LKAB IN BRIEF

BUSINESS CONCEPT
To manufacture and deliver upgraded iron ore products and services for iron-making that create added value for customers on the world market from our base in the Swedish orefields. Other closely related products and services that are based on LKAB’s know-how and that support our main business activities may be included in operations.

VISION
LKAB shall be perceived by customers as the supplier that adds the most value, thus leading the way in our chosen market segments.

PERFORMANCE IN IRONMAKING
Performance in Ironmaking is LKAB's promise to customers. It means that we always put the customer at the centre and ensure quality, stability and delivery reliability throughout our value chain from mine to port. Through close, in-depth cooperation with our customers we develop our products and help improve our customers’ processes.

LKAB’s values form the basis of how the business is operated.

COMMITTED
The performance of our customers is at the heart of everything we do.

INNOVATIVE
We emphasise creative thinking to drive improvements forward.

RESPONSIBLE
We act for the long-term, show respect and put safety first.

This is a summary of the Swedish version of LKAB’s annual and sustainability report, which is available on lkab.com. The English version of LKAB’s annual and sustainability report will be published on April 25th, 2019. It will also be available at lkab.com.
150,000 tonnes of iron ore are mined by LKAB every day

LKAB’s ore deposits are largely mined in underground mines more than a thousand metres below the surface, making demands of both safety and efficiency. All the iron ore mined is then upgraded in our processing plants. Here the ore is sorted and concentrated before finally being pelletised and heated to become small round iron ore pellets. From the processing plants the iron ore products are transported by rail to the ports and shipped to customers in Europe, the Middle East, North Africa, the USA and Asia.

Northern Division
Comprises mines and processing plants in Kiruna. The products are transported along the Malmbanan and Ofotbanen ore railway to the port in Narvik for shipment to steelworks customers around the world.

Southern Division
Comprises mines and processing plants in Malmberget and Svappavaara. The products are transported along the Malmbanan ore railway, mainly to the port in Luleå for shipment to European steelworks customers.

Special Products Division
Develops and supplies products and services including industrial minerals, drilling technology and full service solutions for the mining and construction industries.

25.9 sales in SEK billion

Three divisions

4,188 headcount of the LKAB Group

77% of LKAB’s iron ore products are exported to steelworks in Europe.

82% of LKAB’s delivery volumes consist of iron ore pellets.

150,000 tonnes of iron ore are mined by LKAB every day

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2018 OVERVIEW

For management and follow-up the operations are split into three divisions: the Northern Division, the Southern Division and the Special Products Division.

KEY RATIOS

For management and follow-up the operations are split into three divisions: the Northern Division, the Southern Division and the Special Products Division.

NET SALES
MSEK 25,892

OPERATING PROFIT
MSEK 6,869

CASH FLOW FROM OPERATIONS
MSEK 3,126

FINANCIAL OVERVIEW, DIVISIONS

NORTHERN DIVISION1 2018 2017 2018 2017 2018 2017
Net sales, SEK million 14,278 13,473 10,534 9,999 3,806 3,936
Underlying operating profit2, MSEK 6,016 5,241 2,991 2,746 330 417
Operating profit, MSEK 4,102 4,181 2,799 2,659 330 391

SOUTHERN DIVISION1 2018 2017 2018 2017 2018 2017
Net sales, SEK million 10,534 9,999 3,806 3,936
Underlying operating profit2, MSEK 2,991 2,746 330 417
Operating profit, MSEK 2,799 2,659 330 391

SPECIAL PRODUCTS DIVISION1 2018 2017 2018 2017
Net sales, SEK million 3,806 3,936
Underlying operating profit2, MSEK 330 417
Operating profit, MSEK 330 391

PRODUCTION OF IRON ORE PRODUCTS, Mt

NORTHERN DIVISION1 2018 2017 2016 2015 2014
Net sales, SEK million 14,278 13,473 10,534 9,999 3,806 3,936
Underlying operating profit2, MSEK 6,016 5,241 2,991 2,746 330 417
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SPECIAL PRODUCTS DIVISION1 2018 2017
Net sales, SEK million 3,806 3,936
Underlying operating profit2, MSEK 330 417
Operating profit, MSEK 330 391

