Dec 2020
The following subcomponents are included in cash and cash equivalents:		
Cash and bank balances	5,914	3,316
Current investments, equated with cash and cash equivalents[1)]	375	90
In statement of financial position and statement of cash flows	**6,289**	**3,406**

Cash and cash equivalents – Parent Company

MSEK	31 Dec 2021	31 Dec 2020
The following subcomponents are included in cash and cash equivalents:		
Cash and bank balances	5,522	3,083
Current investments, equated with cash and cash equivalents[1)]	375	90
In statement of financial position and statement of cash flows	**5,897**	**3,173**

1) Cash and cash equivalents include current investments (interest-bearing investments) that were classified as cash and cash equivalents based on the following:
- They have an insignificant risk of fluctuations in value
- They can be easily converted to cash
- They have a maximum maturity of three months from date of acquisition

Interest paid and dividend received

	Group		Parent Company	
MSEK	**2021**	**2020**	**2021**	**2020**
Dividend received	–	–	–	302
Interest received	1	6	116	144
Interest paid	-40	-52	-50	-88
Total	**-39**	**-46**	**66**	**358**

Note 42 continued

Adjustments for items not included in cash flow

	Group		Parent Company	
MSEK	**2021**	**2020**	**2021**	**2020**
Depreciation	3,132	3,136	2,464	2,384
Exchange differences	-133	45	-294	326
Return on current investments	-1,114	-1,048	-7	-214
Gain on sale/retirement of property, plant and equipment	29	0	68	-14
Change in other receivables/liabilities, derivatives	63	90	–	–
Provisions for pensions	-182	-99	-16	-29
Provision for urban transformation	366	1,396	366	1,396
Other provisions	164	176	214	289
Other non-cash items	-143	47	-248	-121
Total	**2,182**	**3,743**	**2,547**	**4,017**

Reconciliation of liabilities from financing activities

Group **MSEK**	**31 Dec 2020**	**Cash flows**	**Non-cash changes**	**31 Dec 2021**
Bond loans	3,241	-996	–	2,245
Lease liabilities	355	-14	–	341
Bank loans	12	-2	–	10
Acquisition of operations	–	–	88	88
Liabilities from financing activities	**3,608**	**-1,012**	**0**	**2,684**

Parent Company **MSEK**	**31 Dec 2020**	**Cash flows**	**Non-cash changes**	**31 Dec 2021**
Bond loans	3,241	-996	–	2,245
Bank loans	10	–	–	10
Liabilities from financing activities	**3,251**	**-996**	**0**	**2,255**

Acquisitions of subsidiaries – Group

MSEK	**2021**	**2020**
Acquired assets and liabilities		
Intangible assets	91	–
Property, plant and equipment	182	–
Financial assets	5	–
Inventories	18	–
Operating receivables	59	–
Cash and cash equivalents	30	–
Total assets	**385**	**–**
Non-current interest-bearing liabilities	-146	–
Deferred tax liabilities	-12	–
Current operating liabilities	-45	–
Total provisions and liabilities	**-203**	**–**
Non-controlling interests	-32	–
Purchase price paid	150	–
Less: Cash and cash equivalents in acquired business	-30	–
Effect on cash and cash equivalents	**120**	**–**

Note 43 Key ratios – disclosures

Alternative key ratios

The company also presents certain non-IFRS financial performance measures and key ratios in the annual report. The management considers this supplementary information to be important if readers of the report are to obtain an understanding of the company's financial position and performance. The implementation of IFRS 16 affected the calculation of net financial indebtedness and the net debt/equity ratio for 2019, but not to any material degree.

Definitions

Return on equity	Profit after tax as a percentage of average shareholders' equity.
Underlying operating profit/loss	Operating profit/loss excluding costs for urban transformation provisions and impairment of intangible assets and of property, plant and equipment.
Operating cash flow	Cash flow from operating activities and investing activities, excluding current investments. A reconciliation of operating cash flow is given in the financial statements on page 78.
Net financial indebtedness	Interest-bearing liabilities less interest-bearing assets.
Net debt/equity ratio	Net financial indebtedness divided by equity.

Net financial indebtedness

MSEK	31 Dec 2021	31 Dec 2020
Loans payable	2,684	3,608
Provisions for pensions	1,396	1,741
Provisions, urban transformation	14,423	14,272
Provisions, remediation	1,775	1,736
Less:		
Cash and cash equivalents	-6,289	-3,406
Current investments	-30,141	-19,073
Financial investments	-400	-348
Net financial indebtedness	**-16,553**	**-1,470**

Net debt/equity ratio

MSEK	31 Dec 2021	31 Dec 2020
Net financial indebtedness	-16,553	-1,470
Equity	67,565	48,412
Net debt/equity ratio, %	**-24.5**	**-3.0**

Net financial indebtedness

MSEK	31 Dec 2021	31 Dec 2020
Profit/loss after tax	22,604	9,757
Average equity	57,989	46,970
Return on equity, %	**39.0**	**20.8**

Note 44 Events after the closing date

LKAB is monitoring developments in the situation that has arisen in Ukraine since the end of the year. The direct impact on the company is limited at present, but it is too early to judge what consequences the security situation may have.

Note 45 Proposed appropriation of earnings

The Board and the President propose that the MSEK 51,484 in unappropriated earnings, of which MSEK 21,647 represents profit for the year, be allocated as follows:

MSEK	
Dividend, 700,000 shares at SEK 17,757 per share	12,430
Carried forward	39,054
Total	**51,484**

The Board's statement in accordance with Chapter 18 section 4 of the Swedish Companies Act to the 2022 Annual General Meeting of Luossavaara-Kiirunavaara AB regarding the dividend proposed for the 2021 financial year

The Board has proposed that a sum of MSEK 12,430 is distributed from non-restricted equity to the shareholder. Following this dividend it is proposed that MSEK 39,054 is carried forward. The proposed dividend represents 24 percent of Luossavaara-Kiirunavaara AB's non-restricted equity, which amounts in total to MSEK 51,484. In the Group as a whole retained earnings including profit for the year attributable to owners of the parent amount to MSEK 64,886 before the dividend and MSEK 52,456 after the dividend.

Operations

The company's operations are capital-intensive. Compared with other iron ore companies, which nearly all mine ore in open-pit mines, the company has a greater need for capital since underground mining requires more extensive investment. The business is highly volume-, price- and currency-dependant. In 2020 LKAB adopted a new strategy involving a major transformation of the company's business that could entail a high level of investment for a long period to come. LKAB has major commitments relating to urban transformation necessitated by the mining, in both its operating locations Kiruna and Malmberget. The company requires good financial strength over time to secure the company's commitments and strategy. In accordance with its finance policy, the company has set aside provisions to secure its liquidity needs, the urban transformation and pensions.

Financial position of the company and the Group

The financial position of the company and the Group as at 31 December 2021 is set out in the annual report for the 2021 financial year, where the accounting policies applied to assets, provisions and liabilities are also stated. The Group's equity includes accumulated unrealised gains in the amount of MSEK 1,946, of which MSEK 2,205 relates to changes in value during the year.

Consolidation requirements and liquidity

LKAB has a dividend policy stating that the dividend to the owner in the long term is to constitute 40 to 60 percent of the consolidated earnings after tax, adjusted to the average earnings level over a business cycle and taking into account investment plans, consolidation requirements and the Group's liquidity and position in general. The proposed ordinary dividend of MSEK 12,430 amounts to 55 percent of consolidated earnings after tax.

The proposed distribution of earnings does not impact the company's ability to meet existing and foreseen payment obligations on time. The company's liquidity ratio is considered to be clearly sufficient for the requirements that the liquidity forecasts imply, with good readiness to cope with variations in ongoing payment obligations.

Dividend justification

The Board has considered other known circumstances that could be of significance for the company's and the Group's financial position and that have not been taken into account within what is stated above.

In this consideration no circumstances have emerged that might make the proposed dividend appear unwarranted.

Dividend for the 2021 financial year

The Board proposes that a dividend is paid for the 2021 financial year in the amount of MSEK 12,430 in accordance with LKAB's dividend policy.

The Board's attestation

The Board of Directors and the President attest that the Annual Report was prepared in accordance with generally accepted accounting principles in Sweden and that the consolidated financial statements were prepared in accordance with international financial reporting standards as referred to in Regulation 1606/2002/EC of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards. The Annual Report and the consolidated financial statements give a fair presentation of the Parent Company's and the Group's financial position and earnings. The Administration Report for the Parent Company and the Group provides a fair review of developments in the Parent Company's and the Group's operations, financial position and earnings and describes significant risks and uncertainties faced by the Parent Company and the companies included in the Group.

Proposed appropriation of earnings

The Board and the President propose that the MSEK 51,484 in unappropriated earnings, of which MSEK 21,647 represents profit for the year, be allocated as follows:

Distributed to the company's owner	MSEK 12,430
Carried forward	MSEK 39,054
Total	**MSEK 51,484**

Luleå, 29 March 2022

Göran Persson
Chairman of the Board

Gunnar Axheim
Board member

Catrin Fransson
Board member

Eva Hamilton
Board member

Lotta Mellström
Board member

Bjarne Moltke Hansen
Board member

Ola Salmén
Board member

Gunilla Saltin
Board member

Per-Olof Wedin
Board member

Anders Elenius
Employee representative

Tomas Larsson
Employee representative

Björn Åström
Employee representative

Jan Moström
President and CEO

As shown above, the annual report, consolidated financial statements and the statutory sustainability report were approved for publication by the Board of Directors on 29 March 2022. The consolidated income statement, statement of comprehensive income and statement of financial position and the Parent Company's income statement and balance sheet are subject to approval at the Annual General Meeting on 28 April 2022.

Our audit report was issued on 29 March 2022.

KPMG AB

Helena Arvidsson Älgne
Authorised Public Accountant

Audit report

To the general meeting of the shareholders of Luossavaara-Kiirunavaara AB, corp. ID 556001-5835

Report on the annual accounts and consolidated accounts

Opinion

We have audited the annual accounts and consolidated accounts of Luossavaara-Kiirunavaara AB for the year 2021, except for the corporate governance statement on pages 58–70 and the sustainability report on pages 10–16, 20, 32–53, 55 and 57. The annual accounts and consolidated accounts of the company are included on pages 10–16, 20 and 32–133 in this document.

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the parent company as of 31 December 2021 and its financial performance and cash flow for the year then ended in accordance with the Annual Accounts Act. The consolidated accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the group as of 31 December 2021 and its financial performance and cash flow for the year then ended in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, and the Annual Accounts Act. Our opinions do not cover the corporate governance statement on pages 58–70 or the sustainability report on pages 10–16, 20, 32–53, 55 and 57. The statutory administration report is consistent with the other parts of the annual accounts and consolidated accounts.

We therefore recommend that the general meeting of shareholders adopts the income statement and balance sheet for the parent company and the group.

Our opinions in this report on the annual accounts and consolidated accounts are consistent with the content of the additional report that has been submitted to the parent company's audit committee in accordance with the Audit Regulation (537/2014) Article 11.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISA) and generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the *Auditor's responsibilities* section of our report. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our other ethical responsibilities in accordance with these requirements. This includes that, based on the best of our knowledge and belief, no prohibited services referred to in the Audit Regulation (537/2014) Article 5.1 have been provided to the audited company or, where applicable, its parent company or its controlled companies within the EU.

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

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the annual accounts and consolidated accounts of the current period. These matters were addressed in the context of our audit of the annual accounts and consolidated accounts as a whole, and in forming our opinion thereon, but we do not provide a separate opinion on these matters.

Provisions for urban transformation

See disclosure note 31 and 32 and accounting principles on page 90 in the annual accounts and consolidated accounts for detailed information and description of the matter.

Description of key audit matter

The group has significant obligations due to deformations in the ground caused by the mining operations. As at 31 December 2021 the group and the parent company have recognised provisions related to urban transformation in the amount of MSEK 14,423. The deformations in the ground are already so extensive, or will become so, that it is necessary to move parts of Kiruna and Malmberget.

The group has a legal obligation to compensate for damage resulting from its mining activities and therefore recognises provisions for urban transformation in Kiruna and Malmberget as the obligations arise. Provisions for these obligations are dependent on the extent of the ground deformations, estimates of damage and compensation claims from affected parties, future inflation and discount rates.

The assumptions used as the basis for the provisions are complex and difficult to estimate. Changes in the estimates and assumptions could have a significant impact on the group's and the parent company's earnings and financial position.

How our audit addressed the key audit matter

We have examined the group's framework for the approval and payment of compensation to affected parties. We have evaluated the adherence to the framework through sample testing.

Furthermore, we have inspected the group's procedures to identify obligations and assess the extent of the obligations including the assumptions made.

We have examined the reasonableness of the group's accounting policies, calculations and assumptions for recognition of urban transformation provisions, and the disclosures that have been included in the annual accounts and the consolidated accounts.

Property, plant and equipment

See disclosure note 15 and 16 and accounting principles on pages 86–87 and 90–91 in the annual accounts and consolidated accounts for detailed information and description of the matter.

Description of key audit matter

As at 31 December 2021 the group and the parent company have recognised property, plant and equipment in the amount of MSEK 41,466 and MSEK 36,229 respectively.

Depreciation periods for main haulage levels, facilities and equipment in mines is dependent on future ore extraction and the useful economic lives of the mines. It is essential that changes in production and the ore base are reflected in the applied depreciation method and useful economic life.

Changes to the assumptions regarding useful economic lives could have a material impact on the group's and the parent company's earnings and financial position.

How our audit addressed the key audit matter

We have gained an understanding of the planned mining and ore base and evaluated the group's principles and procedures for depreciation of mining-related property, plant and equipment.

We have evaluated the group's procedures for following up construction in progress and have verified through audit sampling reported capital expenditure against actual supplier invoices and other expenditure. We have assessed whether the accounting treatment is in line with the applicable accounting framework. We have assessed the depreciation periods and methods applied by the group for plant and equipment in the mines.

We have also evaluated the disclosures on property, plant and equipment that have been included in the annual accounts and the consolidated accounts.

Other information than the annual accounts and consolidated accounts

This document also contains other information than the annual accounts and consolidated accounts, and this is found on pages 1–9, 17–19, 21–31 and 138–170. The other information comprises also of the remuneration report which we obtained prior to the date of this auditor's report. The board of directors and the chief executive officer are responsible for this other information.

Our opinion on the annual accounts and consolidated accounts does not cover this other information and we do not express any form of assurance or conclusion thereon.

In connection with our audit of the annual accounts and consolidated accounts, our responsibility is to read the information identified above and consider whether the information is materially inconsistent with the annual accounts and consolidated accounts. In this procedure we also take into account our knowledge otherwise obtained in the audit and assess whether the information otherwise appears to be materially misstated.

If we, based on the work performed concerning this information, conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors and the Chief Executive Officer

The Board of Directors and the Chief Executive Officer are responsible for the preparation of the annual accounts and consolidated accounts and that they give a fair presentation in accordance with the Annual Accounts Act and, concerning the consolidated accounts, in accordance with IFRS as adopted by the EU, and for such internal control as they determine is necessary to enable the preparation of annual accounts and consolidated accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts and consolidated accounts the Board of Directors and the Chief Executive Officer are responsible for the assessment of the company's and the group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors and the Chief Executive Officer either intend to liquidate the entity or to cease operations, or have no realistic alternative but to do so.

Without prejudice to the Board of Directors' responsibilities and tasks in general, the Board's Audit Committee is responsible for overseeing the company's financial reporting process.

Auditor's responsibilities

Our objectives are to obtain reasonable assurance about whether the annual accounts and consolidated accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and generally accepted auditing standards in Sweden will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts and consolidated accounts.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the annual accounts and consolidated accounts, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of the company's internal control relevant to our audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board of Directors and the Chief Executive Officer.
- Conclude on the appropriateness of the Board of Directors' and the Chief Executive Officer's use of the going concern basis of accounting in preparing the annual accounts and consolidated accounts and, based on the audit evidence obtained, whether any material uncertainty exists related to events or conditions that may cast significant doubt on the company's and the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the annual accounts and consolidated accounts or, if such disclosures are inadequate, to modify our opinion about the annual accounts and consolidated accounts. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause an entity or a group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the annual accounts and consolidated accounts, including the disclosures, and whether the annual accounts and consolidated accounts represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated accounts. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We must inform the Board of Directors of, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We must also provide the Board of Directors with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and, where applicable, measures that have been taken to eliminate the threats or safeguards that have been taken.

From the matters communicated with the Board of Directors we determine those matters that were of most significance in the audit of the annual accounts and consolidated accounts, including the most important assessed risks for material misstatement, which are therefore the key audit matters.
We describe these matters in our auditor's report unless law or regulation precludes disclosure about the matter.

Report on other legal and regulatory requirements

Opinion
In addition to our audit of the annual accounts and consolidated accounts, we have also audited the administration of the Board of Directors and the Chief Executive Officer of Luossavaara-Kiirunavaara AB for the year 2021 and the proposed appropriation of the company's profit or loss.

