



# METALS FOR FUTURE GENERATIONS

Annual and Sustainability Report 2020

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#### About Boliden's Annual and Sustainability Report

The Annual and Sustainability Report describes Boliden's financial performance and sustainability work. The Directors' Report comprises pages 8–11, 16–18, 20–24, 26–31, 33–43 and 54–67. Boliden's Sustainability Report as required by Chapter 6, section 11 of the Swedish Annual Accounts Act, is presented on pages 8–11, 22–23, 28–31, 33–37, and 54–57.



## Trends that shape the demand for metals

Boliden's metals are part of the past, the present and the future. Thanks to their properties, base metals have always been part of society's development throughout the ages.

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## Sustainable production processes at mines and smelters

Long-term responsibility, high technical know-how and a high level of safety and productivity are priority areas in Boliden's operations.

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## Aiming for a green transition for future generations

Boliden is a local employer operating in a global business environment where employees form the basis for success and value creation.

29



#### **SEK 8,438 m**

Operating profit excluding revaluation of process inventory increased due mainly to higher volumes.

#### **SEK 4,957 m**

Free cash flow increased mainly due to higher earnings and lower investments.

#### **SEK 6,305 m**

A number of expansion investments were completed during the year.

0.61

Carbon dioxide intensity

Revenues, SEK m	56,321	10.000
		49,936
Operating profit excl. revaluation of process inventory, SEK m	8,438	7,035
Operating profit, SEK m	8,935	7,597
Earnings per share, SEK	24.86	21.15
Free cash, SEK m	4,957	635
Investments, SEK m	6,305	8,826
Return on capital employed, %	17	16
Return on equity, %	16	14
Net debt/equity ratio, %	5	13
Dividend per share <sup>1)</sup> , SEK	8.25	7.00
Redemption per share <sup>1)</sup> , SEK	6.00	1 to 1 to 1
Accident rate (LTI frequency)	5.8	4.4
Carbon dioxide intensity	0.61	0.64
Number of serious environmental incidents	0	1

<sup>1)</sup> The amount in 2020 refers to the proposed dividend and share redemption respectively.

This is a unique year to summarize. Ultimately, I am both grateful and proud that Boliden has maintained such a high level of safety in our operations and that the spread of Covid-19 among our employees and contractors was limited. Both aspects speak of a high level of responsibility throughout the organization, and that jointly we create workplaces in which health and safety are the cornerstones of value creation in Boliden.

#### A year of very different challenges

Running a business with a high degree of stability in our industry is a challenge even during a normal year. Throughout the entire chain from exploration, mining and concentration and on to the smelters, conditions change in ways that are sometimes difficult to predict. This is one of many reasons why we have chosen an organizational philosophy with a high degree of delegated decision-making. This, together with a corporate culture in which taking responsibility forms a natural part of dayto-day work, creates excellent conditions for resolving situations that arise, and for implementing improvements in one's own area. This was of even greater benefit to Boliden in 2020.

Our industry is global. We were therefore able to see early in the year that Covid-19 and its associated restrictions would have an impact on the metal markets. Initially, deliveries of such things as special chemicals from China were affected, and then, as the disease and national restrictions spread, mine production and concentrate deliveries from all over the world were also affected. In spite of this, Boliden's production in both mines and smelters remained stable throughout the year. This is largely the result of local responsibility based on regional and national decisions and guidelines. At the same time, certain financial measures were taken to ensure a high degree of flexibility. As much as I would rather be without the spread of infection around the world, it has made me proud of how well Boliden and all of our employees have performed during the year.

#### Two strong business areas

One of Boliden's many strengths is its ability to stay focused on the things we can influence ourselves. This was also the case this year. In Business Area Mines, we concluded three important investments to increase the production rate in both of our open pits and Garpenberg. In all, the investments mean that Boliden's mine production increased by around 25% and competitiveness was strengthened. In the meantime, stability in the other units remained high throughout the year, which in the case of Kylylahti meant right up until final mining during the fall. In exploration, the main focus was on Tara Deep and the Boliden Area. Both have progressed well, and both have the potential to create value for Boliden over the long term.

In the case of smelters, the focus was also on completing investments for increased production capacity. We see this most clearly in Rönnskär, where investments continued in a new leaching plant and a new underground repository scheduled to begin operations in early 2021. This not only gives us the opportunity to extract more metal from our processes, but also metals from existing residual material. In Harjavalta, investments in increased copper production were completed and nickel expansion has begun. Meanwhile, we submitted an environmental permit application in Odda for a possible modernization of the operation, which if realized, will mean a significant investment in the zinc smelter.

We are constantly evaluating various ways to continue developing our corporate

culture and operations. For example, the year saw the entire company involved in the work of formulating our new values - Care, Courage and Responsibility. We want our corporate culture to help engender even greater respect between colleagues and to make it abundantly clear that we are all part of our success, and all responsible for meeting our challenges. During the year, we also applied for membership of ICMM (International Council on Mining and Metals with the aim of increasing the opportunities for international knowledge assimilation for our operations. Our focus on well-balanced investments aimed at existing operations will continue. In this way, we seek to ensure productivity growth, high value-creation and stability in order to face a constantly changing environment.

#### Metals for the climate

Also important for Boliden is Europe's emerging realization of the importance of metals for adapting to climate change. This is particularly well illustrated by the European Commission's initiative to create the Raw Material Alliance. The purpose of the alliance is to strengthen the ability to meet increasing demand, especially for base metals in connection with the spread of electrified transportation, renewable energy and energy storage systems on the continent. Boliden supports the alliance and proactively seeks to continue being part of the solution to the climate challenge. These efforts take place in many ways, but most important is to reduce the direct and indirect climate emissions

we give rise to. Our goal is to reduce the carbon dioxide intensity of our products by 40% by 2030 compared to our 2012 levels. The goal presents a challenge, but we are making and will continue to make every effort to achieve it. The nickel expansion in Harjavalta, announced during the year, is a typical example. Nickel is a key metal in the burgeoning battery industry, and the expansion means that the carbon dioxide intensity of nickel smelting will be reduced by almost 20%.

In parallel with these investments and efficiency improvements, we are also working on tools to enable comparison between the carbon footprint of copper produced by Boliden with copper, for example, currently being imported into Europe. Our metal production is already highly competitive today from a climate standpoint. As this becomes increasingly clear, along with how crucial metals per se are for achieving society's climate goals, we are convinced that Boliden will become more attractive for future employees and customers alike. We are also convinced that a climate-efficient operation creates value for the company over the long term. In line with this conviction, we have established a new vision for Boliden - to be the most climate friendly and respected metal provider in the world.

#### Strong financial performance

Considering the challenges we faced during the year, ours was a strong financial performance. Prices and terms were generally good, but stable production was the strongest contributing factor, this year in particular. Long-term and stable value creation is the basis of our strategy, and it is of course gratifying that it is successful even under more challenging conditions. Care in regard to working conditions, high environmental and climate performance and technological development are all areas that have characterized Boliden for many years. As the metals we produce enjoy increasing levels of demand, our position and competitiveness grow stronger. And our position is made even stronger by the fact that we produce these metals responsibly. We form part of the adaptation to climate change and are thus also important for the future.

Mikael Staffas President and CEO



## Trends that shape the demand for metal

Boliden's metals are part of the past, the present and the future. Throughout history, base metals have been part of society's development due to their properties – electrical and thermal conductivity, and protection against demanding and corrosive environments.

#### A world demanding more metal



Population growth, infrastructure development and urbanization

The world's population is growing and metal demand is growing with it. Over the past ten years, the world's population has increased by one percent per year, and this trend is expected to continue. Of the total population, 91% is under the age of 65 and 26% under the age of 15. Population growth combined with urbanization and increased prosperity is driving the demand for metal around in the world.

Metals are not only required in the early stages of economic development in society, but also later. Increased access to electricity, heating and infrastructure provides the conditions for people to drive industrial development and increase prosperity. Increasing prosperity leads to an increasing demand for metal. Metals are also found in different types of more advanced products such as solar cells, electronics and means of transportation.



Adapting to climate change

Metals form part of many solutions for adapting to

climate change. The investments to produce the required quantities of base metals and industrial metals for the transformation of energy production, transmission and storage are significant. The research firm Wood Mackenzie<sup>1)</sup> estimates that metal companies must significantly increase their levels of investment in production capacity for copper, nickel and other metals over the next 15 years compared to the previous 15, to create the conditions for achieving the Paris Agreement goals.

An increase in recycling is important, but significant amounts of new metal will also be needed. Recycling will also be important when companies and consumers make decisions based on total life cycle costs.



Economic growth

Metal demand is strongly linked to global economic

growth. As populations move out of poverty into ever-higher standards of living together with an emerging middle class,, the growth in metal demand will be at its greatest, as significant investments will be needed in infrastructure, housing, installations, electricity supply and transportation. When a high proportion of a population is considered middle class, needs change and an increasing share of income goes toward the purchase of advanced services and products. The growth rate in metal demand will then slow, but infrastructure will still need constant modernization and change, and metals are included in advanced products. Almost half of the world's population still has a per capita GDP at or below the threshold level at which a country's metal consumption has historically taken off.

<sup>1)</sup> Wood Mackenzie 2020



duction performance and protecting the local environment around the company's operations are also important parts of Boliden's competitive abilities.

The way metals are produced will have a major impact on the competitiveness of mining and metal companies. In many metal-producing countries, fossil fuels are used directly in metal production as well as indirectly through the generation of electricity. Other challenges facing the industry include the management of residues, access to water and in some places, human rights. Good reclamation of old operational sites is important if companies are to obtain operating permits over the long term.

petitive mining and metal company into the future. Typical Boliden measures include the electrification of mining trucks and other vehicles, battery-powered underground equipment, transition to fossil-free fuels and reducing agents, increased automation for higher efficiency, heat recovery and the purchase of low carbon-footprint transportation.

of infection or because of difficulties in transporting materials and personnel. The result was a certain shortage of copper concentrate, a lack of zinc concentrate when the Chinese smelting industry began to build inventory for the winter period and a decrease in the supply of nickel ore for the production of nickel pig iron. It was possible to maintain production in Boliden's mines despite extensive restrictions in the operating countries.

## Strong position for tomorrow's metal markets

Base metals are essential for the transition to a sustainable society. Demand is not only driven by increasing prosperity and urbanization, but also by electrification, energy storage requirements and increasing demands for product lifespans and recyclability. Sustainable production processes are essential if we are to continue to be a competitive mining and metal company. Boliden enjoys a strong position in tomorrow's metal markets.

#### Boliden's position and focus

Over time, Boliden has built up competitive operations in its main metals copper, zinc, nickel and lead. The extraction of by-products from these concentrates is important for profitability.

Boliden's value chain runs from exploration through metal production to recycling. In-house mines account for about half of the internal raw material requirements for the smelters, which is a good level that can be allowed to vary depending on market conditions and mine grades. Together, mines and smelters offer synergies and access to valuable knowledge about the value chain. Also, volatility is lower than it would be were the business areas to operate separately.

The focus on responsible, sustainable operation that meets high international standards is the cornerstone in the operation, and Boliden has accumulated expertise essential for remaining competitive in the transformation of the industry. Based on strong values, sustainability efforts focus on concern for people, the environment and society. Compared with the international industry, our carbon footprint is good and our energy consumption is less carbon diox-

ide intensive than that of the mining and metal industry in general, thanks to the energy mix in the operating countries and high production process standards.

#### Growth

Boliden has a history of profitable mining with low-grade ores and has developed technical abilities at its mines and smelters that have generated good profitability despite the high cost structure in the operating countries. Boliden focuses on the constant improvement of existing operations and it invests for organic growth. Acquisitions come into the picture if they create a platform for continued organic growth and provide opportunities for value creation based on Boliden's skills and expertise. Expanding into new geographies is only relevant if it is in line with Boliden's conservative view of country risks.

#### Delegated governance with responsibility

Boliden's governance model is based on clear delegation to the business areas of the task of building their strategic directions taking into account the Group's strategic focus areas. For further information about the business areas and their strategic focus, see pages 18 and 24.

#### Boliden's strategic focus areas

The strategic focus areas are safety, productivity and carbon dioxide intensity. In the areas of safety and carbon dioxide intensity, the targets are Group-wide. In the case of productivity, business areas set target levels based on maintaining or creating competitive positions.

The Group is responsible for monitoring the strategic focus areas as well as capital acquisition and capital allocation. Boliden maintains a conservative financial plan that has proved to be very important in a capital-intensive industry with high price volatility.

The financial targets are designed to ensure preparedness for lower profitability during recessions as well as for periods of aggressive growth.

40%

reduced carbon dioxide intensity between 2012 and 2030



Strong profitability, excellent environmental performance and healthy and safe workplaces creates conditions for long term stable operations with high value creation.

#### FINANCIAL TARGETS

#### Return on Investments

Return on the investments shall be

#### **FINANCIAL PERFORMANCE**

The return on investments shall be at least 10%.1) Any projects must be in line with Boliden's strategy and available resources. The return on operating activities measured as return on capital employed was 17% (16). During the period 2016-2020 the rate of return has averaged 18% per year.

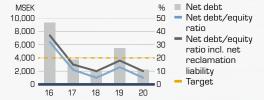
#### **DEVELOPMENT 5 YEARS**



#### Net debt/equity ratio

Boliden strives to achieve a net debt/equity ratio at about 20% at economic peaks.2)

At the end of 2020, the net debt/equity ratio was 5% (13). In addition, the net reclamation liability corresponded to 5 percentage points. The change compared to 2019 is explained by higher free cash flow mainly as a result of higher volumes and lower investments.



#### Dividend

The dividend shall correspond to one third of net profit for the year.

The proposed ordinary dividend is SEK 8.25 (7.00) per share, equivalent to SEK 33.2% (33.1) of the net profit for the year. In addition, an extra dividend of SEK 6.00 per share, in the form of an automatic share redemption procedure, has been proposed. During 2016-2020 the ordinary dividend share amounted to 33.2% of the period's total net profit.



e return of the projects must exceed Boliden's weighted average cost of capital (WACC) adjusted for a risk premium (nominal WACC before tax is set at 12%, equivalent to 10% in real terms). Major, long-term project are usually calculated in real terms. The calculations are based on forecasts of interest rates, metal prices, exchange rates, inflation and other relevant assumptions based on internal analysis and external evaluations.

2) The target also includes net reclamation liability

#### **ENVIRONMENTAL TARGETS**

#### **FINANCIAL PERFORMANCE**

#### **DEVELOPMENT SINCE 2012**

#### Emissions to air

CO<sub>2</sub>-intensity shall be reduced by -40% from 2012 to 2030.

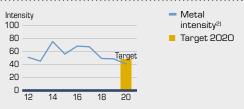
Carbon dioxide intensity has decreased during the year. Boliden is actively engaged with various measures to reduce its carbon footprint by e.g. decreasing its use of fossil fuels and increasing energy efficiency. The measures contribute to the long-term objectives that form part of Boliden's climate plan. Read more about the climate plan on page 35.



The intensity of metals to air shall be reduced compared to the previous year.



The target for the year was achieved. As a result of improved purification techniques at Boliden's smelters, the intensity of metals to air decreased compared to the previous year. Boliden has consistently good metals to air emission levels and works constantly on improvements to achieve further progress.



#### Emissions to water

The intensity of metals to water shall be reduced compared to the previous year



The target for the year was achieved. As a result of well functioning purification techniques and water recycling in Boliden's operations, the intensity of metals-to-water decreased compared to the previous year. Boliden has consistently good metals-to-water emission levels and works constantly on improvements to achieve further progress.

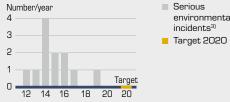


#### **Environmental incidents**

No serious environmental incidents should occur.



The target for the year was achieved as no serious environmental incidents occurred. Boliden works systematically to control and manage environmental challenges in order to prevent the occurrence of environmental incidents.



#### SOCIAL TARGETS

#### Health and safety

Zero accidents with absence should occur.



#### FINANCIAL PERFORMANCE

The injury frequency increased during the year compared with the previous year.

The frequency and number of lost time injuries (LTI) for employees has fallen by approximately 25% over the past five years. Increased focus on proactive measures and greater involvement on the part of management, employees and contractors in daily safety work all contributed to



#### **DEVELOPMENT 5 YEARS**



The sick leave rate shall remain below 4.0%



During 2020, the sick leave rate was 4.8% with seasonal variations during the year. Boliden noted an increase in short-term sick leave at a number of units during the year linked to the Covid-19 outbreak. Boliden has been actively engaged in managing and safeguarding employee health during the pandemic.



#### Diversity

Strive for a diversity of employees that reflects the local communities in which we operate.

Increasing the proportion of women is an important part of Boliden's diversity efforts. At the end of the year, the proportion of women in Boliden was 19.8% of the total number of employees, an increase of 0.6%.



- 1) The CO, Intensity is the ratio of the total carbon dioxide emissions (Scope 1 and Scope 2) and the sum of production of metal in concentrate at Mines and metal production at Smelters
- The emissions of metal equivalent metric tons per million metric tons of metal produced. The Natural Capital Protocol method has been used since 2019 for calculating metal equivalents. An incident that causes or has the potential to cause significant environmental damage.

#### **Business model**

Boliden's operations are an important part of the circular economy by efficively extracting and refining the base metals and precious metals essential to society, and recycling them after use. Collaboration with operators throughout the value chain contributes in achieving enhanced productivity and high resource utilization.

#### **INPUTS**

#### Capital

	2020	2019
Investments, SEK m	6,305	8,826
Capital employed, SEK m	51,007	49,809
Net debt/equity ratio, %	5	13

#### Know-how

- Patents, e.g. for electronic recycling, exploration technologies, water treatment
- Rights and permits
- Reclamation expertise
- R&D partnerships with university, colleges and suppliers

- Number of employees (FTE): 6,071 (5,997)
- Contractors and partners

#### Relationships

• Collaboration and discussions with prioritized stakeholder groups

2019

- Long-term development partnerships
- Participation in industry organizations

#### Natural resources

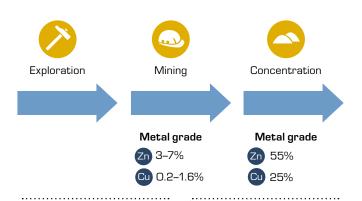
Natural assets

Mineral resources <sup>1)</sup> , Mtonnes	1,644	1,809
Mineral reserves <sup>1)</sup> , Mtonnes	1,602	1,433
Forests and land, ha	24,800	23,600
Raw materials	2020	2019
Energy, TWh	6.5	6.1
– of which electricity, TWh	4.6	4.5
Water <sup>2)</sup> , millions of m <sup>3</sup>	147	132
Mined concentrate feed (primary material), ktonnes	2.463	2.281
Recycled materials (secondary	,	
materials), ktonnes	314	347

<sup>1)</sup> Mineral assets include known and indicated assets. Minera reserves include proven and probable reserves. For complete details on mineral reserves and assets, see pages 105 – 109. <sup>2)</sup> There is no shortage of water in the areas where Boliden conducts

#### **VALUE CREATION**

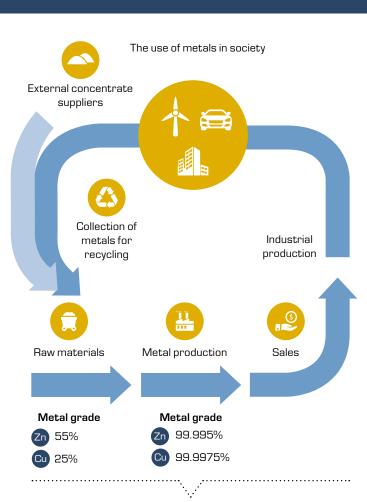
We create value for shareholders and society all the way from exploration to the recycling of metals. Cutting-edge expertise ensure competitiveness and least possible environmental impact.



#### Production of metal in concentrate

	2020	2019
Zinc, ktonnes	286	290
Copper, ktonnes	128	121
Lead, ktonnes	54	55
Nickel, ktonnes	12	10
Gold, kg	7,963	7,257
Silver, kg	353,973	372,199

In addition to primary metals, concentrates contain other metals. which are mainly processed in Boliden's smelters



In addition to metal pro-

duction, Boliden also produces large quantities of by-products such

as sulphuric acid,

tellurium, palladium, cobalt, nickel sulphate

and copper residuals.

2019

486

322

75

26

14.976

489

372

74

25

**586,060** 446,591

18,537

Metal production

Zinc, ktonnes

Gold, kg

Silver, kg

Copper, ktonnes

Lead and lead alloys, ktonnes

Nickel in matte, ktonnes

#### **OUTCOMES**

#### Economic impact

- Purchases: SEK 42,637 m (40,840)
- Salaries to employees: SEK 5,215 m (5,106)
- Dividends to shareholders<sup>1)</sup>: SEK 3,898 m (1,915)
- Financial expenses including interest: SEK 270 m (272)
- Paid tax: SEK 1,608 m (2,060)
- Retained within Boliden: SEK 1,060 m (–1,279)

#### Social impact

- Jobs in Sweden, Finland, Norway and Ireland
- Frequency of occupational injuries leading to absence from work, LTI: 5.8 (4.4)
- Sick leave: 4.8 (4.3) %
- Involvement and value creation in local communities
- Utilization of land and water

#### **Environmental impact**

 The supply of metals necessary for societal development and adaptation to climate change

	2020	2019
Discharges of metals to water, metric tons, Me-eq <sup>2)</sup>	37	51
Emissions of metals to air, metric tons, Me-eq <sup>2)</sup>	60	69
Sulphur dioxide emissions, ktonnes	6.3	6.2
Carbon dioxide emissions, ktonnes <sup>3)</sup>	897	917
Waste:		
i. Non-hazardous, ktonnes	207	249
ii. Hazardous, ktonnes	961	886

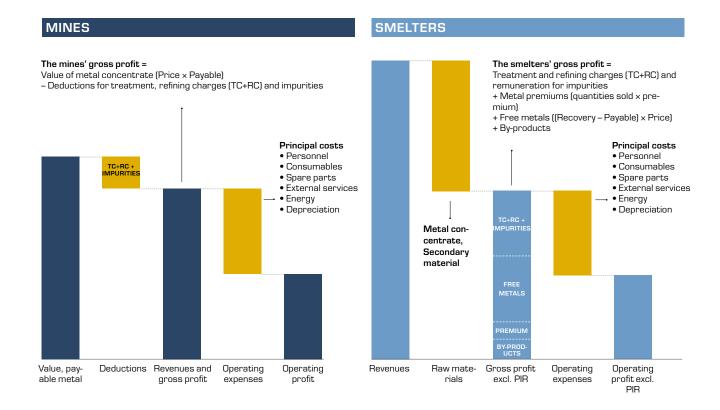
- 1) 2020 includes the proposed ordinary dividend of SEK 8.25 per share and an extra dividend of SEK 6.00 per share in the form of an extraordinal proposed up.
- automatic share redemption procedure.

  The Natural Capital Protocol method has been used since 2019 to calculate metal equivalents.
- 3) Carbon dioxide includes scopes 1 and 2 as per the GHG protocol.

The model is based on the International Integrated Reporting Council's (IIRC) framework. The primary purpose of the model is to explain how the Group creates long-term value.

#### Income model

Boliden operates on the metal market's two submarkets where raw materials are sold from mines to smelters, and where metals are sold mainly to industrial customers. Boliden's integrated business model entails certain synergies and provides stable earnings for the Group, as mines and smelters often have different cycles for revenue generation.



Boliden's smelters have capacity for twice as large volumes compared with what Boliden's mines produce. Significant volumes of concentrate is therefore purchased from external mines. All sales of metal concentrates between Boliden's mines and smelters takes place on market terms. The stacks in the illustrations are not to scale.



#### MINES

Boliden's Business Area Mines produces metal concentrates. Revenues are affected by ore tonnage, metal grades, recovery during the concentration process, inventory changes, the price of concentrates in USD, and exchange rate fluctuations.

The gross profit is normally the same value as revenues since Mines do not have any input raw material. Revenues from metal concentrates are based on the London Metal Exchange (LME) price for each respective metal, with deductions for both treatment and refining charges (TC and RC) as well as impurities in concentrates, and is calculated on the payable metal content (the proportion of metal in concentrate for which the mines can charge). The levels of TC/RC and impurity charges are determined at annual negotiations between leading mines and smelters and become the benchmark for other players. The levels are governed by the global supply of concentrates from mines and the demand from smelters.

The operating profit is the gross profit less operating costs, mainly personnel, consumables, spare parts, external services, energy and depreciation.

An individual mine has natural variations in grades, waste rock dilution, energy requirements at different depths, equipment maintenance and other factors which causes results to varying over time. These variations are often known in advance and are clearly defined in so-called "life-ofmine" plans. Boliden provides guidance on major changes in grades in the larger mines when grades are expected to deviate significantly from the reserves' average grades.

#### **SMELTERS**



Boliden's Business Area Smelters produces pure metals and by-products.

Revenues from the metals are based on the LME price of the metal concerned with the addition of premiums, the level of which is determined by the local balance between metal demand, smelting capacity and terms of payment. The premium also covers costs for transportation and customized alloys.

The gross profit is the difference between revenues and the price of the raw materials, and consists of treatment and refining charges (from concentrates and secondary raw materials), remuneration for impurities, metal premiums, income from so-called free metals, and income from by-products. Free metals arise when the amount of metal recovered exceeds the payable metal content of purchased metal concentrates and secondary materials, while by-products such as sulphuric acid are extracted in the processes.

The operating profit is the gross profit less operating costs, mainly personnel, consumables, spare parts, external services, energy and depreciation.

Unlike mines, smelters have a similar production situation over time except for annual maintenance shutdowns, which are usually scheduled during the warm season. The scope varies from year to year, as more extensive maintenance is usually carried out every two years. Boliden provides guidance on the date and financial impact of maintenance shutdowns for the coming year.

#### **REVENUE COMPONENTS**

Price	Global market price in USD, which is set on the LME and LBMA
Premium	Metal premiums, which com- prise a local adjustment of the LME price
Payability	The payable metal content of the concentrates
тс	Treatment charges
RC	Refining charges
Impurities	Deduction or compensation for impurities in the metal concentrates or secondary material
Recovery	Metal extracted as a percentage of metal content, which depends on the quality of the process and the material
By-products	Income from by-products

With its competitive product portfolio, a stable value chain and a sound ability to deliver results, Boliden provides metals essential to society and a green transition.



#### A stable value chain

Boliden has sound technical know-how, which means its manufacturing processes enjoy world-class productivity and a limited environmental footprint.

The value chain from mines to smelters creates synergies between the business areas and increases stability in the Group's earnings potential. This stability is reinforced by the tendency of treatment charges to move in the opposite direction to base metal prices.

Boliden extracts metals from both mining concentrates and secondary materials and is responsible for controlling the supply chain. Boliden is a leader in the development of methods for the reclamation of closed mines and the disposal of hazardous waste.

Production takes place in northern Europe with low political risk

### A sound ability to deliver results

Boliden has both the expertise and financial position to develop mining and smelting operations.

With experience from almost a century of mine and smelter operations, the company's employees enjoy a valuable cultural heritage. Project management takes place in house with a focus on safety, production stability and technological development.

Boliden strives for a sound balance sheet and has defined financial targets to ensure preparedness for both lower profitability and expansion.

Boliden's most important mines have long lifespans, and the focus is on mine-site exploration where the economic potential is greatest. Acquisitions are made selectively, if and when the right opportunity arises.









The demand for metals requires both primary and secondary raw materials.





## A competitive product portfolio

Boliden provides the metals we need to build a better society for future generations.

The base metals are copper, zinc, nickel and lead. They are all important for a sustainable society and the many other things they are essential for include increasing electrification and corrosion protection.

Boliden's precious metals include gold, silver, platinum and palladium. Precious metal prices tend to go in the opposite direction to those of base metals, and this increases stability in the Group's earnings potential.

## Sustainable production processes at mines and smelters

Long-term responsibility, high-levels of technical know-how, safety and productivity are priority areas in Boliden's operations.

#### **BOLIDEN'S MINES**



#### **AITIK**

Aitik is the world's most productive open-pit copper mine. The concentrate also contains the precious metals gold and silver. Large-scale production, rational methods and a high degree of automation lead to high productivity despite comparatively low grades. Thanks to the electrified trolley line and mining trucks, and less haulage than usual

in the open pit, the mine has enjoyed good climate performance. The mine has been in operation since 1968 and has a long remaining lifespan. All production is hauled by rail to Rönnskär.

Metals: Copper, gold, silver Milled volume: 42 Mtonnes Other: With around 900 employees, Aitik is Gällivare's largest private employer.



#### **BOLIDEN AREA**

Metals: Gold, zinc, silver, copper, lead and tellurium Milled volume: 1.9 Mtonnes Other: At 1,500 m below sea level, Renström in the Boliden region is Sweden's deepest mine.

#### **GARPENBERG**

copper
Milled volume: 3.0 Mtonnes
Other: Garpenberg is Sweden's oldest

Metals: Zinc, silver, lead, gold and

#### KEVITSA

Metals: Copper, nickel, palladium, platinum, gold and cobalt Milled volume: 9.2 Mtonnes Other: The Kevitsa deposit is one of the biggest ever mineral discoveries in Finland.

#### KYLYLAHTI

Metals: Gold, copper, nickel and cobalt Milled volume: 700 Mtonnes
Other: Underground mine that closed its operations in 2020.

#### TARA

Metals: Zinc, lead Milled volume: 2.3 Mtonnes Other: Tara in Ireland is Europe's largest zinc mine.

mining area still in operation.

#### **BOLIDEN'S SMELTERS**

#### **HARJAVALTA**

Harjavalta is a copper and nickel smelter that also produces gold, silver and sulphuric acid. Investments in expanded copper production were recently implemented, and a new sulphuric acid plant has improved further environmental performance from an already high

● TARA

level. Harjavalta is also Europe's largest nickel smelter and has among the lowest carbon dioxide emissions per tonne of nickel produced in the world. During the year, a nickel expansion program was presented that will improve climate performance further. Kevitsa is an important concentrate supplier.

Metals and by-products: Copper, nickel in matte, gold, silver and sulphuric acid

**Production:** Copper 146 ktonnes, nickel in matte 25 ktonnes, gold 5 ktonnes, silver 62 ktonnes, sulphuric acid 769 ktonnes

Other: Flash furnace technology for copper production was developed in Harjavalta.



Metals and by-products: Recycled lead Production: Lead alloys, 46 ktonnes Other: Bergsöe in Landskrona is the Nordics and one of Europe's largest recyclers of used lead batteries.

#### KOKKOLA

Metals and by-products: Zinc, sulphuric

Production: Zinc 297 ktonnes, sulphuric acid 328 ktonnes Other: Kokkola is Europe's second

largest zinc producer.

Metals and by-products: Zinc, Production: Zinc 192 ktonnes, Other: Odda in Norway was established back in the 1920s.

#### RÖNNSKÄR

Metals and by-products: Copper, gold, silver, lead, zinc clinker and sulphuric acid

Production: Copper 226 ktonnes, gold 14 tones, silver 524 tonnes, lead 28 ktonnes, zinc clinker

ktonnes **Other:** Rönnskär is one of the smelters. During the year, the plant turned 90 years.



## **Increased production** rate in mines

Boliden's mining areas are located in Sweden, Finland and Ireland. Boliden uses its expertise, innovation and technology to maintain a high level of safety and take long-term responsibility in all parts of its mining operations, from exploration to reclamation.

Boliden's mining operations strategy is to generate value through operational efficiency and growth. Exploration is the basis for all mining operations and Boliden has historically developed its operations through successful exploration and project development. It remains an important area for the continual development and improvement of methods. Exploration next to existing mining areas is prioritized to create conditions for production increases and to extend mine lifespans. The goal is to maximize operational benefit while minimizing environmental impact.

#### Important events in 2020

Three major expansion investments were completed during the year, which together will increase the business area's production by around 25%. Production capacity in Aitik has increased to 45 Mtonnes per year as a result of investments in such things as

additional mining trucks and an ore crusher in the concentrator. Increased crushing capacity had already been secured. Minor investments in bottlenecks were made in Garpenberg to enable a production rate of 3.0 Mtonnes per year. Investments made in Kevitsa, mainly in a new mill line and increased haulage capacity, resulted in a new production capacity of 9.5 Mtonnes per year. Also, final mining took place in Kylylahti during the year and production at the mine was concluded in Q4. Production in Tara was to some extent affected by national restrictions related to Covid-19, while the Boliden Area went on increasing production in both Renström and Kankberg. The year was also characterized by stability in Kristineberg. Significant exploration was conducted to increase the level of knowledge and promote progress in the Tara Deep and Rävliden development projects, which are satellite deposits

to the existing mines in Tara in Ireland, and Kristineberg in the Boliden Area. At the end of the year, the government announced that it had rejected Boliden's appeal against the Mining Inspectorate's decision to reject Boliden's application for a processing concession for the Laver deposit.