DELIVERIES OF IRON ORE PRODUCTS, Mt

Northern Division1 2018 2017 2016 2015 2014
Net sales, SEK million 14,278 13,473 10,534 9,999 3,806 3,936
Underlying operating profit2, MSEK 6,016 5,241 2,991 2,746 330 417
Operating profit, MSEK 4,102 4,181 2,799 2,659 330 391

Southern Division1 2018 2017 2016 2015 2014
Net sales, SEK million 10,534 9,999 3,806 3,936
Underlying operating profit2, MSEK 2,991 2,746 330 417
Operating profit, MSEK 2,799 2,659 330 391

Total 2018 2017 2016 2015 2014
Net sales, SEK million 26,9 Mt
Underlying operating profit2, MSEK 9 Mt
Operating profit, MSEK 6,8 Mt
Operating margin, % 26,5
Net debt/equity ratio, % 9,2
Profit for the year 5,274 4,803
Operating cash flow, MSEK 3,126 7,136
Return on equity, % 14,4
Net sales, MSEK 25,892
Underlying operating profit2, MSEK 8,975
Operating profit, MSEK 6,869
Operating margin, % 26,5
Profit for the year 5,274
Operating cash flow, MSEK 3,126
Return on equity, % 14,1
Net debt/equity ratio, % 9,2
Capital expenditure on property, plant and equipment, MSEK 2,455
Provisions for urban transformation at end of reporting period, MSEK 17,625
Dividend to owner3, MSEK 3,164

1 The Group’s earnings, the composition of the Group and the breakdown of earnings between operating segments are shown in Note 2 on pages 103–104, in the complete annual and sustainability report. With effect from 2018 a new model is being used for internal distribution of earnings between the Northern Division and the Southern Division. Figures for 2015–2017 have been restated according to the new split.
2 Underlying operating profit is reported in Note 46 on page 129, in the complete annual and sustainability report.
3 The dividend proposed by the Board of Directors will be put to the Annual General Meeting for approval on 25 April 2019.
KEY EVENTS DURING THE YEAR

JANUARY–MARCH
Record production for a single quarter. LKAB gets off to a stable start in 2018 with a continued increase in production volumes, reaching a new record level in the first quarter.

Green light for HYBRIT. SSAB, Vattenfall and LKAB are collaborating to develop processes for fossil-free steelmaking. After completing a pilot study supported by the Swedish Energy Agency, in February it is decided to take the initiative further and construction of a unique pilot facility begins in June.

APRIL–JUNE
Last blast at Gruvberget. On 9 April blasting ends at Gruvberget open-pit mine, which has been mined since 2010. The deposit has not been mined out, however. The question going forward is whether mining it is financially viable and if so, how this can most efficiently be done.

The biggest construction venture in Kiruna’s history is presented. The ongoing urban transformation means that LKAB must build thousands of new homes and commercial premises in Kiruna in the coming years, and in April a press conference is held to present the plans. New areas with completed local plans and ongoing groundworks include Luossavaara with 200 homes, Jägarskolan with 450 homes and the district in Kiruna’s new city centre.

LKAB is named as a Career Company in 2018. For the sixth consecutive year LKAB is named as a “Career Company” – one of Sweden’s 100 best places to work.

LKAB and the Municipality of Kiruna sign billion kronor agreement. The agreement on Mine City Park 3 is signed in June and secures long-term development, including more housing projects, while the Municipality redesignates the present city centre as an industrial area so that LKAB has crucial access to land for its continued operations.

Towards a new world standard for sustainable mining. LKAB launches the Sustainable Underground Mining (SUM) initiative. In partnership with ABB, Epiroc, Combitech and Volvo Group, the aim is to set a new world standard for sustainable mining at great depths.

Collective environmental permit application for Kiruna. During the summer what may be Sweden’s largest environmental permit application is submitted to the Land and Environment Court. At present there are separate permits for Kiruna’s mine and processing plants, with the mine having been approved under older environmental legislation. The new application covers all of LKAB’s operations in Kiruna. Thorough investigations have been carried out to identify which protective measures are required in order that there is no increased impact on the environment even if production increases.