We recommend to the general meeting of shareholders that the profit be appropriated in accordance with the proposal in the statutory administration report and that the members of the Board of Directors and the Chief Executive Officer be discharged from liability for the financial year.

Basis for opinion
We conducted the audit in accordance with generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the *Auditor's responsibilities* section of our report. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have fulfilled our other ethical responsibilities in accordance with these requirements.

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

Responsibilities of the Board of Directors and the Chief Executive Officer
The Board of Directors is responsible for the proposal on appropriation of the company's profit or loss. A proposal regarding a dividend includes an assessment of whether the dividend is justifiable considering the requirements which the company's and the group's type of operations, size and risks place on the size of the parent company's and the group's equity, consolidation requirements, liquidity and position in general.

The Board of Directors is responsible for the company's organisation and the administration of the company's affairs. This includes, among other things, continuous assessment of the company's and the group's financial situation and ensuring that the company's organisation is designed so that the accounting, management of assets and the company's financial affairs otherwise are controlled in a reassuring manner.

The Chief Executive Officer shall manage the ongoing administration of the company according to the Board of Directors' guidelines and instructions and, among other matters, take measures that are necessary to ensure that the company's accounting procedures are in accordance with laws and that assets are managed in a satisfactory manner.

Auditor's responsibilities
Our objective concerning the audit of the administration, and thereby our opinion about discharge from liability, is to obtain audit evidence to assess with a reasonable degree of assurance whether any member of the Board of Directors or the Chief Executive Officer in any material respect:
- has undertaken any action or been guilty of any omission which can give rise to liability to the company, or
- in any other way has acted in contravention of the Companies Act, the Annual Accounts Act or the articles of association.

Our objective concerning the audit of the proposed appropriation of the company's profit or loss, and thereby our opinion about this, is to assess with a reasonable degree of assurance whether the proposal is in accordance with the Companies Act.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with generally accepted auditing standards in Sweden will always detect actions or omissions that can give rise to liability to the company, or that the proposed appropriation of the company's profit or loss is not in accordance with the Companies Act.

As part of an audit in accordance with generally accepted auditing standards in Sweden, we exercise professional judgment and maintain professional scepticism throughout the audit. The examination of the administration and the proposed appropriation of the company's profit or loss is based primarily on the audit of the accounts. Additional audit procedures performed are based on our professional judgment, taking risk and materiality as a starting point. This means that we focus the examination on such actions, areas and relationships as are material for the operations and where deviations and violations would have particular significance for the company's situation. We examine and test decisions taken, support for decisions, actions undertaken and other circumstances that are relevant to our opinion concerning discharge from liability. As a basis for our opinion on the Board of Directors' proposed appropriation of the company's profit or loss, we examined the Board of Directors' reasoned statement and a selection of supporting evidence in order to be able to assess whether the proposal is in accordance with the Companies Act.

The auditor's examination of the corporate governance statement

The Board of Directors is responsible for the corporate governance statement on pages 58–70 and for ensuring that it is prepared in compliance with the Annual Accounts Act.

Our examination of the corporate governance statement has been conducted in accordance with FAR's auditing standard RevR 16 *The auditor's examination of the corporate governance statement*. This means that our examination of the corporate governance statement is different and substantially less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinion.

A corporate governance statement has been prepared. Disclosures in accordance with chapter 6 section 6 second paragraph points 2–6 of the Annual Accounts Act and chapter 7 section 31 second paragraph of the same law are consistent with the other parts of the annual accounts and consolidated accounts and are in accordance with the Annual Accounts Act.

The auditor's opinion regarding the statutory sustainability report

The Board of Directors is responsible for the sustainability report on pages 10–16, 20, 32–53, 55 and 57 and for ensuring that it is prepared in accordance with the Annual Accounts Act.

Our examination has been conducted in accordance with FAR's recommendation RevR 12 *The auditor's opinion regarding the statutory sustainability report*. This means that our examination of the sustainability report has a different focus and is substantially less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that our examination provides a reasonable basis for our opinion.

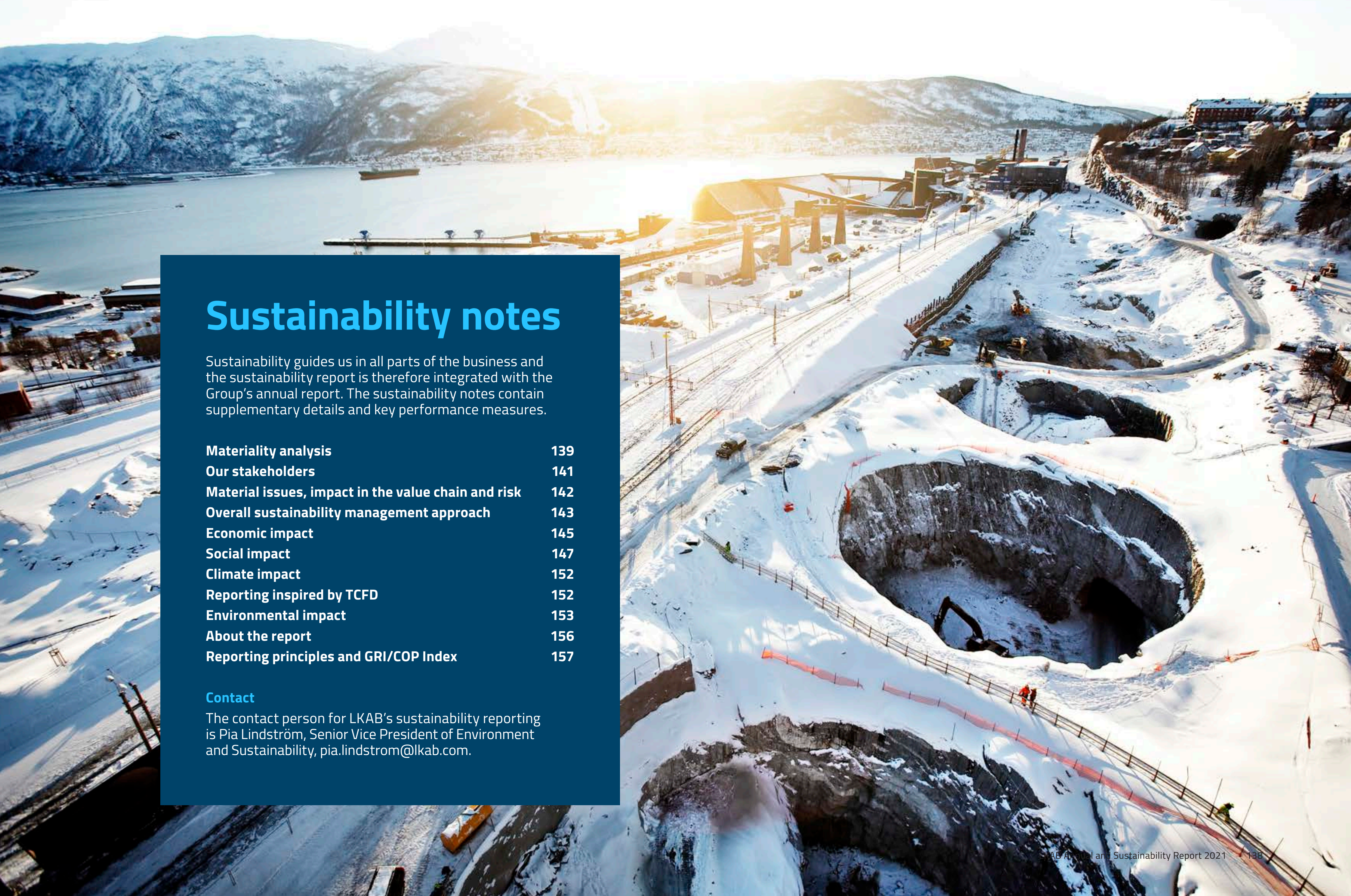
A statutory sustainability report has been prepared.

KPMG AB, Box 382, 101 27 Stockholm, was appointed auditor of Luossavaara-Kiirunavaara AB by the general meeting of the shareholders on 22 April 2021. KPMG AB or auditors operating at KPMG AB have been the company's auditor since 2019.

Stockholm, 29 March 2022

KPMG AB

Helena Arvidsson Älgne
Authorised Public Accountant



Sustainability notes

Sustainability guides us in all parts of the business and the sustainability report is therefore integrated with the Group's annual report. The sustainability notes contain supplementary details and key performance measures.

Contact

The contact person for LKAB's sustainability reporting is Pia Lindström, Senior Vice President of Environment and Sustainability, pia.lindstrom@lkab.com.

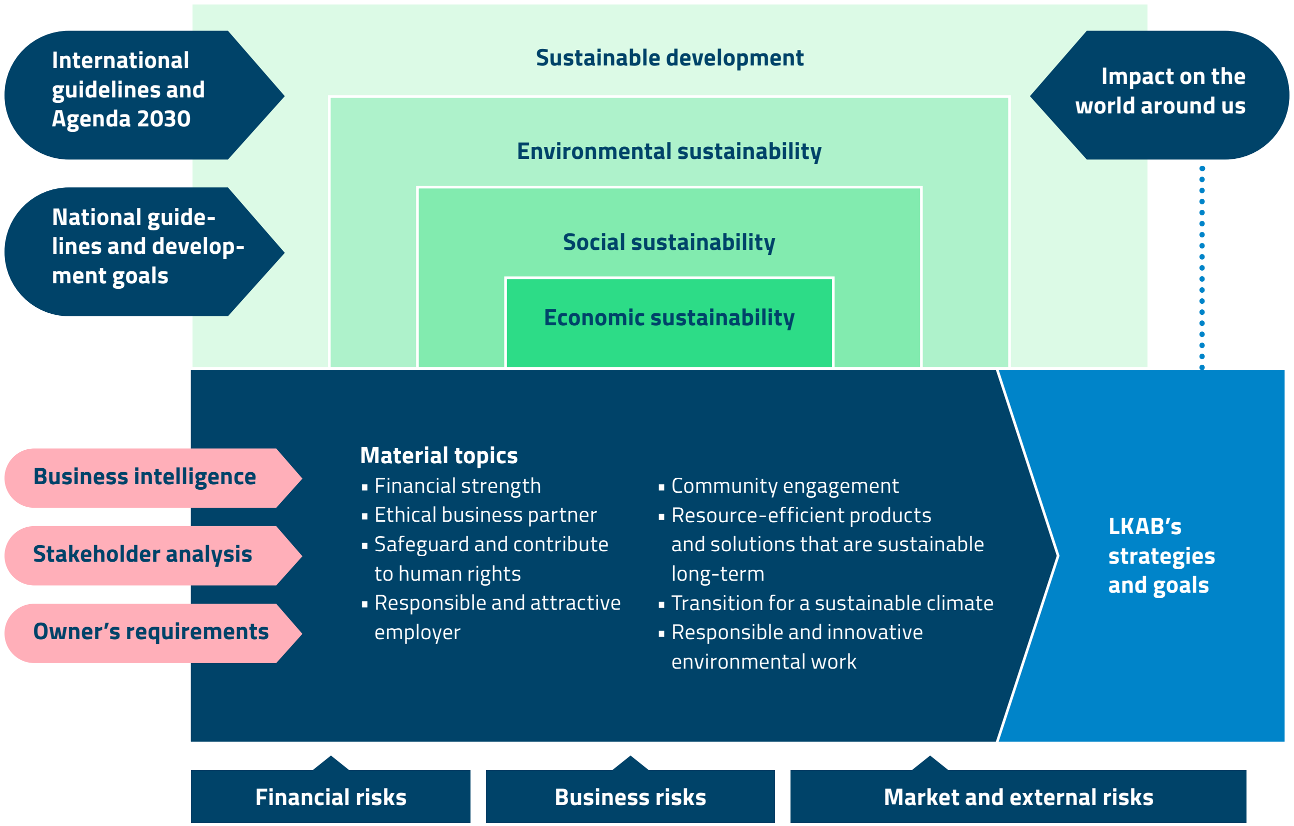
Materiality analysis and priorities for sustainability work

Materiality analysis

The materiality analysis provides decision support for strategy work and setting our goals for sustainable development, and provides the boundaries for the content of the sustainability report. The materiality analysis conducted in 2019 identified eight areas where we have the greatest opportunity and obligation to minimise the negative impact of the operations, and the greatest opportunity to contribute to sustainable development.

LKAB reports the areas identified as relevant according to the materiality analysis and based on dialogue with our stakeholders. See the matrix on page 142 and specific disclosures on pages 145–155.

In 2021 new strategic goals were adopted for the period 2022–3020 and LKAB updated the strategic framework in order to clarify our priorities within environmental and climate sustainability, social sustainability and Economic sustainability. A new materiality analysis is planned for 2022 with the aim of identifying stakeholders' expectations and priorities in relation to our transformation and strategic focus.



LKAB's priority sustainability topics 2022–2030

Climate sustainability – how we become part of the solution	Environmental sustainability – how we minimise our negative impact	Social sustainability – how we take responsibility	Economic sustainability – how we create sustainable value
▪ Fossil freedom and reduced carbon emissions	▪ Biodiversity ▪ Sustainable management of water and waste ▪ Secure energy supply and efficient energy use ▪ Circularity and resource efficiency	▪ Safety first ▪ Local social responsibility and engagement ▪ Diversity and equal opportunity	▪ Financial strength ▪ High business ethics and sustainable value chain

Process for defining report content
The sustainability report has been prepared in accordance with the GRI principles and implementation requirements in the GRI Standards: Core option. Sustainability matters are an integral part of our strategy and operations so that we contribute to sustainable development. The strategy, including our strategic goals, is reported on pages 14–21.

Principles of materiality analysis
Material topics are defined based on GRI principles:
- Stakeholder inclusiveness
- Sustainability context
- Materiality
- Completeness

Business intelligence
Sustainability topics that are important for stakeholder trust and for LKAB's ability to contribute to a sustainable society are identified through broad and continuous business intelligence that is based on:

- Identifying best practice for sustainable business in general and for the industry specifically, including the development of guidelines in accordance with the EU taxonomy
- Comparing with topics identified as material by competitors and industry colleagues, in Sweden and globally
- Standards based on international initiatives such as the UN Sustainable Development Goals (SDGs) and management systems
- Areas and topics raised by the media that are related to LKAB and the mining industry

Stakeholder engagement
LKAB identifies stakeholders based on impact in the value chain. We define stakeholders as groups of people that, directly or indirectly, may affect or be affected by our operations and the decisions made by LKAB. Priority stakeholders are selected based on this definition and on mutual influence.

We maintain continuous dialogue with our stakeholders to identify topics and expectations, as well as to validate the ongoing work and our priorities. A more in-depth analysis is carried out regularly, most recently in 2019, which included in-depth interviews and four workshops. For our stakeholders, forms of dialogue and topics raised see page 141.

Prioritisation of material topics
We apply an external and an internal perspective when prioritising material topics, the external perspective being based on the topics that stakeholders highlight as priorities. The stakeholders' priorities then form a common basis for an internal assessment. The internal perspective is further based on the areas where we have opportunity and a responsibility to act for sustainability and to create value within the frameworks of our business model and vision. A topic with a major impact on sustainable development may be given a lower materiality classification if LKAB's procedures and governance are adequate and the risks associated with the topic are therefore assessed to be lower.

Validation of the materiality analysis
The prioritised topics are validated continually with internal and external stakeholders, and we also check them against surveys that we commission from Novus, for example, and employee surveys. Stakeholders give feedback on the sustainability reporting continually during the year.

Boundaries
For each material topic the boundaries of the reporting are described in the table on page 142 and on pages 145–155, where it is specified whether the topic is material to the LKAB Group (internally) or for some point in the value chain (externally).

Responsibility for the materiality analysis
The sustainability department is responsible for ensuring that there is an up-to-date materiality analysis. A working group on sustainable development participates in the prioritisation of topics and in the validation of the analysis. The analysis is presented to Group management by the Senior Vice President of Environment and Sustainability.

Our stakeholders

LKAB conducts active and ongoing dialogue with many different stakeholders in order to encourage the cooperation required to run a sustainable business and lead the transformation of our industry.