45

Mtonnes has the production capacity in Aitik increased to per year as a result of investments in, among other things, more mining trucks

#### PERSPECTIVE: CARE

## **Environmental program** for greater biodiversity

Boliden must achieve its goal of helping to increase biodiversity in all of its operational regions by 2030. The environmental program in the Kevitsa plant is typical of the proactive way in which Boliden works to preserve and compensate for the loss of biodiversity.

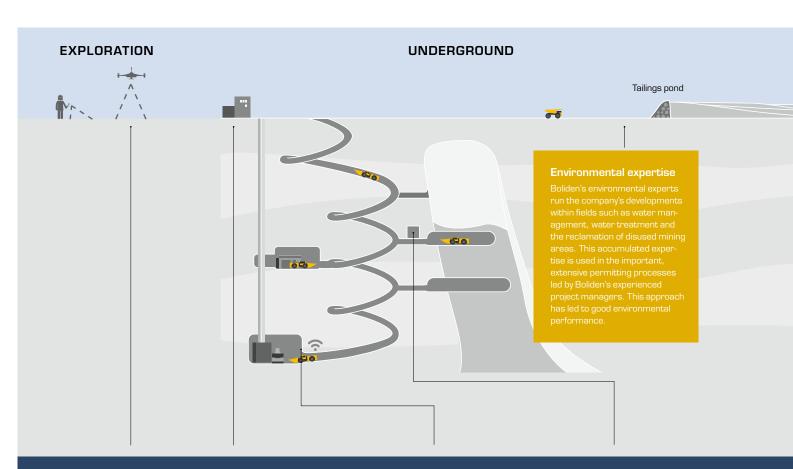
he Kevitsa plant is one of Finland's largest open pits working over the long-term to monitor and increase biodiversity in the area around the site and the surrounding countryside. Many species of plants and animals are monitored and their status is checked at specific intervals. For example, the moor frog, bird life by Lake Satojärvi and the microscopically small diatoms in the watercourses are surveyed every year. Fungi, berries, various species of moss, pine needles, phytoplankton and lake-bottom-dwelling benthic organisms are monitored every three years.

Every five years, a major fish survey is conducted. The survey includes questions about adverse impact factors, fishing techniques and the quality of catches. Among other things, results have shown that birds appear to have adapted well to the blasting in the mining area. The latest survey recorded 53 bird species breeding on Lake Satojärvi, which is also frequently visited by migratory birds. The annual frog survey also showed that the frog population adjacent to the mine area is unchanged compared to previous years.



## How Boliden's mines work

Boliden's mining operations are characterized by long-term responsibility, high levels of safety and productivity, and the best available technology. Three major expansion investments were carried out in 2020 aimed at further strengthening our competitiveness.



#### Exploration

Long-term, systematic exploration is carried out to find new mineable deposits. Aerial surveying, deposits in outcrops, geophysical and seismic methods make up the initial stages while core drilling is the final stage in precisely defining a mineralization. Boliden uses various technologies and equipment. Certain instruments were developed in-house by Boliden's technical departments.

#### Remote control

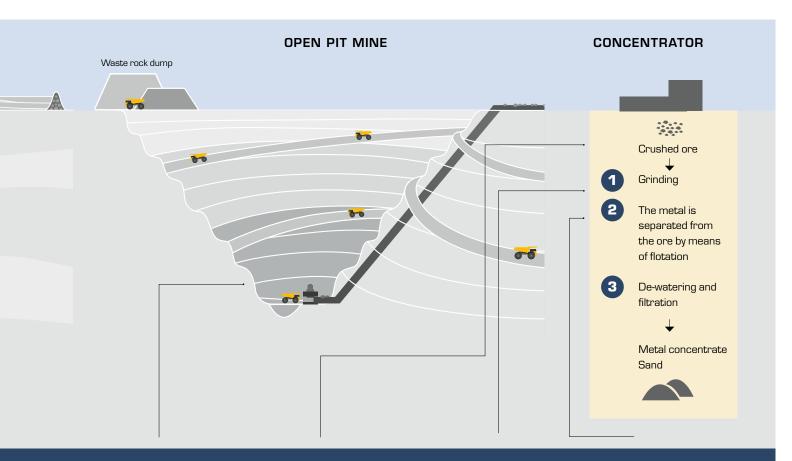
Traveling time to working areas in mines, which can be many hundreds of meters below the surface, can take up to an hour. Increasingly, operators can control loaders and drilling machines from control rooms. Some loaders drive themselves to shafts into which the ore is tipped for onward transportation to the concentrator on the surface.

#### **Positioning**

Boliden has equipped all of its underground mines with a positioning system that allows people and vehicles to determine their positions in real time. The technology works underground in a similar way to GPS to provide visual flows in production. The technology provides for a safer work environment and increased productivity as the operations center can plan for different transportation routes and control production.

#### Safety

Occupational health and safety in underground mines has high priority and maintains a high standard. Rescue chambers constitute an important part in the extensive safety system that every mine has. Systematic training is carried out including frequent evacuation drills.



#### Optimal mine design

Open pits have lower production costs and higher productivity than underground mines. How steep the open pit slope can be made determines how much waste rock is mined in relation to the quantity of ore. This, combined with the ore value permetric ton, forms the basis for optimized open pit design. The ability to electrify haulage by means of electric trolley lines and machines also has an impact on mine design.

#### Mobile control rooms

In many cases, concentrator control rooms are linked to mobile units so that operators have access to process data in real time. The operators guide and control the processes via smartphones or tablets, which increases understanding and communication between individuals, departments and with suppliers. This in turn allows e.g. faster intervention when processes need adjusting, and it enhances the ability to delegate.

#### Autogenous grinding

Boliden's concentrators primarily use a technology known as autogenous grinding where the ore is ground without the addition of a grinding agent. The technology provides lower costs but requires more advanced control than conventional technology. Autogenous grinding also means less wear and lower maintenance costs.

#### Milling complex ores

Boliden has developed concentration technologies for complex ores. Mineralogical studies are used systematically to optimize the concentration process. Boliden has a pilot concentrator used to evaluate processes with new minerals, or to develop the performance of concentrators.

Significant directed efforts are being made in Boliden's mining operations in exploration for new deposits and ensuring that active tailings dams maintain a high level of safety.



#### High dam safety

An important part of mining operations are the construction, operation and reclamation of tailings dams. Tailings from the concentrator are deposited together with process water in these dams. The tailings form sediments in the dams, and the excess water is led to a clarification pond. Boliden is responsible for 10 dam systems, nine of which are located in existing and disused mining areas, and one at the Harjavalta smelter. The safety of these dams is of the highest priority. Each dam has its own dam safety organization to ensure that laws, guidelines and procedures are followed. New interna-

tional guidelines on dam safety were introduced in 2020. Boliden has been largely in compliance with the guidelines, but there is a need for some additional initiatives and changes regarding dam safety organization.

Very frequent monitoring and dam inspections include such things as data collection and analyses. Furthermore, independent reviews of dam safety are carried out. For further information about Boliden's dam safety work, see www.boliden.com.





## Stable production at the smelters

Boliden's five smelters are located in Sweden, Finland and Norway and produce high-quality base metals and precious metals from primary and secondary raw materials.

Boliden's smelters are supplied by concentrate from both own mines and external concentrate suppliers. In addition, secondary materials such as spent electronics, lead acid batteries and ash from industry, constitutes an important source of raw materials.

The strategic focus of Boliden's smelters is to maximize the value from raw materials, production and sales in a sustainable way by making full use of each smelter's ability and flexible processing of complex raw materials. The focus is on increasing metal yield and reducing the generation of residual products.

The recycling of metals generates in some cases significant amounts of carbon dioxide. Boliden runs a large number of development projects to reduce emissions of both metals and carbon dioxide. The aim is to contribute, to the greatest possi-

ble extent, to a circular economy with low climate impact.

#### Important events in 2020

A decision was made to invest EUR 40 m to expand the nickel operation in Harjavalta. The expansion means that Harjavalta's carbon dioxide intensity per produced tonnes of nickel decreases by 15-20%. Also, the first trials of the new leaching plant in Rönnskär began during the fall. At full operation, it will be able to process 45 ktonnes of residual material every year to extract valuable metals from for example copper, zinc and lead. In parallel, the construction of the deep repository in Rönnskär progressed according to plan. In addition, all maintenance shutdowns have been carried out with special precautions regarding Covid-19, and in Odda an environmental permit application was submitted regarding a possible modernization.

**EUR** 40 M

Nickel expansion in Harjavalta. The intention is to increase production and reduce carbon dioxide intensity by 15–20% per ton of nickel produced.



## How Boliden's smelters work

Boliden's smelters extract metals and by-products from concentrate and secondary materials. Extracting as much metal as possible from the raw material is a priority area in order to contribute to high resource utilization in society.

Boliden's smelters are characterized by their long history of supplying society with metals.

Technology advances, investments and skills development have enabled a drastic reduction in environmental impact while also allowing more metal, and metals, to be extracted over the years. At the same time, secondary material has become an increasingly important part of raw material supply. Boliden is among the best in the world at recycling electronics and is one of Europe's largest recyclers of lead acid batteries.

The variety of processes at the smelters enables a broad portfolio of raw materials which are further processed into various metals and by-products. The diversification makes Boliden's smelters less sensitive to the

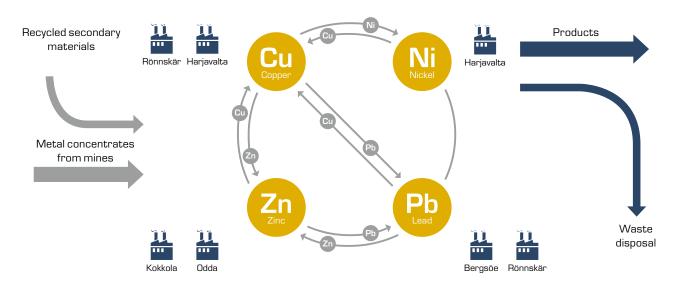
business cycle in terms of material supply and economic performance. At the same time, the smelters strives to reduce the amount of material deposited as waste and are constantly increasing resource utilization.

Technical ability and raw material supply, toghether with stable access to electricity and competitive energy prices, are important competitive factors for energy-intensive smelter operations. Boliden's smelters are located in areas with a high degree of fossil-free energy generation, which generally means excellent environmental performance. Thereto, R&D takes place to further reduce the environmental impact. Amont otherwise specially modified filters are used to minimize emissions to air from smelter processes.

Secondary material has become an increasingly important part of raw material supply.



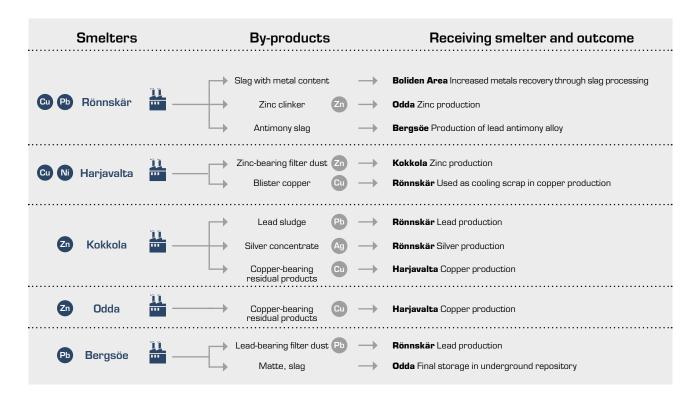
#### **SMELTERS**



#### **METAL PRODUCTION**

Each smelter handles one or more main metals. A large number of by-products are also included aimed at maximizing resource utilization and minimizing landfill material. A degree of collaboration takes place between Boliden's smelters due to technical materials handling capacity. Metal recycling is an important area. However, most production takes place based on metal concentrates from mines. What's more, metal recycling often requires access to mined concentrates. All of Boliden's smelters have good access to transportation infrastructure to allow efficient handling of incoming concentrates and secondary materials, and deliveries to industrial customers. For example, a trainload of refined copper departs Rönnskär everyday. The management of residual material and waste from production processes is a priority issue.





#### **Boliden's sustainability work**

Boliden's purpose is to provide the metals essential to improve society for generations to come. Boliden's vision is be the most climate-friendly and respected metal provider in the world.

#### Boliden's stakeholders

Boliden's operations affect people, society and the environment in different ways. Our stakeholders all have different views and expectations on how the company's operations should be run. Boliden's successes are dependent upon its ability to create value in ways that meet our various stakeholder's needs, while also taking into account the financial, environmental and social consequences. These needs are captured in ongoing talks with stakeholders and materiality analyses carried out both locally and at Group level.

Boliden also monitors sustainability issues on the basis of the process and

product perspective, e.g. through participation in European and national industry organizations. This monitoring enables opportunities and risks relating to the operation to be recognized at an early stage, and for advocacy efforts to be conducted in important issues.

#### Boliden's sustainability issues

To take financial, environmental and social responsibility throughout the metal value chain – from mining to recycling – is of the highest priority in Boliden. Global macro trends stretching from the climate issue to urbanization, digitilization and technological develop-

ment alter conditions for the business. We constantly improve Boliden's sustainability performance by investing in modern technology, developing low-emission processes, and taking corporate responsibility.

Sustainability issues are part of the company's strategy with its long-term focus that seeks to guide and structure sustainability efforts at every level in the company. Boliden's sustainability topics and focus areas are reported in the company's Sustainability Index.



## Aiming for a green transition for future generations

Applying the values Care, Courage and Responsibility in our day-to-day work, Boliden strives to develop employees and operations in safe, innovative work environments.

#### A reliable employer that strives to develop its employees

Boliden is a local employer operating in a global business environment where employees form the basis for success and value creation. For more than 90 years, Boliden has produced metals with safety and development as driving forces. This is premeated in the corporate culture, where innovation and personal responsibility are combined with stable processes. Boliden applies a coaching and present leadership and encourages employees to take initiatives, decisions and actions. The company offers both local and Group-wide development and leadership programs in which participants are not only able to develop their skills, but are also given the opportunity to share their experiences and build networks within the organization.

During the year, Boliden implemented a new purpose, new vision and new values. Developed in collaboration with representatives from across the organization, they seek to keep pace with the way people and communities are evolving. The values provide guidance as to how Boliden works and acts and they combine different skills and experiences that in turn lead the corporate culture toward Boliden's common purpose. The work of concretizing the values in the day-to-day work is an ongoing task for both managers and employees.

### Sustainable work environments - essential for value creation and competitiveness

Boliden is and must be a responsible company where safe and healthy workplaces are crucial to running a successful business. Automation, technology development and innovation have always been closely linked to our occupational health and safety efforts. The goal is an accident-free, healthy operation where people enjoy good health and wellbeing - things that are reflected in productivity and profitability. Most of the technology and automation work this far has been introduced in Boliden's mines, where the new technology means that emploees do not need to be present in areas deemed hazardous. This has been a contributing factor in the reduction in the number of accidents in recent years. The number of lost-time injuries (LTI) for employees and contractors fell by 52% during the period 2012-2019. In 2020, the number of injuries increased by 28%, particularly in the categories of tripping, slipping, falling and crush injuries. The trend for serious injuries, however, continues to decline. A sharper focus on proactive occupational health and safety efforts, increased exchange of experience to learn from internal high performers, implementation of Boliden's new values and measures based on the outcome of the 2020 safety culture survey are all priority areas for ensuring a trend toward healthy, injury-free workplaces. The safety culture



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Attracting and retaining relevant skills is an important part of Boliden's strategy, and demands long-term efforts.

survey provided very valuable information on how to strengthen safety efforts further, thanks to the participation of more than 80% of our employees. Action plans based on the outcomes will be developed across the organization at the beginning of 2021, and measures will be implemented locally during the remainder of the year.

As a complement to the company's normal systematic occupational health and safety efforts, Boliden took extensive precautionary measures during the year to minimize the spread of Covid-19. Every unit in the Group was tasked with developing local risk analysis and to produce necessary action plans. Boliden has also developed more comprehensive recommendations for major maintenance shutdowns. At the beginning of the pandemic, and as a further contribution to a well-functioning society, Boliden decided to offer leave, with undiminished

remuneration, to employees who wanted to work in the healthcare sector.

The safety ambassadors training that started in 2019 was activated during the year at Tara, Odda and in the Boliden Area with a very positive response. The ambassadors have great confidence among colleagues and contributes strongly to improving the safety culture in Boliden. This raises the level of interest in prioritizing work environment issues in the organization, which is a good compliment to the coaching leadership.

#### Long-term partnerships to secure skills

Attracting and retaining relevant skills is an important part of Boliden's strategy, and demands long-term efforts. Much of this work is planned and carried out locally, where Boliden interacts with primary schools and higher educational institutions through various initiatives aimed at students in both vocational and academic programs. Offering summer jobs, degree projects, apprenticeships and internships is very important in order to give students insights into future occupations and career opportunities available at Boliden. More than a thousand students were offered such opportunities within Boliden's units in 2020.

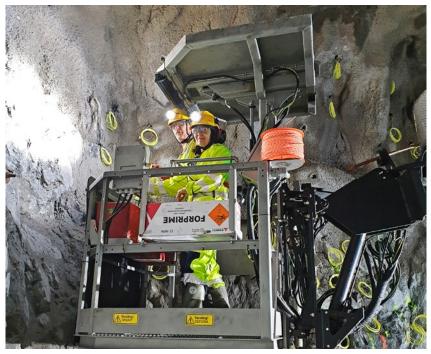
There is a wide range of positions for Boliden's existing employees, which enables development and internal mobility both geographically and between business areas and assignments.

To further strengthen conditions for the development of operations and employees, the work on digitizing Boliden's HR processes continued through the launch of a Group-wide HR system in early 2021.

As for many companies in the metals industry, there is a continued lack of and tough competition for engineers – especially female engineers. As part of the efforts to recruit more female engineers, Boliden took part in the Female Technical Engineers program during the year. Boliden also signed a new collaboration agreement with Luleå University of Technology in 2020 aimed at increasing competitiveness and its attractiveness as an employer. Research, innovation and skills development are all key elements in this regard.









During the year, we implemented our new purpose, new vision and new values to keep pace with the way people and communities are evolving.











#### Flexibility for safe maintenance actions

Annual maintenance at the Harjavalta plant was originally planned for the spring. As a result of Covid-19, the activities were moved to the fall and planning was revised with the aim of minimizing the risk of contagion.

aintenance at Harjavalta was postponed until fall due to Covid-19. Later, August proved to be the ideal time for a shutdown, as the spread of infection in Finland was very low at that time.

Precautionary measures to prevent the spread of infection were planned in close collaboration with occupational health care experts from Boliden and other companies in the industrial area. The guidelines of the Finnish government and the health authorities were strictly adhered to. The measures included arrangements to limit the number of people in different types of premises. Crowds and close contacts were avoided, e.g. by staggering working hours and organizing digital safety training instead of classroom training. The on-site work permit policy was also changed so that no physical meetings took place. Canteens and other social spaces were given specific instructions as they were considered critical areas for the possible spread of the virus. In addition to intensified cleaning, everyone was urged to adopt preventive measures such as social distancing, good hand hygiene

and staying at home if displaying common-cold symptoms. People arriving from abroad were also tested for Covid-19.

Although the maintenance shutdown was extended and the Covid-19 situation required managing, the Harjavalta shutdown was carried out successfully, safely and without any spread of infection. This was all due to good collaboration and flexible methods.

#### **FACTS:**

#### **Duration:**

• Copper line: 11 days

#### Actions:

- 140 different supplier companies
- 1,350 employees in supplier companies of whom 48 outside Finland
- In all, 1,700 people participated in the work



## Proactive environmental initiatives

Boliden plays its part in the sustainable development of society by extracting, producing and recycling metals used in e.g. technology that promotes renewable energy production. The Group is also actively engaged in minimizing its impact and, in many cases, it is a driving force behind technological development.

#### Environmental agenda

The use of metals continues to increase due to global population growth and because an increasing number of people can afford to buy goods and services. There is also increasing demand for metals to meet new societal challenges such as climate change. Several of Boliden's metals have been identified as being of particular strategic significance for Europe.

While Boliden supplies the metals necessary for adaptation to climate change, there is also a responsibility to reduce greenhouse gas emissions from operations.

#### **Environmental impact**

Boliden uses natural resources and large amounts of energy when carrying out its operations. These operations have a local environmental impact in the form of e.g. discharges to air and water, noise and changes in the appearance of the landscape. Environmental impact of mines and smelters can also occur on a regional basis, through e.g. acidification and contributing to eutrophication, and globally through carbon dioxide emissions. The Group takes far-reaching responsibility for limiting this environmental impact throughout the value chain, including reclamation work when a mine or smelter is taken out of production.

#### Water management and dam safety

Boliden's operations require large amounts of water. By optimizing water management and re-using water for processes, the amount used and discharged can be reduced. All of Boliden's operations must include a water plan in which risks and priorities are managed systematically. Boliden bases its investment decisions on where

investments will provide most benefit for animals and nature.

Boliden has many dams for tailings, water storage and water treatment. The dams are located close to concentrators, mines, smelters and in disused production areas. The Group strives to minimize the impact on surroundings while building dams, during and after their operational lifetimes. The units follow the relevant country's dam safety directives and must also comply with Boliden's internal guidelines. In 2020, the review of dam safety continued with the aid of independent dam safety experts (Independent Technical Review Board, ITRB).

#### Initiatives for biodiversity

Boliden's overall objective is to contribute to increased biodiversity by 2030 in every region where the company operates. Boliden works proactively to preserve and compensate for the loss of biodiversity. Land is managed responsibly through reclamation and value-creating activities with ecological reclamation and compensation.

Biodiversity studies are carried out during an early project phase, and in more depth as documentation in localization investigations. Studies are conducted into the protection of species, ecological reclamation and the restoration of biodiversity as compensation for diminished and/or lost species and habitat.

Boliden's efforts in respect of biological compensation are based on the so-called damage limitation hierarchy's four steps – avoid, minimize, mitigate and compensate damage. Reclamation of disused mining areas is a priority item carried out in consultation with local residents to create ecological added value. The goal is

to use the best available technology and to document and follow-up work.

#### Management of forest and land

Boliden owns 24,800 hectares of forest and land that is FSC certified and managed from the perspective of sustainability. The purpose of the initiatives is to safeguard biodiversity in areas which would otherwise be adversely affected.

Boliden takes far-reaching responsibility for limiting environmental impact throughout the value chain, including reclamation when a mine is taken out of production.

#### AN ACTIVE PART OF THE CIRCULAR ECONOMY



Boliden contributes to the circular economy by extracting and recovering metals from concentrates and secondary materials. Metals

can be recycled repeatedly without changing their properties. The planet's elements will not disappear.

The Group's units recirculate 4 million lead acid batteries from the automotive industry every year (50 metric kilotons Pb/year) and recovers electronic material equivalent to two million mobile phones every day (120 ktonnes/year). In all, 11% of Boliden's metals come from recycled materials.

#### LAND USE AND BIODIVERSITY



During the year a new and ambitious biodiversity goal was set under which Boliden, by no later than 2030, will contribute

greater values to biodiversity in every region in which it operates. Guidelines for biodiversity work have been drawn up to help achieve this goal.

The guidelines concentrate on the principles of the mitigation hierarchy to avoid, restore, minimize and compensate for the impact on biodiversity from Boliden's operations.

#### **ENERGY AND CLIMATE**



#### Reduced fossil emissions

Boliden's primary ambition is to reduce fossil CO<sub>2</sub> emissions, closely followed by CO<sub>2</sub> intensity.

The metric is intended to follow-up of internal progress in reducing fossil emissions (from Scopes 1 and 2) in relation to production for all Boliden units.

Projects are under way to reduce diesel dependence, increase electrification and plan fossil-free mines. The direct (scope 1) and indirect (scope 2) carbon dioxide emissions from mines were equivalent to 282 ktonnes (312) of carbon dioxide for the year. The direct (scope 1) and indirect (scope 2) carbon dioxide emissions from smelters were equivalent to 615 ktonnes (605) of carbon dioxide.

#### Better energy efficiency

The production units have implemented an energy management system to improve energy efficiency and conserve energy. In Business Area Smelters, excess heat is made use of and helps reduce carbon dioxide emissions. During the year, 751 (1,306) GWh were made use of internally and 851 (848) GWh were supplied for external use, e.g to nearby district heating plants.

#### MINIMIZING EMISSIONS



Boliden works constantly to reduce emissions to air and discharges to water by improving process efficiency. The Group's

operations are well prepared to meet the requirements of the Best Available Technology as stipulated in EU directives from 2020. Discharges of metals to air were 60 tonnes (69) Me-eq<sup>1)</sup> and 6.3 ktonnes (6.2) of sulphur dioxide. Discharges to water from mines consist primarily of nitrogen, 144 tonnes (181), but also of 8 tonnes (8) of Me-eq metals. Discharges to water from smelters consist primarily of metals, 29 tonnes (43) Me-eq. Smelters generated nitrogen emissions of 57 tonnes (47).

1) The Natural Capital Protocol method has been used since 2019 to calculate metal equivalents.

# **Boliden's climate program**

Boliden's long-term climate goal is to reduce greenhouse gas emissions by 40%, measured in CO<sub>2</sub> intensity by 2030 from base year 2012. In this way, the company will contribute to the EU's ambition of achieving net zero carbon dioxide emissions by 2050 and the Paris Agreement's goal of keeping the global temperature rise below 2°C. Boliden's climate goal also forms part of its vision of being the most climate-friendly and respected metal provider in the world.

#### Climate program

The climate-related improvement activities identified to achieve the long-term climate goal are brought together in Boliden's climate program. The program covers the entire Group. Each business area has evaluated emission and discharge sources, the measures that must be taken and development projects that need to be initiated. Climate program coordination takes place at Group level. Several projects are in progress to reduce diesel dependency, increase electrification and plan entirely fossil-free mines. Boliden has also implemented an energy management system to improve energy efficiency and reduce energy costs.

#### Improvement works in Mines

Electrification of mining trucks in Aitik and Kevitsa had the biggest effect on CO2 emissions. Trials with the battery-powered loader planned for 2020-21 in Kristineberg is another important activity.

Energy efficiency projects linked to mining ventilation are also very important. All underground mines in Sweden have to pre-heat incoming ventilation air in the winter when the outdoor temperature drops below 0° C; this is usually by means of propane gas heaters.

The installation of heat recovery units in Garpenberg has reduced the use of propane gas by 80-90%, with a reduction in annual emissions of around 2 ktonnes of carbon dioxide.

The mine in Kankberg has the potential to reduce emissions by around 1 ktonnes of carbon dioxide with a similar installation.

#### Improvement works in Smelters

Long-term action plans have been drawn up for each smelter. Overall goal for smelters is to improve energy efficiency by 5% from 2019 to 2030.

The business area's R&D department has several projects in progress to evaluate various innovative technologies that have the potential to reduce CO<sub>2</sub> emissions and costs. These include bio-based reducing agents and hydrogen.



# Responsible business

Good business ethics is essential for sustainable and successful business. This is reflected both in the way Boliden conducts its own business and how it selects its business partners.

#### Ethics and compliance

In 2020, Boliden continued to build its new ethics and compliance department through a series of initiatives to boost its compliance work. The department is responsible for the strategic development and coordination of Boliden's work regarding anti-money laundering, anti-corruption, competition law, sanctions, human rights, data protection, whistleblowing and Boliden's codes of conduct.

Boliden's employees and management work together to create a compliance culture in which everyone knows what is expected of them. Regular risk assessments, trainings, audits and effective controls are important parts of Boliden's compliance efforts. The Group's whistleblower channel enables all employees and external stakeholders to report suspected and actual misconduct confidentially and anonymously. If misconduct is proven, disciplinary actions must be taken. Reprisals against anyone reporting misconduct in good faith will not be tolerated. Group management and the Board of Directors receive regular reports on risks, non-compliance and the status of initiatives in progress.

#### Codes of conduct

Boliden's Code of Conduct provides a framework for corporate responsibility based on the company's values and ethical principles. All employees and members of the Board are subject to the Code, which is based on international standards and relevant legislation. As a complement to the Code, there are internal policies that all employees are expected to comply with.

Boliden strives for a sustainable value chain and therefore applies an overarching business ethics and risk management strategy when selecting business partners. The Business Partner Code of Conduct reflects the requirements placed on Boliden's own organization and sets the lowest standard of ethical conduct required of all parties

in the value chain, whether Boliden is the buyer or seller. As with the internal Code of Conduct, this code is based on international standards such as the UN's Global Compact, the ILO's standard core conventions and guidance from the OECD. Compliance and sustainability risks are assessed when selecting business partners. If there is a risk of non-compliance by a business partner, a more detailed review is made. Depending on the outcome, an action plan may be developed and agreed upon, or the business relation may be terminated or rejected.

#### **Human rights**

Boliden is a member of the United Nations Global Compact and works constantly to implement its ten principles, including preventing and limiting negative impact in the own operations and those of its external business partners.

Boliden runs operations in countries where the risk of human rights violations is considered low. No operations are conducted anywhere in UNESCO's World Heritage List. Boliden supports the right of indigenous peoples to consultations under Svemin's interpretation of FPIC. Other important aspects are fair working conditions and the position Boliden has adopted against any form of harassment, discrimination and other behavior that may be considered as victimization by colleagues or related parties. In addition to this, also aspects such as child and forced labor as well as the freedom to form and join trade unions are taken into account when evaluating business partners.

In cases where hazardous waste is sent for disposal by third parties, an instruction is applied whereby payment may only be made after the material has been responsibly processed. Visits and audits are carried out to ensure compliance with the instruction and that the waste is processed correctly. Secondary and primary raw mate-

rials are checked carefully to make sure the materials do not derive from conflict areas.

#### **Anti-corruption**

Anti-corruption forms a central part of the ethics and compliance work, and Boliden has a zero tolerance policy regarding all types of bribery and corruption. The anti-corruption policy applies to the Board of Directors, all employees in the Group, companies and joint ventures in which Boliden has an interest, and third parties acting on the company's behalf. In addition to the anti-corruption work, compliance with applicable competition laws is also very important. A Group-wide policy takes a clear stand against anti-competitive behavior.

Group-wide risk assessments were carried out in 2020 in the areas of anti-corruption and will form the basis for the continuous work. Also, parts of the business partner evaluation process was improved to further protect Boliden against the risks of corruption.

# Anti-money laundering and compliance with sanctions

During the year, Boliden published an anti-money laundering policy for identifying and managing risks in various parts of the business and to strengthen its anti-money laundering efforts. An awareness training were held for various target groups to create a broader understanding of the area and to increase the skills of risk groups and key individuals. The implementation of anti-money laundering controls will continue in 2021.

Sanctions controls are regularly conducted on prospective and existing business partners. This year, the implementation of the sanctions controls program was reviewed to assess how well the procedures are complied with.

For further information on how Boliden works with responsible business, see Boliden's Sustainability Index 2020.

# Role in society

Boliden is an important player regionally, nationally and in Europe. In addition to the metals it produces and recycles, it creates jobs where it operates and generates tax revenues. It also makes extensive purchases of goods and services on an ongoing basis.

#### Metals in Europe

A high proportion of the base metals used in Europe are imported from other continents. Because Boliden is one of the biggest base metal producers in Europe, its production means that less metal need be imported. Together with several other industry players, Boliden initiated a campaign in Sweden during the fall of 2020 aimed at increasing understanding of how important metals are for modern, sustainable societies.

#### Significant value creation

In many of the locations where it operates, Boliden is the biggest employer and a large proportion of employees live close to the workplace. As a result of day-to-day purchases, investments in maintenance or expansions together with tax payments by Boliden and its employees, indirect jobs are also created outside the direct operation. What's more, Boliden is active in social development in various ways, e.g. through sponsoring various types of initiative such as cultural and sporting events. In 2020,

corporation tax and social security contributions totaled SEK 3,121 m. Read more about tax payments in the Sustainability Index, page 13.