JULY–SEPTEMBER
From residual product to strategic minerals. In July LKAB announces its investment in a pilot facility for industrialising an innovative new technology for extracting rare earth metals from the residual products of iron ore production. Among other things this could result in LKAB producing phosphorous, classed by the EU as a strategic mineral of particular importance to industry.

Fatal accident in Svappavaara. Just before 10.30 am on the morning of Friday 27 July a serious accident involving a fall occurs in the pelletising plant in Svappavaara. The worker involved is transported to Umeå, but dies later as a result of her injuries. This is a serious failure for LKAB and work on our safety culture has the highest priority.

Historic building swap. In a ceremony on 28 August LKAB hands over Kiruna’s new city hall, Kristallen (The Crystal), to the Municipality of Kiruna. In return, the Municipality of Kiruna hands over the old city hall for phase-out. LKAB gains access to the land for continued mining.

Pelletising plant in Svappavaara undergoes four months of repairs. During a scheduled maintenance shutdown it emerges that support structures under the cooler at the pelletising plant in Svappavaara need to be replaced earlier than planned. LKAB announces that the pelletising plant in Svappavaara is being taken out of operation until January 2019.

OCTOBER–DECEMBER
Rate of exploration increases. The results of the expanded test drilling programme analysed during the year show that the orebody in Kiruna has a more complex downward geometry than had previously been known. In October LKAB announces that the rate of exploration is being intensified, to secure iron ore deposits after 2030 when the current main haulage levels are expected to be mined out.

Acquisition of UK company Francis Flower is completed. LKAB Minerals’ acquisition of the UK company Francis Flower is approved by the competition authorities and the company is taken over as of 3 December 2018.
How do you view the year’s results?
LKAB is again reporting improved earnings. Underlying operating profit – that is, excluding payments for urban transformation – increased by just over 25 percent. We benefited from market conditions that remained good, with higher iron ore prices and a strong dollar exchange rate. As more and more steelmakers demand more sustainable and resource-efficient input materials, the market is driving towards more highly upgraded and climate-efficient iron ore products. This is our niche and it is here that we can make a big difference for our customers.

Since we cannot influence world market prices, it is important that we focus on things that are within our own control – such as sustainability and quality. But cost control and initiatives to increase volumes are also important. We need to be able to spread our costs across a larger production volume so that we can still be competitive when price levels in the market are lower.

Production disruption, particularly in the second half of the year, and the fact that the pelletising plant in Svappavaara was taken out of operation for extensive maintenance work in the fourth quarter had a significant impact on the total volumes in 2018. Despite this, we succeeded in producing 26.9 Mt – just below the production record of 27.2 Mt reached in 2017. This shows the potential that exists with stable, consistent production.

What was the focus of the business in 2018?
We have a clear growth agenda that is based on highly upgraded products, high productivity and processes that are energy, climate and environmentally efficient. Operational excellence and sustainability are key words for our strategy. In short, ensuring efficient production, seeking out continuous improvements at all levels and at the same time taking responsibility for our impact.

Production stability is crucial and is something we are continually working on. This involves measures for structured planning and optimisation of maintenance work and a constant focus on strengthening the safety and production culture.

LKAB is focusing on becoming more broadly established in the minerals market and in December 2018 we completed our acquisition of UK industrial minerals company Francis Flower, which among other things recovers and processes blast furnace dust. This is our niche and it is here that we can make a big difference for our customers.

In what way is LKAB facing a new situation?
LKAB’s plan in recent years has been to decide at the beginning of the next decade whether to invest in a new main haulage level for the iron ore mine in Kiruna. To prepare for this decision, in 2018 we intensified exploration close to the mine to chart the deposits that exist below the current main haulage levels. During the year the results of the exploration showed that the deposit in the Kiruna mine has a more complex downward geometry and geology than had previously been assumed. The new findings do not affect the mineral reserves and mineral resources that LKAB has reported to date, but are of relevance for the future and the mining that takes place beyond the lifetime of the current main haulage level.