Forms of dialogue with stakeholders	Topics raised	How LKAB impacts this group
Customers Continuous dialogue in various forums, collaborations and development projects.	▪ Product development for more sustainable products and solutions ▪ Communication to create incentives that promote active sustainability work	***Locally and globally:*** Several of our customers are active in the global market, and through development projects and long-lasting customer relationships we promote sustainable development by developing climate-efficient products and processes.
Employees Informal and formal dialogue in the form of workplace meetings, performance reviews, strategy days, health and safety officer meetings, union negotiations and employee surveys.	▪ Attractive employer – a broad commitment to recruitment, securing skills supply, careers, further training and rehabilitation, among other things ▪ Helping to make the locations where we operate more attractive ▪ Practise what you preach – important to send the right signals	***Locally:*** Strategic work to achieve good working conditions, greater equality and diversity contributes to health and well-being among employees.
Suppliers and contractors Regular meetings, dialogue, supplier days and partnerships with suppliers.	▪ Continued development of logistics management to shift more freight from road to rail ▪ Competition on equal terms ▪ Requirements relating to sustainability are passed on along the supply chain	***Locally:*** We secure jobs locally and regionally. ***Globally:*** To positively impact human rights, environmental and economic sustainability throughout the value chain we set requirements of our suppliers in accordance with the Supplier Code of Conduct.
Communities – local residents Cooperation agreements with municipalities affected by our operations. Individual and public meetings, information offices, consultation, publications and social media content ensure opportunities for dialogue. LKAB also engages in collaborative projects and sponsorship, and is involved with various organisations.	▪ Including the community in processes and decisions ▪ More and better information and dialogue to reduce concerns ▪ Co-existence – helping to make the Swedish orefields more attractive ▪ Restoring nature such as bogs and watercourses, and remediation of old deposit sites	***Locally:*** LKAB's operations have varying degrees of social, environmental and economic impact on local residents, on other industries in the local areas and on indigenous peoples. Dialogue with interest groups in various areas, for example, enables us to understand our impact.
Communities – indigenous peoples Individual meetings, public meetings, consultation and information offices provide opportunities for dialogue. There are also cooperation agreements with the Sami communities affected by the operations.	▪ Minimising local environmental impact and dust generation ▪ More and better information and dialogue to reduce concerns ▪ Co-existence – cooperation	***Locally:*** LKAB's operations have varying degrees of social, environmental and economic impact on indigenous peoples. Dialogue in various areas enables us to understand our impact.
Authorities and legislators Public meetings and individual meetings, nationally and internationally, with relevant authorities, county administrative boards and municipalities.	▪ Good advance planning for all decisions and processes ▪ Authority and responsibility to satisfy permit requirements ▪ Setting an example together ▪ Reduced climate and environmental impact	***Locally***: Authorities and legislators set requirements of the operations in order to minimise negative impact and ensure that LKAB works to maintain permits. ***Globally:*** We contribute specialized expertise – in the EU, for example – in order to have a positive impact on social, environmental and economic standards.
Interest groups Dialogue and consultation with interest groups representing the environment and communities. Sector cooperation via membership of organisations such as Euromines and Svemin.	▪ Human rights, particularly the rights of children and indigenous peoples ▪ Circular economy, recycling and sustainable consumption ▪ Legislation and political governance for efficient permit processes, among other things ▪ Attractive workplaces to ensure skills supply ▪ Elevating the entire spectrum of sustainability work and creating acceptance for mining operations	***Locally and globally:*** Dialogue with e.g. interest groups in various areas enables us to understand impacts.
Schools, universities and colleges Individual and public meetings, collaborative projects, sponsorship and involvement on boards.	▪ Playing a significant role in the political discussion of permit processes relating to minerals ▪ Attractive workplaces with equal opportunities in "heavy industry" ▪ Digitalisation on human terms	***Locally and globally:*** Ongoing dialogue plus continuous and project-based collaboration with schools, universities and colleges increases knowledge and opportunities for continued operations and positive development.
Owner LKAB's owner, the Swedish state, is represented on the Board and at the Annual General Meeting. Dialogue and reporting take place continuously through Board representation, owner analysis, visits and meetings.	▪ Safe and healthy work environment, decent work and good working conditions ▪ Human rights ▪ Diversity and equal opportunity ▪ Reduced climate and environmental impact through sustainable use of resources ▪ Good business ethics and active anti-corruption work ▪ Contribute to achieving the global Sustainable Development Goals	***Locally and globally:*** The owner has high requirements: the state's portfolio of companies must set an example as regards corporate sustainability. This results in greater focus on sustainability both in the company and in the value chain.

Material issues, impact in the value chain and risk

LKAB is working to achieve a sustainable mining industry both nationally and internationally, including by setting requirements in the value chain for social, environmental and economic sustainability. Within each topic we have identified a number of material issues. Our work on these material issues is linked to our strategic risks and impacts the various parts of the value chain as shown below.

Material issue	Suppliers	LKAB	Customers	Communities	Link to strategic risk	
ECONOMIC IMPACT						
Financial strength	●	●	●	●	▪ Financial risk ▪ Market risk	▪ Risk of insufficient mineral reserves and mineral resources ▪ Risk of not being sufficiently competitive
Ethical business partner	●	●	●	●	▪ Risk of losing credibility	
SOCIAL IMPACT						
Safeguard and contribute to human rights	●	●	●	●	▪ Risk of losing credibility	
Responsible and attractive employer	●	●		●	▪ Risk of insufficient diversity and skills ▪ Risk of losing credibility	▪ Risk of accidents and illness ▪ Risk of external intrusion and damage
Community engagement	●	●		●	▪ Risk of losing credibility ▪ Risk of negative environmental impact	
CLIMATE IMPACT						
Resource-efficient products and solutions that are sustainable long-term	●	●	●	●	▪ Market risk ▪ Risk of not being sufficiently competitive	▪ Risk of negative environmental impact ▪ Risk of external intrusion and damage
Transition for a sustainable climate	●	●	●	●	▪ Risk of negative environmental impact ▪ Market risk	▪ Risk of not being sufficiently competitive ▪ Risk of a lack of efficient, legally secure processes
ENVIRONMENTAL IMPACT						
Responsible and innovative environmental work	●	●	●	●	▪ Risk of negative environmental impact ▪ Risk of losing credibility	▪ Risk of a lack of efficient, legally secure processes

Overall sustainability management approach

The Group's strategic goals for sustainable value creation are set by the Board of Directors. The goals ensure that the business is run with a focus on sustainability, providing the conditions for and acceptance of its long-term operation. LKAB must also satisfy its owner's requirement that, as a state-owned company, it sets an example in the area of corporate sustainability. The strategic goals are detailed on page 20. The Board of Directors has overall responsibility for the company's sustainability work; see pages 37–46.

Standardising and activating governing documents

The sustainability perspective is integrated into our business management. In 2021 new strategic goals were adopted for the Group and the strategic framework was reviewed in order to link sustainability even more clearly to the business. As part of this we reviewed the management approach to measurement and monitoring of the goals at all levels in the business.

Our starting point is our standardising governing documents, which clarify our approach and state how our operations are to be conducted. In addition to directives from our owner, this includes our vision, mission and values as well as our Code of Conduct and a number of policies and Group guidelines that support our work in key areas.

Activating governing documents provide concrete instructions to act in a certain way in order to achieve the desired development. These include the Group strategy, which has a time horizon of up to 2045 and sets the framework for all other activating governing documents. Part of the Group strategy is our Roadmap 2030, which sets out in concrete terms how active sustainability work is to contribute to the realisation of the Group's strategy. The most operational category of activating governing documents consists of the sustainability programmes, operation plans and business plans for the business areas and the group-wide functions, which break down the Group's overall goals into goals and activities specific to their activities.

Responsibility, monitoring and evaluation

Operational responsibility lies with the President and CEO. The sustainability department is responsible for developing and supporting the Group's sustainability work. The Senior Vice President Enviorment and Sustainability is a member of the Group management team.

Reporting to the Board takes place quarterly and in conjunction with dialogue with the owner.

Many key performance indicators are monitored continuously to ensure that LKAB is complying with permits and conditions. The results are sent to the relevant authorities for external monitoring.

Data collection and the quality of processes are evaluated by internal business auditors as well as in the external assurance of the sustainability reporting.

LKAB has a whistleblower system for reporting any irregularities. The system is called SpeakUp and is available to both internal and external parties. Reports can be made in multiple languages and anonymously, verbally, in writing or via a meeting. Finance Legal is responsible for investigating the matters notified. Reporting takes place to the Board's Audit Committee. The Ethics Council has an advisory function to Legal and is responsible for procedures, calibration and evaluation of the system. The Ethics Council includes the Chief Financial Officer, General Counsel and the Senior Vice President of HR.

Membership of associations

CSR Sweden
Network for driving sustainability efforts

Euromines
The European association for the mining industry

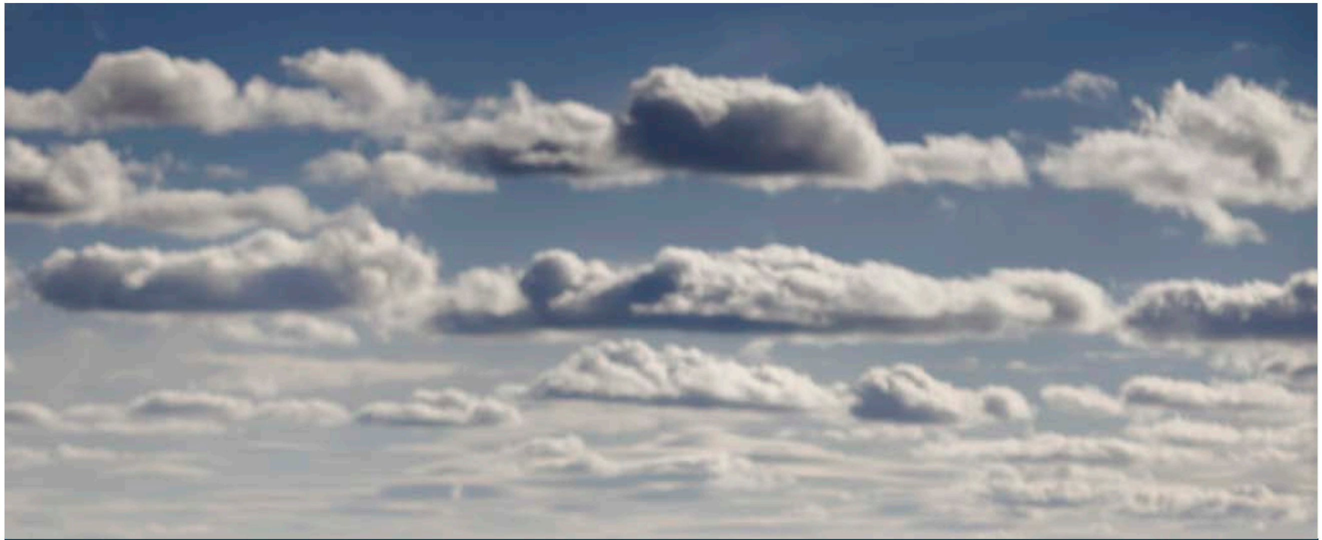
UN Global Compact
Initiative to promote sustainability topics

Jernkontoret
The industry association of the Swedish steel sector, where LKAB participates actively in the environmental committee and sustainability network

Svemin
The industry association of the mining, minerals and metals sector in Sweden; employer issues are dealt with in the mining employers' association Gruvornas Arbetsgivareförening (GAF)

Swedish Safety Culture Network (SÄKU)
Network for safety culture

Transparency International Sweden
Anti-corruption network



External charters, principles and initiatives

UN Global Compact
In autumn 2019 we signed up to the UN Global Compact. Our membership is a way of showing that we accept our responsibilities as regards human rights, labour, the environment and anti-corruption in accordance with the Global Compact's Ten Principles. These are based on the Universal Declaration of Human Rights, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the United Nations Convention Against Corruption. These principles form the basis of the Group's Code of Conduct and Supplier Code of Conduct. The Annual and Sustainability Report constitutes LKAB's Communication on Progress (COP).

UN Guiding Principles on Business and Human Rights
We aim to act in accordance with UN Guiding Principles on Business and Human Rights, which is reflected in our Code of Conduct, Sustainability Policy, Human Rights Guideline and the Supplier Code of Conduct.

Global Reporting Initiative (GRI)
Since the 2008 reporting year LKAB has applied the GRI's guidelines on sustainability reporting, in accordance with the state's ownership policy. As of reporting year 2018 LKAB applies the Standards version along with the Mining and Metals Sector Supplement.

GruvRIDAS
Work on dam safety takes place in accordance with GruvRIDAS, the guidelines for this area issued by Swedish industry association Svemin. Among other things, the guidelines regulate the scope and regularity of inspection and control of dams.

GRAMKO
LKAB works for consensus on environmental matters across the industry by actively participating in GRAMKO, Svemin's work environment committee.

OECD Guidelines for Multinational Enterprises
We aim to comply with these international guidelines, which have been incorporated into the Group's Code of Conduct and Supplier Code of Conduct.

REACH
(Registration, Evaluation, Authorisation and Restriction of Chemicals)
LKAB is covered by the EU regulation on chemical substances. The majority of the chemically modified products that are produced and sold are registered, while other products are naturally occurring minerals that are exempt from registration under REACH.

UNICEF's Children's Rights and Business Principles
Our commitment to these principles on children's rights is reflected in the Group's Code of Conduct and Supplier Code of Conduct.

Agenda 2030
LKAB works actively to contribute to the UN Sustainable Development Goals, also known as Agenda 2030. See pages 43–46.

Certification

To ensure compliance with Swedish legislation, comply with LKAB's management system and similar requirements, and to systematically identify risk factors and meet future demands and expectations, LKAB's operations are certified to ISO 9001 – Quality Management, ISO 14001 – Environmental Management, ISO 45001 – Occupational Health and Safety, ISO 50001 – Energy Management and to SA 8000 – Social Accountability.

ISO certification held	ISO 9001	ISO 14001	ISO 45001	ISO 50001	SA 8000
LKAB	●	●	●	●	
LKAB Berg & Betong AB	●	●	●		
LKAB Mekaniska AB	●	●	●		
LKAB Kimit AB	●	●	●		
LKAB Fastigheter AB					
LKAB Nät AB					
LKAB Malmtrafik AB	●	●	●	●	
LKAB Malmtrafikk AS	●	●	●	●	
LKAB Norge AS	●	●	●	●	
LKAB Minerals AB	●	●	●		
LKAB Minerals Ltd	●	●	●		
LKAB Minerals Oy	●	●	●		
LKAB Minerals BV	●	●	●		
LKAB Minerals GmbH	●	●			
LKAB Minerals AP	●	●	●		
LKAB Minerals Tianjin	●				
LKAB Minerals Inc	●				
Likya Minerals	●	●	●		
LKAB Wassara	●	●	●		
LKAB Trading	●				●

Economic impact

Financial strength

Materiality and impact

LKAB has a significant economic impact. Our profitability creates jobs for employees, contractors and suppliers. Over the past decade the dividend to our owner – the Swedish state – has been significant, as have taxes paid in Sweden, Norway and other countries. Investments in research and development, infrastructure, the urban transformations, acquisitions and sponsorship are further effects of the economic value we create.

Our economic stability is dependent on two things: mineral reserves and demand for our products. A mineral resource is an accumulation of minerals in bedrock which can be commercially extracted. A mineral reserve is the part of the resource that can be profitably extracted. Good knowledge of mineral reserves is essential for major long-term investment decisions, since the volume and quality of the minerals are crucial for product quality, production volumes and costs.

As mining takes place at deeper levels in our mines, further cost efficiencies need to be made in the way we mine in order to maintain our competitiveness. Efficient mining methods on an even greater scale, automation and transport using self-driving vehicles, 24-hour mine operation and production management in real time are important development areas for competitive mining.

To ensure continued demand and a stable global customer base our products must be of high quality and be delivered on schedule. To achieve this we must work constantly to minimise disruptions in production and conduct ongoing product and process development, so that we can continue to be the most competitive supplier going forward.

Our transition to carbon-free processes and products involves major investments over a long period, which will primarily be financed by cash flow from our own operations. LKAB has issued its first green bonds, raising SEK 2 billion in total. The bonds mature in 5.25 years and the proceeds will be used for investments in the transformation to carbon-free, autonomous mining.

Boundary: material both internally and externally.

Governance

LKAB is governed by financial targets and by policies for dividends, currency, credit and finance, among other things. The President and CEO and the Chief Financial Officer (CFO) are responsible for financial performance as reported in interim reports and in the Annual and Sustainability Report. In its exploration work LKAB complies with permits, national legislation and with international and Nordic guidelines, with the Senior Vice President of Exploration, Strategy and Business Development having responsibility for this.

Economic value distributed (MSEK)	2021
Suppliers excl. sponsorship	14,249
Sponsorship activities	223
Employees	4,475
Urban transformation payments	2,681
Shareholders	5,850
Taxes	5,480
Total value distributed	**32,958**

Distributed to suppliers incl. sponsorship (MSEK)	2021
Materials etc.	2,868
Energy	2,366
Transport	819
Other operating expenses	8,416
Board fees	3
Total distributed to suppliers	**14,472**

Distributed taxes by country (MSEK)	2021
Sweden	5,355
Norway	42
Rest of World	84
Total distributed to tax	**5,480**

Ethical business partner

Materiality and impact

LKAB is both a supplier and a customer within various sectors. Certain geographical areas, products and segments are associated with greater sustainability risks, particularly as regards corruption, environmental impact, working conditions and human rights.

Our business is to be run with great integrity and we act in a professional, businesslike and impartial manner in our relations with our business partners. Our desire to set an example both in industry and in the community demands systematic and preventive work within anti-corruption and business ethics, which develops our own organisation along with our business partners in the value chain. These efforts are aimed at promoting social factors such as health, safety and labour rights, and preventing the risk of child labour and forced labour. We also work together to manage environmental factors such as biodiversity, emissions to land, water and air, as well as emissions that impact the climate.

Our aim is to work with business partners that set an example in corporate sustainability, which also reduces business risk and contributes to cost savings.