#### Purchasing goods and services

In all, Boliden has around 6,100 suppliers in fields such as energy, mobile and fixed equipment, logistics, bulk goods and chemicals. The total purchase volume in 2020, excluding concentrates was SEK 17.4 billion. Of this, business area Mines accounted for 59% (59), and Smelters 41% (41). As a major purchaser of goods and services, Boliden has a responsibility to ensure fair competition conditions between different suppliers, and that prospective suppliers meet Boliden's requirements. Accordingly, all suppliers must comply with Boliden's Code of Conduct for suppliers. Many cost-saving procurements were made during the year and ongoing dialogs were held with suppliers to secure deliveries while at the same time minimizing risks related to Covid-19.

#### Purchase volume per category



- Services, 28% (30) Bulk goods and chemicals, 14% (13)
- Logistics, 12% (13)
- Electricity, 12% (11)
- Mobile equipment, 12% (9) Fixed equipment, 8% (10)
- IM&T, IT and other, 7% (7)
- Tools and consumables, 4% (4)
- Electrical installations and equipment, 3% (3)

#### Purchase volume per currency



- SEK, 46% (41)EUR, 45% (52)
- USD, 6% (4)
- NOK, 2% (2) GBP, 0.3% (0.4)
- Other, 0.3% (0.4)

Total purchase volume in 2020, excluding concentrates, was SEK 17.4 billion, Busines mines represented 59% (59) of the purchase volume, while business area Smelters stood for



# Financial development during the year

The Group's operational result increased compared to 2019. Higher metal prices in USD and higher volumes were counteracted by a stronger SEK. Production in both business areas increased. Smelter's operating profit reached a new record level. The focus in both business areas was on improved safety and better productivity.

#### Revenues and operating profit

Boliden's revenue was SEK 56,321 m (49,936), and operating profit was SEK 8,935 m (7,597). The operating profit excluding process inventory revaluation was SEK 8,438 m (7,035). The operating profit for Mines was SEK 4,594 m (4,484), while for Smelters, the operating profit excluding revaluation of process inventory was SEK 3,975 m (2,716). Planned maintenance shutdowns for Smelters charged the result with SEK -345 m (-745) in the form of lower production and higher costs. The Group's operating costs before depreciation were SEK 16,209 m (16,053). Costs increased 3% (4) in local currencies, which is attributable to higher production in both business areas, production disturbances in Mines and inflation. Depreciations increased as a result of increased production of metal in concentrate. 2020 included a total impact on earnings of SEK-130 m attributable to a fire in Kevitsa. Also, earnings for 2020 included an effect of received insurance compensation of SEK 47 m for a breakdown in Harjavalta in 2019. Earnings for 2019 were charged in the amount of SEK-139 m attributable to a new estimation of a liability for future reclamation work in Rönnskär.

#### Investments

Investments for the year totaled SEK 6,305 m (8,826). Major projects during the year included the new leaching plant, the new underground repository, the copper expansion in Rönnskär and expansion to an annual milled volume of 45 Mtonnes in Aitik and 9.5 Mtonnes in Kevitsa.

#### Future reclamation costs

The reclamation reserve and thus related fixed assets decreased by SEK 249 m and SEK 195 m respectively, mainly due to increased mine lifespans. For further information, see notes 14 and 25.

#### Cash flow

Cash flow from operating activities before changes in working capital was SEK 12,303 m (10,005). Increased working capital, partially caused by the Covid-19 pandemic, had a negative effect on cash flow in the amount of SEK –1,048 m (–562). Cash flow from operating activities was SEK 11,255 m (9,442). Free cash flow totaled SEK 4,957 m (635). Paid tax for the year was SEK 1,608 m (2,060).

#### Financial position

As of December 31, 2020, Boliden's net debt was SEK 2,236 m (5,493). Equity totaled SEK 45,638 m (41,440), including the net market evaluation of currency and interest rate derivatives in the amount of SEK -12 m (47) after fiscal effect. The net debt/equity ratio decreased to 5% (13) at the end of 2020 as a result of higher free cash flow. The average term of Boliden's total approved loan facilities at year-end was 3.7 years (3.4). As of December 31, 2020, the average interest rate in the debt portfolio was 1.6% (1.1) and the fixed interest term was 3.1 years (1.1). At year-end, Boliden's current liquidity, in the form of cash and cash equivalents and unutilized binding credit facilities with a term of over one year, totaled SEK 12,741 m (7,165). For further information, see note 29.

#### The Parent Company

The Parent Company conducts limited operation and operates, fiscally speaking, on commission with Boliden Mineral AB. For further information, see page 73.

## Guidelines for remuneration to the CEO and other senior executives

Boliden's remunerations to senior executive consist of fixed salary, variable remuneration, pension benefits and other benefits. Remunerations to senior executives are described in note 5.

2020

2019

#### Performance analysis

SEK m

JEK III	2020	2013	
Operating profit	8,935	7,597	
Revaluation of process			
inventory	497	561	
Operating profit excl.			
revaluation of process			
inventory	8,438	7,035	
Change		1,403	
Analysis of change			
Volumes		4 700	
		1,733	
Prices and terms		467	
Metal prices		1,851	
By-product prices		-319	
Treatment and refining			
charges		65	
Metal premiums		-163	
Exchange rate effects		<i>-967</i>	
Costs (local currencies)		-404	
Depreciations (local curren-			
cies)		-635	
Items affecting comparabil-			
ity <sup>1)</sup>		139	
Other		102	
Change		1,403	
1) 2010 was shareed with SEV 120 m attributable to a pow			

<sup>&</sup>lt;sup>1)</sup> 2019 was charged with SEK –139 m attributable to a new assessment of costs for future reclamation work in Rönnskär

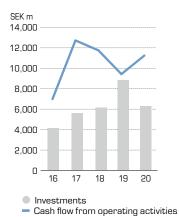
#### Investments

SEK m	2020	2019
Mines	4,439	6,409
Smelters	1,835	2,398
Other	31	19
Total investments	6,305	8,826

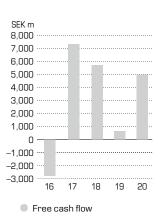
#### Financial performance

SEK m	2020	2019
Revenues	56,321	49,936
Operating costs before depreciation	16,209	16,053
Depreciation	5,693	5,092
Operating profit excl. revaluation of process inventory	8,438	7,035
Operating profit	8,935	7,597

# Investments and cash flow from operating activities



#### Free cash flow



9

Cash flow from operating activities was SEK 11,255 m (9,442).

Free cash flow totaled SEK 4,957 m (635).

#### Cash flow

SEK m	2020	2019
From operating activities before changes in working capital	12,303	10,005
Changes in working capital	-1,048	-562
Cash flow from operating activities	11,255	9,442
Cash flow from investing activities	-6,297	-8,807
Free cash flow (before financing)	4,957	635

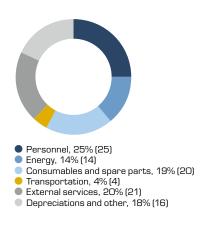
#### Capital structure and returns

SEK m	2020	2019
Balance sheet total, SEK m	72,492	66,424
Capital employed, SEK m	51,007	49,809
Equity, SEK m	45,638	41,440
Net debt, SEK m	2,236	5,493
Return on capital employed, %	17	16
Return on equity, %	16	14
Equity/assets ratio, %	63	62
Net debt/equity ratio, %	5	13

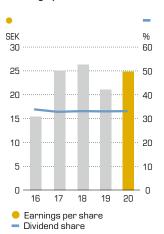
#### Revenues and operating profit



#### Breakdown of operating costs



#### Earnings per share and dividend share



Earnings per share were SEK 24.86 (21.15). The proposed ordinary dividend is SEK 8.25 (7.00), corresponding to a dividend share of 33.2% (33.1). In 2020, an extra dividend of SEK 6.00 per share is proposed through an automatic share redemption procedure.



# **Development Mines**

#### Financial information, Mines

The major part of sales from Mines are made to Boliden's smelters on market terms. Revenues increased to SEK 18,126 m (17,060), of which external sales totaled SEK 982 m (1,318). Operating profit from Mines increased to SEK 4,594 m (4,484), mainly as a result of higher milled volumes and higher metal prices. Total operating costs for Mines before depreciations were SEK 9,173 m (8,849). This corresponds to an increase of 3% (3) in local currency. Depreciation increased to SEK 4,403 m (4,403), mainly due to higher metal production in Kevitsa. Investments totaled SEK 4,439 m (6,409).

The improvement in Aitik's operating profit during the year was due to the fact that the positive effect of higher milled volumes and higher metal prices in SEK could fully compensate for the negative effect of lower copper and precious metal grades. Profits in the Boliden Area were better than in 2019, as higher metal prices in SEK fully compensated the lower milled volumes. Garpenberg did not achieve the 2019 operating profit as higher milled volumes and metal prices were counteracted by lower grades and higher zinc treatment charges. Kevitsa's operating profit increased compared to 2019, despite additional costs associated with a fire in a

crushing station. Higher milled volumes following a completed expansion had a positive effect. In both 2019 and 2020, Kevitsa was in a transitional phase to increase production. Kylylahti reported an operating profit above the 2019 level, despite production being limited by technical mining challenges as the mine went in to its final operating stage during November. Tara turned its 2019 profit into a loss. Lower milled volumes and additional costs related to production problems during the first quarter and higher zinc treatment charges had a negative effect.

#### Key data

	2020	2019
Revenues, SEK m	18,126	17,060
Operating costs excl. depreciations, SEK m	9,173	8,849
Depreciations, SEK m	4,403	3,824
Operating profit, SEK m	4,594	4,484
Investments, SEK m	4,439	6,409
Capital employed, SEK m	29,009	28,719
Return on capital employed, %	15	16
Number of employees, FTE	3,442	3,442

#### Performance analysis

SEK m	2020	2019
Operating profit	4,594	4,484
Change		110
Analysis of change		
Volumes		697
Prices and terms		276
Exchange rate effects		-926
Costs (local currencies)		-306
Depreciations (local currencies)		-593
Other		36
Change		110

#### Operating profit

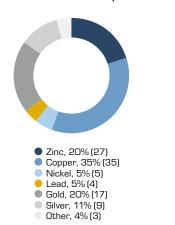
-po: aog p: o		
SEK m	2020	2019
Aitik	2,296	2,149
Boliden Area	872	738
Garpenberg	1,942	2,079
Kevitsa	320	67
Kylylahti	151	39
Tara	-252	283

#### Revenues and operating profit



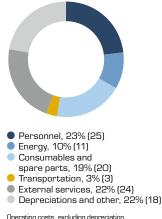
The increased operating profit compared to 2019 was due to higher milled volumes and higher metal prices.

#### Breakdown of sales per metal

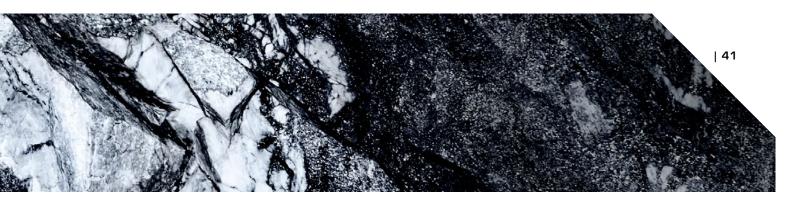


Copper and zinc constitute the main part of Boliden's revenues Among other things, the item 'Other' includes cobalt.

#### Breakdown of operating costs



Operating costs, excluding depreciation, increased by 3% in local currencies.



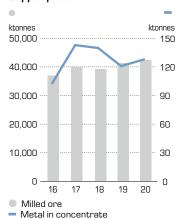
#### Production, Mines

Production in the open pits reached new record levels following completed investment programs. This was in spite of high sick leave rates related to the negative effects of Covid-19. Recovery improved compared to 2019 due to a lower proportion of oxidized ore and good real-time control of the concentration process. The production of copper concentrate increased compared to 2019, but decreased somewhat in the case of zinc. Higher milled volumes in both open pits and higher copper grades in Kevitsa were counteracted by lower grades in Aitik. The

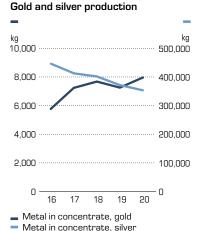
copper grade in Aitik was 0.24% (0.25). Higher milled volumes in Garpenberg and higher grades in Tara had a positive effect on zinc production. However, lower production in Tara and the Boliden Area and lower zinc grades in Garpenberg and the Boliden Area had a negative effect. During the first quarter, Tara suffered an ore conveyor belt breakdown that caused an extended production shutdown. The zinc grade in Garpenberg was 3.8% (4.1). Nickel production increased as a result of higher milled volumes in Kevitsa. This was despite a fire in Kevitsa's primary crusher plant at the end of May. Mobile crushers

were used during the repair period, and these provided around 90% of normal capacity. Repairs were completed in August. Higher gold grades in the Boliden Area, Kevitsa and Kylylahti contributed to an increase in the production of gold in concentrate. Kylylahti's milled volume and its production of most metals fell. Production was hampered by technical challenges in the mine related to its final mining in November 2020. Following 10 years' operation, the mine is now being prepared for reclamation and the concentrator will be mothballed.

#### Copper production

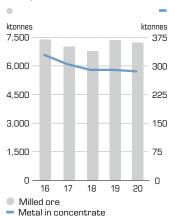


The production of copper in concentrate increased as a result of higher grades in Kevitsa and higher milled volumes in both open pits.



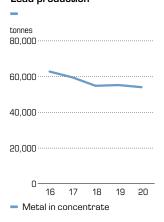
The increase in the production of gold in concentrate is primarily due to higher grades in the Boliden Area and both higher grades and milled volumes in Kevitsa

#### Zinc production



The production of zinc in concentrate decrease due to production problems in Tara and lower grades in Garpenberg and the Boliden Area.

#### Lead production



The production of lead in concentrate fell as a result of production problems in Tara, partially offset by higher milled volumes in Garpenberg.

#### Nickel production



The production of nickel in concentrate increased mainly as a result of higher grades and milled volumes in Kevitsa.



# **Development Smelters**

#### Financial information, Smelters

Revenues totaled SEK 55,283 m (48,556) and gross profit excluding revaluation of process inventory was SEK 12,062 m

Operating profit excluding revaluation of process inventory was SEK 3,975 m (2,716). Including revaluation of process inventory in the amount of SEK 497 m (561), operating profit totaled SEK 4,472 m (3,277), which is a new record. Total operating costs for Smelters before depreciations were SEK 6,922 m (7,070). This corresponds to an increase of 2% (5) in local currency. Higher volumes,

improved treatment charges for zinc and higher metal prices all had a positive effect. A weaker USD and lower sulphuric acid prices and base metal premiums had a negative effect. The maintenance shutdowns in Smelters were all completed successfully despite challenges related to Covid-19. Operating profit was affected by maintenance shutdowns in the amount of SEK -345 m (-745). 2019 included an impact on earnings of approximately SEK –180 m from a breakdown in Harjavalta. In 2020, insurance compensation of SEK +47 m was received for the breakdown. National strikes in Kokkola and Harjavalta also had

a negative effect in 2019. Both Rönnskär and Harjavalta reported record profits for 2020. Rönnskär's higher profit was due to a combination of improved market conditions and higher volumes. Costs, excluding consumables and external services, were largely unchanged. In Harjavalta, a higher proportion of free metals and less extensive maintenance shutdowns contributed to the improvement in profit. Kokkola's profit increased mainly due to improved zinc treatment charges, which also pertained to Odda. Bergsöe reported a minor loss in 2020 as a result of lower lead prices and poor

#### Key data

	2020	2019
Revenues, SEK m	55,283	48,556
Gross profit excl. revalua- tion of process inventory, SEK m	12,062	10,969
Operating costs excl. depreciations, SEK m	6,922	7,070
Depreciations, SEK m	1,273	1,253
Operating profit excl. revaluation of process inventory, SEK m	3,975	2,716
Operating profit, SEK m	4,472	3,277
Investments, SEK m	1,835	2,398
Capital employed, SEK m	21,977	21,175
Return on capital employed, %	20	16
Number of employees, FTE	2,425	2,350

#### Performance analysis

SEK m	2020	2019
Operating profit	4,472	3,277
Revaluation of process inventory	497	561
Operating profit excl. revaluation of process		
inventory	3,975	2,716
Change		1,259
Analysis of change		
Volumes		993
Prices and terms	230	
Exchange rate effects	-246	
Costs (local currencies)	-118	
Depreciations (local currenci	-40	
Items affecting comparability	139	
Other		55
Change		1,259

#### Operating profit

SEK m	2020	2019
Rönnskär	1,327	519
Harjavalta	1,095	746
Kokkola	1,031	912
Odda	548	467
Bergsöe	-21	97

#### Revenues and operating profit excl. revaluation of process inventory

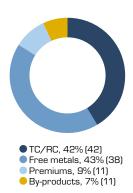


Revenues

Operating profit excl. revaluation of process inventory

Operating profit excluding revaluation of process inventory was higher compared to the previous year. Higher volumes, improved treatment terms for zinc and higher metal prices all had a positive

#### Breakdown of gross profit excl. revaluation of process inventory



Treatment charges and free metals accounted for 85% (80) of gross profit excluding revaluation of process inventory

#### Breakdown of operating costs



Personnel costs, 24% (23)

- Energy, 19% (19) Consumables and spare parts, 19% (19)
- Transportation, 5% (5)
- External services, 15% (15)
- Depreciations and other, 18% (17)

Operating costs excluding depreciations increased by 2%

<sup>&</sup>lt;sup>1)</sup> 2019 includes a cost item of SEK –139 m for future reclamation work in Rönnskär.



availability and low quality of input material due to the Covid-19 pandemic.

#### Production, Smelters

Smelter production of copper and precious metals increased sharply compared to 2019. Production records were noted for copper, gold, zinc and sulphuric acid. Thus the expansion investment previously carried out has shown good results.

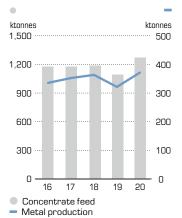
Process stability in the copper smelters improved, and higher precious metal grades in raw material and less extensive maintenance shutdowns all had a positive

effect. However, poorer access to electronic secondary raw materials due to Covid-19 had a negative effect on Rönnskär's secondary feed. High copper concentrate feeds had a positive effect and resulted in even higher sulphuric acid production.

The nickel feed in Harjavalta was affected negatively by low energy content in concentrate and the need to add pyrite. However, process stability was improved compared to 2019, which was affected by a breakdown in the nickel line. Kokkola's feed and zinc production increased. In general, production and availability were good.

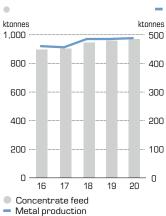
Production in Odda was stable and almost on a par with record year 2019 in respect of feed and the volume of cast zinc. Bergsöe's lead alloys production was lower than 2019 due to the less favorable market situation during the Covid-19 pandemic. The new plastics separation plant commissioned during the latter part of 2019 had a positive effect with regard to both battery feed and lead production.

#### Copper production



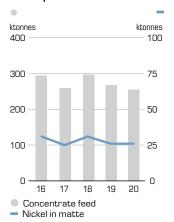
Concentrate feed and copper production increased

#### Zinc production



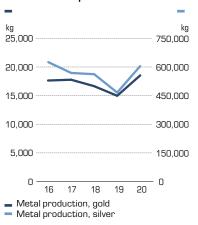
Zinc production was stable, as production increased

#### Nickel production



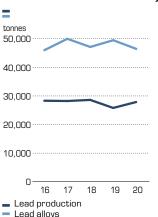
Harjavalta's production of nickel in matte was stable. Nickel feed was lower due to low energy content in input concentrate.

#### Gold and silver production



Precious metal production increased mainly due to higher grades in input material and improved process stability.

#### Production of lead and lead alloys



Lead production was affected negatively by the less favorable market situation during the year.

# **Developments on the metal markets**

Global economic growth decreased in the beginning of 2020 and the decline was severely intensified by the Covid-19 pandemic during the spring, resulting in lower base metal prices and rising precious metal prices. The supply of metals decreased, but not as much as demand, and thus metal stocks were built up. At the same time, the supply of metal concentrates decreased as the pandemic had a significantly greater impact on mine production than that of smelters. The shortage of concentrate depressed spot market treatment charges. The rapid recovery in China after the first quarter drove up base metal prices in the second half of the year, while precious metal prices remained at a high level.

#### Market trends 2020

The decline in industrial activity that began at the end of 2019 continued and was made worse by the Covid-19 pandemic in the spring, and in part toward the end of the year. Activity in the services sector fell sharply as well as in parts of industry, leading to a decline in global GDP. Industrial order intake in the West fell sharply during the first half of the year, but the decline was eventually mitigated, driven in part by the rapid recovery in China after the first quarter.

Global demand for base metals decreased, but the decline was mitigated by

strong developments in China after the first quarter. Metal production remained unchanged or fell slightly; it was higher than demand, resulting in a build-up of metal stocks on and outside the exchanges. The production of metal concentrates decreased due to the pandemic, making the expansion of new mines more difficult. Mining industry production disruptions were highest in zinc and nickel. Spot market treatment charges for zinc and copper concentrate came under pressure during the second half of the year as a result of a shortage of concentrate, especially for zinc.

#### Long-term metal demand

Investment growth is expected to fall in China, and other developing countries do not yet account for such a high proportion of global metal demand that growth in those countries can compensate for the change in China in the short term. Electrification and adaptation to climate change are expected to have a positive effect on global metal demand for a long time. Metal recycling is expected to increase as a share of total supply over time, but significant volumes of new metals will be necessary to meet future demand.



Values are rounded in USD PPP constant prices. Change refers to GDP growth compared to the previous year. Source: International Monetary Fund World Economic Outlook October 2020 via Refinitiv Datastream. Oxford Economics.

#### TRENDS IN SUBMARKETS, 2020

The demand for Boliden's metals is driven mainly by the level of activity in the global industry, trends in the infrastructure and construction markets (construction market investments) and the automotive market.

#### Submarket Global Construction market Global construction investments are estimated to have declined slightly from 2019. In China, investments increased after a weak first guar-Lower level ter. Investment declined in Europe but increased in the US after a rapid recovery in the second half of the year. Industry While global industrial production declined, the activity level development of metal-consuming industries was more stable than that of industry in general. In Lower level China, industrial output rose as of the second auarter. Vehicle production Global vehicle production declined sharply for Sharp the third consecutive year. Production was decline lower in all parts of the world.

#### Long-term metal supply

Because of the finite lifespan, mines must be replaced, but investments in new mines will only take place if companies believe future prices will make mining projects profitable. For a long time, costs and capital intensity in the mining industry have risen faster than inflation. Capital intensity in future mining projects can be expected to increase in line with the need for extensive infrastructure, especially due to climate change. While expansion in existing mines generally has a lower capital intensity, it will only partially satisfy the future demand for metals.

The rate of smelting capacity expansion is based on the expectation companies have in metal demand in the regional market and supply of raw materials. The rate of expansion affects concentrate market balance and thus the terms set between smelters and the mines.

#### Developments in China

To meet rapid growth in demand for base metals, smelting capacity expansion in China has been swift. Metal imports are significant, and the Chinese smelting industry has become a major player in the global concentrate market as there is insufficient mining capacity, especially for copper. China's position as the biggest nickel producing country was established very quickly, with ore mainly from Indonesia. Indonesia, with its major ore reserves, is expanding its nickel production and is expected to become the biggest producer within a few years, while production in China is expected to decline. Periodically, global copper and zinc mining capacity has been a limiting factor in times when investment growth has been high in China. Historically, the periods with low copper and zinc prices have been short, which may be because metal demand in

#### **ABOUT PRICING**

#### Metals

Prices for copper, zinc, nickel and lead are set daily on the London Metal Exchange (LME). In addition to the price, there is usually a premium in which the level is governed by the local balance between metal demand, smelter capacity, shipping costs and payment terms. Prices for gold, silver, palladium and platinum are set in a similar way by the London Bullion Market Association (LBMA). Cobalt and tellurium prices are published in the Metal Bulletin.

#### Concentrates

The price of concentrate is usually the LME price less treatment charges and is calculated on the payable part of a concentrate's metal content, and regulated by terms and conditions between mines and smelters. The balance between the global mine supply of concentrates and smelter demand governs pricing between mines and smelters.

China continued to increase even during periods of weaker global economic activity, or when extraordinary situations have affected the global economy.

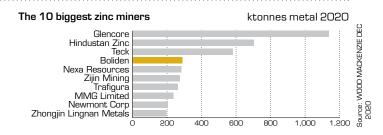
Because China accounts for more than half of global base metal demand and a significant share of global metal supply, economic development in the country will be a major factor in Boliden's markets over the long term.

# **Market position**

Boliden conducts business in a global marketplace and is one of the world's largrest zinc mining and smelting companies. In copper, it is a small but leading player in Europe, and has built up a position in nickel in recent years. It has a leading position in the field of electronics recycling and a prominent position in Europe in the field of lead recycling.

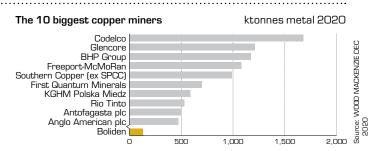
#### Mining companies - zinc

Boliden is the world's fourth largest zinc mining company. Tara and Garpenberg are large zinc mines in international comparison. Garpenberg is one of Europe's largest silver mining producer. Boliden Area is a smaller zinc producer.



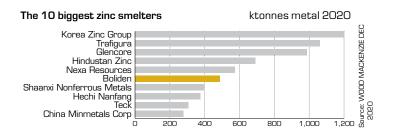
#### Mining companies - copper

Boliden is a small global copper miner but plays an important role in Europe's metal supply. Aitik is a major mine in terms of ore production but medium-sized measured in metal production. Kevitsa and Boliden Area are small in terms of copper production.



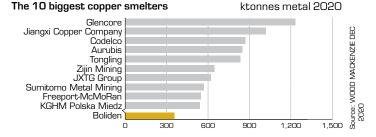
#### Smelting companies - zinc

Boliden is the sixth largest zinc smelter in the world. The Kokkola smelter is a large zinc producer while the Odda smelter is medium-sized.



#### Smelters - copper

Boliden is the world's sixteenth largest copper smelter. The Rönnskär smelter is a large copper producer and world leader in electronics recycling. The Harjavalta smelter is a small copper producer and the largest nickel smelter in Western Europe.



#### Mining and smelting companies - Nickel

Since the acquisition of the Kevitsa mine in Finland, Boliden has one integrated structure in nickel as it does in copper and zinc with the exception that Boliden does not produce finished nickel metal but an intermediate product known as nickel in matte, which is sold for further refining.

#### Mining and smelting companies – Lead

Boliden is a significant global lead mining company, but it is a by-product as Boliden has no primary lead mine. Boliden is a medium-sized primary lead smelting company. Boliden also has a significant position in lead recycling in Europe through its Bergsöe smelter.

# Competitiveness

Metals are traded and priced on global exchanges. Competitive costs and sustainable processes are critical to long-term success as the metals are largely produced and traded in their pure forms without distinguishing properties.

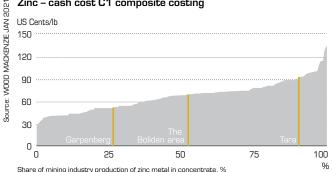
Unlike pure metals, mined concentrates are not traded on exchanges, but are priced by leading operators who announce their terms in the form of annual agreements known as benchmark contracts. A mine's cost per metric ton of metal is well-known to market operators as information on cost levels, known as cash cost, is regularly

compiled by independent research companies. Highly competitive mines often have high grades, substantial revenues from by-products, advantageous infrastructure, and low costs. Smelter competitiveness is usually compared using the cash margin metric, which is a more comparable metric, since smelters extract multiple metals

and by-products. Smelter competitiveness depends on cost levels, stable processes, and the extraction of other metals and by-products in addition to their primary metal. The graphs below show data from an analysis company1) and were not produced by Boliden.

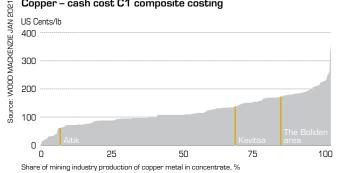
#### CASH COST IN THE MINING INDUSTRY

## Zinc - cash cost C1 composite costing



Garpenberg and Boliden have large revenues from multiple metals and are reported according to pro rata costing<sup>2)</sup>. Tara is reported according to normal costing. Garpenberg's productivity is among the highest in the world, and productivity at Tara is high according to Wood Mackenzie.

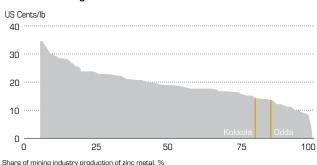
#### Copper - cash cost C1 composite costing



Aitik has low cash cost due to the world's highest productivity for open pits with a concentrator (according to Wood Mackenzie). Kevitsa is a nickel and copper mine with by-products. Kevitsa is in the first quartile on the nickel cash-cost curve.

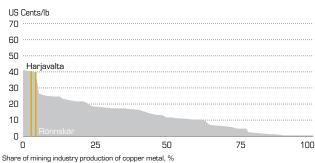
#### **CASH MARGIN FOR SMELTERS**

#### Zinc - cash margin for smelters



The Kokkola smelter is larger than Odda. Odda's margin is lower than Kokkola's, but the curve is flat and there is little difference between the smelters at lower and higher percentiles.

#### Copper - cash margin for smelters



A major part of Rönnskär's materials supply is from secondary raw materials. Harjavalta has major revenues from its nickel business.

<sup>1)</sup> The graphs are based on estimates and assumptions by the research firm Wood Mackenzie, and may differ from Boliden's own cash cost per mine data due to differences in the underlying data. There are a number of different definitions of cash cost. The graphs for the mines show composite costing where either pro rata or normal costing is reported. Pro rata cost ing divides the costs between the different metals, while normal costing reduces the costs by the net revenues from by-products

<sup>&</sup>lt;sup>2</sup> The graphs for the mines show composite costing where either pro rata or normal costing is reported. Pro rata costing divides the costs between the different metals, while normal costing reduces the costs by the net revenues from by-products.

# Trends, prices and terms

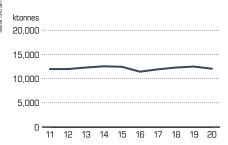
#### ZINC MARKET

# Price and global demand ktonnes of metal USD/tonne 16,000 4,000 12,000 3,000 4,000 2,000 4,000 1,000 — Global demand Price

#### Treatment charges (TC)



#### Global mined production



#### Weak market during the spring

Global demand for zinc metal developed weakly during the first half of the year. The Covid-19 pandemic led to a decrease in metal demand in China during the first quarter, and it began to weaken in the rest of the world as a result of increasing uncertainty in the industry about developments.

The pandemic spread outside China during the second quarter, resulting in a severe deceleration in industry activity level in most major economies, resulting in very weak zinc demand for a short period. The zinc price fell as production of zinc metal in the smelting industry was maintained despite the pandemic, while it exceeded demand. The zinc price fell during the spring to levels where cash flow in high-cost mines became negative, but only for a short period.

#### Lower mined production

In the run-up to 2020, concentrate supply was expected to increase and in negotiations on new treatment charges in benchmark contracts, the smelting industry achieved an increase in treatment charges for the second consecutive year. However, there was no surplus of concentrate as mines were forced to shut down to prevent the spread of Covid-19. There was a shortage of concentrate instead, and spot market treatment charges fell.

#### A stronger second half of the year

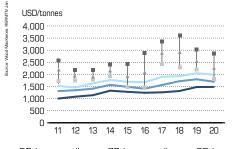
The weak period in China was very short-lived as the negative effects of the pandemic subsided and incentive measures in the country kick-started industrial activity. Steel production rose, and the demand for zinc metal increased from the end of the first quarter through the rest of the year.

The effects of the pandemic remained in the rest of the world, but zinc demand did not fall further from its level in the second quarter. As demand for metal rose in China and the outlook for economic activity in general improved within the industry as well as the financial markets, zinc prices rose throughout the second half of the year and ended the year at a level where cash flows in high-cost mines had improved significantly.

#### Shortage of concentrate all year long

Many of the mines that closed in the spring due to the pandemic opened during the fall, but in general, concentrate stocks in the market had fallen to low levels, just as the Chinese smelting industry was seasonally building up stocks in the fall. As a result, the shortage of mined concentrates remained during the second half of the year and spot market treatment charges were low in comparison to the levels in benchmark contracts.