The orebody under the current main haulage level is still open northwards and goes deeper, but we need to investigate it more closely to get a clearer picture.

What does this mean going forward?
Firstly, we are substantially increasing our investments in exploration. This is partly to optimise production within the framework of investments made previously, with a focus on extending the lifetime of existing production plans, but also so as to secure mining operations in the long-term.

The Sustainable Underground Mining (SUM) development programme that we initiated during the year with ABB, Epiroc, Combitech and Volvo Group is of crucial importance here. The programme aims to achieve a new world standard for large-scale mining at great depths that is also carbon dioxide-free, digitalised and autonomous.

LKAB is also investing in pilot facilities for innovative new technology that processes residual products from iron ore production. Our ambition is to develop production of phosphorous and rare earth metals classed by the EU as strategic minerals.

In partnership with SSAB and Vattenfall, since 2015 we have been conducting the HYBRIT initiative which aims to develop a steelmaking process that uses hydrogen instead of coal. The aim is to have carbon dioxide-free steel by 2035, which will make an important contribution to Sweden achieving the UN climate goals. Following support from the Swedish Energy Agency, last summer we were able to start construction of a pilot facility in Luleå.

The orebody under the current main haulage level is still open northwards and goes deeper, but we need to investigate it more closely to get a clearer picture.
slag and residual products from the steel industry. This acquisition broadens LKAB’s offering in industrial minerals, and at the same time adds significant turnover.

These are important investments for LKAB as it moves forward. We need new technical solutions so that we can mine large volumes at depth safely and profitably, we need to adapt our business to reduce its climate impact and we need to create new business opportunities to supplement our iron ore operations.

**What are the greatest challenges for LKAB right now?**

Our investments in the expansion of exploration and in HYBRIT, SUM and a broader LKAB will require substantial financial input. In view of this, we need to secure existing production plans and continually streamline the business in order to guarantee the lasting profitability required for continued investments.

Access to land for exploration and mining is vital, and for that we need continued good cooperation as regards the development of our operating locations. I feel that there is a strong common interest in securing LKAB’s future in the Swedish orefields. At the same time, our continued operations are dependent on decisions at various levels of society – at municipal level, county level and national level. Complex and drawn-out permit processes are a real challenge. Such processes must be designed so as to provide legal certainty, to be effective and predictable. This is a matter that affects more people than just LKAB, and among others we are working with the Department of Enterprise and Innovation and with other operators in the industry through SveMin in order to improve coordination between authorities. At the municipal level, during the year we became aware that the process of producing local plans had stalled because the exercise of municipal authority had become mixed up with other matters in an unfortunate way.

Another challenge to maintaining LKAB’s competitiveness is that EU ETS – the EU’s Emissions Trading System for carbon dioxide – in practice subsidises pellets and sinter producers with high emissions. The European steel industry has a free allocation of 171 kg of carbon dioxide per tonne of pellets or sinter produced at the steelworks. LKAB’s free allocation is 30.7 kg of carbon dioxide per tonne of pellets produced at the mine. LKAB has reduced its emissions of carbon dioxide to a fifth since the 1960s, while the steel industry remains at the levels that LKAB had 60 years ago. The trading system is being revised from 2021 and it is reasonable for LKAB’s pellets to be compared with the steel industry’s pellets and sinter.

**Sustainability is clearly integrated into LKAB’s strategy.**

*How has this work gone during the year?*

At the end of July there was a serious accident involving a fall, with an employee later dying of her injuries. This is absolutely the worst that can happen. Our employees must be able to take it for granted that they will go home from work each day just as healthy as when they arrived. Reducing the number of accidents is one of LKAB’s priority sustainability goals and we are continuing to put a great deal of effort into designing our workplaces safely and into workplace-related initiatives such as training and dialogue to change attitudes and behaviours. Here we have made progress in parts of the organisation, but unfortunately we have not yet seen the development we want overall. In 2018 we recorded 7.7 accidents per million hours worked, which is an increase compared with 2017 and a good distance away from our target.