Boundary: material both internally and externally.

Governance

Risks of corruption and irregular practices are assessed as part of the Group's overall risk management. The in-depth analysis of corruption risk carried out in 2020 provided a basis for developing an anti-corruption programme which is expected to be completed in 2022.

Our values "Committed – Innovative – Responsible", our Code of Conduct, our Group guideline on hospitality, gifts and other benefits, and the Code to Prevent Corruption in Business provide guidance on the desired behaviour within the organisation. The Code of Conduct is available in Swedish, Norwegian, English, German, Dutch, Chinese and Turkish to meet the needs of the employees. Training in the Code of Conduct is continuous and takes place through interactive training as well as discussion and review at workplace meetings. The number of employees that have completed the training is followed up on a quarterly basis. The training also forms part of the induction process for new employees.

For suppliers there is a separate code of conduct. LKAB conducts its work on sustainable sourcing through risk-based assessment, requirements in the form of basic requirements, the Supplier Code of Conduct, dialogue, training and monitoring. All suppliers must fulfil the basic requirements. There are exemptions for suppliers used for occasional transactions such as membership fees, advertising, conferences, taxi journeys and subscriptions. High-risk suppliers are requested to complete a self-assessment in respect of the requirements in the Supplier Code of Conduct. This is then followed up jointly with the supplier. Responsibility for cooperation with suppliers and subcontractors lies partly with LKAB's purchasing organisation and partly with the respective subsidiary.

Corruption

Incidents where an employee has used their position for personal gain

- 2021: 0 incidents (2020: 0 incidents)

Arbitrary conduct

Incidents with consequences for an employee under labour law because of breach of the contract of employment

- 2021: 3 incidents (2020: 0 incidents), all of which were dealt with

Purchases and suppliers

LKAB makes significant purchases that impact the world around us. We must act in a sustainable way to reduce the risks all along the value chain, focusing on the goals in Agenda 2030. Specific priority areas include suppliers' work on human rights, the work environment, the environment and business ethics/anti-corruption.

We have around 4,800 suppliers in various sectors. These include around 50 that have been identified as being higher risk. Just over half of purchasing consists of contract work, transport and logistics. A further significant part is made up of purchases of equipment, raw materials and chemicals, as well as various types of services. LKAB's suppliers can be found in 35 different countries; mostly in Sweden and Norway, but also in the rest of Europe, the US and Asia.

Risk-based approach

LKAB's work on sustainable purchasing is based on a risk perspective. Suppliers are classified as regards geographic risk, industry/product risk and business-critical risk. Our Supplier Code of Conduct has two parts: basic requirements and enhanced requirements. The basic requirements must be met by all suppliers from the first delivery of goods or services. These are requirements to which we take a zero tolerance approach. The enhanced requirements take the basic requirements and add a greater level of detail. We expect all suppliers to try to fulfil the enhanced requirements within an agreed period and to pass on these requirements along their value chain.

Under the updated ownership policy, LKAB has to specify labour law requirements for suppliers in its purchasing. These are minimum requirements relating to wages, working hours and annual leave in accordance with applicable laws and regulations or terms that have been agreed in relevant collective bargaining agreements. The requirements made of the main supplier also apply to any subcontractors that directly contribute to producing the product or service at any stage. We conduct follow-ups on suppliers' sites where there is deemed to be a high risk of deviation from the Supplier Code of Conduct.

During these site visits LKAB analyses the operations and interviews employees and management. After its visits the supplier is given a report detailing identified points of non-compliance with the requirements set and recommended actions that should be prioritised. The suppliers then come back with an action plan, which may result in joint improvement projects. Restrictions due to Covid-19 limited the number of on-site supplier audits during the year. The focus was therefore on instead carrying out audits online and on preparatory talks with suppliers to ensure a sustainable value chain.

Strategic partnerships with suppliers

LKAB sees great advantages in developing partnerships with strategically important suppliers. The intention is to identify innovative products and solutions that contribute to increased sustainability, productivity and cost efficiency. Consolidating the work to fewer suppliers and establishing long-term relationships provides better conditions to develop along with our suppliers in priority areas such as the work environment, safety and quality. In procurement, greater importance is being attached to the suppliers having the skills and resources to work on sustainability matters.

LKAB's supplier handbook states that only two subcontractor stages are allowed when renegotiating contracts or entering into new contracts. Fewer stages increases the opportunities for streamlining sustainable collaboration with the contractors.

Purchasing office in Asia

LKAB's local purchasing office in Shanghai, China, helps to lower costs, improve quality and reduce sustainability risk in the value chain. This local presence makes it easier to support suppliers considered to have good potential to develop and improve, for example in the areas of health and safety, employment terms, the environment and business ethics.

Modern Slavery Act Transparency Statement

In accordance with the requirements of the UK Modern Slavery Act 2015, which applies to all companies with operations in the UK, LKAB publishes an annual statement describing the steps taken to ensure that no form of modern slavery or human trafficking occurs within our operations or our supply chains.

Social impact

Safeguard and contribute to human rights

Materiality and impact

Social responsibility extends throughout the value chain – within our organisation, to our local communities, to suppliers and customers. We must give consideration to human rights and take responsibility for ensuring that these rights are respected, with a particular focus on our social impact from mining, on our operations and production in high-risk countries, and on indigenous peoples in the communities where we operate. Successful social sustainability efforts involve systematically identifying and managing risks associated with impacts on human rights, but also to giving consideration to and actively including our stakeholders in the local communities in our decision-making processes.

Boundary: material both internally and externally.

Governance

In accordance with our owner's requirement that state-owned companies respect and uphold human rights, risk analysis is conducted to effectively identify and manage risks associated with direct and indirect negative impact on human rights. This risk analysis results in action plans in accordance with our guidelines on human rights. In 2021 LKAB published its third statement on modern slavery and human trafficking, describing the measures taken to ensure that modern slavery and human trafficking do not occur in our operations and value chain. As part of implementing the statement LKAB has decided to participate in the ICC Forum on human rights in order to be involved, have an influence and find out about future changes and legislation at an early stage. In addition, a new risk management system for suppliers has been implemented, supplier days have been held, and new strategic Group goals have been established as well as a sustainability roadmap. Many of the material topics include various human rights such as non-discrimination, equal opportunity, health and safety, labour rights and the rights of indigenous peoples. For further information see other material topics.

Human rights are communicated in the Code of Conduct and through associated training. As an employer it is important to have a continual dialogue with trade union representatives, since these represent the employees' interests. Employees are represented on the Board by union representatives. Responsibility for cooperation with suppliers and subcontractors lies partly with our purchasing organisation, but also within the respective subsidiary. The Senior Vice President of Urban Transformation is responsible for implementing the action plan for urban transformation.

Operations in or adjacent to indigenous peoples' territories, and agreements with indigenous peoples

The Sami people and Sami communities have a special position as a stakeholder group due to their status as indigenous peoples. To ensure that LKAB does not violate the human rights of indigenous peoples, the Group conducts dialogue and cooperates with the three Sami communities within whose territories LKAB conducts operations. Cooperation agreements have been drawn up, where relevant based on the principle of free, prior and informed consent (FPIC) as expressed in international law on the rights of indigenous peoples. The agreements form a framework for the forums and working methods that are needed for sharing information, decision-making and ongoing consultation. They are built on reciprocity and respect, and aim to put everyone in a better situation to reach agreement and find solutions on different issues.

Incidents of violations involving rights of indigenous peoples

Questions have been raised as to whether LKAB has disregarded human rights (protection of property) as a result of the substantial number of collisions with reindeer along the Ore Railway. An external review will be carried out in cooperation with the Sami communities affected.

Responsible and attractive employer

Materiality and impact

To be an attractive employer we must offer professional challenges, broad and clear career paths and personal development through lifelong learning. Essential to this is a good organisational and social work environment that enables people to develop and ensures that diversity, equal opportunity and non-discrimination are a given. Future requirements are analysed to identify key skills and ensure that those in each position have the right competencies for the job.

Our operations are associated with health and safety risks for employees, contractors and suppliers, and LKAB has a great responsibility as regards health and safety, the work environment and working conditions. Anyone wishing to enter the industrial areas and mines must complete interactive safety training, whether they are employed by us or are an external person. Plans and organisation for managing various types of crises are in place, and training activities take place regularly.

Work to prevent and eliminate occupational health and safety risks, to create safe workplaces and to manage work-related injuries and unsafe situations is based on cooperation between employer, employees, trade unions, health and safety officers, support organisations, clients and suppliers.

Boundary: material internally.

Governance

2021	LKAB Group
Number of suppliers audited in respect of the following impacts:	
308-2 Environmental	19
414-2 Social	26
Number of suppliers identified as having significant actual and potential negative impacts:	
308-2 Environmental	1
414-2 Social	1
Significant actual and potential negative impacts identified:	
308-2 Environmental	Failures/shortcomings in the management of hazardous waste, chemicals and emissions. Environmental permit not updated.
414-2 Social	Failures/shortcomings in employment terms and working conditions, such as working hours, salaries, contracts, employee insurance and safe workplaces, and failure by suppliers to set and monitor requirements.
Percentage of suppliers identified as having impacts with which improvements were agreed upon as a result of assessment, as a percentage in each area:	
308-2 Environmental	100%
414-2 Social	100%
Percentage of suppliers identified as having impacts with which relationships were terminated as a result of assessment. Information for each area:	
308-2 Environmental	0
414-2 Social	0

This work is governed by national legislation and regulations on the work environment as well as the Group's sustainability policy, health and safety goals, safety management system, Code of Conduct, guidance on diversity, Supplier Code of Conduct, supplier handbook, Group HR guidelines, employee handbook, and Group guidelines on communication. The "Safety First" and "Golden Rules" programmes aim to reinforce the safety culture and reduce the number of accidents through systematic efforts relating to the work environment and health. Contractors are also included in these efforts and statistics are also kept of accidents involving contractors. Objectives within this area are followed up on a quarterly basis, with reporting to the Board of Directors. In addition, other metrics are monitored to ensure that the work is proceeding according to plan and in accordance with the goals for the operations.

Work environment and health-related matters are handled by local work environment teams and by central work environment, health and safety and rehabilitation committees. The teams include representatives of employees and trade unions.

The President and CEO has delegated employer responsibility to department, section and production managers. The Risk Committee and the Chief Risk Officer (CRO) are responsible for structure and for exercises and drills relating to crisis situations. The Senior Vice President of HR is responsible for strategic personnel matters, including skills availability and salaries, but operational responsibility is delegated down the line.

Employee performance reviews and surveys

Performance reviews and employee surveys are conducted regularly and we work on the results on a continual basis. The results of the employee survey conducted in autumn 2021 indicate an improvement on the results of the last survey, which took place in 2019. The Employee Satisfaction Index (on a scale of 1 to 4), which measures employees' general satisfaction, increased to 3.38 (2019: 3.20).

Significant fines and other sanctions relating to health and safety

LKAB paid MSEK 3 in 2021 in relation to a fatal accident in Svappavaara in 2018.

Improved results were obtained in all four areas: LKAB as an employer 3.22 (2019: 3.06); In my workplace 3.32 (2019: 3.30); My line manager 3.27 (2019: 3,21); and Myself as an employee 3.33 (2019: 3.30). The response rate for the survey was 66% (2019: 63%).

Incident management

All employees of LKAB and of our suppliers can report incidents in the work environment such as risks, near misses, accidents and occupational illness. Such incidents are investigated and remedial measures are taken to avoid injury and ill-health among employees and suppliers. The goal for 2022 onwards is to achieve an accident rate no higher than 2 by 2030.

Number of employees by region[1]	2021	2020
Asia, men	9	10
Asia, women	12	11
UK, men	176	200
UK, women	58	58
Finland, men	1	1
Finland, women	4	3
Netherlands, men	14	14
Netherlands, women	6	7
Norway, men	178	175
Norway, women	31	29
Slovakia, men	1	1
Slovakia, women	0	0
Sweden, men	3,425	3,230
Sweden, women	1,283	1,152
Turkey, men	53	53
Turkey, women	1	1
Germany, men	5	4
Germany, women	5	5
Spain, men	1	1
Spain, women	0	0
Greece, men	1	1
Greece, women	0	0
USA, men	2	2
USA, women	3	3

1) Refers to permanent and fixed-term employees as at 31 December 2021.

Workforce

The number of permanent employees is 4,825 (4,555), of whom 25 (25) percent are women and 75 (75) percent are men. A total of 15 of the permanent employees work part-time, of whom 4 are women and 11 men. The number of fixed-term employees is 199 women and 245 men.

All employees in Sweden and Norway are covered by collective bargaining agreements, with the exception of Group management. Of the total volume of hours worked by LKAB and suppliers, suppliers account for 40 percent. The majority of contracted hours relate to IT support, construction projects and maintenance of LKAB's sites.

The information is compiled from the payroll systems and HR systems in each country which therefore form the basis of the results.

Labour practices and decent work Metrics	**Result in 2021**
Number of newly recruited permanent employees	430
Percentage of newly recruited permanent employees who are women	34%
External recruitments as a percentage of permanent employees at 31 December previous year	9%
External departures as a percentage of permanent employees at 31 December previous year	8%
Number of permanently employed women who left during the year	77
Number of permanently employed women aged <30 who left during the year in the region Sweden/Norway	16
Number of permanently employed women aged 30–50 who left during the year in the region Sweden/Norway	26
Number of permanently employed women aged >50 who left during the year in the region Sweden/Norway	10
Number of permanently employed men who left during the year	271
Number of permanently employed men aged <30 who left during the year in the region Sweden/Norway	54
Number of permanently employed men aged 30–50 who left during the year in the region Sweden/Norway	84
Number of permanently employed men aged >50 who left during the year in the region Sweden/Norway	89

Labour/management relations

The notice period in connection with organisational changes in the Group varies, but complies with applicable legislation, working methods and procedures. In the case of organisational changes discussions take place with the trade unions at an early stage and employees are supported by a social action plan that is adapted to the local circumstances. The action plan may include assistance with finding other suitable work within LKAB or with looking for new work and/or training. Other tools include severance pay, early retirement and financial incentives for those who find new jobs within the notice period. The support services may take the form of individual careers advice or administrative support.

Diversity and equal opportunity

Diversity and equal opportunity contribute to long-term sustainability and LKAB has zero tolerance of any kind of discrimination or harassment.

We have guidance on diversity for the period 2020–2025 and aim to create the conditions for increased diversity and to prevent and exclude discrimination. The results of the work are measured continually in employee surveys.

- Activities associated with diversity and equal opportunity shall be included in all business plans
- All workplaces shall have produced standards and ground rules that include diversity and equal opportunity
- Diversity and equal opportunity matters shall be discussed at workplace meetings and at CPD days for health and safety officers
- Diversity and equal opportunity shall be included in all management training and management seminars
- LKAB shall also discuss diversity and equal opportunity with suppliers and contractors

In 2021 the following were discovered:

- 3 incidents of discrimination/harassment, all of which related to sexual harassment and were dealt with
- 2 incidents involving threats, threats of violence or violence, all of which were dealt with

Gender distribution

Metrics	2021	2020
Percentage of women in LKAB's management team	13	13
Percentage of men in LKAB's management team	87	87
Percentage of women on LKAB's Board of Directors	33	27
Percentage of men on LKAB's Board of Directors	67	73
Percentage of women in LKAB's workforce	25	25
Percentage of men in LKAB's workforce	75	75
Average age, LKAB's management team	55	55
Average age, LKAB's Board of Directors	59	56

Individuals born abroad, according to data from Statistics Sweden

Metrics	2021	2020
Percentage with a foreign background, total	9.5	8.9
Percentage with a foreign background, women	9.8	9.1
Percentage with a foreign background, men	9.3	8.8
Percentage with a foreign background, <35 years old	8.5	7.5
Percentage with a foreign background, 35–54 years old	9.9	9.5
Percentage with a foreign background, >55 years old	10.2	9.8
Percentage with a foreign background, white-collar	13.8	14.4
Percentage with a foreign background, blue-collar	7.1	6.8

Deviation: Individuals born abroad stated only for the whole of the Swedish operations.

Permanent employees in Sweden[1]

Age	2021	2020
<25	261	264
25–29	504	514
30–34	649	647
35–39	560	524
40–44	474	456
45–49	511	540
50–54	632	624
55–59	620	605
60+	289	240

1) Broken down into average values for the year.