#### Cash cost and price



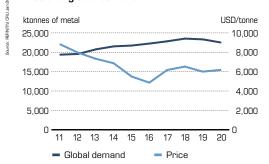
■ 50th percentile
 ■ 75th percentile
 ■ 90th percentile
 ■ Maximum price
 ■ Maximum price

#### Cash cost zinc

In weaker market environments, metal prices have dropped toward the cash cost level for high-cost mines. For shorter periods during weak economic conditions, the zinc price dropped towards the 60th percentile where 40% of production is unprofitable. In periods of weak market conditions, annual average prices were close to the 90th

percentile. In 2020, the average cash cost level for the industry rose as treatment charges, which accrue to smelters, rose. Cash cost in the 90th percentile is estimated to have fallen to USD 1,980 per tonne (2,030) as mines with even higher cash costs closed.

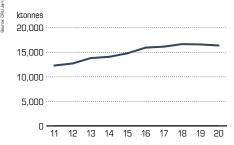
#### Price and global demand



#### Treatment charges (TC)



#### Global mined production (concentrates)



#### Weak market during the spring

Global demand for copper developed weakly during the first half of the year, but the effect of the Covid-19 pandemic was not as adverse as in many other metal markets. The period of weak demand was short-lived in China, and after the first quarter there was a clear turnaround with rising copper demand. Analysts believe the Chinese state was purchasing copper for strategic storage.

Copper demand was affected positively by the trend toward increased electrification and expanding charging and power transmission infrastructure. However, during the first half of the year, the growth in demand for electrically driven vehicles leveled off, but later there were signs that demand for batteries and battery metals was rising, and there were rising sales of electrically driven vehicles in several major markets.

The copper price fell during the first quarter, but similar to other periods of weak demand, it remained somewhat higher than the cost level in high-cost mines.

## Mined production was somewhat lower

At the beginning of the second quarter there was constant news about how an increasing spread of infection would have a negative impact on mined production, especially in South America, but ultimately production was not affected to the extent initially anticipated. The development of mining projects was affected to a greater extent as the expansion phase usually involves a significant workforce. Mining companies chose to reduce the rate of expansion due to infection risks, and we presume that the production start for several new mines has been delayed.

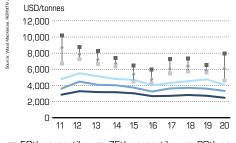
#### High year-end copper price

The demand for copper strengthened continually during the second half of the year, and the copper price at year-end was the highest for eight years.

#### Lower treatment charges

In the run-up to 2020, a certain shortage of concentrate was anticipated, and treatment charges in benchmark contracts were negotiated down from the 2019 level to the lowest level since 2012. The pandemic caused production disturbances in the mines, but this was limited in relation to global mining capacity. From time to time, there were production disturbances in the mining industry due to labor disputes and technical challenges in South America. Spot market treatment charges fell and at year-end were lower than in contracts.

#### Cash cost and price



■ 50th percentile ■ 75th percentile ■ 90th percentile ■ Minimum price ▲ Average price ■ Maximum price

#### Cash cost copper

In weaker market environments, metal prices have dropped toward the cash cost level for high-cost mines. For shorter periods during weak economic conditions, the copper price dropped towards the 80th percentile where 20% of production is unprofitable. In weak market conditions, annual average

prices were higher than the 90th percentile for copper. In 2020, it was primarily lower treatment charges, lower oil prices and lower precious metal prices that reduced the average cash cost level. Cash cost in the 90th percentile fell to USD 4,150 per tonne (4,390), driven by lower operating costs including diesel.

#### **NICKEL MARKET**

#### Price and global demand ktonnes of metal LISD/tonne 2,500 25,000 2,000 20,000 1,500 15,000 1.000 10 000 500 5.000 19 13 14 15 16 17 18 Global demand Price

## Depressed nickel price during first six months

Global demand for nickel metal developed weakly during the first half of the year as demand for nickel for the production of stainless steel fell severely. Stainless steel is the biggest segment for nickel and accounts for more than two thirds of global nickel demand. Demand fell for nickel for alloys used in various high performance applications such as airplane engines.

Nickel demand was affected positively by the trend toward electrification as the metal is an important component in lithium batteries used in electrically powered vehicles and in electronics. During the first half of the year, analysts calculate that the growth in demand for lithium batteries leveled off but improved during the second six months.

The production of nickel metal increased during the year driven by continued expansion in smelter capacity in Indonesia. The country has the biggest ore reserves in the world and the state has introduced

ore export restrictions with the aim to compel companies to invest in further in-country processing.

The nickel price fell during the first quarter to levels close to the high cost segment on the cash cost curve.

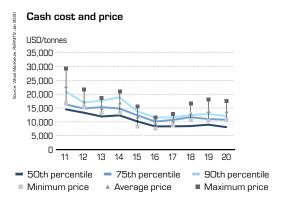
#### Strong fourth quarter

Positive developments in the Chinese economy after the first quarter led to increasing stainless steel production and rising nickel demand. Global production of stainless steel was lower than the previous year for the first nine months, but higher during the fourth quarter.

The nickel price rose as of the second quarter, but not until the fourth quarter did the price reach far above cost level for the high-cost producers.

#### Lower mined production

Together, Indonesia and the Philippines accounted for almost half of global mined production and they provide the raw material for the production of nickel pig iron in China and Indonesia. Production fell sharply in both countries following production cutbacks in connection with the pandemic.



#### Cash cost nickel

In weaker market environments, metal prices have dropped toward the cash cost level for high-cost producers. The nickel price has seldom dropped below cash cost in the 75th percentile, but high stocks and excess supply forced the nickel price even lower in 2016 and 2017.

Cash cost in the 75th percentile was USD 10,500 per tonne (11,600), and in the 90th percentile USD 12,400 per tonne (12,630). Higher palladium prices, lower oil prices, exchange rates and other operational costs led to a drop in average cash cost.

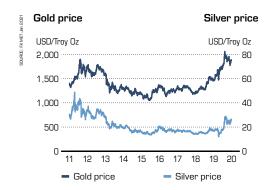
#### LEAD MARKET

#### Price and global demand ktonnes of metal USD/tonnes 14.000 3.500 12,000 3.000 10.000 2.500 8 000 2 000 6,000 1,500 4,000 1,000 2.000 500 0 13 14 15 16 17 18 19 Global demand Price

#### Lead

Global lead demand decreased due to the severe drop in global car production, and in part due to a general weakness in the transportation industry. The supply of lead metal fell but exceeded demand. The availability of mined concentrates decreased due to the closure of mines in connection with the pandemic. Spot market treatment charges fell and were lower than contract prices.

#### **PRECIOUS METAL MARKETS**



#### Gold and silver

Gold and silver prices are governed by anticipated trends in the global economy and have often been sought-after metals in weak economic climates or when unusual events affect the global economy. Precious metals are included in the investment portfolios of financial players to an increasing extent. The gold price rose to a new record level above

USD 2,000 per troy. oz. in August and fell back to around USD 1,900 toward year-end. Initially, the silver price did not follow the gold price trend when the pandemic broke out, but rose sharply later during the fall. A significant part of silver demand goes to industry segments that are dependent on the economic cycle.

#### SULPHURIC ACID MARKET

#### Sulphuric acid price

DURCE: CRL



Sulphuric acid CFR NW Europa, contract 6 months

#### Sulphuric acid

Global and European sulphuric acid demand was stable compared to the previous year, but supply exceeded demand and sulphuric acid prices came under pressure. During the fourth quarter, the prices rose somewhat as sulphur supply from oil refineries was reduced, which led to an increase in sulphuric acid demand

#### **CURRENCY TRENDS**

#### Currency



The USD strengthened at the beginning of the year until Covid-19 spread globally. In many countries, stimulus packages combined with robust action from central banks resulted in an increase in risk appetite, while reduced interest rate differences later weakened the USD.

The dollar weakened against both the Euro and Swedish krona during

the year; its fall was especially sharp against the Swedish krona, which strengthened in parallel with the economic recovery. On average, the USD to SEK rate was 9.20 (9.46), and at year-end it stood at 8.19 (9.32). On average, the EUR to SEK rate was 10.49 (10.59), and at year-end it stood at 10.04 (10.43).

#### **BOLIDEN WEIGHTED INDEX**

#### Index



Boliden weighted index — Metal price/TC index (USD)
 Currency index Index 100=January 1, 2015.

The table on the left shows a weighted index of the prices, terms and currencies that have the greatest impact on Boliden's profits, together with a weighted currency index and a weighted metal price and treatment charge index. The Boliden weighted index increased by 13% during the

year and is at a historically high level. Currencies and metal prices have often displayed a negative correlation that has had an equalizing effect on Boliden's weighted index and earnings.

# The share

The Boliden share is noted on Nasdaq Stockholm and is part of the Large Cap segment. During the year, the share rose by 17% and thus developed more strongly than the Stockholm exchange.

#### Trading in the Boliden share

In all, 1.0 billion (0.7) Boliden shares were traded in 2020 with a total value of SEK 231 billion (284). Nasdaq accounted for 74% (76) of all trading in Boliden shares. During the year, 459 million (384) Boliden shares were traded on Nasdaq Stockholm, with a total value of SEK 104 billion (91). An average of 1.8 m (1.6) shares were traded per trading day, and the Boliden share accounted for 1.8% (2.1) of the total volume of shares traded on Nasdaq Stockholm. The largest exchange after Nasdaq, was Cboe CXE, which accounted for 14% of trading in the share.

#### Price trend and dividend

The Boliden share rose by 17%, while the OMX Stockholm 30 index rose by 6%, and the Refinitiv Global Mining Sector Index in SEK rose by 6%. At year-end 2020, the Boliden share was quoted at SEK 291 (249) on Nasdaq Stockholm, corresponding to a market capitalization of SEK 79.7 billion (68.0). In common with other raw materials companies, the value of the Boliden share varies on average more than the broad stock market indices.

Over the last five years, the beta value of the Boliden share) against OMXSPI was 1.26 (1.39).

The Board of Directors proposes to the Annual General Meeting an ordinary dividend of SEK 8.25 (7.00) per share for 2020, which is in line with Boliden's dividend policy. The proposed dividend corresponds to 33.2% (33.1) of the net earnings per share and a dividend yield of 2.8% (2.8) of the share price at year-end. In addition, an extra dividend in the amount of SEK 6.00 per share was proposed through an automatic share redemption procedure. Boliden's average total return (dividend paid and price development) over the past 10 years was 11% (14) per year.

#### Share capital

The total number of shares is 273,511,169. Each share has a nominal-value of SEK 2.12, and total share capital is 578,914,338. Boliden's share capital derives from one type of share where each share has the same voting rights and the same right to dividends. There is no provision in Boliden's articles of association that limits the right to transfer shares

or any voting right restrictions as to how many votes a shareholder may exercise at a shareholders' meeting. Boliden does not hold any of its own shares, nor has it issued any shares in 2020.

Boliden is unaware of any agreement between shareholders that may entail restrictions on the right to transfer shares in the company. Boliden is not party to any significant agreement affected by any public buyout offer. Boliden has no shareholders who have declared that they directly or indirectly represent at least one tenth of the total number of votes for all shares.

#### Ownership structure

As of December 31, 2020, Boliden had 89,711 shareholders (82,922).

Approximately 60% of the shares (63) were registered to foreign accounts. The ten largrest individual shareholders represented 30.5% (28.2) of the share capital.

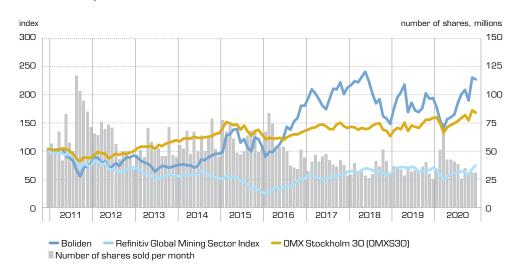
Boliden's employees hold shares, via profit sharing foundations, for which voting rights cannot be directly exercised. At year-end, the foundations held 1,096,991 shares (964,354).

#### Share price, sector index, and Nasdaq Stockholm

#### Share price, sector index, and Nasdaq Stockholm

During the year, the Boliden share rose by 17%, while the OMX Stockholm 30 index rose by 6% and the Refinitiv Global Mining Sector Index in SEK rose by 6%.

Source: Thomson Reuters Datastream



#### Breakdown of Boliden's shares as of December 31, 2020

Shareholdings	Number of shareholders	Number of shares	Shareholding, %	Votes, %
1 – 100	50,062	1,837,343	0.7	0.7
101 – 500	25,229	7,174,752	2.6	2.6
501 – 1,000	7,354	6,055,521	2.2	2.2
1,001 – 10,000	6,066	16,088,406	5.9	5.9
10,001 – 50,000	384	8,407,105	3.1	3.1
50 001 –		185,273,855	67.7	67.7
Anonymous ownership		48,674,187	17.8	17.8
Total		273,511,169	100.0	100.0

Source: Monitor, Modular Finance AB Holdings

## Boliden's 10 biggest shareholders as of December 31, 2020

BlackRock 5.1 T. Rowe Price 4.1 Handelsbanken fonder 4. Swedbank Robur 3. Norges Bank 3.1 Vanguard 2.1 AMF 2.1 SEB Fonder 1.5 Söderbloms Factoringtjänst AB 1.5	Total	30.6
BlackRock         5.           T. Rowe Price         4.           Handelsbanken fonder         4.           Swedbank Robur         3.           Norges Bank         3.           Vanguard         2.           AMF         2.           SEB Fonder         1.	Artemis	1.3
BlackRock         5.           T. Rowe Price         4.           Handelsbanken fonder         4.           Swedbank Robur         3.           Norges Bank         3.           Vanguard         2.           AMF         2.	Söderbloms Factoringtjänst AB	1.8
BlackRock         5.           T. Rowe Price         4.           Handelsbanken fonder         4.           Swedbank Robur         3.           Norges Bank         3.           Vanguard         2.	SEB Fonder	1.8
BlackRock         5.           T. Rowe Price         4.           Handelsbanken fonder         4.           Swedbank Robur         3.           Norges Bank         3.	AMF	2.0
BlackRock 5.1 T. Rowe Price 4.1 Handelsbanken fonder 4.5 Swedbank Robur 3.	Vanguard	2.9
BlackRock 5.1 T. Rowe Price 4.1 Handelsbanken fonder 4.	Norges Bank	3.0
BlackRock 5. T. Rowe Price 4.	Swedbank Robur	3.1
BlackRock 5.0	Handelsbanken fonder	4.7
• •	T. Rowe Price	4.9
Percentage of capital and votes, %	BlackRock	5.0
<b>5</b>	Percentage of capital and votes, $\%$	

Source: Monitor, Modular Finance AB. The verification date may vary for certain shareholders.

#### The share in brief, 2020

·	
Exchange	Nasdaq Stockholm
Ticker	BOL
ISIN code	SE 0012455673
ICB code	5510
Highest price paid	SEK 302
Lowest price paid	SEK 137
Closing price	SEK 291
Market cap. 31 Dec	SEK 80 b
Turnover rate	159%
Number of shares	273,511,169
Beta value (5 years)	1.26

Source: Nasdaq OMX

## Shareholder information on the website

Continuously updated information about the Boliden share, the shareholder list, metal prices and currencies is available on the Boliden website at Boliden.com. Boliden's financial reports, presentations and contact details to the stock analysts in the 19 (18) banks and fund commissioners who monitor Boliden are also available on the website.

Annual total return as of December 31, 2020	1 year	3 years	5 years	10 years
Boliden	21%	5%	19%	11%
OMX Stockholm 30	7%	9%	9%	9%
Refinitiv Global Mining Sector Index, SEK	11%	10%	26%	1%

The average total shareholder return on the Boliden share over the past 10 years was 11% per annum and 193% for the period as a whole.

Source: REFINITIV

#### Trading on different exchanges



CDUE CAL, 1470

Aquis, 4%Cboe BXE, 3%

UDDOE BXE, 35

Other, 4%

#### In 2020, 74% (76) of Boliden shares were traded on the Stockholm Exchange. Source: Modular Finance AB

#### Ownership by country



Sweden, 40%

USA, 22%

United Kingdom, 12%

Luxemburg, 6%Other, 20%

#### Ownership by category



• Foreign accounts, 60%

Swedish legal entity accounts, 29%

Swedish natural person accounts, 11%

The percentage of foreign-owned shares decreased in 2020; 60% (63) of the shares were registered to foreign accounts.

# Risk management

Boliden runs a business that is exposed to changes in metal prices and foreign exchange rates. Operations affect the surrounding environment and many processes are associated with occupational health and safety risks. Boliden seeks to mitigate all these risks, inter alia through scenario analysis. Also, Boliden constantly monitors risks based on process and product perspectives. This monitoring enables opportunities and risks relating to the operation to be recognized early.

#### **OPERATIONAL RISKS**

Operational risks are managed by the operating units in compliance with the guidelines and instructions established for each business area and unit. The most significant opportunities and risks are presented to Group management and are compiled annually for the Board. There is an insurance department at group level that makes sure material risks enjoy the appropriate insurance cover.

#### HISK

#### Description of risk

#### Management and comments for the year

#### Health and safety

Boliden handles large flows of materials both above ground and below. Employees and contractors are periodically exposed to heavy machinery and lifting, to high temperatures, and to substances that are hazardous to health. Inattentiveness or deviation from established procedures can create dangerous situations and increase the risk of injury. A great many Boliden employees and contractors do shiftwork, which increases psycho-social risks.

Boliden has a zero vision for accidents and follows established procedures for health and safety. These procedures worked extremely well during the Covid-19 pandemic in 2020, and even though a small number of Covid-19 cases occurred, all of the production units have been able to continue working with maintained production.

The number of serious injuries continues to fall, even though there was some increase in the total number of injuries resulting in lost time (LTI) in 2020. A group-wide safety culture survey was conducted during the fall of 2020 to identify potential improvements and to turn the accident trend down again. A continued focus on managerial involvement, preventive risk management, and greater involvement by employees in health and safety activities all constitute important parts of the proactive occupational health and safety efforts.

#### Environmental impact

#### Environmental impact

Boliden's operations affect the air, water, land and biodiversity in the vicinity of those operations. The extraction of metals also creates waste products that must be processed safely. There are risks posed by both ongoing and decommissioned operations. Significant issues managed by Boliden include discharges to air and water, waste storage, land-use (landfill, waste management, impact on biodiversity), climate and energy consumption.

Boliden sets emissions goals and monitors them closely. The management of emissions and discharges is based on risk analyses, continuous monitoring and maintenance. Also, technological development is constantly in progress to ensure best resource utilization and the smallest possible waste volumes. Boliden's operations have also implemented an energy management system to improve energy efficiency and conserve energy. For example, excess heat from processes is utilized to help reduce carbon dioxide emissions.

#### Water management and dam safety

Tailings ponds constitute one of the mining industry's significant risks through their environmental impact during dam construction, and the risk of dam failure. Extreme weather conditions and changes in average rainfall affect these risks.

Boliden develops water balance models to ensure better resource utilization and to create a wider safety margin in relation to emergency water discharges. Every operating unit with its own dam has a dam safety manager and a dam operations manager.

#### Climate change

Global warming may increase the risk of more severe weather events as the global climate continues to change. Changes in precipitation may lead to heavier snowfall or flooding that can affect operations.

Boliden has created a climate program covering the entire Group as its contribution to global climate challenges; see page 35. Each unit is responsible for evaluating the physical risks associated with weather conditions and their operation. Planning includes the analysis of scenarios arising from changed climate conditions in a mine's various phases (including reclamation following closure) as part of the investigation process.

#### Unplanned stoppages

Boliden's production essentially consists of continuous processes, and any unplanned stoppages can affect production, emissions and discharges to air and water, and financial performance. Stoppages may be long-term. Unplanned stoppages may occur due to e.g. technical problems, accidents or strikes. The past year has also shown that there is risk of pandemics leading will lead to production stoppages through restrictions or disruptions in supplier chains.

Boliden carries out preventative maintenance work at all of its production facilities. Major maintenance shutdowns are carried out every year in the smelting operations, while maintenance work forms an integral part of day-to-day operations in mines

Boliden's objective is to minimize the total cost of the Group's damage risks. This is achieved partly by continuously developing damage prevention and mitigation efforts in the operations, and partly by introducing and developing groupwide insurance solutions.

#### **CONT. OPERATIONAL RISKS**

#### Risk Description of risk Management and comments for the year

#### Skills supply

In the years ahead, a large number of Boliden employees will retire. Furthermore, general competition for skilled labor is hardening in many of the places where Boliden operates, due to e.g. industrial start ups. Meanwhile, a major technology shift is taking place in Boliden with an increase in digitization, process development and automation that will require new skills in many different occupational areas.

During the year, Boliden worked on boosting its attractiveness. Boliden's employer offering was concretized and differentiated to clarify the healing between our values, our role in adaptation to climate change, innovation and technology development, and Boliden as a secure employer. Furthermore a number of new collaborations with important universities and colleges were begun. Work on developing important personnel processes was completed during the year as part of the preparations for the implementation of a group-wide HR computer system in 2021.

#### MARKET AND COMMERCIAL RISKS

Boliden's market and commercial risks are primarily managed within the individual business areas and at Group level.

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Risk	Description of risk	Management and comments for the year
Metal prices	Changes to metal prices have a significant impact on Boliden's profits and cash flow.	Boliden's policy is not to hedge metal prices, but rather to allow price changes to be reflected in profits. However, Boliden's risk management function hedges smelter metal prices and currency exposure in the period between the purchase of raw materials and the sale of corresponding metals (with the exception of process inventory).
Treatment charges	Treatment charges make up a large part of the smelters' gross profit and are determined by supply and demand in metal concentrates.	Terms are negotiated annually by the major operators in the mining and smelting industries. Boliden applies these terms internally and the majority of external contracts are based on them.
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Customers	In copper, Boliden is dependent on a small number of large customers. Reduced sales to industrial customers in Europe increases the need to conduct sales via the London Metal Exchange (LME), with slightly lower margins as a result.	Boliden endeavors to reduce these risks by maintaining a diversified portfolio of customers with long-term relationships, via its own northern European sales organization. Boliden also has plans in place that would enable production to be reorganized to produce LME-quality products for sale via the LME. Diversification of the customer portfolio during the year has had the desired effect in the form of limited exposure to those segments whose demand fell most in the wake of the Covid-19 pandemic. Boliden was able to sell its production without deliveries through the LME stock.
Raw materials supply	Stable, reliable raw materials supply is important for creating the most profitable raw materials mix and thereby enabling the smelters to produce at high levels of capacity utilization and consistent quality.	Boliden endeavors to conclude long-term contracts in relation- ships with reliable external suppliers of metal concentrate and secondary materials, who also demonstrate high-performance in sustainability issues.
Supply of goods and services	All of Boliden's operations are dependent on the ongoing sale of equipment, consumables and services. Our suppliers' output of goods and services and our logistic chains for inbound and outbound delivery are sensitive to external influence and disruptions.	Boliden works pro actively to reduce these risks by having multiple qualified suppliers in each respective category and field. In cases where there is only one supplier, risk is reduced by maintaining a safety stock and by identifying alternative supply solutions. When Covid-19-related disruptions occurred during the year, Boliden's various units have been able to collaborate and remedy potential shortage situations.  Even though preventive risk management is constantly applied, the part played by the organization's ability to adapt quickly is at least as important in the management of supply risks.

#### Energy prices

Energy accounts for approximately 14% of operating costs, and changes in energy prices can have a significant effect on profitability.

#### Emissions allowances

Changes to regulations and taxes in the EU Emissions Trading Scheme (ETS) may lead to cost increases that jeopardize Boliden's competitiveness on the international market.

In Norway, Boliden has a long-term electricity agreement with inflexible pricing clauses. The contract portfolios in Sweden, Finland and Ireland have shorter terms and Boliden is more exposed to market price, and rising or falling energy prices affect operating profit accordingly. Price volatility in the electricity market is expected to increase in the years ahead. During the year, Boliden concluded long-term contracts in Sweden and Finland which come into force in 2021 and 2022. Boliden monitors the potential for entering into longer term pricing agreements as and when favorable terms are offered.

Boliden works through industry organizations to promote transparency in the emissions trading system and to ensure that European metal producers are not disadvantaged.

#### **FINANCIAL RISKS**

Boliden has a centralized finance department responsible for managing financial risks with the exception of credit risks in trade receivables. The role of the finance department is to support management and operational units with risk control. The finance department is responsible for identifying and limiting the Group's financial risks in line with the financial policy adopted by the Board of Directors.

Risk	Description of risk	Management and comments for the year
Currency and metal price risk	Because Boliden's products are largely priced in USD; fluctuations in the USD exchange rates have a significant impact on Boliden's profits and cash flow. Pricing terms for Boliden's products are based mainly on metal exchanges.  **Transaction exposure** Boliden's transaction exposure arises from binding undertakings to customers and suppliers.  The Group buys metals in the form of raw materials, which it processes into refined metals, and where the cost of the raw materials and exchange rates may differ from the final market value. Some customers are offered fixed prices in different currencies that are sometimes set well in advance of delivery.	Transaction exposures in conjunction with binding undertakings are hedged, with the exception of the smelters' process inventory. Forward exchange contracts are used to hedge the sales price and exchange rate when purchasing input raw material, or in fixed-price sales agreements. Hedge accounting is applied to forward exchange agreements to hedge fair values in the Income Statement.  There are constant calculations into the way in which changes in metal and exchange rate markets will affect the Group's future financial position.  The Group may use contracts to hedge metal prices and exchange rates for the cash flows from forecast metal sales. Hedging is only carried out in conjunction with certain major investments, when the investment amount is in a currency other than local currency.  Hedge accounting applied to the derivative to hedge cash flows is reported in Other comprehensive income, and the sensitivity analysis in Note 28.
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Currency risk	Translation exposure  A translation difference arises when converting net investments in overseas operations into SEK in conjunction with exchange rate fluctuations, which affects Other comprehensive income within the Group.	Under Boliden's finance policy, the effect of translation expo- sure is not actively eliminated (so-called equity hedging). How- ever, if an external borrowing requirement exists, the liability in foreign currency is used as equity hedging against the foreign asset pool.
Interest rate risk	Changes in market interest rates affect the Group's profits and cash flows.	Boliden's finance policy allows an average fixed-interest term of up to four years. On December 31, 2020, the Group's loan portfolio had an average fixed interest term of 3.1 years (1.1).
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Refinancing and liquidity risk	The risk that Boliden will be unable to obtain the requisite financing or meet its payment obligations due to insufficient liquidity.	Boliden limits refinancing risk by ensuring a good spread of counterparties, financing sources and maturities. Adequate current liquidity is created in the form of available, unutilized credit facilities; it is reviewed regularly.  The average term of total loan limits was 3.7 years (3.4) at year-end. As of December 31, 2020, Boliden's current liquidity, in the form of cash and cash equivalents and unutilized binding credit facilities with a term of more than one year, totaled SEK 12,741 m (7,165).
Credit and counterparty risk	Credit risks and financial operations The term 'credit and counterparty risk' refers to the risk that a counterparty in a transaction may fail to fulfill their obligation, thus causing the Group to incur a loss. Boliden's financial exposure to counterparty risk mainly occurs when trading in derivative instruments.  Credit risks in trade receivables The risk of the Group's customers failing to fulfill their obligations constitutes a credit risk.	Boliden's financial policy mandates a Standard & Poor's credit rating of A when entering into a transaction, and a maximum investment of cash and cash equivalents per counterparty. The credit quality and counterparty spread for derivatives are considered to have been good in 2020. As of December 31, 2020, the credit risk in external derivative instruments had a total market value of SEK 143 m (93).  Credit risks are managed through an established credit rating process, active credit monitoring, short credit periods, and daily procedures for monitoring payments. The necessary provisions for doubtful receivables are also monitored continuously. The quality of trade receivables is deemed to be good. Impairment charges for outstanding trade receivables on December 31, 2020 only occur in limited amounts and have also been insignificant in historical terms. See also Note 20, Trade and other receivables. Credit insurance is also used in certain cases.
Financial reporting	The risk of inaccurate financial and operational reporting	Boliden has a well functioning internal control structure. Control functions exist locally, in individual units, the business areas and at the head office. All of the functions work within a group-wide internal control framework for financial reporting. Controls are tested annually within the framework, both internally and by external auditors. The Group's controller function,

which works closely with the local units and business areas, follows up and checks operational and financial reporting.

#### OTHER RISKS

mitting processes.

#### Description of risk Risk Management and comments for the year Legal risks Boliden's operations are to a great extent subject to licensing Operations are dependent to a great extent on the retention and renewal of existing licenses and the granting of new ones on reasonable terms and in good time. Usually, permits require and to wide-ranging environmental and other regulations. Per mits are tested regularly. Also, Boliden may become involved in commercial disputes and legal proceedings. renewal on several occasions throughout a mine's lifespan. Boliden monitors legal developments in relevant fields, and implements, follows up and ensures compliance with applicable laws and regulations. Boliden is an active member in domestic and foreign industry organizations such as Svemin and Eurometaux. During the year, Boliden has also applied for membership in the International Council on Mining and Metals (ICMM). Boliden is also a referral body for new rules, regulations and initiatives relating to the industry. Information on legal proceedings and disputes is provided in Note 31. Boliden may be exposed to legal or regulatory sanctions, Boliden works to integrate compliance as part of its corporate Compliance risks material financial losses or damaged reputation as a result of culture. The Ethics & Compliance department's function is to ensure that effective procedures are in place to identify, any failure to follow applicable regulations. assess, monitor and report exposures to non-compliance risks. The focus during the year was on strengthening Boliden's efforts to counter money laundering and bribery and corruption, and its work on promoting competition law and sanctions compliance. Among other measures, an anti-money laundering policy was adopted by the President. Boliden trains relevant employees in areas such as anti-corruption, competition law, sanctions and the prevention of money laundering. Boliden also has an external whistle-blower system that enables the anonymous reporting of serious irregularities within the Group. Risks to Confidence in Boliden can be harmed by events such as acci-Boliden has a crisis management group with procedures for confidence dents or the failure of employees or business partners to live managing crises and complex events, e.g. linked to accidents. Because Boliden seeks to be associated with ethical, sustainup to Boliden's business ethics and sustainability. See also page 36. able business partners, it conducts systematic evaluations of customers and suppliers in respect of business ethics and sustainability. New business partners must accept Boliden's Code of Conduct for business partners or other relevant and generally accepted business standards before agreements are concluded, and where necessary audits are carried out on business partners' premises to ensure compliance. There are procedures in place for managing any non-compliance and serious breaches may lead to the end of a business relationship. Political risks Political decisions can have effects in Sweden and in the coun-Boliden and its industry organizations are often referral bodies tries where Boliden and its business partners conduct operafor upcoming political decisions relating to Boliden's operations. Examples of such decisions include changes to various types of taxes, the management of reclamation work and per-

# **Corporate Governance**

#### Governance of the Group

Boliden is a Swedish limited company listed on Nasdaq Stockholm. The Boliden Group has approximately 6,000 employees and runs mines and smelters in Sweden, Finland, Norway and Ireland.

Boliden's corporate governance is based on the Swedish Annual Accounts Act, the Swedish Companies Act, Nasdaq Stockholm Rule Book for Issuers, the Swedish Code of Corporate Governance, and other applicable legislation and regulations.

In addition to these regulations, Boliden uses New Boliden Way – the Group's organizational and operational philosophy – and the internal control tool, BICS. There are also policies in a number of areas;

one such is Boliden's Code of Conduct, with which all employees must be familiar and follow. Also, the Group's units work in compliance with management systems for occupational health & safety, the environment, energy and quality.

#### Typical issues from 2020

As a result of the Corona pandemic, the Board of Directors has stepped up its monitoring of external factors and constantly follows trends in global mine production of base metals, the supply of concentrate and demand for Boliden's products. To minimize the impact on the operation and create room to maneuver in various scenarios, a number of measures were adopted including cost savings, a sharper focus on cash

flow and enhanced liquidity. Dividends to shareholders were also the subject of more comprehensive considerations than during a normal year. The Board noted that Boliden has a flexible dividend policy, specifically designed to meet cyclical fluctuations. Our strong balance sheet and the stress tests carried out by the company for different scenarios confirmed that the proposed dividend could be delivered without detrimental effects. A more disturbing effect of the pandemic were the limitations on in-person meetings for cross-checks and follow-ups, which may be the reason behind the break in the previously positive accident trend during 2020. The Board of Directors regard this trend as serious and stands behind the company management's

## Comment from the Chairman of the Board

Efficient corporate governance is a prerequisite for generating added value for our shareholders and maintaining confidence among our stakeholders in a broader sense.