Work on matters such as anti-corruption and non-discrimination has a high priority and LKAB’s stated aim is for our Code of Conduct to be complied with throughout the organisation.

As part of LKAB’s diversity plan the operations worked on and updated standards and ground rules, during the year. The aim is to create the conditions for diversity and to prevent discrimination at all levels.

We introduced a human rights policy in 2016 to support work on identifying and managing risks associated with this area throughout the value chain, including among our more than 8,000 suppliers.

In the area of climate, the long-term ambition is to be carbon dioxide-free. Although we see a limit to the improvements that can be achieved with reasonable efforts within the framework of the current production structure, we need to continually reduce our energy use and limit emissions with an environmental impact – as is reflected in the targets that we have set for 2021.

The issue of dam safety has come back into focus following a serious accident involving a mine dam burst at one of the company Vale’s facilities in January 2019. The issue of liability for the accident in Brazil has not yet been clarified, but events such as this affect the world’s trust in the entire industry. At LKAB we are continually developing the technology and routines for how the dams are maintained, and in spring 2018 we had a panel of experts from Australia and Canada audit our dam safety work so that we can improve it further.

**How is work on the urban transformations going?**

LKAB is entirely dependent on there being attractive communities in the Swedish orefields, and our investments to secure our future operations go hand in hand with the development of these communities. In 2018 we moved into a phase that involves a high level of construction activity in both Gällivare and Kiruna. New residential areas have taken shape and in Kiruna’s new city centre the city hall known as The Crystal is now complete.

The fact that the urban transformations are in an intensive phase will mean increased expenditure over the coming year. During the year LKAB and the Municipality of Kiruna concluded a third Mine City Park agreement with a value of around SEK 2 billion, which gives us access to new land extending over an area that will cover mining operations up to the year 2028.

Our ambition is to complete the urban transformations on schedule, at a reasonable cost and in a way that creates security for residents and local businesses. In our annual survey, more than 80 percent of residents in Gällivare and Kiruna say that they remain confident that LKAB is shouldering its responsibilities. I think that’s a good result.

**How do you see the outlook for LKAB?**

We have great challenges ahead of us, but I feel optimistic. We are determined to drive the technological transformation of the industry while at the same time making the most of our expertise in mining, processing and logistics to broaden the business.

Fundamentally, we are competitive. Increased focus on the climate challenges, more stringent environmental requirements and our customers’ efforts to achieve more resource-efficient production are strengthening our position as a niche player in the global iron ore market. It is from this position that we are building the LKAB of the future.

*President’s Report*

Jan Moström, President and CEO

Luleå, 21 March 2019
LKAB’s mission is to utilise Sweden’s iron ore resources in a responsible way and to secure lasting competitiveness and long-term value creation. Sustainability work is therefore central to our business strategy.

2045

In partnership with SSAB and Vattenfall, LKAB is conducting the HYBRIT initiative for future fossil-free steelmaking. If the initiative is successful it will make a significant contribution to meeting Sweden’s climate targets for 2045.
OBJECTIVE

OBJECTIVES FOR SUSTAINABLE DEVELOPMENT

ECONOMIC SUSTAINABILITY

LKAB needs to be financially strong in order to be an innovative and responsible company that contributes to prosperity. We are working to double our ore reserve in the longer term. At the same time, we will continue to improve our competitiveness with the ambition to increase productivity by 40–50 percent in the next generation of mining and processing. The objectives that LKAB has set for the period up to 2021 in order to measure and monitor financial sustainability are summarised below.

<table>
<thead>
<tr>
<th>Follow-up of objectives</th>
<th>2018</th>
<th>2017</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on equity of at least 12 percent over a business cycle</td>
<td>14.1</td>
<td>14.4</td>
<td>&gt;12%</td>
</tr>
<tr>
<td>Net debt/equity ratio 0–30 percent</td>
<td>9.2</td>
<td>-6.6%</td>
<td>0–30%</td>
</tr>
<tr>
<td>Ordinary dividend of 40–60 percent of profit for the year</td>
<td>60%</td>
<td>60%</td>
<td>40–60%</td>
</tr>
</tbody>
</table>

1 The Board of Directors is proposing to the Annual General Meeting that the ordinary dividend amounts to MSEK 3,164 – which corresponds to a dividend of 60 percent of profit for the year.