Accidents

Metrics	Result in 2021	Comment	Boundaries
Number of accidents leading to absence, employees	68		Group-wide
Number of accidents leading to absence, women	11	Gender of injured is only indicated in Sweden and Norway. It is not mandatory to report this for external/hired-in staff.	Sweden/Norway
Number of accidents leading to absence, men	57	Gender of injured is only indicated in Sweden and Norway. It is not mandatory to report this for external/hired-in staff.	Sweden/Norway
Number of accidents leading to absence, Sweden/Norway	67		Sweden/Norway
Number of accidents leading to absence, other countries	1		Other countries
Number of accidents leading to absence, contractors	36		Sweden, including LKAB Minerals
Fatalities due to occupational accidents, employees	0		Group-wide
Fatalities due to occupational accidents, contractors	0		Group-wide
Accident rate, calculated as number of accidents leading to absence per million hours worked	8.2	The 2021 target is maximum 3.5 accidents per million hours worked. Result based on monthly reports. Effective from 2017 contractors' accidents are also included in monitoring.	Group-wide, including contractors
Most common type of injury	sprains/strains	Among accidents resulting in absence, the category "Tripping or falls on the same level" was the commonest cause. The commonest injury is sprains/strains.	Group-wide
Number of working days lost due to accidents	814		Group-wide, excluding LKAB Minerals

Community engagement

Materiality and impact

LKAB has a significant impact on local communities as a major employer and business as well as through various initiatives to help create attractive communities. The urban transformations in our operating locations are also having a major impact and require significant cooperation between LKAB and various stakeholders such as municipalities, government authorities, businesses and the local population. It is important to take people's views into consideration and maintain a respectful, open and transparent dialogue both concerning the day-to-day operations and concerning changes and unforeseen events. See also the material topic "Responsible and innovative environmental work".

Dialogue and cooperation with property owners and stakeholders take place directly and indirectly, for example via meetings, consultation, information meetings, news forums, partnerships with suppliers, sponsorship, outdoor ventures and educational initiatives.

The Sami people and Sami communities have a special position as a stakeholder group due to their status as indigenous peoples. Cooperation agreements have been drawn up with the Sami communities on whose land LKAB has mining operations. See also the material topic "Safeguard and contribute to human rights".

Boundary: material externally.

Governance

The President and CEO and the Senior Vice President of Communication and Climate have the main responsibility for our internal and external communication, but can delegate operational responsibility to designated functions and executives.

Activities involving the utilisation of land and the urban transformation are governed by laws and regulations, LKAB's guidelines on land use and a compensation model for property purchases that was published in 2015. The Senior Vice President of Urban Transformation, the Senior Vice President of Environment and Sustainability and the Senior Vice President of the Iron Ore business area have responsibility within their respective areas.

LKAB receives community- and environment-related views and grievances by post, email or phone. All matters and incidents are addressed, with feedback provided on a continuous basis. Follow-up is carried out primarily by the organisation concerned and responsible – for example, by the environmental department or the department for urban transformation in Kiruna or Malmberget. Depending on the nature of the incidents, they are reported to the supervisory authority and followed up through formal information exchange.

Work on communication and sponsorship is governed by our communication strategy and by the Group guidelines on communication.

64%

of Kiruna residents take a positive view of the urban transformation and 85 percent have great confidence in LKAB's ability to shoulder its responsibility for the urban transformation.

70%

of Gällivare residents take a positive view of the urban transformation and 87 percent have great confidence in LKAB's ability to shoulder its responsibility for the urban transformation.

Results for 2021 for Kiruna, Malmberget, Svappavaara and Narvik

Grievances filed about environmental impacts	
Total number of complaints filed concerning environmental impacts	66
Number of complaints addressed during the period	66
Number of complaints resolved during the period	66
Number of previous complaints resolved during the period	0
Grievances filed about social impacts	
Total number of claims filed during the period	6
Number of claims addressed during the period	5
Number of claims accepted during the period	0
Number of claims rejected during the period	1
Number of previous claims accepted during the period	0
Number of previous claims rejected during the period	4
Grievances filed about urban transformation	
Total number of complaints filed during the period	20
Number of complaints addressed during the period	20
Number of complaints resolved during the period	20
Grievances filed via SpeakUp[1)]	
Total number of complaints	11
Number of complaints addressed/dealt with during the period	10

1) Grievances filed via SpeakUp were classified as follows: 3 x HR grievances, 4 x purchasing/suppliers, 1 x conflict of interest, 1 x sexual harassment, 1 x environment, health and safety, 1 x other.

Resettlement, dwellings and residents

Number of households resettled in 2021 (total)	300 (247)

Approach (process) and measures taken to prevent negative consequences of resettlement for those affected

LKAB Fastigheter informs the tenants with plenty of notice and if possible starts the dialogue five years before resettlement has to take place. The resettlements are managed based on the tenants' own preferences for resettlement in newly constructed housing or within existing housing stock. LKAB's compensation rules provide for gradual rent increases over an extended period of eight years, with full rent being paid by the tenant from the ninth year. LKAB works to ensure that private property owners that are landlords and municipal housing companies accept the same responsibilities in respect of their own tenants if functional replacement has been agreed. Their tenants are also covered by LKAB's compensation for staged rent increases. In the case of other property owners – those living in co-op apartments and individual family houses – an offer is made in accordance with LKAB's compensation rules (monetary compensation or functional replacement). In accordance with the compensation rules, businesses affected are dealt with by special resettlement work in which LKAB works closely with the municipal property companies. In Kiruna the aim is to use LKAB's compensation rules to offer new properties and premises that are finished and adapted for all the businesses, so that they move to Kiruna's new city centre together and are operating there in September 2022. In Malmberget, which has far fewer businesses than Kiruna, the relocation of the businesses affected has been dealt with individually in accordance with the compensation rules. LKAB has now agreed compensation for relocation or closure for the majority of the property owners, according to their own preference.

Significant disputes that have arisen in the process and how these were resolved

No particularly significant disputes have been reported. There are procedures for dealing with any disputes.

Urban transformation

The extensive changes in the communities in recent years as a result of the mining in Kiruna and Malmberget have taken place gradually. The majority of residents have been affected in some way. LKAB takes responsibility for the impact that the mining has by compensating those who have to relocate and making it easier for them. The development of attractive and vibrant operating locations in partnership with the people who live there, the municipalities and local businesses is a key part of our strategy.

Mining requires long planning horizons and access to the land impacted, through environmental permits and agreements with the municipalities and property owners, must be ensured. In 2021 the municipal councils in Kiruna and Gällivare made some decisions that were important and positive for LKAB, by adopting the zoning plans for the industrial mining areas. In Kiruna decisions were taken on zoning plans for the areas GP 2:5 and GP 3:1, and both have taken legal effect. A zoning plan for GP 3:2 was also decided, but this was appealed and is being processed in the Land and Environment Court. Consequently, the zoning plan is not yet in effect. For Malmberget decisions were taken on new zoning plans for areas 4 and 6:1 in western Malmberget. Both zoning plans were appealed and are being processed in the Land and Environment Court. The zoning plans have therefore not yet come into effect.

Important milestones in Kiruna

In Kiruna the urban transformation has prioritised zoning plans and has received the decisions mentioned above within the area marked for phase-out, to secure land for continued mining.

To facilitate relocation to the development areas, Kiruna's new city centre is a priority area. Here LKAB is carrying out various important projects for the construction of new homes, office premises and retail spaces. One example of an ongoing project is quarter 4, which includes homes for both external stakeholders and LKAB's own property company LKAB Fastigheter. Another very large project is taking place in quarters 7, 8 and 9, where retail premises are expected to be fully leased in 2022 – something that is essential if the overall schedule is to be met.

During the year a project was also started with the intention of building a commercial property in quarter 6. The quarter is planned to house hotels, office premises and a small number of retail spaces.

The project's portfolio of residential properties matches current needs, taking into consideration the pace of the phase-out work. However, LKAB sees a need for the continuous and long-term realisation of more residential projects and is working strategically to drive development faster than the phase-out.

Land for the building of more than 220 rental homes within several districts in the Skjutbane area has been acquired from Kiruna Municipality, and following tendering the project has started according to plan. During the year LKAB acquired further land in the Flyttleden area. Tendering is under way, with the intention of starting a further project to build around 200 rental homes next year.

At the end of the year LKAB also completed the acquisition of a large and important industrial property next to the new city centre, an area to which Kiruna Church – among other buildings – is planned to be moved.

Important milestones in Malmberget and Gällivare

The urban transformation in Malmberget and Gällivare has been in an intensive phase in recent years. New residential areas have been built and various new municipal buildings have been opened. In other words, the future townscape of Gällivare has begun to take shape.

In 2016 LKAB signed an agreement with Gällivare regarding compensation for municipal buildings in the area that would be impacted by the mining. This agreement made it possible to build new, modern structures such as the new Kunskapshuset upper secondary school and the new sports arena, both of which were opened in October/November, and the new multi-activity arena that is now being built in central Gällivare.

In addition to the municipal buildings, LKAB has acquired and entered into agreements with property owners for 92 percent of the properties within the phase-out areas in Malmberget. A large proportion of these properties have been vacated and have either been demolished or are in the process of being demolished. To compensate, in recent years LKAB has built and is in the process of building a total of 1,350 homes in Gällivare and Koskullskulle. The homes in the new Bryggeribacken area have also been begun and various new buildings are already in place in the area. The first homeowners moved in during summer 2020.

At the same time, a new development area – LKAB's second largest area for replacement owner-occupied houses – is emerging in western Repisvaara.

In 2021 LKAB continued completing various projects to replace the homes that are being phased out in Malmberget. In total 153 rental apartments were completed in 2021 and a further 308 apartments are under construction.

The relocation of heritage buildings to Solbacken in Koskullskulle is one of the projects completed in 2021. The project has been in progress since 2016 and a total of 30 buildings were moved from Malmberget to Solbacken in three stages. The project involves a total of 86 apartments.

Principles of the urban transformation

LKAB aims for development before phase-out, which means that new homes, commercial premises and important social functions are to be completed or under construction before previous built environments are phased out. LKAB and the municipalities agree schedules for the urban transformation. The municipality determines what form the communities will take, while under the Minerals Act it is LKAB that pays for the costs that arise when mining makes the transformation necessary.

Property owners are offered an equivalent home or financial compensation equal to the market value plus 25 percent. For industrial and commercial properties LKAB again aims to find constructive solutions together with the property owners, according to the same principles.

LKAB compensates residential tenants for their removal expenses, offers staged rent increases and has negotiated lower rents with the Swedish Union of Tenants (Hyresgästföreningen) for tenants moving from phase-out areas into new-build replacement housing. The same principles apply in the case of commercial tenants.

Climate impact

Resource-efficient products and solutions that are sustainable long-term

Materiality and impact

LKAB's mines are among the most high-tech in the world and safe, resource-efficient production using well-developed production methods and processes is crucial for our profitability. The goal is to be a strong, sustainable company that remains competitive under varying economic conditions. We will achieve this by developing our core business of high quality iron ore products through reliability and sustainable innovation, and by becoming more broadly established in the industrial minerals market – both through acquisitions and by developing new products.

The focus is on safety, autonomy, productivity and decreased environmental impact and on eliminating greenhouse gas emissions throughout the value chain. Developing processes and products that decrease our customers' environmental impact provides competitive advantages.

LKAB's development work for internal processes is carried out in a chain from laboratory scale through to pilots and full-scale trials, with a focus on maximising product yield and minimising the volume of residual products and emissions both at LKAB and among our customers. Successful development involves cooperation between different categories of personnel, often both within our own organisation and at the customer company. The development work is based on a fundamental understanding of the function of the products in our customers' processes in order to meet quality requirements.

Boundary: material both internally and externally.

Governance

Resource management is governed at an overall level by the Sustainability Policy and by the Group's quality, energy and environmental management systems. Our materials and energy use is monitored at an increasingly detailed level. Reducing energy use is also a strategic group-wide objective. The responsibility for this lies with the Senior Vice President of Market and Technology and the Senior Vice Presidents of each business area.

Our Supplier Code of Conduct sets out sustainability requirements that are monitored by supplier audits, among other things. Read more under the material topic "Ethical business partner" on page 145.

Reporting inspired by TCFD

Governance	Strategy	Risk management	Indicators and goals
▪ The Board's oversight of climate-related risks and opportunities ▪ *Read more on pages 62–65*	▪ Climate-related risks and opportunities the organisation has identified ▪ *Read more on pages 15–16 and 47–55*	▪ The organisation's processes for climate-related risks ▪ *Read more on pages 15–16 and 47–55*	▪ The organisation's indicators for evaluating climate-related risks and opportunities ▪ *Read more on pages 13 and 20*
▪ Management's role in assessing and managing climate-related risks and opportunities ▪ *Read more on page 49*	▪ Impact of climate-related risks and opportunities on the organisation's business, strategy and financial planning ▪ *Read more on pages 47–55 and 56–57*	▪ Integration of the above processes into the organisation's overall risk management ▪ *Read more on pages 15–16 and 47–55*	▪ Scope 1, 2 and 3 emissions according to the Greenhouse Gas Protocol ▪ *Read more on pages 13, 20, 39 and 154*
	▪ Resilience of the organisation's strategy taking into consideration different climate-related scenarios ▪ *Read more on pages 14–21 and 47–55*		▪ Targets used by the organisation to manage climate-related risks and opportunities ▪ *Read more on pages 13 and 20–21*

Transition for a sustainable climate

Materiality and impact

Mining and processing iron ore is a highly energy-intensive business. Our operations in Sweden give rise to direct emissions of 677,000 tonnes of carbon dioxide. That means we account for four percent of total carbon emissions from industry and are fourth in the list of companies with the highest carbon emissions in Sweden. We have therefore taken on a great challenge, seeing opportunities in transitioning to carbon-free processes and products by 2045. Entirely fossil-free production from mine to steel is the cornerstone of our development projects. Read more about our strategy on pages 15–21.

Our direct carbon emissions are mainly caused by the fact that our current processes are half supplied with energy from fossil fuels such as coal, fuel oil and diesel. LKAB's goal to eliminate our carbon emissions and reduce our energy consumption involves phasing out fossil fuels. This is being done through electrification, by replacing fossil fuels with biofuels and by reusing existing energy in our processes.

In 2021 trials aimed at finding alternative fuels, including the use of plasma burners in Luleå, were carried out at the project stage. Trials involving the use of tall oil in Malmberget continued throughout the year with good results.

Boundary: material both internally and externally.

Governance

This area is governed overall by the Sustainability Policy and the Group's energy management system, which is certified to ISO 50001. Reducing carbon emissions is also a Group goal and is reported quarterly and on an annual basis. We are also covered by the EU Emissions Trading System and report to the competent authorities on an ongoing basis. Governance and reported emissions and energy use are reviewed by external parties annually. The responsibility for this lies with the Senior Vice President of Market and Technology and the Senior Vice Presidents of each business area.

Environmental impact

Responsible and innovative environmental work

Materiality and impact

Our operations give rise to significant environmental impact. Mines, industrial areas and urban transformation utilise land and impact the look of the landscape as well as biodiversity and peripheral industries. Moreover, pellet production requires large amounts of water and energy. The process for pellet production results in emissions to air of primarily sulphur dioxide (SO_2), nitrogen oxides (NO_x) and carbon dioxide (CO_2) from the burning of fuel. This can have a regional impact on sulphur and nitrogen balances, and by extension a global impact through the greenhouse effect – thereby in turn impacting biodiversity, natural resources and ecosystem services, for example. Diffuse dust from industrial areas also has an impact on the local environment. To study the impact of the dust generation on vegetation and ecosystem services LKAB is running two research projects in partnership with the Swedish University of Agricultural Sciences (SLU) and Uppsala University. LKAB's operations are located in a part of Sweden with a high proportion of protected areas – for example, through national park status, Natura 2000 or similar. This means that our industrial areas and mining areas are often relatively close to land and water with a high biological status. Biodiversity has therefore long been a priority at LKAB. Even in more urban environments biodiversity is an important aspect to take into consideration.

We already work to create well-groomed and green industrial areas, and in parallel we are planning what form our management, remediation and landscape design will take in the future. Our long-term ambition is for the operations to have no emissions with a negative impact on air, land or water and that we will make a positive contribution to biodiversity in the regions and environments where we are active. This is in line with the industry-wide roadmap that we produced in partnership with Svemin and others.

The Swedish mining operations discharge water into nearby lakes and watercourses. Although there is a high degree of recirculation in the processing operations, the groundwater pumped out of the mines means that the operations generate surplus water. The water, in the form of wet tailings, goes into dam systems where sedimentation takes place before it is discharged into the surroundings. There is a local impact on ecological parameters such as fish size and plankton composition. The substances that occur in increased concentrations in discharge water are various forms of nitrogen and salts (known as major elements). Causes of the impact are being examined and we have been investigating and testing possible treatment methods for a number of years.

Boundary: material both internally and externally.

Governance

Mining and processing operations are covered by various laws and regulations that must be complied with before, during and after production, and permits are required. The requirements set out in the permits cover social impacts, environmental impacts and the work environment, and the business must be run in accordance with the terms of the permits. Permits are regularly reviewed and there are frequent legislative changes. These changes are continually monitored to ensure adjustments are made in order to fulfil new requirements.

LKAB's sustainability work goes further than the legislation, with our own environmental goals, implemented environmental management system and development work. Compliance with the permit levels is ensured through regular follow-up based on self-monitoring programmes. We also monitor progress in connection with reporting on sustainability objectives to the Board and for the sustainability report, as well as in the annual environmental reports compiled for regulatory authorities. Environmental incidents are reported via a nonconformity management system. The Sustainability Policy and our guidelines on land use provide a foundation for the management of environmental work. In addition, guidelines on water management were produced during the year. The environmental management system is certified to ISO 14001, one element of which involves risk analysis that applies the precautionary principle to prevent negative environmental consequences.