A group, essentially comprising Swedish institutional investors, has been a long-term Boliden owner since we were re-listed in Sweden 20 years ago, and the last few years have seen their ranks joined by a number of large, foreign, institutional owners. However, there is no clear principal owner, and this places special demands on the Board as the owners' ambitions must be "inferred". We work in an industry that is characterized by high volatility, that is, rapid and vigorous fluctuations in profits. It also places great demands on the company's management and Board and their ability to provide high quality, transparent information and to handle rapid changes without suffering from hubris during upturns or despondency during downturns. At the same time, the Board and management must be able to manage major, long-term investment projects. Naturally, while such projects are crucial for value creation within the company, they also entail many risks, and these are discussed by the Board over a relatively long period before any decision is taken. One of the prerequisites for value-generating work by the Board is that the Board has a firm grip on operations and a good grasp of events in the outside world. We achieve this through of e.g. monthly reports and a well-structured body of material for the Board.

The Corona pandemic was by far the most significant world-wide event in 2020 and everyone has been affected by it in one way or another. Although Boliden as an individual company has managed relatively well to avoid the most immediate negative economic consequences, the pandemic has entailed changes in a number of areas. This applies to practical matters as well as everything from how to conduct meetings, plant visits, maintenance shutdowns and how to maintain the supply of raw materi-

als, production, transportation and sales, to more strategic decisions regarding long-term investments and other adjustments to operations in order to manage increased uncertainty and shorter planning horizons. These matters, together with limiting the effects of the pandemic on Boliden's operations, have naturally had high priority on the Board's agenda.



We usually visit two of Boliden's operating facilities every year to make a thorough study of the operations and to meet local management and employees. Visits during 2020 were suspended due to travel restrictions arising from the Corona pandemic.

To make sure we devote sufficient time to the more long-term, strategic issues, we agree each year on a number of themes for incorporation into our agenda. The Corporate Governance Report details the themes we addressed during the past year. Some of them are recurring themes, such as CSR issues, which we address specifically at our October meeting, and leadership development, which is the focus of our December meeting. The evaluation of the Board's work as performed in 2020 shows that it continues to function well. The evaluation forms the basis for the work of the nomination committee, and is an important tool for the Board's efforts to ensure continuous improvement in its work.

February 2021

Anders Ullberg
Chairman of the Board

decision to step up proactive health and safety work in order to strengthen the safety culture and thus reverse the trend.

Although the pandemic has left its mark on a great many things, the global trend in recent years continues toward an increasing focus on sustainability, in terms of occupational health & safety, the environment and business ethics. Expectations are not only increasing from the political arena, but also from investors, business partners, employees and the general public, and this requires putting objectives and intensified work on such issues into practice. During the year, the focus was on the EU's 'Green Deal', a stricter emissions trading system, indirect compensation for electricity-intensive industries and a review of the Water Directive. An important part of the advocacy efforts is the promotion of a better understanding of the role base metals play in society and adaptation to climate change, and giving decision-makers a holistic perspective to avoid conflicting with green initiatives, such as increased recycling and reduced emissions. The Raw Material Alliance was formed in the EU to improve Europe's security of supply in base metals, rare earth metals and certain industrial minerals, which is beneficial for Boliden's operations. These initiatives also mean that issues regarding investments that help achieve the prioritized environmental goals, such as reducing the carbon dioxide intensity by 40% by 2030 and better energy efficiency and waste management, will be presented for resolution by the Board. The expansion of the Harjavalta nickel line (EUR 40 m) is one of the major investments handled by the Board during the year; it will not only contribute to profitability, but also to environmental performance. The expansion is in line with Boliden's nickel strategy from 2015 and will mean increased production at a lower carbon intensity per metric ton of metal produced. Conditions for a possible modernization of the zinc smelters in Odda were another issue addressed by the Board during the year. A possible investment decision not only requires adequate confidence in the project itself, but also a clear picture of business cycle trends.

An agreement was also reached in 2020 on fossil-free electricity supplies in Sweden and Finland to secure compet-

#### ANNUAL GENERAL MEETING 2020

shareholders in person or by proxy, representing a total of slightly more to the current pandemic restrictions, the Board was only represented by its Chairman.

The auditor in charge and the CEO were also present.

Among other things, the AGM resolved to reelect all Board members. Anders Ullberg was re-elected as Chairman of the Board. The AGM also

- accordance with the proposal by the Board.
- gårdh, Ola Peter Gjessing (Norges Bank Investment Management), Lilian the Board of Directors) as members of the Nomination Committee.
- solved that the fee for the Chairman of the Board remain unchanged at members who are not employed by the Company, and that SEK 225,000 be paid to the Chairman of the Audit Committee and SEK 125,000 be paid the Remuneration Committee also remained unchanged at SEK 50,000 to each of the committee's two members.

The AGM also resolved to approve the proposed principles for remuneration salary, any variable cash remuneration, other benefits and pensions. The goals that are specific to the individual. The criteria must be designed in such a way as to promote the company's strategy and long-term interests.

#### **WELCOME** TO THE 2021 ANNUAL GENERAL MEETING.

#### **BOLIDEN GOVERNANCE STRUCTURE**



itive, climate-smart power supplies to multiple Boliden units. This is particularly important as the electrification of processes continues. Dam safety is another urgent sustainability issue that is the subject of recurrent Board reviews. During the year, new global dam safety guidelines known as the Global industry Standard on Tailings Management were issued on the initiative of the International Council on Mining and Metals (ICMM), the UN environmental program and the PRI industry organization. The new standard seeks to sharpen the focus on matters and contribute to greater transparency and uniform global management. Implementation of the new standard is in progress, and Boliden has also applied for membership in ICMM.

#### Shareholders and the AGM

The biggest shareholders are Swedish and foreign funds and institutions. At year-end, the number of shareholders was 89,000 (83,000). The single largest owners were BlackRock, T Rowe Price, Handelsbanken Fonder, Swedbank Robur fonder and Norges Bank. The share of foreign ownership decreased a little during the year to approximately 60% (63). Further information about ownership structure is available on pages 52 and 53 in the annual report and on Boliden's website.

Boliden's shareholders exercise their right of decision by submitting proposals to, and participating in and voting on the resolutions submitted to the Annual Gener-

al Meeting (AGM) and any extraordinary general meetings. Shareholders may request that a matter be considered at the AGM by submitting a written request to the Board at the designated time sufficiently in advance of the meeting that the matter can be included in the notice to attend. Shareholders are also welcome to submit inquiries on company issues to the Board and the President, the auditor and the remuneration committee and audit committee chairmen during a general meeting.

The AGM is the highest decision-making body. The duties of the AGM include the election of members of the Board, the Chairman of the Board, and the nomination committee; adoption of the income statement and balance sheet, resolutions on the appropriation of earnings and release from liability for members of the Board and the company's CEO; the approval of fees to members of the Board and auditors and the principal terms and conditions of employment for the CEO and other senior executives. Where applicable, the AGM also passes resolutions on changes to the articles of association and the election of auditors.

AGMs are usually held at one of the installations in Sweden to provide shareholders with an insight into the business. In conjunction with the meetings, the shareholders have the opportunity to enjoy guided tours in mines, concentrators or smelters to gain a deeper understanding of the various operations and an opportunity to meet Boliden's employees. The 2020

AGM was scheduled to take place in Aitik, but was moved to Stockholm to allow it to be held in a Covid-safe venue.

#### **Nomination Committee**

The nomination committee represents the shareholders. The nomination committee is tasked with preparing and submitting proposals for resolutions shareholders vote on at the AGM. The proposals concern the number and election of members of the Board, the Chairman of the Board, fees payable to the Board and its committees, the election of auditors and fees payable to then and where necessary, the process and the criteria that govern the appointment of members to the nomination committee.

The focus of the nomination committee's work is to ensure that the Board consists of members who jointly possess the knowledge and experience that meet the standards shareholders demand of the company's highest governing body. Accordingly, the Chairman of the Board presents the nomination committee with his evaluation of the work of the Board and the individual members during the past year as part of the process of drafting proposals for Board members. Also, the President presents the company's operations and future focus, and an opportunity is given for the nomination committee to meet the Board's members. Supported by the audit committee, the nomination committee also drafts proposals for the election of auditors. Shareholders may submit proposals to the nomination committee in accordance with the instructions available on Boliden's website. The AGM passes resolutions on the principles governing the appointment and duties of the nomination committee. According to the nomination committee instructions, the nomination committee must comprise a minimum of five and a maximum of seven members. The AGM elects five members, of whom three must represent the biggest shareholders and one the smaller shareholders, and one of whom must be the Chairman Of the Board. The nomination committee may offer places on the committee to other, larger shareholders the better to reflect the shareholder structure in the event of changes in ownership. The nomination committee appoints its own chairman and works in the best interests of all shareholders. Nomination committee members receive no remuneration.

#### The work of the nomination committee in 2020

The 2020 AGM elected Jan Andersson (Swedbank Robur fonder), Lars-Erik Forsgårdh, Ola Peter Gjessing (Norges Bank Investment Management), Lilian Fossum Biner (Handelsbankens fonder) and Anders Ullberg (Chairman of the Board of Directors) as members of the Nomination Committee. The Nomination Committee has exercised its mandate to invite another member, Anders Oscarsson (AMF), the better to reflect the shareholder structure. The Nomination Committee appointed Lilian Fossum Biner as Chair. The current composition of the Nomination Committee is also presented on the Boliden website. The nomination committee met six times prior to the 2021 AGM, and at the same time also met with two Board members and the President. Committee members were also in telephone contact with each other. These contacts afford the nomination committee a good opportunity to form an opinion of the way in which the Chairman of the Board and the individual members of the Board view the work of the Board, of the executive management, and of the way in which they view Boliden's operations and the challenges faced by the company in the next few years.

In accordance with the provisions of the Code, the nomination committee endeavors to ensure diversity and an even gender distribution, and has chosen to apply section 4.1 of the Code as its diversity policy. This means the Board must, with

regard to the company's operations, developmental phase, future orientation and overall conditions, have a composition that is fit for purpose and characterized by versatility and broad scope in terms of the elected members' skills, experience and background. In 2020, 43% of the Board members proposed by the nomination committee and subsequently elected by the AGM were women, resulting in a relatively even gender distribution. Also, according to the nomination committee, the Board has a good composition and is fit for purpose.

The Nomination Committee proposed the re-election of Anders Ullberg as Chairman of the Board prior to the 2021 AGM. The Board members Helene Biström, Perttu Louhiluoto, Michael G:son Löw, Elisabeth Nilsson and Pia Rudengren were proposed for re-election. Per Lindberg and Karl-Henrik Sundström were proposed new elections. Per Lindberg is the erstwhile CEO of Billerud Korsnäs and Epiroc. Among his other former positions, Karl-Henrik Sundström has served as CFO of Ericsson and CEO of Stora Enso. The Nomination Committee's other proposals will be made clear in its motivated statement, which will be published in the notice of attendance to the AGM and on Boliden's website

#### The Board of Directors

The Board of Directors is appointed by the owners to bear ultimate responsibility for the company's organization and the management of the company's affairs in the best interests of both Boliden and the shareholders. This must be done in a sustainable way that entails carefully balanced risk-taking, in order to ensure that the company's longterm developmental trend is a positive one.

Under the provisions of the articles of association, the Board of directors must comprise a minimum of three and a maximum of ten members, without deputies, elected by the AGM. Employees have a statutory right to appoint three members and three deputies to the Board. Since the AGM of 2020, the Board, which is elected for one year at a time, has comprised seven members elected by the AGM and three members appointed by the trade union organizations. Board meetings are attended both by the ordinary members and by the unions' three deputies. General Counsel, Group Legal Affairs is Board Secretary. The CEO and CFO usually attend Board meetings as representatives of company

management. Other members of Group management and other executives also attend and present reports on specialist issues as required.

The Board members elected by the AGM are all independent in relation to major shareholders, the company and Group management. Thus the Board complies with the requirements of the Code with regard to independent members. The members of the Board are presented on pages 65 and 66 and on the Boliden website.

The Board sets the company's financial goals and strategy, appoints and evaluates the President and CEO; it ensures that efficient systems are in place for monitoring and controlling operations, that statutory and regulatory requirements are complied with, and that information is published in a correct and transparent manner. At the statutory board meeting held every year immediately after the AGM, the Board adopts rules of procedure that govern its work and responsibilities in more detail, together with the special tasks assigned to the Chairman of the Board.

The Chairman supervises the Board's work and ensures an open, constructive dialog. The Chairman's duties also include monitoring and evaluating the expertise and work of individual Board members and their contribution to the Board. An important part of the Chairman's work is monitoring operations through an ongoing luminaires with the President. The Chairman acts as an interlocutor in support of the President and makes sure that the Board's decisions, instructions and directives are obeyed and carried out. Prior to every Board meeting, the Chairman and the President review the issues for discussion at the meeting. Supporting documentation for Board discussions on such issues are sent to Board members one week before each Board meeting. The allocation of duties between the Board and the President is set out in the Instructions to the President adopted by the Board at the statutory board meeting.

#### The work of the Board in 2020

The Board held seven meetings in 2020, including the statutory board meeting.

The Board receives information at Board meetings and in monthly reports regarding commercial and financial performance, and the fulfillment of the company's sustainability goals. Every Board meeting begins with a review of the business, the current

safety situation and sustainability issues. In addition to these issues and others related to the operation, the Board adopts, at the beginning of each year, a number of themes for special attention with the aim of providing a better understanding of Boliden's capabilities and challenges in a broader perspective.

With regard to the nature of the operation, appropriate and efficient permit processes and reasonable operational conditions (license to operate) are important issues for the company and its Board, and they are addressed on a recurring basis. In line with this, health and safety work and the follow-up of accidents and the sick leave rate are standing discussion items at every Board meeting.

The Chairman ensures that the Board and its work are evaluated annually and that the results of the evaluation are conveyed to the nomination committee. The evaluation is carried out by the Board under the supervision of the Chairman or with the help of an independent consultant. The 2020 evaluation was a self-assessment in which the members answered a number of questions in writing on a range of different subjects.

#### **Board committees**

The overall responsibility of the Board cannot be delegated, but it may set up

internal committees to address issues within their respective remits. Thus in 2020, as in previous years, the Board set up an audit committee and a remuneration committee. Committee members are appointed at the statutory Board meeting held after the AGM. Their work is governed by the committees' rules of procedure and instructions.

#### **Audit Committee**

The audit committee prepares a number of issues for consideration by the Board and thereby supports the Board in the fulfillment of its responsibilities within the areas of internal control, auditing and assuring the quality of financial reporting. Boliden has an internal controller department whose work includes identifying risk areas and following up work in identified areas. The committee also monitors the procurement of services from the company's auditors in addition to the audit; and where necessary it submits its proposals for auditors to the nomination committee. The audit committee meets prior to each reporting date and also as necessary.

As of the 2020 AGM, the audit committee comprises Pia Rudengren (Chairwoman), Tom Erixon and Anders Ullberg. The committee members have specialist competence, experience of and interest in financial and accounting issues; see Board

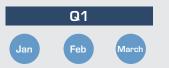
assignments and previous positions, pages 65 and 66. The committee's meetings are also attended by Boliden's CFO and the Head of Internal Control. The Committee met five times in 2020 . During the year, special attention was paid to internal controls, reclamation and IT security. As of 2020, the Audit Committee also receives annual reports on ethics and compliance issues. The audit committee works according to the Instructions for the Audit Committee adopted annually by the Board, and it reports the results of its work to the Board.

#### **Remuneration Committee**

The remuneration committee submits proposals for resolution by the Board regarding salary and other terms of employment for the President, and follows up on and evaluates programs for variable remuneration for the management. The committee also approves proposals regarding salaries and other terms of employment for Group management, as proposed by the President. Also, the remuneration committee draws up proposals regarding remuneration principles for the President and Group management for subsequent submission by the Board to the AGM for resolution. The application of the guidelines and relevant remuneration structures and levels in the company is also followed up by the com-

#### THE WORK OF THE BOARD IN 2020

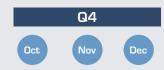
**Recurring business:** Sustainability and safety issues; review of operations, investments, costing and theme items. Listed below are the principal agenda items for the year's Board meetings:



# Q2 April May J

Q3

July Aug Sep



#### February:

Review of the year-end report, the annual report, the audit report, the dividend proposal and agenda items for submission to the AGM. IT security, deepening in Rönnskär, mineral resources and mineral reserves, financing issues, acquisition opportunities, investments, status of major disputes. Meeting between the Board and auditors without the presence of management.

#### April:

(Ordinary and statutory Board meeting):

Financing issues, the Q1 interim report, dividend considerations, Covid-19 impacts, structural matters, nickel market and investments, sustainability and license to operate. AGM and statutory Board meeting.

#### July:

Q2 Interim Report and review of the audit report. Covid-19 impacts, cost control, cash flow and working capital, market and customer knowledge, investments.

Strategic focus for business area Mines with a special focus on Aitik and Tara, dam safety issues, technology development and automation, investment in the Harjavalta nickel line and an evaluation of Odda.

#### October:

Q3 Interim Report, strategic focus for business area Smelters with special focus on Rönnskär, waste management and CO₂emissions, annual follow-up of New Boliden Way and Corporate Social Responsibility. Risks and risk preparedness, industrial climate Finland.

#### December:

Review of strategy, budget and business plan. Tara and Tara Deep, Aitik, dam safety, IT security, management and Board evaluation, acquisition opportunities and investments.

# 7 meetings

mittee, and the results of this evaluation are published on the company website. See Note 5 for an account of the remuneration paid to Group management.

The Remuneration Committee works according to the Instructions for the Remuneration Committee adopted annually by the Board, and it reports the results of its work to the Board. The Remuneration Committee comprises Anders Ullberg (Chairman) and Michael G:son Löw. During the year, the committee held two meetings and were also in contact by telephone a number of times.

#### The President and Group management

The President has ultimate responsibility for Boliden's strategic orientation and for ensuring compliance with and implementation of the Board's decisions, and for ensuring that risk management, control, systems, organization and processes are all of a satisfactory standard. The President is supported in his work by the Group's management team which, in addition to the President, comprises the presidents of Boliden's two business areas Mines and Smelters, the CFO, and the Director, Corporate Responsibility (CR). Group management meets once a month to follow up operations and discuss group-wide issues, draw up proposals for strategic plans, business plans and budgets, which the President presents to the Board. The areas addressed by the Board have largely reflected the work of Group management during the year. Group management also holds two meetings every year on strategy planning. Group management, together with the management of the respective business areas, also meet six times a year to review business area-specific issues, including a review of budgets and operations. For large scale projects, special steering groups are formed, which regularly meet with project managers and other stakeholders. The President and CR also meet with the company's employee representative Board members and deputies before every Board meeting, to discuss the agenda and other issues of current interest. See page 67 for a presentation of the Group management team.

#### Business management

Management by the Board takes place through the President and Group management to the operating units. Responsibilities and powers are delegated in the organization within clear frameworks. These

frameworks are defined by Boliden's policy documents, budget and strategic plan. The policy documents are available on Boliden's internal management system; the documents constitute the internal framework required for effective management. They Include the Code of Conduct, the Financial Policy, Tax Policy, the Insider Policy, the Whistleblower Policy, and documentation on sanctions control, delegation and decision-making, anti-corruption and conflicts of interest, competition law issues, supplier evaluation and code of conduct, communications, privacy and personnel information processing (GDPR), and a large number of policy documents relating to the environment and health and safety issues.

#### Sustainability governance

Sustainability governance is an important part of Boliden's operations and is conducted on the basis of the issues that are most essential for the business. These issues are managed by the Board through the President and Group management to the operational units. One member of Group management is dedicated to corporate responsibility (CR) issues. The day-to-day responsibility for sustainability issues is decentralized to the respective units. Group CR functions are responsible for creating structure and focus for the work, the exchange of experience, gathering business intelligence and following up the work of the units. Sustainability issues are followed up and discussed at all management group meetings and Board meetings, and in local management meetings.

The most important sustainability issues are integrated into the company's strategy, as described on page 33. Every sustainability issue has a long-term focus that must help to guide and structure sustainability efforts at every level in the company. Factors that form the basis for prioritization include the impact of operations on people and the environment, how work on these issues can support operations; expectations from internal and external stakeholders, risks and opportunities, external factors, and applicable regulations, including the UN's Global Compact and its global goals for sustainable development. Boliden also supports the Task Force on Climate-related Financial Disclosures (TCFD) and has a management system that complies with the ISO standards for the environment, quality, energy and occupational health and safety. Sustainability issues are also monitored

through participation in European and national industry organizations. Because priority challenges and opportunities change over time, regular reviews take place, usually once per year and in which representatives from the business units and functions are involved. Priority sustainability issues are integrated into Boliden's strategy work, and each business area is responsible for setting local goals based on the Group's guidelines on sustainability issues.

Sustainability work is valuation based, which means measures are not only determined on the basis of legislation and regulatory requirements, but also on needs and identified measures to improve the situation for people and the environment where our operations take place. This means that investments with e.g. major environmental and safety benefits in relation to the invested amount are carried out independently of any external requirements or charges.

During the year, a new purpose, vision and values were drawn up for the company. To make sure the values reflect the strengths in the corporate culture while also identifying areas that need development and improvement, the work was carried out by Group management together with representatives from the entire organization. All Boliden employees will take part in the work with values, to shape and move the corporate culture toward Boliden's common purpose and vision.

In addition to areas linked to the well-being of people and the environment, business ethics are always matters for discussion. At the end of 2019, a new ethics and compliance function was set up with the overall responsibility of ensuring compliance with regulations concerning anti-corruption, competition, trade sanctions, money laundering, information security, human rights, whistle-blowing, business partner due diligence and the company's Code of Conduct. The function reports to the Director, CR.

As of 2017, a Sustainability Report has been included in the Annual Report. Boliden also compiles a Sustainability Index that follows the GRI Global Compact and guidelines from TCFD. This report is the subject of an external review by the auditors. The review is also aimed at underlining the importance of sustainability work and further boosting the confidence of the market and other stakeholders regarding this work.

#### **Auditors**

The external auditor conducts independent audits of accounts to ensure that in all material respects they provide an accurate, fair and comprehensive picture of the company's position and economic performance. The auditor also reviews the Board's and the President's administration and reports his findings to the Board without the presence of management. The auditor is in contact with Group management in conjunction with audits or emerging issues. The auditor regularly attends Audit Committee meetings and has also met with the Board once without the management's presence in 2020. The auditor also reports to the shareholders at the AGM.

The auditing firm of Deloitte AB was elected at the 2020 AGM to serve as the company's auditors until the conclusion of the 2021 AGM. Authorized public accountant Jan Berntsson is auditor-in-charge. He is a partner and CEO of Deloitte Sweden and has auditing assignments for Electrolux, among others. Remuneration to the auditors is payable against approved invoices. See note 6 for information concerning remuneration in 2020.

# Board of Directors' report on internal control

The purpose of internal control over financial reporting is to provide reasonable assurance with regard to the reliability of the external financial reporting and to ensure that the reports are produced in accordance with generally accepted accounting principles, applicable legislation and statutes, and with other requirements imposed on listed companies.

The Board has overall responsibility for ensuring that an effective internal control system exists within the Group. The President is responsible for ensuring that a process and organization are in place to safeguard internal control and the quality of the internal and external financial reporting.

#### Internal control function

Boliden has an internal control function responsible for implementing processes and frameworks that safeguard internal control and ensure the quality of the financial reporting. The internal control function reports to the CFO and presents reports on issues relating to internal control at the audit committee's meetings.

#### Control environment

The control environment at Boliden is characterized by relatively few but large operational units that have long operated according to well-established processes and control activities. To ensure a uniform approach and working methods within Boliden, there are binding policy documents and indicative guidelines for delegated responsibility within the organization.

The starting point is the New Boliden Way, which includes the Code of Conduct, decision-making and authorization instructions, and a financial manual covering financial policy, accounting and reporting instructions. In addition, there are local management systems with more detailed instructions and descriptions of important processes.

Boliden has a uniform, standardized internal control framework known as the Boliden Internal Control System (BICS), which includes both financial processes and general IT processes.

#### Risk analysis

The operating units conduct ongoing risk analyses with regard to financial reporting. The risks inherent in the various accounting and reporting processes are identified, analyzed and documented in BICS.

#### Control activities

Various types of control activities are carried out in the Group and in every different aspect of the accounting and reporting process on an ongoing basis. The control

activities are carried out in order to manage known risks and to detect and rectify any errors and discrepancies in the financial reporting.

Documentation of significant control activities in the accounting and reporting process continued in BICS in 2020. For every risk identified, the controls used to manage the risk are documented.

#### Information and communication

Information on policies, guidelines and manuals is available on Boliden's intranet and the business management system. Backup Information on updates and changes to reporting and accounting principles is issued via email and at the regular finance and controller meetings. External communication is conducted in accordance with the Group communications policy. All information must be communicated openly, judiciously and clearly.

#### Follow-up

Work on follow-ups of, improvements to and development of systems, processes and controls within the Group is ongoing. Annual tests are conducted on documented controls within the framework of BICS, both by internal personnel and external auditors. Areas where room for improvement is identified in conjunction with audits are documented, analyzed and actioned.

#### Control activities

Compliance with Boliden's accounting manual Control of consolidated earnings Analysis and follow-up Budget and forecasts Correct financial reporting controls

#### Tax control

#### Responsible

Group accounting/Controller department Group accounting/Controller department Business Areas/Controller department Business Areas/Controller department Operational units/Business areas

Operational units/Business areas

#### Follow-up

Group management
Group management
Group management
Group management
Consolidated accounts, Internal control,
Controller department
Head of Group tax







Name	Anders Ullberg Chairman	Helene Biström Board member	Tom Erixon Board member
Education	M.Sc. Economics	M.Sc. Engineering	LL B MBA
Elected	2005	2020	2013
Born	1946	1962	1960
Other assignments	Chairman of the Boards of Eneqvist Consulting and Studsvik. Member of the Boards of Beijer Alma, Epiroc and Valedo Partners. Chairman of the Swedish Financial Reporting Board, member of the Board of the European Financial Reporting Advisory Group	Paper, Billerud Korsnäs	CEO and President of Alfa Laval Proposed Chairman, ÅF Pöyry
Previous positions	CFO of Svenska Varv. CFO, Executive Vice President, and President and CEO of SSAB	CEO of Infranord and Norrenergi and Executive Vice President of Vattenfall	Managing partner in Boston Consulting Group, various executive positions in Sandvik and CEO and President of Ovako
Number of shares <sup>1)</sup>	45,000	2,000	6,900
Meeting attendance	7 of 7	5 of 5	7 of 7
Committee work (attendance)	Audit commit- Rem. committee tee 5 of 5 2 of 2	_	Audit committee 5 of 5
Board fee, SEK	1,750,000	580,000	580,000
Committee fee, SEK	125,000+ 50,000	_	125,000
Total fee	1,925,000	580,000	705,000
Independent from company and company management	Yes	Yes	Yes
Independent of major owner	Yes	Yes	Yes







Name	Marie Holmberg employee representative	Kenneth Ståhl employee representative	Cathrin Öderyd employee representative
Assignment	Board member since 2008. Deputy member 2005–2008. Representative for the Swedish Association of Graduate Engineers and the Council for Negotiation and Cooperation	Board member since 2014. Chairman of the IF Metall Chapter, Bergsöe	Board member since 2018. Chairman of the Aitik Mine Chap- ter (IF Metall)
Elected	2008	2014	2018
Born	1963	1973	1975
Number of shares 1)	50	0	8
Meeting attendance	7 of 7	7 of 7	7 of 7

<sup>&</sup>lt;sup>1)</sup>Own holdings and those of related legal or natural persons, on 31 December 2020.

# The Board of Directors









Name	Michael G:son Löw Board member	Elisabeth Nilsson Board member	Pia Rudengren Board member	Perttu Louhiluoto Board member
Education	M.Sc. Economics	M.Sc. Engineering Honorary Doctor, Luleå University of Technology.	M.Sc. Economics	M.Sc. Economics LL B
Elected	2010	2015	2017	2019
Born	1951	1953	1965	1964
Other assignments	Member of the boards of Preem, Stena Bulk, Naturstenskompaniet International, Deputy Chairman Swedish Association for Energy Economics. Board member of the Royal Swedish Academy of Engineering Sciences (IVA)	Board member of EKN, Royal Swedish Academy of Engineering Sciences (IVA) and a member of Hanaholmen's Corporate Management, chairman of the KK Foundation, Vadstenaakademien and Scandinavian Japan Sasakawa Foundation. Special investigator	Chairman of the board of Social Initiative, member of the boards of Picsmart and Academedia	Proposed Board Member Neles
Previous positions	Various executive positions within Conoco Inc. President and CEO Preem	CEO of Jernkontoret (the Swedish Steel Producers' Association) and a variety of senior executive positions in the SSAB Group. CEO of SSAB Merox, county Governor	CFO of Investor and Vice President of W Capital Management	Various senior executive positions in Metso and McKinsey & Company
Number of shares <sup>1)</sup>	100	1,000	1,000	1,170
Meeting attendance	7 of 7	7 of 7	7 of 7	7 of 7
Committee work (attendance)	Rem. committee 2 of 2	_	Audit committee 5 of 5	-
Board fee, SEK	580,000	580,000	580,000	580,000
Committee fee, SEK	50,000	_	225,000	_
Total fee	630,000	580,000	805,000	580,000
Independent from company and company management	Yes	Yes	Yes	Yes
Independent of major owner	Yes	Yes	Yes	Yes







Name	Magnus Filipsson employee representative	Gard Folkvord employee representative	Ola Holmström employee representative
Assignment	Deputy member since 2018. Representative for Unionen	Deputy member since 2018. Chairman of Odda Kjemiske Arbeiderforening. Member of the Industri Energi trade union Competency Committee. Member of the Odda Municipal Executive Committee (Norwegian Labor Party). Chairman of the Board of Oddaprodukt AS	Deputy member since 2017. Chairman of the Mine Chapter Kristineberg (IF Metall), FSG (trades union cooperation, mines)
Elected	2018	2018	2017
Born	1974	1969	1965
Number of shares 1)	0	101	170
Meeting attendance	7 of 7	7 of 7	5 of 7

<sup>1)</sup>Own holdings and those of related legal or natural persons, on 31 December 2020.

# **Group management**







Name	Mikael Staffas President and CEO	Håkan Gabrielsson CFO	<b>Åsa Jackson</b> Director – Corporate Responsibility
Education	M.Sc. Engineering MBA	M.Sc. Business Administration	M.Sc. Business and Economics
Employed	2011	2009 – 2011, 2016	2019
Born	1965	1967	1964
Other assignments	Chairman of the boards of Eu- rometaux and SveMin. Vice Chair- man of the Employers' Association of the Swedish Mining Industry. Member of the boards of the International Zinc Association, the International Copper Association and the Confederation of Swedish Enterprise	-	-
Previous positions	President Boliden Mines and CFO Boliden, CFO Södra Skogsägarna, Partner McKinsey & Company	CFO Fagerhult, Director Group Controlling at Boliden, and a variety of positions within Sapa, Ericsson and Electrolux	President HR, Health & Safety, Ahlstrom-Munksjö, President HR and Sustainable Development and other senior positions within ABB Sweden
Number of shares 1)	20.500	3.055	800





Name	<b>Daniel Peltonen</b> President – Business Area Smelters	Stefan Romedahl President – Business Area Mines
Education	M.Sc. Chemical Technology & Industrial Economy	M.Sc. Geotechnology
Employed	2019	1994–2003, 2013–2016, 2018
Born	1971	1967
Other assignments	-	Board member of the Employers' Association of the Swedish Mining Industry, SveMin and Euromines
Previous positions	President and CEO for Iggesund Pa- perboard, Mill Manager and other executive positions within Holmen	Vice President of LKAB Northern Division, CEO of Zinkgruvan, Project Manager of Swedish Nuclear Fuel and Waste Management Company (SKB) and various senior positions within Boliden
Number of shares 1)	500	1,600

<sup>&</sup>lt;sup>1)</sup>Own holdings and those of related legal or natural per-sons, on 31 December 2020.