SOCIAL SUSTAINABILITY

LKAB shall be a safe and attractive workplace and exert a positive influence on our business partners and our immediate environment. Within social sustainability LKAB aims to offer safe, secure and healthy workplaces where diversity, non-discrimination and equality can be taken for granted. Our work aims to ensure cutting-edge expertise, to maintain exemplary stakeholder dialogue and ethical value chains, and to contribute to lively and attractive local communities. The objectives that LKAB has set for the period up to 2021 in order to measure and monitor this work are summarised below.

<table>
<thead>
<tr>
<th>Follow-up of objectives</th>
<th>2018</th>
<th>Base year 2015</th>
<th>Objective 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce accidents resulting in absence to a rate of 3.5 per million hours worked by 2021</td>
<td>22.1%</td>
<td>20.0%</td>
<td>&gt;25%</td>
</tr>
<tr>
<td>Percentage of women to be at least 25 percent by 2021</td>
<td>21.4%</td>
<td>17.7%</td>
<td>&gt;25%</td>
</tr>
<tr>
<td>Compliance with LKAB’s Code of Conduct and effective dialogue with stakeholders2</td>
<td>91% have completed training,2 Dialogue according to plan,3</td>
<td>n/a2</td>
<td>n/a3</td>
</tr>
</tbody>
</table>

2 The acquisition of Francis Flower brought a large number of new employees into the Group in December who did not have time to complete the training in 2018.
3 For more information concerning KPIs associated with the objective see page 47, in the complete annual and sustainability report.

ENVIRONMENTAL SUSTAINABILITY

LKAB aims to be one of the most resource-efficient and environmentally efficient mining companies in the world. Our long-term ambition is to achieve carbon dioxide-neutral operations. Our vision also includes environmentally neutral use of water and energy, and no impact from emissions on our surroundings. We want to safeguard biodiversity and are working to turn residual products into resources. The objectives that LKAB has set for environmental improvements in the existing production system are summarised below.

<table>
<thead>
<tr>
<th>Follow-up of objectives</th>
<th>2018</th>
<th>Base year 2015</th>
<th>Objective 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce carbon emissions by at least 12 percent per tonne of finished product by 2021 compared with 2015, and at the same time reduce emissions of nitrogen to air (NOx)1</td>
<td>25.7 kg/tonne</td>
<td>27.2 kg/tonne</td>
<td>&lt;23.9 kg/tonne</td>
</tr>
<tr>
<td>Reduce energy intensity (kWh per tonne of finished product) by at least 17 percent by 2021 compared with 2015</td>
<td>161 kWh/tonne</td>
<td>166 kWh/tonne</td>
<td>&lt;138 kWh/tonne</td>
</tr>
<tr>
<td>Reduce discharges of nitrogen to water by at least 20 percent per tonne of finished product by 2021 compared with 2015</td>
<td>16 g/tonne</td>
<td>26 g/tonne</td>
<td>21 g/tonne</td>
</tr>
<tr>
<td>Reduce emissions of particulates to air from scrubbing equipment by at least 40 percent by 2021 compared with 2015, calculated as an average for all equipment4</td>
<td>10 mg/m² ndg</td>
<td>17 mg/m² ndg</td>
<td>10 mg/m² ndg</td>
</tr>
</tbody>
</table>

4 The objective covers dust extractors throughout LKAB’s operations. The objective thus does not include the flues in the pelletising plants, where problems with or an absence of scrubbing equipment have resulted in the limits for SO2 and particulates being exceeded. See "Environmental impact and resource consumption" on pages 56–57, in the complete annual and sustainability report.
STRATEGIC FRAMEWORK

LKAB AIMS TO BE A MINING AND MINERALS COMPANY WITH A CLEAR NICHE THAT GROWS GLOBALLY THROUGH:

- Highly upgraded products
- Highly productive mining, processing and logistics
- Energy, climate and environmentally efficient processes

FOUNDATIONS

Growth

Operational excellence

Sustainability

Leadership and employeeship

Values

**Operational excellence**

LKAB will increase its productivity through more stable, more efficient processes and continuous improvements at all levels. Our focus is on optimising plant and machinery utilisation throughout the operations. In parallel, we are working to evaluate and develop new technology in order to increase productivity and resource efficiency. By being resource-efficient we can reduce both our costs and our impact on the environment.