Operational responsibility for all environmental aspects has been delegated to the Senior Vice Presidents of the business areas, and from there to the organisation's departments and subsidiaries. Group functions assist with applications for environmental permits and with self-monitoring.

LKAB conducts operations at six sites close to protected areas or areas with a high biodiversity status: the operations in Kiruna, Svappavaara, Malmberget, Mertainen and Masugnsbyn, and one site close to Denizli in Turkey. Gruvberget and Leveäniemi are included in the Svappavaara operating site.

All the sites, apart from that near Denizli in Turkey, are covered by Swedish environmental legislation. The guidelines on land use were updated during the year and now apply to all LKAB's operating locations. The guidelines state that the mitigation hierarchy is to be followed as far as possible, with efforts based on these steps: avoid, minimise, restore and – as a last resort – compensate for environmental damage. In addition, there are management and compensation plans for Mertainen and parts of Svappavaara.

The permit process requires remediation plans to be submitted that include a general description of how LKAB intends to restore land used for industrial and mining activities. We have also produced guidelines for ecological remediation. These aim to speed up the increase in the nature values of the land, as well as its values for reindeer husbandry. There is currently no separate biodiversity management plan for the quarry in Turkey belonging to our subsidiary LKAB Minerals. The site is located on forest land owned by the Turkish government. To obtain permits and the necessary licences to operate in this area, LKAB Minerals must compile environmental reports that include a section on flora and fauna. This states which species are in the licence area and that these species are not affected by the activities. Once mining has ended, the area will be reshaped by the Turkish Ministry of Agriculture and Forestry in a way that allows it to be replanted with trees.

Biodiversity

Significant impacts on biodiversity

No new nature areas known to have a high biodiversity status were utilised in 2021 in a way that risks any species being negatively impacted either locally or regionally, or in such a way as to threaten the survival of a species. Guidelines for promoting biodiversity at LKAB's various sites are being developed and a systematic survey of LKAB's operations is planned for 2022.

Significant fines and other sanctions for non-compliance with environmental laws and regulations

In 2021 two corporate fines of SEK 50,000 were paid as well as one of SEK 90,000, totalling SEK 190,000.

Direct and indirect emissions

Direct carbon dioxide emissions

LKAB has emissions of the greenhouse gas carbon dioxide and reports these. The calculation methods are linked to national legislation and the EU Emissions Trading System, and are based on actual materials used and energy consumption.

The emissions are caused by fuels and additives used in pellet production and transport. Transport is not included in the monitoring for EU ETS, but is included in the emissions and goals monitored and reported in the Annual and Sustainability Report. The emission factors used for each fuel and additive are regulated through permits for carbon dioxide emissions.

Indirect carbon emissions

The indirect emissions of carbon dioxide are caused by electricity and are calculated using the electricity suppliers' emission factors. In 2021 electricity purchases in Norway and Sweden consisted of origin-labelled electricity from non-fossil sources. Work to identify Scope 3 carbon emissions, i.e. by customers and suppliers, was carried out in 2021.

Nitrogen oxides (NOx), sulphur oxides (SOx) and other significant air emissions

Determination of emissions to air is based on samplings regulated in self-monitoring programmes and, where applicable, on calculations based on fuel consumed and emission factors, or mass balance calculations. Mass balance calculations are completed for emissions from pellet production of SO_2, F and HCl. Both mobile and stationary sources are covered by environmental conditions and are included in the reported data. Emissions to air are monitored continuously via measurement as well as random sampling. Precipitated particulates are measured using the NILU (Norwegian Institute for Air Research) method at a number of measuring points in the communities. More information on data measurement points and measurement techniques can be found in LKAB's annual environmental reports and self-monitoring programmes submitted to supervisory authorities.

Carbon emissions LKAB Minerals, outside Sweden[1]	**2021**	**2020**
Carbon dioxide (kt)	37.0	32.4

1) District heating and diesel consumption for LKAB's subsidiaries KIMIT, Malmtrafik, Mekaniska, Minerals, Wassara and LKAB Berg och Betong are not included in the reporting. Electricity consumption in LKAB's property stock outside the production locations is likewise not included.

Energy consumption LKAB Minerals, outside Sweden and Norway[1]	**2021**	**2020**
Energy consumption (GWh)	154	130

1) District heating and diesel consumption for LKAB's subsidiaries KIMIT, Malmtrafik, Mekaniska, Minerals, Wassara and LKAB Berg och Betong are not included in the reporting. Electricity consumption in LKAB's property stock outside the production locations is likewise not included.

Mined amounts, inputs, residual products and emissions	**2021**	**2020**
Mined amounts		
Crude ore, magnetite and hematite (Mt)	52.4	47.8
Huntite (kt)	30	25
Dolomite (kt)	166	121
Finished products (Mt)	26.7	27.1
Inputs		
Explosives (kt)	21	20
Concrete produced (103 m^3)	240	209
Additives (kt)	828	954
Residual products		
Barren rock (Mt)	22.3	21.9
Barren rock recirculated (Mt)	7.7	
Tailings (Mt)	4.6	5.1
Tailings recirculated (Mt)	0	
Waste lime (kt)	113	78
Waste lime recirculated (Mt)	0	
Other waste deposits LKAB Minerals (kt)	8	2

Mined amounts, inputs, residual products and emissions	**2021**	**2020**
Emissions to air from product manufacturing[1]		
Particulates (t)[2]	581	977
Sulphur dioxide (t)	437	407
Hydrogen fluoride (t)	30	32
Hydrogen chloride (t)	75	82
Nitrogen oxide (t)	4,568	4,060
Emissions to water[3]		
Nitrogen (t)	560	531
Phosphorus (kg)	575	470
Trace metals (kg)	184	242
Emissions of trace metals[4]		
Chromium (kg)	1.5	2.1
Cadmium (kg)	0.3	1.0
Copper (kg)	27.7	29.9
Nickel (kg)	100.2	109.2
Lead (kg)	0.2	0.3
Zinc (kg)	34.7	83.4
Arsenic (kg)	18.9	16.5
Total trace metals (kg)	**183.5**	**242.3**

1) Refers to total emissions in Kiruna, Svappavaara and Malmberget.
2) Refers to total emissions from pelletising plants, central boiler plant as well as operating and maintenance plants in Kiruna, Svappavaara, Malmberget, Luleå and Narvik.
3) The quantities are based on overflow water from ponds in Kiruna, Svappavaara and Malmberget.
4) The quantities are based on overflow water from ponds in Kiruna, Svappavaara and Malmberget.

Read more about environmental sustainability and about our carbon emissions and energy consumption in Sweden on pages 38–39.

Significant spills

Total number and volume of significant spills

We work continuously to identify and address hazardous situations or facilities where spills may occur through risk and incident reporting and risk analysis; management and statistics include what is shown below. In 2021 it was discovered during an internal check that a significant quantity of fuel oil was missing. An external party has been engaged and the investigation shows that 2,000 m^3 of fuel oil has leaked out. Only a small proportion has been able to be traced to a physical leak. The cistern has been emptied and inspected by an external party. The ground around the cistern has been dug up to detect spillage, but without result. The investigation continues.

Other self-monitoring programmes – impact on land and water

Control and follow-up of land impact and deformation limits are regulated by conditions in the environmental permits. The measurements are mainly taken using GPS measurement rods placed around the communities in Kiruna and Malmberget. Vibrations and atmospheric shock waves are measured continuously by online monitoring equipment at the operating locations of Kiruna, Malmberget, Svappavaara and Masugnsbyn. The water quality in the recipients is monitored in respect of chemical and biological values.

Another environmental impact monitored is noise, which is measured annually at a number of measurement points at all the operating locations in accordance with the Swedish Environmental Protection Agency's guidelines for measurement of external industrial noise emissions.

Significant spills 2021	**Kiruna**	**Malmberget**	**Svappavaara**	**Narvik**	**Luleå**	**Special Products**
Significant spills with financial impact	0	0	0	0	0	0
Spills reported to authority	74	18	10	0	0	0
Volume, litres	2,003,996	1,100	2,300	0	0	0
Description of spills reported to authority (mainly oil, diesel and glycol)	The spills occurred in the industrial area. Investigation is in progress.	Oil spills. Remediation has been carried out for all spills.	Spills on land and in water. Remediation was carried out for all.		.	

Reporting practice

LKAB publishes its sustainability report annually as an integrated part of its annual report. The sustainability report covers the 2021 financial year unless otherwise stated. The last report, prior to this one, was published in March 2021. This year's version is to be seen as an update since there have been no major changes between the years.

Since 2008 LKAB has prepared its sustainability reports in accordance with the framework for sustainability reporting issued by the Global Reporting Initiative (GRI). For 2021 the report has been prepared in accordance with the GRI Standards: Core option and includes the Mining and Metals Sector Supplement (MM). Where the GRI framework calls for detailed descriptions of specific topics, LKAB has chosen to include supplementary information and clarifications in the sustainability notes.

The Annual and Sustainability Report also constitutes LKAB's Communication on Progress (COP) for the UN Global Compact, and also contains information on how we are contributing to Agenda 2030 and the Sustainable Development Goals. LKAB has begun the process of reporting according to TCFD guidelines; see page 55.

Sustainability information in the Annual Report includes the pages referenced in the GRI/COP index on pages 157–158. The statutory sustainability report prepared in accordance with Chapter 6 Section 10 of the Swedish Annual Accounts Act has been integrated into LKAB's administration report, its scope being defined in the Annual and Sustainability Report's table of contents.

Boundaries of the report

As in previous years, the report concentrates on the Nordic activities and focuses on the iron ore operations in Sweden and Norway. The Iron Ore business area makes up the bulk of activities, accounting for around 90 percent of the Group's total sales. Documentation from the Special Products business area is also included. Information concerning subsidiaries has been included in the report where deemed relevant. Which entities are covered is detailed in the report alongside the data reported.

External assurance

LKAB's sustainability reporting is assured by an external party in accordance with the government's ownership policy for state-owned companies. The table of contents for the Annual and Sustainability Report specifies which pages are subject to external assurance. The auditing firm KPMG is regarded as independent of LKAB's Board of Directors, which issues and signs the Annual and Sustainability Report as a whole.

GRI/COP Index

GRI Standard	Description	Page reference	Comment	UNGC principle
General Information				
Organisational profile				
102-1	Name of organisation	4		
102-2	Activities, brands, products and services	11, 23, 25		
102-3	Location of headquarters	170		
102-4	Location of operations	24, 26, 148		
102-5	Ownership and legal form	4		
102-6	Markets served	23–26		
102-7	Scale of the organisation	2, 148		
102-8	Information on employees and other workers	32–34, 40–42, 147–149		
102-9	Supply chain	146		
102-10	Significant changes to the organisation and its supply chain	7, 17, 19		
102-11	Precautionary Principle or approach	153		
102-12	External initiatives	144		
102-13	Membership of associations	143		
Strategy				
102-14	Statement from senior decision-maker	5–9		
Ethics and integrity				1, 2, 4, 5, 10
102-16	Values, principles, standards and norms of behaviour	7, 36, 61, 145–146		
Governance				
102-18	Corporate governance	60–70		
Stakeholder engagement				
102-40	List of stakeholder groups	141		
102-41	Collective bargaining agreements	148		3
102-42	Identifying and selecting stakeholders	140		
102-43	Approach to stakeholder engagement	140–141		
102-44	Key topics and concerns raised	141		
Reporting practice				
102-45	Entities included in the consolidated financial statements	71, 91, 156		
102-46	Defining report content and topic boundaries	139–140		
102-47	List of material topics	139–140		
102-48	Restatements of information	156		
102-49	Changes in reporting	156		
102-50	Reporting period	156		
102-51	Date of most recent report	156		
102-52	Reporting cycle	156		
102-53	Contact point for questions regarding the report	138		
102-54	Claims of reporting in accordance with the GRI Standards	156		
102-55	GRI content index	156–158		
102-56	External assurance	156, 159		
Topic-specific Disclosures				
GRI 200	**Economic disclosures**			
Economic performance				
103-1–103-3	Explanation of the material topic and its boundary, management approach	13, 20, 56, 61, 139–140, 142–145		
201-1 + MM	Direct economic value generated and distributed	145		
201-3	Defined benefit plan obligations and other retirement plans	113–116		
Indirect economic impacts				
103-1–103-3	Explanation of the material topic and its boundary, management approach	139–140, 142–145		
203-2	Significant indirect economic impacts	12, 150–151		
Anti-corruption				10
103-1–103-3	Explanation of the material topic and its boundary, management approach	61, 139–140, 142–146		
205-3	Confirmed incidents of corruption and actions taken	146		
GRI 300	**Environmental disclosures**			
Materials				7, 8, 9
103-1–103-3	Explanation of the material topic and its boundary, management approach	11, 17–19, 23–26, 38, 61, 139–140, 142–144, 153–154		
301-1	Materials used by weight or volume	154		
Energy				7, 8, 9
103-1–103-3	Explanation of the material topic and its boundary, management approach	13, 20, 38, 61, 139–140, 142–144, 152–154		
302-1	Energy consumption within the organisation	39, 154		
302-3	Energy intensity	6, 13, 39		
Biodiversity				7, 8
103-1–103-3	Explanation of the material topic and its boundary, management approach	16, 39, 46, 61, 139–140, 142–144, 153–154		
304-2 + MM	Significant impacts of activities, products and services on biodiversity	39, 153		
MM2	Sites requiring biodiversity management plan	39, 153		
Emissions to air				7
103-1–103-3	Explanation of the material topic and its boundary, management approach	13, 20, 38–39, 61, 139–140, 142–144, 153–154		
305-1	Direct (Scope 1) GHG emissions	6, 13, 39, 154		
305-2	Energy indirect (Scope 2) GHG emissions	154		
305-7 + MM	NO_x, SO_x and other significant air emissions	13, 154		

GRI/COP Index cont.

GRI Standard	Description	Page reference	Comment	UNGC principle
Effluents and waste				7
103-1–103-3	Explanation of the material topic and its boundary, management approach	13, 61, 139–140, 142–144, 153–155		
306-3	Significant spills	155		
MM3	Total amounts of overburden, rock, tailings and sludges	155		
Environmental compliance				7, 8, 9
103-1–103-3	Explanation of the material topic and its boundary, management approach	38–39, 61, 139–140, 142–144, 153		
307-1	Non-compliance with environmental laws and regulations	153		
Supplier environmental assessment				7, 8, 9
103-1–103-3	Explanation of the material topic and its boundary, management approach	42, 61, 139–140, 142–144, 146		
308-2	Negative environmental impacts in the supply chain and actions taken	147		
GRI 400	**Social disclosures**			
Employment				1, 2, 3, 6
103-1–103-3	Explanation of the material topic and its boundary, management approach	32–33, 40–41, 61, 139–140, 142–144, 147–149		
401-1	Employee turnover	115, 148		
Labour/management relations				1, 2, 3, 6
103-1–103-3	Explanation of the material topic and its boundary, management approach	32–33, 40–41, 61, 139–140, 142–144, 147–149		
402-1	Minimum notice periods regarding operational changes	149		
Occupational health and safety				1, 2, 3, 6
103-1–103-3	Explanation of the material topic and its boundary, management approach	13, 20, 40–41, 61, 139–140, 142–144		
403-2 + MM	Types of injury and rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities	6, 41, 149		
Diversity and equality				1, 2, 6
103-1–103-3	Explanation of the material topic and its boundary, management approach	41–42, 61, 139–140, 142–144, 147–149		
405-1	Diversity of governance bodies and employees	41, 68–70, 149		
Non-discrimination				1, 2, 4, 5, 6
103-1–103-3	Explanation of the material topic and its boundary, management approach	41, 61, 139–140, 142–144, 147–149		
406-1	Incidents of discrimination and corrective actions taken	149		

GRI Standard	Description	Page reference	Comment	UNGC principle
Rights of indigenous peoples				1, 2
103-1–103-3	Explanation of the material topic and its boundary, management approach	40, 42, 61, 139–140, 142–144, 147, 150		
411-1	Incidents of violations involving rights of indigenous peoples	147		
MM5	Operations in or adjacent to indigenous peoples' territories, and agreements with indigenous peoples	42, 150		
Human rights assessment				1, 2, 4, 5, 6
103-1–103-3	Explanation of the material topic and its boundary, management approach	42, 61, 139–140, 142–147		
412-1	Operations that have been subject to human rights reviews or impact assessments	146–147		
Supplier social assessment				1, 2, 3, 4, 5, 6, 10
103-1–103-3	Explanation of the material topic and its boundary, management approach	42, 61, 139–140, 142–144, 146		
414-2	Negative social impacts in the supply chain and actions taken	147		
Local communities				1, 2, 7
103-1–103-3	Explanation of the material topic and its boundary, management approach	10–11, 34, 61, 139–140, 142–144, 150		
413-2	Operations with significant actual or potential negative impacts on local communities	150		
Resettlement				1, 2, 7
103-1–103-3	Explanation of the material topic and its boundary, management approach	60–61, 139–140, 142–144, 150–151		
MM9	Households affected by resettlement, and effect on their livelihoods	150-151		
Closure plan				1, 2, 7
103-1–103-3	Explanation of the material topic and its boundary, management approach	27–28, 61, 139–140, 142–144		
MM10	Operations with closure plans	153		
Emergency preparedness				1, 2, 7
103-1–103-3	Explanation of the material topic and its boundary, management approach	139–140, 142–144, 147–148		

Auditor's Limited Assurance Report on the Sustainability Report

To Luossavaara-Kiirunavaara AB,
corporate identity number 556001-5835

Introduction

We have been engaged by the Board of Directors of Luossavaara-Kiirunavaara AB ("LKAB") to undertake a limited assurance engagement of LKAB's Sustainability Report for the year 2021. The company has defined the scope of the Sustainability Report in conjunction with the table of contents on the inside cover.