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# CONSOLIDATED INCOME STATEMENT

SEK m	Note	2020	2019
Revenues	3, 4	56,321	49,936
Cost of goods sold	7	-45,516	-40,522
Gross profit		10,805	9,414
Selling expenses	7	-505	-486
Administrative expenses	6, 7	-675	-688
Research and development costs	7	-749	-740
Other operating income	8	342	354
Other operating expenses		-283	-252
Results from participations in associated companies	17	0	-6
Operating profit	3–8, 11, 13–15	8,935	7,597
Financial income	9	3	12
Financial expenses	10	-270	-272
Profit after financial items		8,668	7,337
Tax	18	-1,867	-1,548
Net profit for the year		6,801	5,788
Net profit for the year attributable to:			
Owners of the Parent Company		6,799	5,786
Non-controlling interests		2	2
Earnings per share, SEK	23	24.86	21.15
There are no potential shares, hence no dilution effect			
Average number of shares, before and after dilution		273,511,169	273,511,169

# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

SEK m	Note	2020	2019
Net profit for the year		6,801	5,788
Other comprehensive income			
Items to be reclassified to the profit/loss			
Cash flow hedging			
Change in market value of derivative instruments		-76	47
Fiscal effect on derivative instruments		16	-10
Transfers to the Income Statement		2	-2
Tax on transfers to the Income Statement		0	0
		-58	36
Year's translation difference on overseas operations		-810	289
Result of hedging of net investments in overseas operations		267	-28
Tax on the net profit for the year from hedging instruments		<b>-</b> 57	6
		-600	267
Total items to be reclassified to the profit/loss		-659	303
Items that will not be reclassified to the profit/loss			
Revaluation of defined benefit pension plans	24	-36	-130
Tax attributable to items not reclassified to the profit/loss for the period		8	27
Total items that will not be reclassified to the profit/loss		-28	-103
Total other comprehensive income		-687	200
Comprehensive income for the year		6,115	5,988
Comprehensive income for the year attributable to:			
Owners of the Parent Company		6,112	5,986
Non-controlling interests		2	2

# CONSOLIDATED BALANCE SHEET

SEK m	Note	31.12.2020	31.12.2019
ASSETS			
Non-current assets			
Intangible assets	13	3,506	3,621
Property, plant and equipment	14, 15	· ·	·
Buildings and land		7,088	6,230
Deferred mining costs		8,558	8,566
Machinery and other technical facilities		21,982	21,456
Equipment, tools, fixtures and fittings		572	552
Work in progress		5,406	7,186
		43,605	43,989
Other non-current assets			
Participations in associated companies	17	9	9
Other shares and participations	26	6	6
Deferred tax assets	18	94	127
Derivative instruments	26, 27	6	18
Non-current receivables		425	139
		540	299
Total non-current assets		47,650	47,909
Current assets			
Inventories	19	14,238	13,262
Trade and other receivables	20, 26	3,631	2,119
Tax receivables		242	232
Derivative instruments	26, 27	137	75
Other current receivables	21	1,533	1,453
Cash and cash equivalents	12, 26	5,060	1,373
Total current assets	· · · · · · · · · · · · · · · · · · ·	24,842	18,514
TOTAL ASSETS		72,492	66,424
EQUITY AND LIABILITIES			
Equity	23		
Share capital		579	579
Other capital provided		5,940	5,940
Translation reserve		608	1,208
Hedge reserve		-12	47
Defined benefit pension plans		-969	-942
Retained earnings		39,479	34,597
Equity attributable to the owners of the Parent Company		45,625	41,429
Non-controlling interests		13	12
Total equity		45,638	41,440
Non-current liabilities			
Provisions for pensions	24	1,159	1,113
Other provisions	25	4,880	4,930
Deferred tax liabilities	18	3,296	3,128
Liabilities to credit institutions	26, 29	5,951	3,261
Other interest-bearing liabilities	15, 29	153	182
Derivative instruments	26, 27, 29	17	-
Total non-current liabilities		15,456	12,615
Current liabilities			
Liabilities to credit institutions	26, 29	0	2,242
Other interest-bearing liabilities	15, 29	50	86
Trade and other payables	26, 29	6,607	6,391
Other provisions	25	254	170
Current tax liabilities		173	109
Derivative instruments	26, 27, 29	37	129
Other current liabilities	30	4,277	3,242
Total current liabilities		11,398	12,369

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

Fauits	v attributable to	the owners	of the Parent	: Company

SEK m	Note	Share capital	Other capital provided	Translation reserve	Hedge reserve	Defined benefit pen- sion plans	Retained earnings	Total Boliden's shareholders	Non- controlling interests	Total equity
Opening equity, 01.01.2019		579	5,940	942	11	-838	32,366	39,000	11	39,011
Net profit for the year							5,786	5,786	2	5,788
Other comprehensive income		-	-	267	36	-103	-	200	0	200
Comprehensive income for the year	•	_	_	267	36	-103	5,786	5,985	2	5,987
Dividend to Boliden AB's shareholders		-	-	-	-	-	-2,393	-2,393	-	-2,393
Dividend to non-controlling interests		-	-	-	-	-	-	-	-2	-2
Redemption		-289	-	-	-	-	-873	-1,162	-	-1,162
Bonus issue		289	-	-	-	-	-289	-	-	-
Closing equity, 31.12.2019		579	5,940	1,208	47	-942	34,597	41,429	12	41,440
Opening equity, 01.01.2020		579	5,940	1,208	47	-942	34,597	41,429	12	41,440
Net profit for the year							6,799	6,799	2	6,801
Other comprehensive income		-	-	-600	-58	-28	-	-687	0	-687
Comprehensive income for the year		-	-	-600	-58	-28	6,799	6,113	2	6,115
Dividend to Boliden AB's shareholders		-	-	-	-	-	-1,915	-1,915	-	-1,915
Dividend to non-controlling interests		-	-	-	-	-	-	_	-1	-1
Closing equity, 31.12.2020	23	579	5,940	608	-12	-969	39,479	45,625	13	45,638

#### Other capital provided

Refers to equity contributed by the owners. When shares are issued at a premium, an amount corresponding to the amount received in excess of the nominal value of the shares is reported as Other capital provided.

## Translation reserve

The Balance Sheet for overseas companies is converted at the exchange rates applicable at the end of the reporting period. The Income Statement is converted at the average rates for the reporting period. Any exchange rate differences arising are reported under Other comprehensive income. Boliden currency hedges net investments in overseas subsidiaries to some extent by adopting the opposite position in the form of loans in the relevant foreign currency. The exchange rate difference on loans raised is, after the fiscal effect, reported under Other comprehensive income.

Net debt, SEK m	31.12.2020	31.12.2019
Liabilities to credit institutions	5,951	5,503
Other interest-bearing liabilities	203	268
Pension liabilities	1,159	1,113
Interest-bearing assets	-18	-19
Cash and cash equivalents	-5,060	-1,373
	2,236	5,493

#### Hedge reserve

Boliden applies hedge accounting for financial derivatives acquired with a view to hedging part of the forecast currency and interest flows. Changes in the market value of hedging instruments are reported under Other comprehensive income until such time as the underlying flows are reported in the Income Statement.

### Defined benefit pension plans

Revaluations of pension undertakings are reported under Other comprehensive income.

#### Retained earnings

Refers to profits earned.

Capital employed, SEK m	31.12.2020	31.12.2019
Intangible assets	3,506	3,621
Property, plant and equipment	43,605	43,989
Participations in associated companies	9	9
Other shares and participations	6	6
Inventories	14,238	13,262
Trade and other receivables	3,631	2,119
Other receivables	2,083	1,666
Provisions, other than for pensions		
and tax	-5,134	-5,100
Trade and other payables	-6,607	-6,391
Other non-interest bearing liabilities	-4,331	-3,372
	51,007	49,809

## CONSOLIDATED STATEMENT OF CASH FLOW

SEK m	Note	2020	2019
Operating activities			
Profit after financial items		8,668	7,337
Adjustment for items not included in the cash flow:			
Depreciation, amortization and impairment of assets	13, 14	5,693	5,092
Provisions		12	15
Revaluation of process inventory		-497	-561
Translation differences and other		35	182
Tax paid		-1,608	-2,060
Cash flow from operating activities before changes in working capital	12	12,303	10,005
Cash flow from changes in working capital			
Increase (-)/Decrease (+) in inventories		-562	-2,313
Increase (-)/Decrease (+) in operating receivables		-1,709	-373
Increase (+)/Decrease (-) in operating liabilities		1,268	2,097
Other		-44	27
Cash flow from changes in working capital		-1,048	-562
Cash flow from operating activities		11,255	9,442
Investment activities			
Acquisition of intangible assets	13	-43	<b>-</b> 37
Acquisition of property, plant and equipment	14	-6,256	-8,790
Sale of property, plant and equipment		0	0
Disposal/acquisition of financial assets		2	20
Cash flow from investment activities		-6,297	-8,807
Free cash-flow		4,957	635
Financing activities			
Dividend		-1,915	-3,556
Loans raised		8,176	3,434
Amortization of loans		-7,533	-1,417
Cash flow from financing activities	12	-1,271	-1,538
Cash flow for the year		3,686	-903
Opening cash and cash equivalents		1,373	2,272
Exchange rate difference on cash and cash equivalents		0	3
Closing cash and cash equivalents	12	5,060	1,373

## Income Statement, Parent Company

SEK m	Note	2020	2019
Dividends from subsidiaries	16	-	7,036
Profit after financial items		-	7,036
Tax		-	-
Net profit for the year		-	7,036

The operations of Boliden AB are limited in scale and are conducted, fiscally speaking, on commission with Boliden Mineral AB, which means that the profit is reported as part of Boliden Mineral AB.

Boliden AB has no amounts to report under Other comprehensive

## Balance Sheet, Parent Company

SEK m	Note	31.12.2020	31.12.2019
ASSETS			
Non-current assets			
Financial assets			
Participations in subsidiaries	16	3,911	3,911
Receivables from subsidiaries		12,884	14,763
Total non-current assets		16,796	18,674
Current receivables			
Receivables from subsidiaries		_	2,120
Total current assets	-	_	2,120
TOTAL ASSETS		16,796	20,794
<b>EQUITY AND LIABILITIES</b>			
Equity	23		
Restricted equity			
Share capital		579	579
Statutory reserve		5,252	5,252
		5,831	5,831
Non-restricted equity			
Retained earnings		10,215	5,094
Net profit for the year		_	7,036
		10,215	12,130
Total equity		16,046	17,960
Liabilities			
Non-current liabilities to credit institutions	: 26, 29	750	750
Current liabilities to credit institutions	26, 29	_	2,084
Total liabilities		750	2,834
TOTAL EQUITY AND LIABILITIE	ES	16,796	20,794

## Statement of changes in equity, Parent Company

SEK m	Share capital	Statu- tory reserve	Non-re- stricted equity	Total equity
Opening equity, 01.01.2019	579	5,252	8,649	14,480
Dividend			-2,393	-2,393
Redemption	-289		-873	-1,162
Bonus issue	289		-289	-
Net profit for the year			7,036	7,036
Closing equity, 31.12.2019	579	5,252	12,130	17,960
Opening equity, 01.01.2020	579	5,252	12,130	17,960
Dividend			-1,915	-1,915
Net profit for the year			-	-
Closing equity, 31.12.2020	579	5,252	10,215	16,046

The statutory reserve includes amounts transferred to the share premium reserve before January 1, 2006. Accumulated profit together with profit for the year constitutes non-restricted equity. Non-restricted equity in the Parent Company is available for distribution to shareholders.

## Statement of Cash Flow, Parent Company

SEK m	Note	2020	2019
Operating activities			
Profit after financial items		-	7,036
Adjustment for items not included in the cash flow:		-	
Capital profit/loss		-	-
Cash flow from operating activities		_	7,036
Financing activities			
Loans raised		_	2,334
Amortization of loans		-2,084	-
Dividend		-1,915	-3,556
Amortization, loans from subsidiaries		3,999	-5,814
Cash flow from financing activities	12	_	-7,036
Cash flow for the year		-	-
Opening cash and cash equivalents		_	_
Closing cash and cash equivalents		_	_

## Notes

All amounts in SEK million unless otherwise stated. All notes refer to the Group unless otherwise stated. Rounding differences may occur.

#### Note 01 Significant accounting and valuation principles

#### General accounting principles

Boliden AB (publ.), Swedish Corporate ID No. 556051-4142, is a limited liability company registered in Sweden. The Company's registered office is in Stockholm at the address: Klarabergsviadukten 90, SE-101 20 Stockholm, Sweden. The Boliden share is listed on NASDAQ Stockholm's Large Cap list.

The Company is the Parent Company of the Boliden Group, whose principal operations involve the mining and production of metals and operations compatible therewith.

The Consolidated Statements have been compiled in accordance with the EU-approved International Financial Reporting Standards (IFRS) and interpretations of the IFRS Interpretations Committee (IFRS IC). In addition, the Group applies the Swedish Financial Reporting Board's recommendation RFR 1 Supplementary accounting regulations for corporate conglomerates specifying the supplements to IFRS required pursuant to the stipulations of the Swedish Annual Accounts Act.

The Parent Company's functional currency is the Swedish krona (SEK) and this is also the reporting currency for both the Group and the Parent Company.

Items have been valued at their historical cost in the consolidated accounts, with the exception of certain financial assets and liabilities (derivative instruments), which have been valued at their fair value, and inventories in those cases where they are hedged at fair value.

The Parent Company's accounting principles follow those of the Group with the exception of the mandatory regulations stipulated in the Swedish Financial Reporting Board's recommendation, RFR 2 Accounting for legal entities. The Parent Company's accounting principles are presented under the heading "The Parent Company's accounting principles".

The most important accounting principles are presented in the note to which they are attributable. These principles have been applied consistently for all years presented, unless otherwise specified.

The Annual Report was approved for publication by the Board on February 12, 2021. The Balance Sheets and Income Statements are subject to approval by the Annual General Meeting on April 27, 2021.

## New or amended standards and interpretations from IASB and statements from IFRS IC that came into force in the 2020 calendar year

Changes made to IFRS 9 and IFRS 7, Interest Rate Benchmark Reform, have had no impact on the Group's financial statements. A revised definition of materiality, IAS 1 and IAS 8, has been applied but has had no impact on the financial statements. The changes in IFRS 16 relating to Covid-19 related rent relief, and the changes in IFRS 3 regarding the definition of the term business, were not applicable by Boliden.

## New standards and interpretations that come into force in the 2021 calendar year or thereafter

New and amended standards and interpretations that come into force for the financial year beginning on January 1, 2021 are not expected to have any significant impact on the Group's financial statements.

#### **Consolidated Statements**

The Consolidated Statements cover the Parent Company and all companies over which the Parent Company through ownership, directly or indirectly, exercises a controlling influence. The term "controlling influence" refers to companies in which Boliden exerts influence, is exposed to, or is entitled to a variable return from its involvement and in which it can use its influence over the company to influence its return. This is generally achieved by ensuring that its ownership share, and the share of votes, exceeds 50%. The existence and effect of potential voting rights that can currently be utilized or converted are taken into account when assessing whether the Group is capable of exercising a controlling influence over another company. Subsidiaries are included in the Consolidated Statements as of the

point in time at which a controlling influence has been attained, while companies that have been sold are included in the Consolidated Statements up to the time when the sale occurred, i.e. up to the point in time when controlling influence ceased to apply.

The Consolidated Statements have been compiled in accordance with the acquisition accounting method, which means that the historical cost of a company comprises the fair value of the payment made (including the fair value of any assets, liabilities and equity instruments issued). The identifiable assets, liabilities and contingent liabilities acquired are reported at their fair value at the time of acquisition. In conjunction with every acquisition, a determination is made as to whether a holding without a controlling influence should be reported at fair value or at the holding's proportional share of the acquired company's net assets. When required, the subsidiaries' accounts are adjusted to ensure that they follow the same principles applied by other Group companies. All internal transactions between Group companies and intra-Group balances are eliminated when the Consolidated Statements are compiled.

#### Conversion of foreign subsidiaries and other overseas operations

The currency in the primary economic environments in which the subsidiary companies operate is the functional currency. When consolidating to the reporting currency, the Balance Sheets for overseas subsidiary companies are converted at the exchange rates applicable at the reporting period end, while the Income Statements are converted at the average exchange rates for the reporting period. Any exchange rate differences arising and accumulated translation differences in respect of the conversion of subsidiaries are reported as Other comprehensive income.

Boliden hedges its net investments in foreign subsidiaries to some extent by taking an opposite position (in the form of loans) in the relevant foreign currency. Exchange rate differences on hedging measures are reported as Other comprehensive income.

In conjunction with the sale of overseas operations whose functional currency is different from the Group's reporting currency, the accumulated translation differences attributable to the operations are realized in the Consolidated Income Statement, after deductions for any currency hedging activities.

## Assets and liabilities in foreign currencies

Receivables, liabilities and derivatives in foreign currencies are converted to Swedish kronor at the exchange rate applying on the closing day. Exchange rate differences on operating receivables and operating liabilities are included in the operating profit, while exchange rate differences on financial assets and liabilities are reported under financial items. Exchange rate effects on financial instruments used in cash flow hedging and the hedging of net investments in overseas operations, are reported under Other comprehensive income with the exception of any exchange rate differences on currency swaps in foreign currencies reported under net financial items.

## The Parent Company's accounting principles

The Parent Company's annual accounts are compiled in accordance with the Swedish Annual Accounts Act, the Swedish Financial Reporting Board's recommendation, RFR 2 Accounting for legal entities, and the statements issued by the Swedish Financial Reporting Board. Under RFR 2, the Parent Company must, in the accounts for the legal entity, apply all EU-approved International Financial Reporting Standards (IFRS) and statements to the extent that this is possible within the framework of the Swedish Annual Accounts Act and with due regard to the connection between reporting and taxation. The recommendation specifies the exceptions and additions to be made in relation to IFRS. The differences between the Group's and the Parent Company's accounting principles are described below.

# Reporting of Group contributions and shareholders' contributions Group contributions received or made are reported as appropriations. Shareholders' contributions are booked directly against non-restricted equity by the recipient and as an increase in the item Participations in Group companies by the contributor.

#### Anticipated dividends

Anticipated dividends can be reported in those cases where the Parent Company has the sole right to determine the size of the dividend and has ensured that the dividend does not exceed the subsidiary company's dividend payment capacity.

#### Financial instruments

Financial instruments are not valued in the Parent Company in accordance with IFRS 9 Financial Instruments. Valuation is conducted on the basis of historical cost.

#### Subsidiaries

Participations in subsidiaries are reported in the Parent Company in accordance with the historical cost method. Transaction expenses in the acquisition of subsidiaries are reported as costs in the consolidated accounts, while in the Parent Company, they are reported as part of the historical cost.

Determination of the value of subsidiaries is effected when there are indications of a decline in value.

## Note 02 Estimates and assessments

In order to compile the financial statements in accordance with IFRS accounting principles, assessments and assumptions must be made that impact the reported asset and liability amounts and the income and expense amounts, as well as other information provided in the financial statements. The estimates and assessments of the Board of Directors and the Company's management are based on historical experience and future trend forecasts. The actual outcome may differ from these assessments.

#### Valuation of inventories

In the smelters' process inventories and stocks of finished metals, it is difficult to differentiate between externally purchased material and mined concentrate from the Group's own operations. Consequently, calculating the internal profit of inventories and the reported value of process inventory entails estimations of how large a share comes from the process inventory and finished metal inventories from the in-house mining operations, based on the quantities of mined concentrate bought in and produced in-house.

#### Pension commitments

Pension provisions are dependent on the assumptions made in conjunction with the calculations of the amounts. The assumptions refer to discount interest rates, rate of salary increases, future increases in pensions, the number of remaining working years for employees, life expectancy, inflation and other factors, and are reviewed annually. The assumptions are made for every country in which Boliden has defined benefit pension plans. The most significant assumptions, in Boliden's opinion, are with regard to the discount rate, the rate of salary increases, and life expectancy, and Boliden has elected to present sensitivity analyses for these factors. Boliden's assumptions and sensitivity analysis are presented in Note 24, Provisions for pensions and similar obligations.

#### Legal disputes

Boliden regularly analyses and evaluates outstanding legal disputes using internal company legal counsels and, when necessary, with the help of external advisors, in order to assess the need for provisions to be made. See Note 31, Pledged assets and contingent liabilities.

#### Reclamation costs

Provisions for reclamations are made on the basis of an assessment of future costs based on current conditions. Provisions are reviewed regularly by internal and external specialists and updates made when necessary when the estimated useful lives, costs, technical preconditions, regulations or other conditions of mine and smelter assets change. See Note 14, Property, plant and equipment and Note 25, Other provisions.

Boliden also has a responsibility for the reclamation of a number of decommissioned mines and continually reviews the requirement to make provisions in respect of these objects. Inspection of and risk assessments in relation to reclamation measures are conducted on a systematic basis.

In the event of supplementary reclamation work on a decommissioned mine being deemed necessary in order to comply with the requirements of external regulations, a provision is reported for the anticipated future costs. The provision is reviewed as investigations and action plans provide underlying data for revised costings.

To determine the size of the reclamation liability, a real discount rate of 2% (2) has been used. A reduction in the discount rate of 0.5 percentage points would result in an increase in the reclamation liability of approximately SEK 400 m and a corresponding increase in capitalized reclamation costs. Earnings in the coming year and thereafter would be burdened by approximately SEK 20 m in higher depreciation, while net financial items would be positively affected by approximately SEK 18 m.

#### Valuation of non-current assets

Impairment tests for property, plant and equipment and intangible assets are based on the Company's internal business plan and on assumptions with regard to future trends in e.g. metal prices, treatment and refining charges, and exchange rates. Changes in market prices of metals, treatment and refining charges and currencies have a substantial effect on the Group's future cash flows and hence on the estimated impairment requirement. Assumptions with regard to price trends for metals, treatment and refining charges and currencies are made by the Company management with the help of external experts. The assumptions are reviewed on an annual basis and adjusted when necessary. For further information, see Note 14, Property, plant and equipment.

The depreciation periods for deferred mining costs, installations and equipment in mines depend on future ore extraction and the lifespan of the mine. The assessment of these aspects is, in turn, heavily dependent on mineral reserves and, consequently, on factors such as anticipated future metal prices. The valuation is based on assumptions that the necessary environmental permits will be obtained. Changes to conditions may entail changes to the rate of depreciation applied in future. Business Area Mines draws up annual production plans for the mines' lifespans.

#### Mineral Reserves

Boliden's Mineral Reserves are divided into two categories: Probable and Proven. The assessment is based on geological measurements and assumptions that are explained in greater detail on pages 105–107. Boliden's assessment of the size of the Mineral Reserves affects annual depreciation costs and impairment tests for intangible assets and property, plant and equipment.

## Note 03 Information per segment and geographical market

#### **ACCOUNTING PRINCIPLES**

Boliden is organized into two segments: Business Area Mines and Business Area Smelters. The Business Areas correspond to Boliden's operating segments in that 1] the Business Area Managers are directly responsible to the CEO, 2] the CEO controls the Group's component parts via two Business Area Boards, one for each Business Area, through which the financial results are evaluated in relation to financial goals, 3] financial goals as well as investment plans and overhead budgets for the respective Business Areas are set in the business plan and budget process, 4) decisions on goals and resource allocation for units within the respective Business Areas are made within the respective Business Areas' management groups, and 5) heads of operating units report not to the CEO but to the Business Area Managers.

Business Area Mines comprises the operations of the Swedish mines Aitik, the Boliden Area and Garpenberg, the Tara mine in Ireland, and the Kylylahti and Kevitsa mines in Finland. Business Area Mines is also responsible for sales of mined concentrates.

Business Area Smelters includes the Kokkola and Odda zinc smelters in Finland and Norway respectively, the Rönnskär and Harjavalta copper smelters in Sweden and Finland respectively, and the Bergsöe lead smelter in Sweden. The Business Area is responsible for all sales of the smelters' products and handles all raw material flows between the Group's mines, smelters and customers. This includes responsibility for purchases of metal concentrates and recycling materials from external suppliers. The copper smelters also recycle metal and electronic scrap and smelt nickel. The Bergsöe lead smelter recycles lead metal, mainly from scrap car batteries.

Transactions between the Business Areas, primarily involving metal concentrates, are settled on an arms' length basis.

Set out below are details of revenues per segment and geographical market, showing the location of external customers, and providing information on major customers. Assets and investments per geographical market are also reported there.

#### Segment - Business Areas

31.12.2020	Mines	Smelters	Other <sup>2)</sup>	Accounting principles <sup>3)</sup>	Eliminations	The Group
External revenues	982	55,339	0	_	_	56,321
Internal revenues	17,144	-56	204	_	-17,293	0
Revenues	18,126	55,283	204	_	-17,293	56,321
Results from participations in associated companies	0	0	_	-	-	0
Operating profit	4,594	4,472	-130	-	-	8,935
Net financial items						-267
Profit after financial items						8,668
Tax						-1,867
Net profit for the year						6,801
Intangible assets	355	3,144	7			3,506
Property, plant and equipment	31,660	11,747	199			43,605
Equity shares and other financial assets	-20	11	23			15
Inventories	1,365	13,336	-463			14,238
Other receivables	2,911	4,337	505		-2,040	5,714
Assets in capital employed	36,270	32,576	271		-2,040	67,078
Provisions, other than for pensions and tax	4,162	683	288			5,133
Other non interest-bearing liabilities	3,099	9,916	-38		-2,040	10,937
Liabilities in capital employed	7,261	10,599	250		-2,040	16,071
Total capital employed	29,009	21,977	21		0	51,007
Depreciation	4,401	1,274	19			5,693
Investments <sup>1)</sup>	4,431	1,863	31			6,324

31.12.2019	Mines	Smelters	Other <sup>2)</sup>	Accounting principles <sup>3)</sup>	Eliminations	The Group
External revenues	1,318	48,617	1	_	_	49,936
Internal revenues	15,743	-61	147	_	-15,828	_
Revenues	17,060	48,556	148	_	-15,828	49,936
Results from participations in associated companies	-6	0	-	_	_	-6
Operating profit	4,484	3,277	-164	_	_	7,597
Net financial items						-260
Profit after financial items						7,337
Tax						-1,548
Net profit for the year						5,788
Intangible assets	370	3,243	8			3,621
Property, plant and equipment	32,348	11,544	96			43,989
Equity shares and other financial assets	-20	11	23			15
Inventories	1,357	12,365	-459			13,262
Other receivables	2,726	2,590	247		-1,778	3,785
Assets in capital employed	36,781	29,753	-84		-1,778	64,672
Provisions, other than for pensions and tax	4,372	728	0			5,100
Other non interest-bearing liabilities	3,690	7,850	1		-1,778	9,763
Liabilities in capital employed	8,062	8,578	1		-1,778	14,863
Total capital employed	28,719	21,175	-85			49,809
Depreciation	3,819	1,258	15			5,092
Investments <sup>1]</sup>	6,535	2,410	19			8,964

<sup>1)</sup> Excluding capitalized reclamation costs but including right-of-use assets.

Boliden has three customers within the Smelters segment who account for 20% (15), 11% (13) and 5% (8) respectively of Boliden's external revenue. Other customers each represent less than 4% [4] of Boliden's total external revenue. Boliden's metals are sold primarily to industrial customers, but are also sold to base metal dealers and international metal stocks, such as the LME.

#### Geographical areas

Sales figures are based on the country in which the customer is located. Assets and investments are reported in the location of the asset.

Revenues	2020	2019
Sweden	6,591	7,287
Nordic region, other	4,846	5,139
Germany	13,421	12,006
UK	13,885	11,304
Europe, other	16,110	12,658
North America	77	78
Other markets	1,390	1,464
	56,321	49,936

Assets in capital employed	31.12.2020	31.12.2019
Sweden	46,762	43,537
Finland	15,795	16,323
Norway	1,654	1,764
Ireland	2,848	3,028
Other countries	19	20
	67,078	64,672

Investments in non-current assets <sup>1)</sup>	31.12.2020	31.12.2019
Sweden	3,794	4,394
Finland	1,965	3,829
Norway	182	232
Ireland	383	508
Other countries	0	0
	6,324	8,964

<sup>1)</sup> Excluding capitalized reclamation costs but including right-of-use assets 2020

### Note 04 Revenues

#### **ACCOUNTING PRINCIPLES**

The sale of finished metals, metal concentrates, intermediate products and by-products is recognized at the time of delivery to the customer in accordance with the terms and conditions of sale, i.e. revenue is recognized when control passes to the purchaser.

The Group's metal concentrates are invoiced provisionally upon delivery. Final invoicing takes place when all relevant parameters have been determined (concentrate quantity, metal content, impurity content and metal price for the agreed price setting period, which is usually the average price on the LME in the month following delivery). Revenues from the provisional invoicing are reported at the metal prices and exchange rates applicable on the closing day and adjusted continuously until final invoicing occurs.

The Group's metals are invoiced to the customers at the time of delivery. The Group eliminates the price risk in conjunction with the sale and purchase of metals by hedging the imbalance between quantities purchased and sold on a daily basis. The smelters' income comprises treatment and refining charges, free metals, compensation for impurities in raw materials and the value of by-products.

Income from activities outside the sphere of the regular operations is reported as Other operating income.

<sup>2) &#</sup>x27;Other' includes Group staff functions and Group-wide functions not allocated to Mines or Smelters. This item also includes elimination of internal profit.

<sup>3)</sup> Comprises unrealized market values attributable to cash flow hedging, as well as minor adjustments for other accounting principles only followed up at Group level. The market values of the cash flow hedges are, when realized, reported in the profit for the respective segment.

Boliden's revenues derive primarily from the sale of metals. The following table shows external revenues broken down by product category. Information on internal sales revenues between the segments and sales revenues between the geographical areas is shown in Note 3, Information per segment and geographical market.

2020	Mines	Smelters	Other	The Group
Finished metals	-	46,807	-	46,807
Metal concentrate	982	-	-	982
Intermediate products	-	7,472	-	7,472
By-products	-	1,010	-	1,010
Other sales	0	50	0	50
Total external sales revenues	982	55.339	0	56.321

2019	Mines	Smelters	Other	The Group
Finished metals	-	41,712	-	41,712
Metal concentrate	1,315	0	-	1,315
Intermediate products	_	5,708	-	5,708
By-products	-	1,101	-	1,101
Other sales	3	96	1	99
Total external sales revenues	1,318	48,617	1	49,936

## Note 05 Employees and personnel costs

The Parent Company has one employee. As Boliden AB is in a tax agreement with Boliden Mineral AB, the employee is remunerated by Boliden Mineral AB.

Average number of employees <sup>1)</sup>	2020	of whom women	of whom men	2019	of whom women	of whom men
Subsidiaries	·					
Sweden	3,451	806	2,645	3,368	775	2,593
Finland	1,656	274	1,382	1,683	275	1,408
Norway	346	73	273	319	61	258
Ireland	598	42	556	609	36	573
Others	19	9	10	18	7	11
Total in subsidiaries/The Group	6,071	1,205	4,866	5,997	1,154	4,843

<sup>1)</sup> Refers to full-time employees.

Percentage of women at Board and Group management level	2020	2019
The Board of Directors	50%	50%
Group management	20%	20%

	2020		201	9
Salaries, other remuneration and social security expenses	Salaries and remuneration	Social security expenses	Salaries and remuneration	Social security expenses
- Subsidiaries	3,899	1,316	3,829	1,277
of which pension expenses		(371)		(376)
The Group, total	3,899	1,316	3,829	1,277

	2020		201	9
Salaries and other remuneration broken down by country, Board Members etc. and other employees	Board of Directors, President & other senior executives	Other employees	Board of Directors, President & other senior executives	Other employees
Subsidiaries in Sweden	27	2,002	31	1,923
Subsidiaries abroad				
Finland	10	1,060	10	1,005
Norway	2	206	2	212
Ireland	6	571	5	626
Others	2	13	2	14
The Group, total	47	3,852	49	3,780

#### Profit-sharing system

A profit-sharing system was introduced for all Boliden Group employees in 2007. A profit share is payable when the return on capital employed exceeds 8%, and the maximum profit share (SEK 30,000/full-time employee) is payable when the return on capital employed reaches 18%. However, the annual maximum allocation may never exceed one-third of the dividend paid to shareholders. The funds may not be disbursed to employees until after three years. An allocation of SEK 27,750 (23,388) per full-time employee is proposed for 2020 as the return on capital employed was 17.2% (15.8). This is, however, conditional upon the dividend resolution by the Annual General Meeting. The allocation for each year is invested in liquid interest-bearing assets and shares in Boliden.

#### Remuneration paid to Board Members and senior executives Principles

Fees as approved by the Annual General Meeting are payable to the Chairman of the Board and to Board Members. The President and employee representatives do not receive Directors' fees.

Remuneration paid to the President and other senior executives comprises basic salary, variable remuneration, other benefits and pensions. The term senior executives refers to those persons who have made up the Group management during the year. At year-end, Group management comprised five persons, including the President. All members of Group management are employed in Sweden.