**Leadership and employeeship**

Developing the organisation and skills supply are key areas, and work to create a shared culture that focuses on safety, production stability and continuous improvements must go on. By continuing to build a culture that is innovative, flexible, responsible and committed to LKAB’s future we can secure our competitiveness in both the short and the long-term.

**Values**

LKAB’s values involve taking responsibility and seeing your own significance for the future of the company as a whole; being committed and focusing on results for our customers; and being innovative in order that we develop and improve all the time. Our values guide us in prioritising our work and are kept alive by talking about them and living them in all things, large or small.

**Sustainability**

LKAB is working for increased sustainability throughout the value chain. As a niche player, this gives us a competitive advantage in the global arena. Minimising the negative impact of our operations and seeking to maximise our benefit to customers and communities creates the conditions for long-term profitable growth.
STRATEGY

A BROADER, STRONGER LKAB

The transition to the next generation of mining brings considerable opportunities for the future, not least as regards sustainability. At the same time, it requires extensive investments as well as a long planning horizon. Securing competitiveness – through sustainability, operational excellence and growth – within the framework of the company’s existing structures creates the conditions for investing in the future.

Future competitiveness
As well as work to optimise investments made previously, LKAB is running strategic programmes in four areas that are central to our long-term expansion plan and for the transition to the next generation of mining, processing plants and logistics:
- Knowledge of the ore and barren rock – to understand the next generation of production systems and products.
- Automation and digitalisation to enhance productivity and safety.
- Energy for efficient use of electricity and a gradual transition to carbon dioxide-free operations.
- Leadership and employee engagement, the work environment, expertise, working methods and a culture that develops and involves people. Securing the skills needed for the necessary transition.

Transitioning to sustainable production and exploiting the opportunities that increased digitalisation offers are key. Agenda 2030 and the global development goals are also guiding LKAB on this journey.

Development programmes
Development work for next-generation production systems is being conducted at many different levels, but largely based on two development programmes that also offer practical test environments.

SUM – Sustainable Underground Mining
SUM is an initiative to develop a new world standard for sustainable mining at great depths. The initiative is a collaboration between LKAB, ABB, Epiroc, Combitech and Volvo Group. The work is taking place in a physical test mine in the Konsuln orebody in Kiruna, as well as in a virtual test mine.

HYBRIT – steel without coal
The aim of HYBRIT, which is being run in partnership with Vattenfall and SSAB, is to make the value chain from mine to steel fossil-free. Central to this work is replacing the blast furnace process with a direct reduction process that uses hydrogen as reducing agent. The by-product of this process is not carbon dioxide, but water. Construction of a pilot facility began in 2018, with research and development expected to continue until 2024. The plan is to carry out trials in a full-scale demonstration facility during the period 2025–2035.

Alternative growth opportunities
LKAB will also focus on becoming more widely established in the minerals market. Examples of this include the acquisition of UK industrial minerals company Francis Flower as well as the work being conducted within the ReeMAP project, which involves extracting phosphorous and rare earth metals from our waste streams. Becoming more active in these areas will broaden LKAB’s scope and make us more resilient when faced with fluctuations in the iron ore market.

PRIORITIES

For competitiveness 2019–2030
- Maximise production, focusing on:
  - more stable production
  - greater utilisation of facilities
  - continuous improvements
- Expand existing production systems by developing new technology and new working methods.
- Evaluate alternative growth opportunities, including acquisitions of deposits, mines, operations and companies.

For future competitiveness
- Expand exploration next to existing production areas.
- Develop next-generation production systems.
- Evaluate alternative growth opportunities, including acquisitions of deposits, mines, operations and companies.