Responsibilities of the Board of Directors and the Executive Management for the Sustainability Report

The Board of Directors and the Executive Management are responsible for the preparation of the Sustainability Report in accordance with the applicable criteria, which are explained on page 156 of the Sustainability Report and are the parts of the Sustainability Reporting Guidelines (published by the Global Reporting Initiative) which are applicable to the Sustainability Report, as well as the accounting and calculation principles that the Company has developed. This responsibility also includes such internal control as is relevant to the preparation of a Sustainability Report that is free from material misstatement, whether due to fraud or error.

Responsibilities of the auditor

Our responsibility is to express a conclusion on the Sustainability Report based on the limited assurance procedures we have performed. Our engagement is limited to the historical information reported and thus does not include forward-looking information.

We conducted our limited assurance engagement in accordance with ISAE 3000 Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (revised). A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the Sustainability Report, and applying analytical and other limited assurance procedures. The procedures performed in a limited assurance engagement vary in nature from, and are less in extent than for, a reasonable assurance engagement conducted in accordance with IAASB's Standards on Auditing and other generally accepted auditing standards in Sweden.

The firm applies ISQC 1 (International Standard on Quality Control) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with professional ethical requirements, professional standards and applicable legal and regulatory requirements. We are independent of LKAB in accordance with generally accepted auditing standards in Sweden and have otherwise fulfilled our ethical responsibilities under these requirements.

The review procedures conducted consequently do not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Our procedures are based on the criteria defined by the Board of Directors and the Executive Management as described above. We consider these criteria suitable for the preparation of the Sustainability Report.

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

Conclusion

Based on the limited assurance procedures we have performed, nothing has come to our attention that causes us to believe that the Sustainability Report is not prepared, in all material respects, in accordance with the criteria defined by the Board of Directors and Executive Management.

Stockholm, 29 March 2022

KPMG AB

Helena Arvidsson Älgne
Authorised Public Accountant

Torbjörn Westman
Expert Member of FAR

Mineral resources and mineral reserves

LKAB is an iron ore producer with over 130 years of mining history at our three operating locations in northern Sweden. LKAB produces over 45 million tonnes of iron ore every year.

Development 2021

This year's update of the mineral resources and mineral reserves continues to show good results from the ongoing exploration activities and technical studies. LKAB continually updates the geological interpretations for each asset and maintains international best practise during the exploration activities, geological data collection and resource modelling.

Increased mineral resources and mineral reserves

Mineral resources and mineral reserves are the basis of a mining company's operations and require successful and continuous exploration. Besides exploration, mining costs and the ore price are also important factors affecting the level of mineral resources and mineral reserves being reported. The exploration initiatives over the past year in conjunction with a re-evaluation of the geological interpretations and mineral resource classification approach has resulted in a further increase to the mineral resources and mineral reserves of LKAB. There has also been significant progress in the LKAB project for extracting critical minerals from the biproducts of the mining and processing of iron ore. This means that LKAB is also reporting a rare earth element resource for the first time. Specifically, this is due to a better understanding of the distribution of important minerals within the iron ore resources and further justification of the beneficial processing and biproduct generation from the apatite concentrate derived from the tailings stream. LKAB is in a unique position where the phosphorous content of the iron ore carries a potentially significant value addition to the business rather than being treated as a deleterious element.

Intensive exploration and modeling activities

Highlights of the 2021 activities include the completion of a detailed review of the classification criteria in place across all deposits, with a consequent increase in measured mineral resources being reported. This results in a net increase in mineral reserves. LKAB is also including a mixed material type within the mineral resource statement for the first time, this being a combination of the principal hematite and magnetite minerals and transitional between the dominant magnetite and hematite material types. The introduction of the mixed mineralogy material type has reduced the amount of hematite material being reported compared to previous years. Planned test work has been designed to assess the most suitable processing route of the mixed material.

LKAB has also undertaken optimisation studies across the Svappavaara deposits to determine the material which is suitable as either open pit and / or underground resources. This has resulted in an increase to the Gruvberget mineral resources due to material demonstrating either open pit or underground mining potential. As part of the underground resource reporting, LKAB are introducing "Must Take" material as part of the mineral resource statements for the first time. This is material modelled as internal waste and which, due to the mining method employed at the underground operations, is considered material that will be mined along with the mineralisation.

The addition of the rare earth element content is also a significant step forward that will be advanced over the course of 2022. Another significant addition to the LKAB portfolio is the inclusion of the Per Geijer project. This project is being reported for the first time after the completion of intensive exploration and modelling throughout 2021.

During 2022, LKAB will continue to develop the model evolution process to ensure maximum value from the exploration activities and technical studies carried out.

Definitions

About The Classification

Mineral resources and mineral reserves are estimated separately and are divided into different categories. LKAB's mineral resources are reported exclusive of mineral reserves. Mineral reserves are those portions of mineral resources which, after the application of the modifying factors, result in an estimated tonnage and grade or quality, that in the opinion of the Competent Person making the estimates can be the basis of a viable project. When mineral resources are converted to mineral reserves, those quantities are subtracted from mineral resources. The mineral resource statement presented here has been classified following the definitions and guidelines of The PERC Reporting Standard (2017) from which the following definitions have been taken.

Inferred mineral resource

An inferred mineral resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An inferred resource has a lower level of confidence than that applying to an indicated mineral resource and must not be converted to a mineral reserve. It is reasonably expected that the majority of inferred mineral resources could be upgraded to indicated mineral resources with continued exploration.

Indicated mineral resource

An indicated mineral resource is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An indicated mineral resource has a lower level of confidence than that applying to a measured mineral resource and may only be converted to a probable mineral reserve.

Measured mineral resource

A measured mineral resource is that part of a mineral resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of modifying factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A measured mineral resource has a higher level of confidence than that applying to either an indicated mineral resource or an inferred mineral resource. It may be converted to a proved mineral reserve or to a probable mineral reserve.

Probable mineral reserve

A probable mineral reserve is the economically mineable part of an indicated, and in some circumstances, a measured mineral resource. The confidence in the modifying factors applying to a probable mineral reserve is lower than that applying to a proved mineral reserve.

Proved mineral reserve

A proved mineral reserve is the economically mineable part of a measured mineral resource. A proved mineral reserve implies a high degree of confidence in the modifying factors.

Iron mineral resources and mineral reserves in 2021

Kiruna
Mineral reserves have increased as a result of increased mineral resources in the measured category and updated extraction factors based on review of mine production performance, which together have more than offset the depletion of mineral reserves from mining. Mineral resources have decreased slightly overall due to an update to the geological model. Confidence in the mineral resources has been improved through ongoing validation of historical data and the treatment of this information in the estimates, as well as additional drilling resulting in significant additions to the measured and indicated mineral resource categories.

Malmberget
Mineral reserves increased with new mineral resources being converted to mineral reserves, although this was partly offset by mining depletion. Reclassification of mineral resources from indicated to measured has enabled a significant increase in Proven Reserves. Successful exploration of down-dip extensions of the Fabian, Printzsköld-Alliansen and Western Field deposits has resulted in significant additions to the mineral resources reported this year.

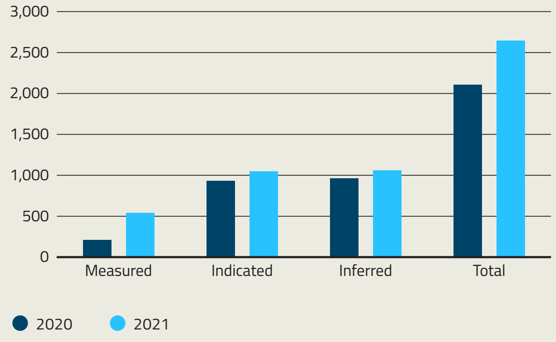
Svappavaara
Leveäniemi
Mineral reserves have decreased for the year due to mining depletion. Limited exploration drilling combined with only minor changes to the geological model have resulted in only minor changes to the mineral resource. Of note, an open pit optimisation study was completed for constraining the Leveäniemi mineral resources.

Gruvberget
Significant exploration drilling down-dip on the southern half of the deposit, combined with updates to the geological model have resulted in a significant increase in mineral resources, particularly in the inferred category. The key drivers to the mineral resource increase at Gruvberget are the inclusion of a low-grade halo to the previously modelled mineralisation, a depth extension to the southern hematite block and the open pit / underground optimisation study.

Mertainen
No updates to the geological model were completed in 2021 although an open pit optimisation was carried out to constrain the mineral resources. This was based on assumptions comparable to those used at Leveäniemi and Gruvberget and which resulted in a decrease in the resources being reported.

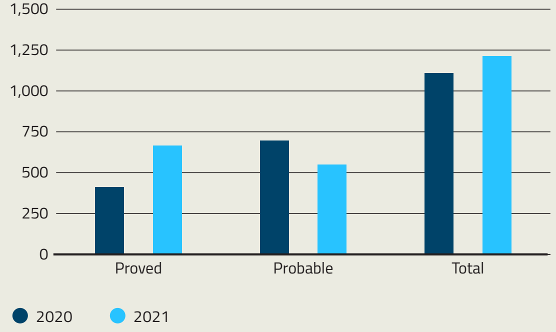
Per Geijer
An inferred maiden mineral resource is being reported for Per Geijer after the completion of intensive exploration and modelling activities during 2021. The mineral resource has been constrained to material that could be mined underground as well as applying restrictions to exclude material located near to surface.

Iron mineral resources as at 31 December 2021[1]
Mt



1) Does not include Must Take material as this is being reported for the first time.

Iron mineral reserves as at 31 December 2021
Mt



Iron mineral resources (mineral reserves excluded)

as at 31 December 2021 (including sorting plants)

	Quantity, Mt		Percent, Fe	
	2021	**2020**	**2021**	**2020**
Kiruna magnetite[1]				
Measured	112	–	64.0	–
Indicated	481	399	61.9	61.6
Inferred	90	314	56.0	58.3
Total	**683**	**713**	**61.4**	**60.1**
Kiruna				
Must Take	6	–	8.6	–
Malmberget magnetite				
Measured	211	40	58.0	56.8
Indicated	258	289	57.7	57.2
Inferred	373	378	58.4	58.7
Total	**842**	**707**	**58.0**	**58.0**
Malmberget mixed				
Measured	4	–	59.0	–
Indicated	18	–	52.0	–
Inferred	4	–	53.4	–
Total	**27**	**–**	**53.3**	**–**
Malmberget hematite				
Measured	5	3	63.0	51.8
Indicated	6	44	55.1	53.3
Inferred	0.1	23	48.1	53.3
Total	**11**	**71**	**58.5**	**53.2**
Malmberget				
Must Take	101	–	24.5	–
Leveäniemi magnetite				
Measured	90	68	43.0	47.5
Indicated	58	64	43.1	41.6
Inferred	14	9	36.4	38.8
Total	**162**	**141**	**42.5**	**44.2**

	Quantity, Mt		Percent, Fe	
	2021	**2020**	**2021**	**2020**
Leveäniemi mixed				
Measured	1	–	59.4	–
Indicated	1	–	53.6	–
Inferred	0.04	–	57.2	–
Total	**2**	**–**	**57.7**	**–**
Leveäniemi hematite				
Measured	–	1	–	59.5
Indicated	–	0	–	49.0
Inferred	–	0	–	–
Total	**–**	**1**	**–**	**59.4**
Leveäniemi				
Must Take	–	–	–	–
Gruvberget magnetite				
Measured	36	23	56.0	53.7
Indicated	110	24	43.5	50.7
Inferred	68	147	41.1	49.9
Total	**214**	**194**	**44.8**	**50.5**
Gruvberget mixed				
Measured	7	–	56.9	–
Indicated	19	–	42.2	–
Inferred	25	–	57.0	–
Total	**51**	**–**	**51.4**	**–**
Gruvberget hematite				
Measured	12	17	55.6	52.9
Indicated	29	17	40.7	50.1
Inferred	53	23	60.5	50.8
Total	**94**	57	**53.8**	51.2
Gruvberget				
Must Take	5	–	16.3	–

	Quantity, Mt		Percent, Fe	
	2021	**2020**	**2021**	**2020**
Mertainen magnetite				
Measured	63	60	34.1	36.0
Indicated	68	97	35.0	38.5
Inferred	24	72	31.8	34.4
Total	**155**	229	**34.1**	36.5
Mertainen				
Must Take	–	–	–	–
Per Geijer magnetite				
Measured	–	–	–	–
Indicated	–	–	–	–
Inferred	281	–	56.3	–
Total	**281**	–	**56.3**	–
Per Geijer mixed				
Measured	–	–	–	–
Indicated	–	–	–	–
Inferred	72	–	49.2	–
Total	**72**	–	**49.2**	–
Per Geijer hematite				
Measured	–	–	–	–
Indicated	–	–	–	–
Inferred	55	–	51.3	–
Total	**55**	–	**51.3**	–
Per Geijer				
Must Take	0.3	–	13.3	–

1) Including Konsuln.

Iron mineral reserves

as at 31 December 2021 (including sorting plants)

	Quantity, Mt		Percent, Fe	
	2021	2020	2021	2020
Kiruna				
Proved	336	246	42.2	42.6
Probable	494	491	41.2	40.9
Total	**830**	**737**	**41.6**	**41.5**
Malmberget magnetite				
Proved	247	79	40.6	38.2
Probable	37	186	39.4	39.5
Total	**284**	**265**	**40.4**	**39.1**
Malmberget hematite				
Proved	8	6	46.7	44.6
Probable	6	9	45.5	43.7
Total	**14**	**15**	**46.2**	**44.0**
Leveäniemi				
Proved	74	81	50.7	50.3
Probable	11	10	24.2	36.8
Total	**86**	**91**	**47.2**	**48.9**

UK operations

Operations are located at Dimmock Cote Quarry and Bracken Quarry in the UK and for the second time, LKAB is reporting mineral resources and mineral reserves from its UK operations under the PERC Standard.

Limestone mineral resources (mineral reserves excluded)

as at 31 December 2021

Bracken Quarry, Lund, UK	Limestone	
	2021	2020
	Kt	Kt
Measured	0	0
Indicated	0	0
Inferred	789	789
Total	**789**	**789**

Limestone mineral reserves

as at 31 December 2021

Dimmocks Cote Quarry, Wicken Cambridgeshire, UK			Limestone	
	2021	2020	2021	2020
	Kt[1]	Kt[1]	Kt[2]	Kt[2]
Proved	–	–	–	–
Probable	673	698	471	471
Total	**673**	**698**	**471**	**471**

1) Included in planning permission.
2) Not included in planning permission.

Phosphorous and rare earth element mineral resources in 2021

LKAB plan to create a sustainable business from LKAB mine tailings and offer P-fertilizer products and biproducts containing rare earth elements (REE), fluorine, and gypsum. The initiative is part of an ongoing LKAB study for extracting critical minerals from the biproducts of the mining and processing of iron ore.

LKAB's mine tailings are a biproduct of iron ore mining; they are essentially a secondary raw material from which an apatite mineral concentrate rich in phosphorus ("P") can be recovered. The iron ore has demonstrated "Reasonable Prospects of Eventual Economic Extraction" ("RPEEE") as required by international Mineral Resource reporting codes. This equally demonstrates the continued production of apatite tailings in which rare earth oxides ("REO") are also found.

The project is planned to be implemented through a flotation process of fresh tailings to produce an Apatite concentrate. This will be followed by additional hydro-chemical processes to produce P-fertiliser, MREO concentrate, Fluorine product and Gypsum for the construction industry. By extracting the mineral apatite from the iron ore tailings, these biproducts are under detailed technical evaluation as a revenue generator from the existing tailings stream currently produced. Key drivers in this initiative being sustainability, resource efficiency, circularity, and the drive to fossil fuel-free manufacturing methods.

Current studies are focussed on the Kiruna and Malmberget future tailings although the Svappavaara and Per Geijer future tailings will also be considered as potential apatite sources following further studies.

The main products are the phosphorous product(s) as a phosphoric acid and/or a mineral fertiliser. The fertiliser product goals are the commodity products MAP and DAP (Monoammonium phosphate (11-52-0) and Diammonium phosphate (18-46-0)).