The split between basic salary and variable remuneration shall be in proportion to the executive's responsibilities and authority. The variable remuneration is maximized to 60% of the basic salary for the President, while for other senior executives, it is maximized to 40–50% of the basic salary. Of this, ten percentage points are contingent upon the purchase of Boliden shares for the gross sum before

Pension benefits and other benefits payable to the President and other senior executives are taken into account when determining fixed and variable remuneration.

#### Remuneration and other benefits paid during the year

Specification of remuneration paid to the Board Members and senior executives.

	Directors Basic s		Variable rer	nuneration	Other b	enefits	Pensio	n cost
SEK k	2020	2019	2020	2019	2020	2019	2020	2019
Board of Directors								
Anders Ullberg, Chairman	1,925	1,925						
Marie Berglund	-	580						
Helene Biström	580	-						
Tom Erixon	705	705						
Michael G:son Löw	630	630						
Perttu Louhiluoto	580	580						
Elisabeth Nilsson	580	580						
Pia Rudengren	805	805						
Group management								
Mikael Staffas, President	7,843	7,844	3,361 <sup>2)</sup>	2,9413)	27	69	2,766	2,793
Other members of Group management <sup>1)</sup>	10,668	14,132 <sup>4)</sup>	2,984 <sup>2)</sup>	3,490 <sup>3)</sup>	282	267	4,280 <sup>5)</sup>	3,064

<sup>1)</sup> A total of 4 people in 2020 and 2019.

The Directors' fees shown above also include remuneration for work on the Remuneration and Audit Committees.

#### Variable remuneration

The variable remuneration paid to the President in 2020 was based on the Group's return on equity and the accident trend within the Group

For other members of the Group management the variable remuneration for 2020 was based on the Group's financial goals and on their personal spheres of responsibility, including financial and individual targets, and the accident trend. Other benefits refer primarily to company cars.

#### Pensions

The President has a defined contribution pension plan to which the company sets aside 35% of the fixed monthly salary on a rolling basis. The President decides himself the level of survivor annuity, indemnity for medical treatment or disability etc., in his insurance plan. The President's retirement age is 65.

All other members of the Group management have defined contribution pension plans to which the company sets aside 30% of the fixed monthly salary.

The company's premium-based pension plans do not include costs for the ITP basic level, ITPK, part-time retirement pension and supplementary health insurance. The retirement age is 65.

#### Severance pay

The President and the company shall give six and twelve months' notice respectively of the termination of the President's position. If notice is given by the company, severance pay corresponding to twelve months' salary is payable, in addition to pay during the period of notice. Other income shall be deducted from severance pay. No severance pay is payable in the event of notice being given by the President.

Other members of the Group management have a notice period of six months if they give notice themselves. If notice of termination is given by the company, the period of notice is six to twelve months. In addition, severance pay corresponding to six to twelve months' salary is payable. A summation of notice period pay and severance pay may not exceed eighteen months. Other income shall be deducted from severance pay. No severance pay is payable in the case of resignation.

### Preparation and decision-making process

See the 2020 Corporate Governance Statement for information.

<sup>&</sup>lt;sup>2)</sup> The amounts are attributable to 2020 but will be disbursed in 2021.

<sup>&</sup>lt;sup>3)</sup> The amounts are attributable to 2019 but will be disbursed in 2020.

<sup>&</sup>lt;sup>4)</sup> Includes a one-off cost due to changes in the Group management.

 $<sup>^{5)}</sup>$  Of which SEK 534 k pertain to pension premiums for 2019.

## Note 06 Auditors' fees and reimbursement of expenses

	2020	2019
Deloitte AB		
Audit engagements	8	7
Auditing assignments over and above audit		
engagements	0	0
Tax consultancy	0	0
Other services	0	0
	8	7

## Note 07 Key expense items

	2020	2019
Raw material costs, incl. inventory changes	25,544	21,291
Personnel costs	5,412	5,312
Energy costs	2,994	2,982
Other external costs	7,803	7,760
Depreciation and amortization	5,693	5,092
	47,445	42,436

The specification of key expense items relates to the Income Statement items Cost of goods sold, Selling expenses, Administrative expenses and Research and development costs.

Depreciation and amortization are reported		
$\ under \ the \ following \ Income \ Statement \ items:$	2020	2019
Cost of goods sold	5,652	5,048
Selling expenses	0	8
Administrative expenses	29	26
Research and development costs	12	10
	5,693	5,092

#### Note 08 Other operating income

	2020	2019
Payment for sludge deliveries	-	20
Rental income, industrial properties	19	21
Insurance payments	104	6
Sick pay received	33	-
Profit, sale of non-current assets	9	2
Realized exchange rate gains	85	207
Scrap sales	26	31
Sales of district heating	25	-
Profit on the sale of emissions rights	14	27
Other	27	39
	342	354

#### Note 09 Financial income

	2020	2019
Interest income on cash and cash equivalents <sup>1)</sup>	2	11
Other	0	1
	3	12

 $<sup>^{\</sup>rm 1)}$  Included in the category Financial assets at amortized cost.

### Note 10 Financial expenses

	2020	2019
Interest on loans at amortized cost	90	54
Interest on currency futures <sup>1)</sup>	23	73
Interest on pension provisions	14	20
Interest on reclamation reserve	98	91
Interest on leases	4	4
Other financial items	42	30
	270	272

 $<sup>^{\</sup>mbox{\tiny 1)}}$  Included in the category Financial assets at fair value through profit or loss.

Boliden's average interest rate totaled 1.3% (1.1), weighted against rolling debt.

### Note 11 Government subsidies

#### **ACCOUNTING PRINCIPLES**

Government support refers to subsidies, grants or premiums designed to provide an economic benefit, or Government support in the form of transfers of resources to the company that may entail an undertaking. Government support attributable to assets is reported either by recognizing the support as a prepaid income or by reducing the reported value of the asset. Other contributions are recognized as other income or a reduction in personnel costs in the same period as the costs that the contributions are intended to cover are reported.

Government subsidies totaling SEK 69 m (50) were received in 2020 and SEK 107 m (79) was reported in the Income Statement. The majority of the subsidies were received in Norway under a carbon dioxide compensation scheme and for energy efficiency improvement measures and are reported under Cost of goods sold in the Income Statement. Furthermore, compensation for sick pay costs and a reduction of employer contributions related to Covid-19 was received in the amounts of SEK 33 and 4 m respectively.

## Note 12 Supplementary information to the Statement of Cash Flow

The Statement of Cash Flow is prepared in accordance with the indirect method.

	2020	2019
Interest received		
Bank interest	2	10
	2	10
Interest paid		
Interest on currency futures	-23	-75
Interest on external loans	-81	-53
Interest on leases	-4	-4
	-108	-132
Cash and cash equivalents, December 31		
The following items are included in cash and cash equivalents:		
Cash and bank balances	5,060	1,373
Short-term investments	0	0
	5,060	1,373

Interest paid in the Statement of Cash Flow does not include accrued interest expenses, unlike in the Income Statement. Interest paid for interest capitalization is reported as part of investment activities.

Short-term investments included in cash and cash equivalents comprise investments with a term of three months or less at the point of acquisition and which can be easily converted into cash and cash equivalents. Cash and cash equivalents are exposed to only an insignificant risk of value fluctuation.

The following table shows changes in liabilities attributable to financing activities.

	At the beginning		Items not affecting cash flow		Amount at
The Group 2020	of the year	Cash flow	Currency	Other <sup>1]</sup>	year-end
Non-current liabilities to credit institutions	3,261	2,968	-278		5,951
Current liabilities to credit institutions	2,242	-2,242			0
Other interest-bearing liabilities, non-current	182			-29	153
Other interest-bearing liabilities, current	86	-83		47	50
Total liabilities from financing activities	5,771	643	-278	18	6,154

<sup>1)</sup> The effect of changes in leases during the year.

	At the beginning		Items not affecti	ng cash flow	Amount at
The Group 2019	of the year	Cash flow	Currency	Other 1)	year-end
Non-current liabilities to credit institutions	3,145	87	29		3,261
Current liabilities to credit institutions	216	2,026			2,242
Other interest-bearing liabilities, non-current	0	-		182	182
Other interest-bearing liabilities, current	2	-96		180	86
Total liabilities from financing activities	3,363	2,017	29	362	5,771

<sup>1)</sup> Transitional effect in respect of leases and new lease contracts during the year.

The Parent Company's changes in liabilities attributable to financing activities constitute, in their entirety, items affecting cash flow.

## Note 13 Intangible assets

#### **ACCOUNTING PRINCIPLES**

#### Exploration, research and development

Boliden's R&D primarily comprises exploration. Boliden is also involved, to a limited extent, in developing mining and smelting processes. Expenses associated with research and development are primarily booked as costs when they arise, and are reported under the item "Research and development costs" in the Income Statement. When the financial potential for the exploitation of a mine deposit has been confirmed, the expenses are booked as costs up to that date. After that date, the expenses are capitalized as deferred mining costs, whose principles are described in Note 14, Property, plant and equipment. Exploration rights acquired in conjunction with operational acquisitions have been capitalized as intangible assets.

Acquired exploration rights are assessed to have an indefinite useful life as there is no predictable limit on the time during which the asset is expected to generate net payments to Boliden. Impairment testing in respect of exploration rights is carried out in accordance with IFRS 6 Exploration for and Evaluation of Mineral Resources, and impairment testing is, therefore, only carried out in the presence of an indication that the need to write down an asset exists.

## Patents, licenses and similar rights

Intangible assets also include patents, licenses and similar rights. They are amortized over their anticipated useful lives.

#### Goodwill

Goodwill arises at the time of acquisition when the historical cost exceeds the fair value of the Group's share of the identifiable net assets of the subsidiary company. Goodwill is reported in the Balance Sheet at the value given in conjunction with the acquisition, converted, where relevant, at the closing day rate, after deduction for accumulated impairments. Calculations of the profit or loss on the sale of a unit include any remaining reported goodwill value ascribed to the operations sold.

Goodwill has been assessed as having an indefinite useful life. Goodwill is allocated to the smallest possible unit or group of units that generate cash where separate cash flows can be identified, and an impairment test is performed on the reported value at least once a year to determine whether there is any need for an impairment. Such impairment tests are, however, performed more frequently if there are indications that the value may have fallen during the year.

#### **Emission allowances**

The Boliden Group participates in the European system for emission rights. Rights are allocated across the European market. One emission right grants entitlement to emit the equivalent of one metric ton of carbon dioxide or similar gas and is classified as an intangible asset. Allocated emission rights are valued at the historical cost of zero, while rights acquired are valued at the purchase price. An intangible asset and a provision in the corresponding amount are reported during the current year in the event of any need arising to purchase additional emission rights. The asset is amortized over the remaining months of the year, thereby distributing the cost in line with production. The intangible asset is thereby exhausted and the provision for emissions made is settled. If the liability to deliver emission rights exceeds the remaining emission rights allocation, the liability is revalued at the market value of the number of emission rights required to clear the undertaking on the closing day.

#### Impairments

On each reporting occasion, an assessment is performed to determine whether there is any indication of impairment in respect of the Group's assets. Should this be the case, the recoverable amount of the asset is calculated. Goodwill, together with any intangible assets with indefinable useful lives, is subject to annual impairment tests even if there are no indications of a reduction in its value. The recoverable amount comprises whichever is the higher of the value in use of the asset in the operations and the value that would result if the asset were sold to an independent party, fair value minus selling expenses. The value in use comprises the present value of all incoming and outgoing payments attributable to the asset for the duration of its expected use in the operations, plus the present value of the net sales value at the end of the asset's useful life. The period during which use of the asset is expected to be possible is based on the assumption that the necessary environmental permits can be obtained. If the estimated recoverable amount is lower than the book value, the latter is written down to the former.

Impairments are reported in the Income Statement. Any impairment is reversed if changes in the assumptions leading to the original impairment mean that the impairment is no longer warranted. Impairments that have been performed are not reversed in such a way that the reported value exceeds the amount that would, following deductions for depreciation according to plan, have been reported if no impairment had been performed. Reversals of impairments are reported in the Income Statement. Goodwill impairments are not reversed. See also the section in Note 2 about the Valuation of non-current assets.

Nation   N		Capitalized development	Patents, licenses and similar rights	Exploration rights	Goodwill	Total Intangible
Opening balance, 01.01.2019         231         257         250         3,159         3,897           Investments         35         2         -         -         37           Sales and retirements         -         -2         -         -         -         -2           Reclassifications         -         1         -         -         -         1           Translation differences for the year         2         4         4         45         55           Closing balance, 31.12.2019         268         262         254         3,204         3,988           Opening balance, 01.01.2020         268         262         254         3,204         3,988           Investments         35         8         -         -         -         43           Sales and retirements         -         -1         -         -         -         43           Sales and retirements         -         -9         -         -         -         -           Reclassifications         -         9         -         -         -         -           Reclassifications         -         9         -         -         -         -         -	10	expenses	and similar rights	Exploration rights	Goodwiii	assets
Nestments   35		004	057	050	0.450	0.007
Sales and retirements				250	3,159	•
Reclassifications		35		-	-	
Translation differences for the year         2         4         4         45         55           Closing balance, 31.12.2019         268         262         254         3,204         3,988           Opening balance, 01.01.2020         268         262         254         3,204         3,988           Investments         35         8         -         -         43           Sales and retirements         -         -         1         4           Sales and retirements         -         9         -         -         1           Reclassifications         -         9         -         -         9           Translation differences for the year         -4         -10         -10         -127         -151           Closing balance, 31.12.2020         299         268         244         3,077         3,888           Amortization         -154         -177         -12         -151           Sales and retirements         -         -15         -19         -2         -2           Poening balance, 01.01.2020         -170         -197         -367           Translation differences for the year         -10         -18         -2         -28		-		-	-	
Closing balance, 31.12.2019         268         262         254         3,204         3,988           Opening balance, 01.01.2020         268         262         254         3,204         3,988           Investments         35         8         -         -         43           Sales and retirements         -         -1         -         -         -1           Reclassifications         -         9         -         -         -9         9         -         -         -1		-	•	-	-	
Opening balance, 01.01.2020         268         262         254         3,204         3,988           Investments         35         8         -         -         43           Sales and retirements         -         -1         -         -         -1           Reclassifications         -         9         -         -         9           Translation differences for the year         -4         -10         -10         -127         -151           Closing balance, 31.12.2020         299         268         244         3,077         3,888           Amortization         -         -         -10         -127         -151           Closing balance, 31.12.2020         -154         -177         -31         -331           Amortization for the year         -15         -19         -2         2           Sales and retirements         -         2         2         2           Closing balance, 31.12.2019         -170         -197         -367           Amortization for the year         -10         -197         -367           Amortization for the year         -10         -18         -2         -28           Sales and retirements         -         1			<u>.</u>			
Investments   35	Closing balance, 31.12.2019	268	262	254	3,204	3,988
Sales and retirements         -         -1         -         -         -         9         -         -         9           Translation differences for the year         -4         -10         -10         -127         -151           Closing balance, 31.12.2020         299         268         244         3,077         3,888           Amortization           Opening balance, 01.01.2019         -154         -177         -331         -331           Amortization for the year         -15         -19         -362         -34           Sales and retirements         -         2         2         -34           Sales and retirements         -         2         2         -367           Translation differences for the year         -1         -3         -4         -4           Closing balance, 01.01.2020         -170         -197         -367         -367           Amortization for the year         -10         -18         -28         -28           Sales and retirements         -         1         1         1           Translation offferences for the year         4         8         -26         -382           Closing balance, 31.12.2020         -176         -2	Opening balance, 01.01.2020	268	262	254	3,204	3,988
Reclassifications	Investments	35	8	-	-	43
Translation differences for the year	Sales and retirements	-	-1	-	-	-1
Closing balance, 31.12.2020   299   268   244   3,077   3,888	Reclassifications	-	9	_	-	9
Amortization Opening balance, 01.01.2019 -154 -177 -331 Amortization for the year -15 -19 -34 Sales and retirements - 2 2 2 Translation differences for the year -1 -3 -3 -4 Closing balance, 31.12.2019 -170 -197 -367 Opening balance, 01.01.2020 -170 -197 -367 Amortization for the year -10 -18 -28 Sales and retirements -10 -18 -28 Sales and retirements -10 -18 -28 Sales and retirements -10 -18 -28 Closing balance, 31.12.2020 -176 -206 -382  Reported value as per Balance Sheet, 31.12.2020 -176 -206 -382  Reported value as per Balance Sheet, 31.12.2020 -123 62 244 3,077 3,506  Amortization according to plan, included in operating profit	Translation differences for the year	-4	-10	-10	-127	-151
Opening balance, 01.01.2019         -154         -177         -331           Amortization for the year         -15         -19         -34           Sales and retirements         -         2         2           Translation differences for the year         -1         -3         -4           Closing balance, 31.12.2019         -170         -197         -367           Opening balance, 01.01.2020         -170         -197         -367           Amortization for the year         -10         -18         -28           Sales and retirements         -         1         1           Translation differences for the year         4         8         12           Closing balance, 31.12.2020         -176         -206         -382           Reported value as per Balance Sheet, 31.12.2020         123         65         254         3,204         3,621           Reported value as per Balance Sheet, 31.12.2020         123         62         244         3,077         3,506           Amortization according to plan, included in operating profit         -15         -19         -34         -34	Closing balance, 31.12.2020	299	268	244	3,077	3,888
Opening balance, 01.01.2019         -154         -177         -331           Amortization for the year         -15         -19         -34           Sales and retirements         -         2         2           Translation differences for the year         -1         -3         -4           Closing balance, 31.12.2019         -170         -197         -367           Opening balance, 01.01.2020         -170         -197         -367           Amortization for the year         -10         -18         -28           Sales and retirements         -         1         1           Translation differences for the year         4         8         12           Closing balance, 31.12.2020         -176         -206         -382           Reported value as per Balance Sheet, 31.12.2020         123         65         254         3,204         3,621           Reported value as per Balance Sheet, 31.12.2020         123         62         244         3,077         3,506           Amortization according to plan, included in operating profit         -15         -19         -34         -34	Amortization					
Amortization for the year -15 -19 -34 Sales and retirements - 2 2 -2 Translation differences for the year -1 -3 -3 -4 Closing balance, 31.12.2019 -170 -197 -367 Opening balance, 01.01.2020 -170 -197 -367 Amortization for the year -10 -18 -28 Sales and retirements - 1		-154	-177			-331
Sales and retirements         -         2         2           Translation differences for the year         -1         -3         -4           Closing balance, 31.12.2019         -170         -197         -367           Opening balance, 01.01.2020         -170         -197         -367           Amortization for the year         -10         -18         -28           Sales and retirements         -         1         1           Translation differences for the year         4         8         12           Closing balance, 31.12.2020         -176         -206         -382           Reported value as per Balance Sheet, 31.12.2019         98         65         254         3,204         3,621           Reported value as per Balance Sheet, 31.12.2020         123         62         244         3,077         3,506           Amortization according to plan, included in operating profit         -15         -19         -34		-15	-19			-34
Closing balance, 31.12.2019	•	_	2			2
Closing balance, 31.12.2019         -170         -197         -367           Opening balance, 01.01.2020         -170         -197         -367           Amortization for the year         -10         -18         -28           Sales and retirements         -         1         1           Translation differences for the year         4         8         12           Closing balance, 31.12.2020         -176         -206         -382           Reported value as per Balance Sheet, 31.12.2019         98         65         254         3,204         3,621           Reported value as per Balance Sheet, 31.12.2020         123         62         244         3,077         3,506           Amortization according to plan, included in operating profit         -15         -19         -34	Translation differences for the year	-1	-3			-4
Amortization for the year -10 -18 -28 Sales and retirements - 1 1 1 Translation differences for the year 4 8 12 Closing balance, 31.12.2020 -176 -206 -382  Reported value as per Balance Sheet, 31.12.2019 98 65 254 3,204 3,621 Reported value as per Balance Sheet, 31.12.2020 123 62 244 3,077 3,506  Amortization according to plan, included in operating profit 2019 -15 -19 -34	Closing balance, 31.12.2019	-170	-197			-367
Amortization for the year -10 -18 -28 Sales and retirements - 1	Opening balance, 01.01.2020	-170	-197			-367
Sales and retirements         -         1         1           Translation differences for the year         4         8         12           Closing balance, 31.12.2020         -176         -206         -382           Reported value as per Balance Sheet, 31.12.2019         98         65         254         3,204         3,621           Reported value as per Balance Sheet, 31.12.2020         123         62         244         3,077         3,506           Amortization according to plan, included in operating profit         -15         -19         -34		-10	-18			-28
Closing balance, 31.12.2020	· ·	_	1			1
Closing balance, 31.12.2020	Translation differences for the year	4	8			12
31.12.2019         98         65         254         3,204         3,621           Reported value as per Balance Sheet, 31.12.2020         123         62         244         3,077         3,506           Amortization according to plan, included in operating profit           2019         -15         -19         -34	· · · · · · · · · · · · · · · · · · ·	-176	-206			-382
31.12.2019         98         65         254         3,204         3,621           Reported value as per Balance Sheet, 31.12.2020         123         62         244         3,077         3,506           Amortization according to plan, included in operating profit           2019         -15         -19         -34						
31.12.2020     123     62     244     3,077     3,506       Amortization according to plan, included in operating profit       2019     -15     -19     -34		98	65	254	3,204	3,621
operating profit           2019         -15         -19         -34		123	62	244	3,077	3,506
2019 -15 -19 -34						
2020 -10 -18 -28		-15	-19			-34
	2020	_10	-18			-28

#### Goodwill

The Group's goodwill item arose primarily in conjunction with the acquisition of the operations from Outokumpu at the end of December 2003. Goodwill from the 2003 acquisition has principally been allocated to the Group's Smelters segment. Impairment tests have been carried out on the goodwill value as described in Note 14 under Impairment tests for the year – Intangible assets and Property, plant and equipment.

#### Emission allowances

In 2020, the Boliden Group has sold unused emission rights to a value of SEK 14 m.

### **Exploration rights**

In 2014, Boliden acquired the exploration rights and mining operations of the Kylylahti copper mine in Finland. No amortization of these assets has been effected.

## Note 14 Property, plant and equipment

#### **ACCOUNTING PRINCIPLES**

Land, plants and equipment and associated capitalized costs for development, pre-production measures and future reclamation costs, are booked at historical cost less depreciation and any impairment. Interest expenses attributable to financing development and completion of significant items of property, plant and equipment are included in the acquisition value. Repair and maintenance expenses are booked as costs, while substantial improvements and replacements are capitalized.

Estimated future expenses for the dismantling and removal of a tangible asset and the restoration of a site or area where the tangible asset is located (reclamation costs) are capitalized. Capitalized amounts comprise estimated expenses, calculated at current value, which are simultaneously reported as provisions. Effects of subse-

quent events that result in costs that exceed the provision are discounted, capitalized as a tangible asset and increase the provisions, and are depreciated over the remaining life of the asset.

Deferred mining costs at mines comprise the waste rock excavation required to access the ore body, work relating to infrastructural facilities, roads, tunnels, shafts and inclined drifts, as well as service, electricity and air distribution facilities. Deferred mining costs arising from expanding the capacity of the mining operation, the development of new ore bodies, and the preparation of mining areas for future ore production are capitalized. Mining costs arising from waste rock removal from open pit mines are capitalized as part of an asset when it becomes possible to identify the part of an ore body to which access has been improved.

## Depreciation principles for Property, plant and equipment

Depreciation according to plan is based on the original capitalized values and the estimated useful life, and begins when an asset becomes operational.

Plant and capitalized values attributable to waste rock are depreciated per pushback and in conjunction with metal extraction in relation to the anticipated metal extraction for the entire pushback. Plant and capitalized values included in deferred mining costs are depreciated in accordance with a production-based depreciation method that is based on the Proven and Probable Mineral Reserves in the respective ore bodies. Depreciation is effected to the estimated residual value. Estimated residual values and production capacity are subject to ongoing review. Plant not directly linked to production capacity is depreciated on the basis of its anticipated lifespan. The estimated useful life is based on the assumption that the necessary environmental permits can be obtained.

Smelters and production plants are depreciated linearly over their anticipated useful lives.

The following depreciation periods are applied to Property, plant and equipment, including future reclamation costs:

Buildings 20–50 years
Land improvements 20 year

Deferred mining costs and waste rock capitalization Capitalized reclamation costs

Concurrently with metal extraction Linearly over the anticipated

Processing facilities 10–25 years
Machinery 3–10 years
Inventories 3–10 years

Boliden applies component depreciation, which means that larger processing facilities are broken down into component parts with different useful lives and thus different depreciation periods.

	Buildings and land	Deferred mining costs	Machinery and other tech- nical facilities	Equipment, tools, fixtures and fittings	Work in progress.	Total Property, plant and equipment
Historical costs						
Opening balance, O1.O1.2O19	11,255	18,354	46,019	1,692	5,533	82,852
Investments	494	2,393	2,238	129	3,535	8,789
Capitalized reclamation costs	23		792			815
Sales and retirements	-78	-11	-769	-7	0	-865
Reclassifications	625	146	948	170	-1,897	-8
Translation differences for the year	91	82	269	45	15	502
Closing balance, 31.12.2019	12,410	20,964	49,498	2,029	7,186	92,085
Opening balance, 01.01.2020	12,410	20,964	49,498	2.029	7,186	92,085
Investments	1,080	1,802	2,856	34	490	6,262
Capitalized reclamation costs	-16	.,	-179			-195
Sales and retirements	-24	-178	-476	-9	0	-687
Reclassifications	396	384	1,341	113	-2,243	-9
Translation differences for the year	-318	-358	-1,047	-163	_27	-1.913
Closing balance, 31.12.2020	13,528	22,614	51,993	2,004	5,406	95,543
Down sisting						<u> </u>
<b>Depreciation</b> Opening balance, 01.01.2019	-5.787	-10.522	-26,303	-1.365		-43.976
Depreciation for the year	-5,787 -482	-10,322	-20,303 -2.561	-1,303 -79		-43,970 -4,971
Sales and retirements	-462 74	10	-2,301 767	-/3 7		-4,971 858
Reclassifications	3	-	707	,		3
Translation differences for the year	-54	-37	-156	-40		-287
Closing balance, 31.12.2019	-6.246	-12.398	-28.252	-1,477		-48.373
	,	,				,
Opening balance, 01.01.2020	-6,246	-12,398	-28,252	-1,477		-48,373
Depreciation for the year	-550	-2,041	-2,899	<b>-95</b>		-5,585
Sales and retirements	16	178	487	8		689
Reclassifications	-	-	-	-		-
Translation differences for the year	173	205	609	132		1,119
Closing balance, 31.12.2020	-6,607	-14,056	-30,055	-1,432		-52,150
Reported value as per Balance Sheet,						
31.12.2019	6,230	8,566	21,456	552	7,186	43,989
01	0.004	0.550	04.000	F70	F 400	40.005
Closing balance as above, 31.12.2020	6,921	8,558	21,938 44	572	5,406	43,395
Reported right-of-use assets  Reported value as per Balance Sheet,	167		44			211
31.12.2020	7,088	8,558	21,982	572	5,406	43,605
Depreciation according to plan, included in operating profit						
2019	-482	-1,849	-2,561	-79		-4,971
2020	-550	-2,041	-2,899	-95		-5,585

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Capitalized reclamation costs include expenses in relation to the dismantling and removal of assets and the restoration of the sites where the assets are located. Accumulated capitalized reclamation costs total SEK 3,367 m (3,556). Accumulated depreciation totals SEK -735 m (-604). The change in capitalized reclamation costs for

the year totaled SEK –195 m (815) attributable to the usual view of reclamation needs and an assessment of the mine's lifespan. The change is reported in accordance with IFRIC 1 Changes in Existing Decommissioning, Restoration and Similar Liabilities. Reclamation costs for the year are not included in the consolidated key ratios for

the year's investments, and have no effect on the Group's cash flow. Investments in property, plant and equipment include leases according to IFRS 16 Leases, totaling SEK 19 m (137) see also Note 15, Leases. The same principle for key ratios, cash flow and reclamation costs for the year, applies to right-of-use assets under IFRS 16.

	31.12.2020		31.12.	1.12.2019	
Capitalized interest expenses included in planned residual value	Reported value, SEK m	Interest rate, %	Reported value, SEK m	Interest rate, %	
Rönnskär's expansion, completed in 2000	18	6.8	21	6.8	
Odda's expansion, completed in 2004	3	4.0	3	4.0	
Aitik's expansion, completed in 2011	115	2.5	128	2.5	
Rönnskär, electronic scrap recycling, completed in 2012	7	3.2	8	3.2	
Garpenberg's expansion, completed in 2014	68	1.7	74	1.7	

## Annual impairment test - Intangible assets and Property, plant and equipment

Impairment tests are carried out yearly, or throughout the year if an event occurs that may result in an impairment requirement, and are based on the Group's annual budget and strategic planning work. The planning horizon is the estimated lifespan of each mine - usually between 5 and 30 years - and 10 years for smelters. Boliden's operations are characterized by long-term production plans in which every mine has set production plans for the entire estimated lifespan of the mine in question, while a substantial part of the smelters' concentrate supply is regulated by means of long-term delivery agreements. The plans are based on the assumption that the permits needed to conduct the operations can be obtained and, where necessary, renewed. Covid-19 is not anticipated to impact future cash flows. This long-term production planning also enables the use of long-term cash flow forecasts. Additional growth assumptions are not included in extrapolated cash flow forecasts beyond the planning horizon, which means that smelters' cash flows from year eleven onwards are extrapolated using year ten as a base, after which no growth is taken into account.

The value of discounted cash flows is highly sensitive to metal prices, treatment and refining charges (TC/RC), and exchange rates (see sensitivity table in Note 28). The present value of estimated future cash flows is based on the budget and planning prices adopted by the Board of Directors. Planning prices for the first year comprise futures prices on metals and currency markets. The long-term planning prices used in year two and thereafter consist of an anticipated average price over a single business cycle, generally 10 years. The long-term planning prices are based on internal and external analyses, mainly with regard to anticipated demand for metals and margin costs for metal producers. The long-term planning prices are compared with average long-term prices from different market players, such as industry analysts and other mining and smelting companies. The Group does not believe futures prices from base metals markets to be good indicators of long-term price trends, as they are heavily influenced by spot prices.

Real long-term planning prices are currently those listed in the table below.

	2020				2019	
	Metal prices	Treatment/refining charges	Exchange rates	Metal prices	Treatment/refining charges	Exchange rates
Copper	USD 6,600/tonne	USD 80/tonne USc 8.0/ib	USD/SEK 8.00	USD 6,600/tonne	USD 80/tonne USc 8.0/ib	USD/SEK 8.00
Zinc	USD 2,400/tonne	USD 210	USD/NOK 7.50	USD 2,400/tonne	USD 210	USD/NOK 7.50
Lead	USD 2,100/tonne	USD 190	EUR/USD 1.17	USD 2,100/tonne	USD 190	EUR/USD 1.17
Nickel	USD 16,000/tonne			USD 16,000/tonne		
Gold	USD 1,300/tr oz			USD 1,200/tr oz		
Silver	USD 17.0/tr oz			USD 17.0/tr oz		

Individual mines or mining areas with centralized concentrating facilities, copper smelters, zinc smelters, Boliden Bergsöe AB and Boliden Commercial AB are classified as cash-generating units. The discounted real cash flows before tax for the respective cash-generating units are compared with the book value of capital employed. The cash flows are discounted with a real discount rate before tax of 9% (9), which corresponds to the weighted capital cost. The Group's goodwill is allocated to Segment Smelters, rather than to cash-generating units, in accordance with monitoring of goodwill. The value in use of the Group's assets is deemed to exceed the carrying amounts, and no impairment requirement is consequently deemed to exist. An increase in the discount rate by one percentage point would have led to a need for impairment of a cash-generating unit in the Mines

segment. A 10% reduction of all long-term planning prices for metals would not lead to any need for impairment in the Smelters segment, but for the Mines segment, such a reduction would mean that the book value would exceed the discounted cash flows in three cash-generating units. If the long-term planning prices for metals were to remain unchanged, a 10% weakening of the US dollar against all other currencies would not occasion an impairment requirement for Segment Mines or Smelters. The calculation does not include any compensatory movements in metal prices, TC/RC, or the prices of by-products or input goods, which has historically often been the case. A 10% fall in TC/RC for all metals would not result in any impairment requirement in the Smelters segment; in the Mines segment, the same fall would have a positive effect.