In addition, the process aims to produce the following biproducts:

- Rare earth elements as an oxide concentrate,
- Fluorine product of fluorsilicic acid,
- Gypsum, commercial grade for plasterboard or cement manufacturing

As part of the project and so that future technical studies can be accelerated, the P and REO have been estimated into the Mineral Resource models resulting in P being declared a second year and REO for the first time.

Phosphorous mineral resources (Inclusive of reserves)

as at 31 December 2021

	Quantity, Mt		Percent, Fe	
	2021	**2020**	**2021**	**2020**
Kiruna[1]				
Measured	704	188	0.17	0.1
Indicated	555	893	0.57	0.3
Inferred	90	327	0.12	0.5
Must Take	24	–	0.26	–
Total	**1,373**	**1,407**	**0.33**	**0.3**
Malmberget				
Measured	474	99	0.74	0.7
Indicated	352	429	0.50	0.7
Inferred	377	384	0.45	0.5
Must Take	168	–	0.60	–
Total	**1,371**	**912**	**0.58**	**0.6**
Svappavaara				
Measured	292	–	0.42	–
Indicated	287	–	0.49	–
Inferred	184	–	0.59	–
Must Take	5	–	0.61	–
Total	**769**	**–**	**0.49**	**–**
Per Geijer				
Measured	–	–	–	–
Indicated	–	–	–	–
Inferred	407	–	2.73	–
Must Take	1	–	1.03	–
Total	**408**	**–**	**2.73**	**–**

REE mineral resources (Inclusive of reserves)

as at 31 December 2021

	Quantity, Mt		PPM, TREO[2]	
	2021	**2020**	**2021**	**2020**
Kiruna[1]				
Measured	–	–	–	–
Indicated	–	–	–	–
Inferred	1,349	–	164	–
Must Take	24	–	129	–
Total	**1,373**	**–**	**163**	**–**
Malmberget				
Measured	–	–	–	–
Indicated	–	–	–	–
Inferred	1,203	–	226	–
Must Take	168	–	232	–
Total	**1,371**	**–**	**227**	**–**

1) Including Konsuln.
2) Total rare earth oxide (TREO).

To date, the estimation of phosphorous within the resource models follows the same strategy and uses the same data quantity as the iron estimate. As such, the classification of the phosphorous resources is aligned with the iron classification. No reserves are currently being reported for the phosphorous or contained apatite.

Rare earth data commenced collection as part of the standard assay suite in 2017 and as such, rare earth data is more limited in its spatial extent throughout the deposits. This, and the early stage test work being undertaken, has restricted the classification of the rare earth elements to the Inferred mineral resource category.

Pan-European Reserves & Resources Reporting Committee

LKAB compiles its mineral resources and mineral reserves annually. LKAB's reporting method follows the reporting standard PERC 2017 (Pan-European Reserves & Resources Reporting Committee), aimed at a balanced assessment of the value of LKAB's mines and deposits. The PERC Reporting Standard is consistent with the definitions contained in the CRIRSCO Template (Committee for Mineral Reserves International Reporting Standards). This report covers the reporting period from 1 January 2020 to 31 December 2021. At the time of compilation of the Technical Reports, an update to the PERC Reporting Standard was released. This report follows the guidelines of the 2017 Reporting Standard and complies with the PERC transition period between the 2017 and 2021 Reporting Standards. Future updates will follow the guidelines of the PERC 2021 Reporting Standard.

Basis for estimates

LKAB reports its mineral resources and mineral reserves in accordance with The PERC Reporting Standard (2017). The estimation of mineral resources and mineral reserves requires judgment to interpret available geological data and subsequently to select an appropriate mining method and then to establish an extraction schedule. Estimation requires assumptions about future commodity prices and demand, exchange rates, production costs, transport costs, close-down and restoration costs, recovery rates and discount rates and, in some instances, the renewal of mining licenses. There are many uncertainties in the estimation process and assumptions that are valid at the time of estimation may change significantly when new information becomes available. New geological or economic data, or unforeseen operational issues, may change estimates of mineral resources and mineral reserves. Estimates are made based on the following underlying factors:

Metal prices

Mineral resources and mineral reserves provide a basis for the company's long-term planning. Mineral resource estimates are reported within an optimised open pit and / or underground optimised stopes at Svappavaara with the addition of a 20% Fe cut-off at Mertainen due to modelled low-grade material falling within the Mertainen optimised open pit. At Kiruna and Malmberget, no cut-off is applied due to an approximate 40% Fe cut-off applied during the modelling process. This approach is considered by the Competent Person to represent 'reasonable prospects for eventual economic extraction'. Mineral reserve estimates are reported considering a long-term price of 65 USD/tonne of iron ore (62% Fe) over the coming business cycle.

Dilution

Dilution is referred to as the waste material that is being mined along with the ore during mining operations. This varies in percentage, depending on various mining and geological factors. LKAB systematically monitors the quantity of waste rock mixed with mined ore and this data is included in all estimates of mineral reserves.

Recovery

Depending on the mining method employed, orebody geometry and other technical and geological factors, some percentage of the ore cannot be recovered. The percentage of recoverable mineable mineral reserves is defined as ore recovery. This factor has been taken into consideration in the estimates of mineral reserves.

Standards, codes and recommendations

LKAB's mineral resources and mineral reserves have been estimated and listed according to the reporting standard PERC 2017.

The above text was compiled by Howard Baker FAusIMM(CP), Managing Director and Resource Geologist, Baker Geological Services Ltd (BGS). The mineral resource and mineral reserve statements in this report have been reviewed and approved by Howard Baker (BGS), Guy Dishaw, Principal Consultant and Tim McGurk, Corporate Consultant of SRK Consulting (UK) Limited.

March 2022

Tim McGurk B.Eng, C.Eng, FIMMM
Competent Person

Howard Baker, FAusIMM(CP).
Competent Person

Guy Dishaw, P.Geo.
Competent Person

Ten-year overview

Results **MSEK**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**
Net sales	48,812	33,914	31,260	25,892	23,367	16,343	16,200	20,615	23,873	26,971
Operating profit before impairment losses and provisions	**27,270**	**13,050**	**13,229**	**8,975**	**7,148**	**1,621**	**1,548**	**4,002**	**8,259**	**11,770**
Impairment of property, plant and equipment	–	–	–	–	-26	-1,192	-7,136	–	–	–
Costs for urban transformation provisions	-372	-1,396	-1,441	-2,106	-1,147	-2,106	-1,568	-3,432	-620	-1,181
Operating profit/loss	**26,898**	**11,654**	**11,788**	**6,869**	**5,975**	**-1,677**	**-7,156**	**570**	**7,639**	**10,589**
Operating margin, %	*55.1*	*34.4*	*37.7*	*26.5*	*25.6*	*-10.3*	*-44.2*	*2.8*	*32*	*39.3*
Net financial income/expense	1,484	797	1,136	-185	290	613	-115	24	129	388
Profit/loss before tax	**28,382**	**12,452**	**12,924**	**6,685**	**6,266**	**-1,063**	**-7,271**	**594**	**7,768**	**10,977**
Tax	-5,778	-2,695	-2,751	-1,411	-1,462	85	1,585	-247	-1,736	-2,224
Profit/loss for the year	**22,604**	**9,757**	**10,173**	**5,274**	**4,803**	**-978**	**-5,686**	**347**	**6,032**	**8,753**
Depreciation according to plan	**3,132**	**3,136**	**2,907**	**2,857**	**2,886**	**2,746**	**2,800**	**2,865**	**2,432**	**1,952**
Production and deliveries										
Production volume, Mt	26.7	27.1	27.2	26.9	27.2	26.9	24.5	25.7	25.3	26.2
Delivery volume, Mt	27.0	28.5	24.9	26.8	27.6	27	24.2	26	25.5	26.3
Deliveries of pellets, %	83	84	83	82	83	84	84	83	83	84
Capital structure and return										
Non-current assets	49,329	43,514	41,331	40,562	34,309	35,461	35,558	40,775	35,213	31,712
Current assets	45,316	31,755	33,350	28,399	25,990	22,165	20,470	22,359	22,609	26,232
Total assets	**94,645**	**75,269**	**74,681**	**68,961**	**60,298**	**57,626**	**56,028**	**63,134**	**57,822**	**57,944**
Equity	**67,565**	**48,412**	**45,528**	**38,573**	**36,348**	**30,551**	**32,116**	**37,756**	**41,472**	**41,085**
Non-current liabilities	18,458	18,542	21,467	20,040	17,139	17,740	17,900	18,402	11,670	12,485
Current liabilities	8,622	8,315	7,685	10,347	6,811	9,335	6,011	6,976	4,680	4,374
Total equity and liabilities	**94,645**	**75,269**	**74,681**	**68,961**	**60,298**	**57,626**	**56,028**	**63,134**	**57,822**	**57,944**
Return on equity, %	39.0	20.8	24.2	14.1	14.4	-3.1	-16.3	0.9	14.7	22.3
Operating assets	52,090	49,095	49,032	46,833	38,836	42,567	40,820	45,254	41,128	38,151
Return on operating assets, %	51.6	23.8	24.6	16	14.8	-4	-16.6	1.4	19.3	29.2
Net financial indebtedness	-16,553	-1,470	-1,158	3,552	-2,382	6,329	3,203	-16	-7,315	-9,780
Net debt/equity ratio, %	-24.5	-3	-0.9	11	-3.9	23.1	10.8	1.4	-16.2	-22.1

Ten-year overview, cont.

Results MSEK	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Cash flow										
Cash flow from operating activities	**23,485**	**8,963**	**9,469**	**7,059**	**8,860**	**526**	**3,834**	**7,536**	**8,557**	**11,273**
of which expenditure for urban transformation	-2,681	-4,191	-2,624	-1,871	-2,178	-1,035	-291	-1,354	-295	-407
Investing activities										
Investing activities, net – operations	-3,497	-2,925	-2,487	-3,673	-1,724	-3,288	-6,204	-5,463	-6,123	-5,802
Operating cash flow	**19,988**	**6,038**	**6,981**	**3,386**	**7,136**	**-2,762**	**-2,370**	**2,073**	**2,434**	**5,471**
Investing activities – financial	-9,960	1,780	-2,476	-972	-6,770	-1,159	1,357	-703	2,325	-3,729
Cash flow after investing activities	**9,670**	**7,817**	**4,506**	**2,414**	**366**	**-3,921**	**-1,013**	**1,370**	**4,759**	**1,742**
Financing activities										
Borrowing/repayments	-986	-600	-1,325	705	-937	2,114	108	2,793		
Dividend	-5,850	-6,104	-3,164	-2,882			-139	-3,500	-5,500	-5,000
Cash flow for the year	**2,834**	**1,112**	**17**	**237**	**-571**	**-1,807**	**-1,044**	**663**	**-741**	**-3,258**
Employees										
Average number of employees	4,469	4,535	4,348	4,188	4,118	4,224	4,463	4,539	4,427	4,357
Proportion of women, %	25	25	24	22	21	21	20	19	18	18
Lost time accidents per million hours worked[1]	8.2	6.3	6.8	7.7	6.8	5.8	6.2	5.3	6.7	9.92
Sick leave, %	4.2	4.4	3.5	3.6	3.7	3.7	3	2.9	2.9	2.9

1) Figures from 2013 onwards also include the accident rate among suppliers.

Definitions

Operating margin: operating profit as a percentage of net sales.

Return on equity: profit for the year according to the income statement as a percentage of average equity.

Return on operating assets: operating profit as a percentage of average operating assets.

Operating assets: intangible assets, property plant and equipment, inventories, accounts receivable, other receivables. Not financial assets, cash & cash equivalents and current investments.

Net financial indebtedness: interest-bearing assets minus interest-bearing liabilities.

Net debt/equity ratio: net financial indebtedness in relation to equity.

Terms and definitions

General glossary

Concentrating: beneficiation of finely ground ore by separation into a concentrate of iron ore powder with very high purity, known as slurry.

Open-pit mining: an ore deposit that is situated close to the surface and is mined in the open air.

Zoning plan: a zoning plan shows how a defined area in a municipality may be built on and how land and water areas may be used.

Direct reduction (DR) pellets: DR pellets are iron ore pellets designed for using natural gas to reduce the oxygen in the iron ore to produce DRI, which is used to produce steel in an electric arc furnace.

DRI, Direct Reduced Iron: input material for steelmaking in an electric arc furnace; also known as sponge iron.

Remediation: clean-up, restoration and/or ecological compensation of mining areas that have reached end-of-life.

Fossil-free steel: steel produced using reducing agents and energy from fossil-free sources.

Fossil-free steel production: steel produced from renewable energy sources and iron ore reduced to crude iron using fossil-free reducing agents, such as hydrogen.

GRI (Global Reporting Initiative): international standard for sustainability reporting.

Mine City Park: the areas that are to be phased out in favour of mining and transformed into park areas in Kiruna. More parks will be added as the urban transformation continues.

Waste rock: waste rock is a collective economic term for the rock that is not ore.

Hematite: mineral, iron ore (Fe_2O_3), named from the Greek for "blood stone". Has no magnetic properties.

Huntite: mineral with various uses, including as a halogen-free flame-retardant additive in plastics and cables.

Main haulage level: haulage level in an underground mine from which ore is transported to surface level via skip hoists.

Industrial minerals: collective term for rocks, minerals or other naturally occurring materials that are of economic value, excluding metals, energy minerals and gemstones.

Iron ore: ore with a high content of the element iron. A mineralisation is described as ore if it is profitable to mine it. The minerals magnetite and hematite are examples of iron ore.

Sponge iron: sponge iron is produced by removing the oxygen from the iron ore at low temperatures using carbon dioxide and hydrogen made from natural gas.

Corruption: incidents where an employee uses their position in the company for personal gain.

Magnetite: mineral, ferrimagnetic iron ore (Fe_3O_4), also known as lodestone, which in upgraded form is used for iron- and steelmaking. Other applications for magnetite include water purification, noise and vibration dampening and as ballast in high-density concrete.

Ore: economic term for a mineral that is deemed profitable to mine.

Ore base: the percentage difference between the mined crude ore and the theoretical quantity of ore.

Swedish orefields: describes a geographical area in the northern Swedish county of Norrbotten that includes Kiruna, Gällivare and Svappavaara.

Orebody: underground mining of ore is largely about finding orebodies and building drifts – which involves blasting tunnels/passageways in the rock – in order to be able to mine the ore along these orebodies.

Ground deformation: the mining gives rise to ground deformation – in other words, ground movements.

Blast furnace pellets: iron ore pellets that are reduced to crude iron in a steelworks blast furnace.

Pelletising: process whereby slurry is mixed with additives and binder, rolled into balls and sintered in a pelletising plant.

Pellet premium: mark-up factor on the iron ore price for producers of upgraded iron ore products.

Exploration: systematic searching for natural raw materials such as minerals and rocks. Exploration may take the form of geophysical surveys, geochemical investigation or geological surveys.

Crushed ore: designates iron ore from the mines before it has been upgraded.

Crude ore: see crushed ore.

Crude iron: molten iron from a blast furnace that is subsequently refined in a steelworks.

Seismic event: rock tremor, earthquake.

Barren rock: rock that is not ore; synonymous with waste rock.

Sintering: fusing of fine-grained ore (fines) into lumps (sinter) at a high temperature.

Sub-level caving: the method of mining that LKAB employs in its underground mines. It means that the ore is mined level by level and that waste rock loosens and fills the space where the ore was. As a result, no cavities are left underground, while the ground above slowly sinks.

Sorting: rough sorting, crushing and screening to separate waste rock and increase the iron concentration of the ore.

Values:LKAB's values: committed – innovative – responsible.

Units and abbreviations

g: gram

GWh: gigawatt hour

kg: kilogram

kt: kilotonne

kWh: kilowatt hour

m³: cubic metre

mg: milligram

mg/m³ ndg: milligrams per normal cubic metre dry gas

SEK bn: billion Swedish kronor

MSEK: million Swedish kronor

Mt: million tonnes

ppm: parts per million

TJ: terajoule

TWh: terawatt hour

Financial information

Interim reports
28 April
Interim Report, Q1 2022

12 August
Interim Report, Q2 2022

27 October
Interim Report, Q3 2022

February 2023
Interim Report, Q4 2022
together with Year End Report

Contacts
Please direct any questions regarding LKAB's financial information to Peter Hansson, CFO or Jan Moström, President and CEO.

Please direct any questions regarding the sustainability report to Pia Lindström, Senior Vice President, Environment and Sustainability.

Annual General Meeting

Date
LKAB's Annual General Meeting will be held at 3 pm on Thursday 28 April 2022.

Attendance
The Annual General Meeting is open to the public.

Notice of general meeting
The notice of the Annual General Meeting, financial information and other information can be found at lkab.com.

Printed financial information can be ordered by emailing info@lkab.com.

A printed version of LKAB's Annual and Sustainability Report 2021 will be available on 28 April 2022.

Forward-looking information
This report may contain forward-looking information including, but not limited to, statements concerning operations and earnings, our strategy and market conditions. Forward-looking information is based on current expectations and forecasts relating to future events and includes assumptions and estimates that are associated with risks and uncertainties. Actual results may therefore differ from what is described. Some of these risks and uncertainties are described further in the section on risks on pages 47–55.

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