## Note 15 Leases

#### **ACCOUNTING PRINCIPLES**

The lease agreements are recognized as right-of-use assets and equivalent liabilities, and reported on the day the leased asset is available for use by the Group. The calculation of the liability for a leased asset is based on the current value of the remaining lease charges, discounted by the implicit borrowing rate. If this cannot be determined, the discounting takes place instead using the marginal borrowing rate. The liability is recognized under Other interest-bearing liabilities, split between a current and a non-current part. Each lease payment is distributed between amortization of the debt and financial expense. The financial cost is distributed over the lease period so that each accounting period is burdened with an amount corresponding to a fixed interest rate for the liability reported during the relevant period. The right-of-use asset is initially valued at historical cost, which is made up of the sum of the lease liability, any direct expenses and reclamation costs. The right-of-use asset is recognized as Property, plant and equipment in the Balance Sheet, broken down between the items Buildings and land as well as Machinery and other technical facilities. Depreciation takes place linearly over time. The Boliden Group's lease agreements comprise various properties, mining and service machinery, concentrate stores and excavators. The lease contracts vary in length, although the majority are between 3-6 years. The terms are negotiated separately for each agreement and vary. The leased assets may not be used as collateral for loans. Some agreements contain variable lease payments that are based on an index or interest rate. Changes to the index first affect the lease liability in the period when cash flow from the change occurs. At this time, the lease liability is recalculated and adjusted against the right-of-use asset. The option of extending an agreement is included in a few of the Group's leases for vehicles and equipment. and has not been included in the lease liability because the Group does not consider it reasonably certain that these options will be exercised. Revaluation of lease liability is carried out e.g. in the event of amended assessments of the utilization of options as well as amended assessments of the outcome of residual value guarantees.

A lease agreement running for less than 12 months, known as a short-term lease, or a lease that relates to lease of a low-value asset, is exempt and is not included when determining liability and right-of-use asset, rather these are booked linearly in the item Cost of goods sold in the Income Statement. This also applies to agreements with variable pricing, such as certain transport agreements. Low value leases include IT equipment, office equipment and the hire of building modules.

#### The Group

#### Amounts reported in the Balance Sheet

The Balance Sheet presents the following amounts related to leases:

	2020	2019
Right-of-use assets		
Buildings and land	167	66
Machinery and other technical facilities	44	209
	211	275
Lease liabilities		
Current	50	85
Non-current	153	182
	203	267

Additional right-of-use assets totaled SEK 19 m (137).

#### Amounts reported in the Income Statement

The Income Statement presents the following amounts related to leases:

	2020	2019
Depreciation of right-of-use assets		
Buildings and land	-4	-18
Machinery and other technical facilities	-76	-69
	-80	-87
Interest expenses Expenses relating to short-term leases	-4 -17	-4 -60
Expenses relating to leases for which the underlying asset is of low value, which are not short-term leases	-41	-29
Expenses relating to variable lease payments not included in the lease liability	-479	-411

The total cash flow relating to leases was SEK  $550\,\mathrm{m}$  (595).

## Note 16 Participations in subsidiaries

Specification of the Parent Company's and the Group's holdings of participations in subsidiaries

	31.12.2020			
Subsidiary/Co. reg. no./Registered office	Shares/ participations	Percentage share	Book value	Book value 2019
Boliden Limited, 3977366, Toronto, Canada	85,811,638	100	_	_
Ontario Inc, 1393512, Toronto, Canada				
Boliden BV, 18048775, Drunen, Netherlands				
Boliden Apirsa S.L in liquidation, ESB-41518028, Aznalcóllar (Seville), Spain				
Boliden Mineral AB, 556231-6850, Skellefteå, Sweden	1,650,000	100	3,911	3,911
Boliden Harjavalta Oy, 1591739-9, Harjavalta, Finland				
Boliden Kokkola Oy, 0772004-3, Kokkola, Finland				
Kokkolan Teollisuusvesi Oy, 2558533-2, Kokkola, Finland				
Boliden Commercial AB, 556158-2205, Stockholm, Sweden				
Boliden Commercial UK Ltd, 5723781, Warwickshire, England				
Boliden Commercial Deutschland GmbH, 14237, Neuss, Germany				
Tara Mines Holding DAC, 60135, Navan, Ireland				
Boliden Tara Mines DAC, 33148, Navan, Ireland				
Irish Mine Development Ltd, 174811, Navan, Ireland				
Rennicks and Bennett Ltd, 34596, Navan, Ireland				
Boliden Odda AS, 911177870, Odda, Norway				
Boliden Bergsöe AB, 556041-8823, Landskrona, Sweden				
Boliden Bergsoe AS, 20862149, Glostrup, Denmark				
Boliden Kylylahti Oy, 1925412-3, Polvijärvi, Finland				
Boliden Kuhmo Oy, 1925450-2, Polvijärvi, Finland				
Boliden Kevitsa Mining Oy, 2345699-1, Sodankylä, Finland				
Boliden FinnEx Oy, 2345662-5, Sodankylä, Finland				
Other subsidiaries, dormant or of minor importance				
			3,911	3,911

During the year, the Parent Company, Boliden AB, received a dividend totaling SEK – m (7,000) from Boliden Mineral AB and a dividend totaling SEK – m (36) from Boliden Limited.

## Note 17 Participations in associated companies

	31.12.2020	31.12.2019
Book value at the beginning of the year	9	25
Dividends received	-	-10
Liquidation results	-	-6
Exchange rate differences	0	0
Share in associated companies' profits for the year	0	0
Book value at year-end	9	9

	Corporate ID number	Registered office	Number of participations	Percentage share	Value of equity share in the Group
Indirectly owned					
KIP Service OY	2240650-3	Kokkola	3,280	46	9
					9

## Note 18 Tax

#### ACCOUNTING PRINCIPLES

The tax expense (income) for the period comprises current tax and deferred tax. Tax is reported in the Income Statement, Other comprehensive income or Equity, depending on where the underlying transaction has been reported.

Current tax is the tax calculated on the taxable profit/loss for each period. The year's taxable profit/loss differs from the year's reported profit/loss before tax in that it has been adjusted for non-taxable and non-deductible items and temporary differences. The Group's current tax liability is calculated in accordance with the taxation rates stipulated or announced on the closing day.

Deferred tax is reported using the balance sheet method, under which deferred tax liabilities are reported in the Balance Sheet for all

taxable temporary differences between reported and fiscal values of assets and liabilities. Deferred tax assets are reported in the Balance Sheet in respect of loss carry-forwards and all deductible temporary differences to the extent that it is likely that these amounts can be used to offset future taxable surpluses. The reported value of deferred tax assets is reviewed at the end of each accounting period and reduced to the extent that it is no longer likely that sufficient taxable surpluses will be available for its use. Deferred tax is calculated in accordance with the taxation rates that are expected to apply to the period in which the asset is recovered or the liability settled.

Both deferred and current tax receivables and tax liabilities are offset when they relate to income tax levied by the same tax authority.

		_
Current tax expenses	2020	2019
Tax expenses for the period	<b>-1,68</b> 6	-1,334
Adjustment of tax attributable to previous years	-2	9
	-1,688	-1,325
Deferred tax expense (-) / tax income (+)		
Deferred tax income/tax expenses in respect of temporary differences	<b>-286</b>	-223
Deferred tax income in tax value loss carryforward capitalized during the year	104	-
Revaluation of deferred tax due to a change in the taxation rate	3	-1
	<b>-17</b> 9	-224
Total reported tax expense (-) / tax income (+)	<mark>-1,867</mark>	-1,548
Reconciliation of effective tax		
Reported profit before tax	8,668	7,337
Tax according to current taxation rate	-1,810	-1,559
Fiscal effect of non-deductible expenses	<b>–6</b> C	<b>–</b> 7
Fiscal effect of non-taxable income	5	2
Deductible costs not reported in the Income Statement	4	6
Market valuation of deferred tax assets	-7	3
Revaluation effect due to a change in the taxation rate	3	-1
Adjustment of tax attributable to previous years	-2	9
Total reported tax expenses	-1,867	-1,548

Tax expenses comprise 21.5% (21.1) of the Group's pre-tax profit. The anticipated tax expense for 2020 of 20.9% (21.2) has been calculated given the current Group structure and applicable taxation rates in the respective countries.

#### Deferred tax assets/tax liability

The tax assets reported in the Balance Sheet and the provision for deferred tax relates to the following assets and liabilities.

		31.12.2020			31.12.2019	
The Group	Deferred tax asset	Deferred tax liability	Net	Deferred tax asset	Deferred tax liability	Net
Intangible assets	3	-5	-2	3	-7	-3
Buildings and land	109	-109	-	143	-105	37
Machinery and equipment	7	-2,888	-2,881	8	-2,736	-2,728
Deferred mining costs	-	-141	-141	-	-153	-153
Other property, plant and equipment	1	-4	-3	1	-5	-4
Inventories	119	-664	-545	120	-560	-440
Non-current liabilities	273	-2	271	300	-9	291
Tax losses carried forward	99	_	99	_	-	-
Total	611	-3,813	-3,202	575	-3,576	-3,001
Offset within companies	-517	517	_	-448	448	_
Total deferred tax assets/tax liability	94	-3,296	-3,202	127	-3,128	-3,001

#### Change in deferred tax in respect of temporary differences and tax losses carried forward

The Group 2020	Amount at the beginning of the year	Reported in the Income Statement	Reported in Other com- prehensive income	Translation difference	Amount at year-end
Intangible assets	-3	1	-	-	-2
Buildings and land	37	-25	-	-12	0
Machinery and equipment	-2,728	-197	-	44	-2,881
Deferred mining costs	-153	7	_	5	-141
Other property, plant and equipment	-4	1	-	-	-3
Inventories	-440	-105	_	_	-545
Non-current liabilities	291	35	-48	-7	271
Tax losses carried forward	-	104	-	-4	100
Total	-3,001	-179	-48	26	-3,202

#### Change in deferred tax in respect of temporary differences and tax losses carried forward

The Group 2019	Amount at the beginning of the year	Reported in the Income Statement	Reported in Other com- prehensive income	Translation difference	Amount at year-end
Intangible assets	14	-18	-	0	-3
Buildings and land	80	-48	-	6	37
Machinery and equipment	-2,773	58	-	-13	-2,728
Deferred mining costs	-43	-111	-	1	-153
Other property, plant and equipment	-4	-	-	-	-4
Inventories	-327	-114	-	0	-440
Non-current liabilities	247	9	33	2	291
Total	-2 804	-224	33	_4	-3 001

#### Tax losses carried forward

Unutilized tax losses carried forward for which deferred tax assets have not been reported totaled SEK 72 m (73) in Canada on December 31, 2020, which will mature between 2030 and 2037. It is considered unlikely that the loss can be offset against future surpluses as no operations are conducted in Canada.

## Note 19 Inventories

#### **ACCOUNTING PRINCIPLES**

The Group's inventories primarily comprise mined concentrates, materials tied up in the smelters' production processes and finished metals. Inventories are valued at whichever is the lower of the historical cost in accordance with the first-in-first-out principle and the net sale value, taking into account the risk of obsolescence. The historical cost of inventories of metals from the company's mines and semi-finished and finished products manufactured in house comprises the direct manufacturing costs plus a surcharge for indirect  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left( 1\right) +\left( 1\right) \left( 1$ manufacturing costs. Supplies inventories are valued at whichever is the lower of the average historical cost and the replacement value. When mined concentrates are bought in from external sources and definitive pricing has not yet occurred, the acquisition value is estimated at the closing day price. Fair value hedging is effected in conjunction with the definitive pricing of mined concentrates. The change in the value of hedged items in the inventory value is also reported in conjunction with fair value hedging of mined concentrates and finished metals

	31.12.2020	31.12.2019
Raw materials and consumables	7,150	6,882
Goods under manufacture	5,520	4,650
Finished goods and tradable goods	1,569	1,731
	14,238	13,262

#### Tax paid by country

2020	2019
1,326	1,558
203	396
-18	62
97	41
1	3
1,608	2,060
	1,326 203 -18 97 1

### Note 20 Trade and other receivables

#### **ACCOUNTING PRINCIPLES**

Receivables are classified as trade and other receivables as well as interest-bearing short-term holdings of securities or other investments, which are not classified as non-current assets and which are not attributable to cash and cash equivalents. Receivables are reported at the anticipated recoverable amount, i.e. after deductions for expected credit losses. The anticipated term of trade receivables and other current receivables is short, and the value is, therefore, reported at the nominal amount without any discounting, in accordance with the amortized cost method.

Boliden applies the simplified method for reporting expected credit losses through trade and other receivables, which take place on an individual basis. The need to recognize impairment is evaluated on each closing day based on expected credit losses, which constitutes an assessment that reflects an objective, probability-weighted outcome based on reasonable, verifiable data. For information on the management of credit risks, see Credit risks in trade and other receivables on page 56 in the Risk management section of the Directors' Report.

On December 31, 2020, trade and other receivables falling due for payment in more than 30 days totaled SEK 11 m (10), corresponding to 0.3% (0.5) of total trade and other receivables. Provisions for expected credit losses are not reported on the basis of materiality.

	31.12.2020	31.12.2019
Trade and other receivables not due	3,386	1,764
Overdue O-30 days	234	345
Overdue 31–60 days	10	5
Overdue 61–90 days	0	4
Overdue more than 90 days	1	1
	3,631	2,119

The overwhelming majority of the Group's trade and other receivables relate to European customers. Trade and other receivables in foreign currencies have been valued at the closing day rate. Note 3, Information per business segment and geographical market, shows the breakdown of revenues by geographical area.

### Note 21 Other current receivables

	31.12.2020	31.12.2019
Energy tax	74	81
Royalties	341	295
Other prepaid expenses and accrued income	267	222
VAT recoverable	522	496
Other current receivables	329	359
	1,533	1,453

## Note 22 Related party disclosures

#### Relationships

The Parent Company's directly owned subsidiaries are reported in Note 16, Participations in Subsidiaries; associated companies are reported in Note 17, Participations in Associated companies. Information regarding the Members of the Board and Group management, and the remuneration paid to these, is presented in Note 5, Employees and personnel costs and in the Corporate Governance Report on pages 65–67.

## Transactions

No Board member or senior executive in the Group participates or has participated, directly or indirectly, in any business transactions during the current or previous financial year between themselves and the Group which are or were unusual in nature with regard to their terms. Nor has the Group granted loans, issued guarantees or provided sureties to any Board member or senior executives of the Company, During the year, the Parent Company, Boliden AB, received a dividend totaling SEK – m (7,000) from Boliden Mineral AB and a dividend totaling SEK – m (36) from Boliden Limited.

### Note 23 Equity

#### **ACCOUNTING PRINCIPLES**

#### Share capital

Ordinary shares are classified as share capital. Transaction costs in conjunction with a new share issue are reported as a net amount after tax for deduction from the issue proceeds received.

#### Buv-back of own shares

Boliden's holdings of its own shares are reported as a reduction in equity. Transaction costs are reported directly against equity.

#### Dividend

A dividend payment proposed by the Board of Directors does not reduce the equity until it has been approved by the Annual General Meeting.

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Share capital	31.12.2020	31.12.2019
Opening number of shares	273,511,169	273,511,169
Stock split 2:1	-	273,511,169
Redemption	-	-273,511,169
Closing number of shares	273,511,169	273,511,169
Nominal value, SEK	578,914,338	578,914,338
Nominal value per share	2.12	2.12
Equity, SEK m	31.12.2020	31.12.2019
Share capital	579	579
Total equity	45,638	41,440
Equity attributable to the owners of the Parent Company	45,625	41,429
Equity per share, SEK	166.81	151.47
Earnings per share	31.12.2020	31.12.2019
Net profit for the year attributable to the owners of the Parent Company, SEK m	6,799	5,786
Average number of shares, before and after dilution	273,511,169	273,511,169
Number of own shares held	-	_
Earnings per share, SEK	24.86	21.15

#### Equity

The Articles of Association for Boliden AB state that the share capital must comprise a minimum of SEK 200 m and a maximum of SEK 800 m. Share capital comprises a single class of share.

There are no potential shares and hence no dilution effect.

The Annual General Meeting held on April 28, 2020 resolved to pay a dividend of SEK 7.00 per share, in all SEK 1,915 m.

Boliden's Board of Directors will propose to the Annual General Meeting that a dividend of SEK 8.25 (7.00) per share be paid, equivalent to a total of SEK 2,256 m. Boliden's dividend policy requires approximately one-third of the net profit after tax to be disbursed.

The Board of Directors of Boliden also proposes that the Annual General Meeting approve an autoamtic share redemption procedure whereby every share is divided into one ordinary share and one redemption share. The redemption share will then automatically be redeemed for SEK 6.00 (-) per share, corresponding to a total of SEK 1.641 m.

This, in combination with the proposed ordinary dividend, will, subject to the approval of the Annual General Meeting, mean that shareholders receive SEK 14.25 (7.00) per share, corresponding to a total of SEK 3,898 m.

#### Earnings per share

Earnings per share are calculated by dividing the profit for the period attributable to the owners of the Parent Company by the average number of shares.

#### **Asset management**

Boliden's managed assets comprise equity. Consolidated equity is presented on page 71. There is also a description of the content of the various capital categories. There are no external capital requirements other than those mandated in the Swedish Companies Act.

Boliden monitors its capital structure e.g. with the aid of the net debt/equity ratio. The net debt/equity ratio is calculated as the net of interest-bearing provisions and liabilities less financial assets including cash and cash equivalents, divided by equity.

See page 8 for details of Boliden's dividend policy and net debt target.

#### Note 24 Provisions for pensions and similar obligations

#### **ACCOUNTING PRINCIPLES**

#### **Employee benefits**

#### Pension commitments

The Group's companies have a variety of pension systems in accordance with local conditions and practices in the countries in which they operate. These are generally financed through payments made to insurance companies or through the company's own provisions, which are determined through periodic actuarial calculations. The Group's provisions for pension commitments are calculated in accordance with IAS 19 Employee benefits.

For pension systems where the employer is committed to defined contribution systems, the obligation in relation to the employee ceases when the agreed premiums have been paid. Premiums paid are booked as costs on an ongoing basis.

The obligation does not cease for pension systems where a defined benefit pension has been contractually agreed, until the agreed pensions have been paid out. Boliden commissions independent actuaries to calculate pension obligations relating to the defined benefit pension plan arrangements in each country. For information on calculation parameters, see Note 2, Estimates and assessments: Pension commitments.

Revaluations of the defined benefit net pension liability, such as actuarial gains and/or losses and the difference between the return on plan assets and the discount rate, are reported under Other comprehensive income including attributable special payroll tax. The financing cost of the net pension liability is calculated using the discount rate for the pension liability. The financing cost, the cost of service during the current period and any previous periods, losses from settlements and costs in connection with special payroll tax are all reported in the Income Statement. Special payroll tax is regarded as  $\label{eq:control} % \begin{center} \end{center} \begin{center} \end{c$ part of the total net pension liability.

Boliden has established pension plans in the countries in which the company operates. The pension plans include both defined benefit and defined contribution plans. The defined benefit plans provide the employee with a fixed amount of their final salary in conjunction with retirement. Boliden's defined benefit pension plans are mainly operated in Sweden and Ireland, and to a small extent in Norway and Finland. The defined contribution plans comply with local regulations in the respective countries. Boliden has defined contribution plans in Sweden, Ireland, Finland and Norway.

#### Sweden

Boliden's pension obligations in Sweden are not invested in funds. The pension obligations are secured through the Swedish PRI/FPG system and through insurance companies. The majority of the pension commitments for salaried employees are secured through insurance with Alecta and are lifelong retirement pensions. The benefits offered by the lifelong pensions are determined using different percentages for different salary intervals. Alecta has not provided sufficient information for the 2020 financial year for the ITP plan to be reported as a defined benefit plan, thus it is reported as a defined contribution plan under UFR 10, Reporting of ITP 2 pension plan financed through insurance with Alecta. A surplus in Alecta can be allocated to the policyholders and/or those insured. At the end of the year, Alecta's collective consolidation level was 148% (148). The collective consolidation level comprises the market value of Alecta's assets as a percentage of the insurance commitments calculated in accordance with Alecta's actuarial calculation assumptions, which do not correspond with those of IAS 19. Boliden's pension obligations account for only a very small percentage of Alecta's insurance commitments. There are, in addition to the ITP plans, a few previously earned temporary retirement pensions within Boliden.

"Gruvplanen" (GP) is a pension agreement for underground workers. The plan grants underground workers entitlement to receive a pension between the ages of 60 and 65 and between 65 and 70 under certain preconditions based on an average income. The "Gruvplanen" plan was closed to new earners in 2011 and replaced by a defined contribution pension plan (GLP). The commitments change from vesting to non-vesting in conjunction with retirement.

#### Ireland

The pension commitment is secured by the transfer of funds to four defined benefit plans and one defined contribution plan. The defined benefit plans are closed to new employees. The pension plans are governed by the Irish Pensions Board and Irish Pensions Legislation. All of the defined benefit pension plans are funded. The largest defined benefit plan and the defined contribution pension plan both have Board Members from the company and the members. Boliden has appointed the Irish Pension Trust to manage the other defined

The financial position of the pension plans is reviewed every three years by an actuary in order to determine the requisite financing level. The actuary ensures that Boliden receives annual reports on the financial position in accordance with accounting requirements. Payments are made to all five plans through a combination of contributions from both Boliden and employees in accordance with employment contracts. No other deposits are made.

The Board of the pension plans is responsible for investments in plan assets. The majority of the shares are invested in companies operating in the health care, financial services and raw materials sectors that are based in North America (58%) and Europe (35%), and which are measured against sector indices and other benchmarks. A significant proportion, namely 72%, of plan assets are placed in European government bonds to reduce the risk. Cash and cash equivalents are held in order to facilitate pension disbursements.

#### Events during the year

The current value of Boliden's pension commitment is slightly higher than last year's level (recalculated), largely due to the effect of amended assumptions.

The Group's reported pension liability totals SEK 1,159 m (1,113), which includes endowment insurance and similar commitments totaling SEK 117 m (115) in respect of defined contribution pension plans

#### Actuarial assumptions during the year

Costs, commitments and other factors in pension plans are calculated by means of the Projected Unit Credit Method, using the assumptions shown in the table on the next page.

The discount rate is established for every geographical market with reference to the market return on company bonds on the closing day. In Sweden, where there is no functioning market for such bonds, the market return on housing bonds has been used and a premium for a longer term added, based on the duration of the pension

The financing cost of the net pension liability is calculated using the discount rate and is reported under Boliden's net financial items.

	Swe	den	Irela	and	Otl	her	
Actuarial assumptions (weighted average)	2020	2019	2020	2019	2020	2019	
Discount rate, %	1.5	1.80	0.95	1.20	0.5–1.5	1.5–1.8	
Future pay increases, %	2.00	2.30	1.75	1.20	2.00-2.3	1.8-2.25	
Future pension increases, %	1.5	1.80	1.25	1.20	1.3	1.8	
Life expectancy							
Women	89	89	89	89	90	90	
Men	87	87	88	87	86	86	

	Swed	den	Irela	and	Oth	er	Tota	al
Specification of provisions for pensions	2020	2019	2020	2019	2020	2019	2020	2019
Pension obligation at the beginning of the year	985	840	-6	12	19	13	998	865
Defined benefit plan costs	58	57	5	6	11	12	73	75
Revaluations recognized in Other comprehensive								
income	23	130	12	-3	0	3	36	130
Payments and disbursements	-38	-42	-17	-21	-8	<b>-</b> 7	-63	-70
Translation differences	-	_	0	0	-3	-2	-3	_2
Pension obligation at year-end <sup>1)</sup>	1,028	985	-6	-6	19	19	1,042	998
Endowment insurance and similar commitments	117	115	_	_	_	-	117	115
Net debt, as per Balance Sheet 2)	1,146	1,100	-6	-6	19	19	1,159	1,113
Specification of provisions for pensions, as per December 31								
Pension obligations, funded	-	-	275	264	24	24	299	289
Pension obligations, unfunded	1,028	985	-	-	12	11	1,040	997
Fair value of plan assets	-	_	-281	-271	-16	-17	-297	-287
Pension obligations	1,028	985	-6	-6	19	19	1,042	998
Endowment insurance and similar commitments	117	115	_	-	-	-	117	115
Net debt, as per Balance Sheet	1,146	1,100	-6	-6	19	19	1,159	1,113
Specification of costs								
Cost of defined benefit plans								
Current service cost	43	37	3	4	11	12	56	53
Interest expense on obligations	14	20	3	5	0	0	17	25
Interest income from plan assets	-	-	-3	<b>-</b> 5	0	-	-3	-5
Special payroll tax and other tax	1	0	-	-	-	-	1	0
Administrative costs and premiums paid	-	_	2	3	0	0	2	3
Total cost of defined benefit plans	58	57	5	6	11	12	73	75
Cost of defined contribution plans	98	98	46	42	167	181	311	321
Total pension costs	156	155	51	48	178	193	385	396

<sup>&</sup>lt;sup>1)</sup> Obligations in Sweden include obligations in accordance with PRI/FGI totaling SEK 748 m (703), obligations for underground workers totaling SEK 172 m (177), and other obligations totaling SEK 0 m (0).

<sup>&</sup>lt;sup>2)</sup> The pension liability reported in the Balance Sheet includes not only the defined benefit pension obligations and endowment insurance, but also special payroll tax in Sweden.

	Swed	den	Irela	ind	Oth	er	Total	al
Reconciliation of pension obligations	2020	2019	2020	2019	2020	2019	2020	2019
Present value of obligations at the								
beginning of the year	985	840	264	289	35	30	1,286	1,160
Current service cost	43	37	3	4	11	12	56	53
Interest expense on obligations	14	20	3	5	0	0	17	25
Special payroll tax	1	0	-	-	-	-	1	0
Revaluation of defined benefit pension liability recognized in Other comprehensive income	23	130	12	21	1	3	36	154
of which gain/loss as a result of financial assumptions	17	90	8	23	0	0	25	113
of which gain/loss as a result of experience-based assumptions	6	40	4	-2	0	3	11	41
Disbursements made	-38	-42	-12	-59	-8	-7	-59	-107
Translation differences	-	-	5	4	-2	-3	2	1
Present value of obligations at year-end	1,028	985	275	264	36	35	1,339	1,286
Endowment insurance and similar commitments	117	115	_	_	_	_	117	115
of which amounts attributable to active employees	410	576	88	78	26	26	524	680
of which amounts attributable to holders of paid up policies	353	247	8	11	-	_	361	258
of which amounts attributable to retired employees	383	277	179	175	10	9	572	461
Reconciliation of plan assets Fair value of plan assets at the beginning of the year	-	_	271	277	17	16	288	293
Interest income from plan assets	_	_	3	5	0	0	3	5
Return on plan assets excluding amounts included in net interest items, recognized in Other comprehensive income	_	_	0	24	1	0	1	24
Fees from the employer excluding disbursements in conjunction with terminations	_	_	17	21	, _	_	17	21
Disbursements made	_	_	-12	-59	-2	_	-14	-59
Administrative costs, tax and premiums paid	_	_	-2	-3	_	_	-2	-3
Translation differences	_	_	4	6	0	1	4	7
Fair value of plan assets at year-end	_		281	271	16	17	297	288
			_					
Net debt, as per Balance Sheet <sup>1)</sup>							1,159	1,113
$^{\mathfrak{I}\mathfrak{J}}$ Including endowment insurance and similar obligations t	otaling SEK 1	17 m (115).						
Specification of plan assets								
Listed shares and participations	-	-	48	76	-	-	48	76
Interest-bearing securities	-	-	231	194	-	-	231	194
Cash and cash equivalents	-	-	2	1	-	-	2	1
Other	-	-		_	16	17	16	17
	-	-	281	271	16	17	297	288

Sensitivity analysis of the effect on the defined benefit pension liability				
(+increase/-decrease in pension liability)		Sweden	Ireland	Total
Significant actuarial assumptions				
Discount rate, %	+0.5	-76	-16	-92
	-0.5	87	16	103
Pay increases, %	+0.5	59	-1	58
	-0.5	-50	1	-49
Increased life expectancy, years	-1	-29	0	-29
	+1	29	10	39

The sensitivity analysis has been conducted on the basis of the above actuarial changes, as Boliden is of the opinion that they can have a substantial impact on the pension liability. It is also likely that changes to these assumptions will be made. The calculations have been performed by means of the analysis of each change individually, and the

calculations have not taken into account any interdependence between the assumptions. No sensitivity analyses have been conducted for Norway and Finland as the amounts in question are insignificant. Other countries have no defined benefit pension liabilities.

Defined benefit pension liability terms	Sweden	Ireland	Other	Total
Benefits scheduled for disbursement within 12 months	51	12	4	67
Benefits scheduled for disbursement within 1-5 years	203	67	18	288
Benefits scheduled for disbursement after 5 years or more	892	412	22	1.326

The maturity of plan assets in Ireland has reduced anticipated payments after five years or more. The weighted average duration of the defined benefit pension liability is 18 years for Sweden and 13 years for Ireland.

## Note 25 Other provisions

#### **ACCOUNTING PRINCIPLES**

Provisions are reported when the Group has, or may be considered to have, an obligation as a result of events that have occurred and it is likely that disbursements will be required in order to fulfill this obligation. A further prerequisite is that it should be possible to make a reliable estimate of the amount to be disbursed.

When a significant effect arises due to the point in time at which a provision is made, the provision is valued at the present value of the amount expected to be required to settle the obligation. A discount interest rate is used before tax that reflects current market evaluations of the time value of money in the long term and the risks associated with the provision. The increase due to the passing of time is reported as an interest expense. Provisions are broken down into current and non-current parts.

With the exception of pensions (see Note 24), Boliden's provisions refer primarily to reclamation costs that are expected to arise when an operation is decommissioned. Provisions are also made for any purchases of emission rights and for any remuneration payable in conjunction with the termination of employment that may be payable to employees to whom a commitment of termination has been given or to employees who accept voluntary redundancy. The Group reports a provision and a cost in conjunction with a termination when Boliden is obligated either to give the employee notice prior to the normal point in time for employment's cessation, or to provide remuneration with a view to encouraging early retirement.

	31.12.2020	31.12.2019
Reclamation costs	4,837	5,086
Other	297	15
	5,134	5,100
Of which:		
Non-current	4,880	4,930
Current	254	170
	5,134	5,100

#### **Reclamation costs**

Provisions for reclamation costs are made on the basis of an assessment of future costs based on current technology and other conditions. The present value of assessed reclamation liabilities are reserved in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets and IFRIC 1 Changes in Existing Decommissioning, Restoration and Similar Liabilities. We strive to achieve gradual reclamation, but most reclamation work takes place following a decision to decommission. In historical terms, Boliden has succeeded in extending the useful life of its mining assets compared with the original plans. Provisions for reclamation are reviewed on an ongoing basis. Additions to, and reversal of, existing provisions of net SEK 195 m, are attributable to the usual review of reclamation requirements and an assessment of the mine's lifespan.

To determine the size of the reclamation liability, a real discount rate of 2%(2) has been used. A sensitivity analysis in respect of the discount rate is presented in Note 2, Estimates and assessments.

	2	2020		2019			
The Group	Reclamation costs	Other	Total	Reclamation costs	Other	Total	
Book value at the beginning of the year	5,086	15	5,100	4,016	16	4,032	
Additions to existing provisions	39	_	39	915	3	918	
Provision during the year	34	304	338	139	-	139	
Reversal of existing provisions	-235	-5	-240	-	-1	-1	
Payments	-116	-3	-119	-81	-3	-84	
Discount effect for the period	98	0	98	91	0	91	
Translation difference	-69	-13	-81	6	0	6	
Book value at year-end	4,837	297	5,134	5,086	15	5,100	
Anticipated time of outflow of resources:							
Within one year	254	0	254	170	0	170	
Between one and two years	226	4	230	339	9	348	
Between three and five years	431	289	720	478	1	479	
More than five years	3,926	4	3,930	4,098	5	4,103	
	4,837	297	5,134	5,086	15	5,100	

## Note 26 Financial instruments

#### **ACCOUNTING PRINCIPLES**

The following financial instruments, i.e. financial assets and liabilities, are recognized in the Balance Sheet: shares, receivables, cash and cash equivalents, liabilities and derivatives.

Financial instruments are recognized in the Balance Sheet when the company becomes bound by the instrument's contractual terms (the economic approach). However, liabilities to credit institutions are not reported until the settlement date. Financial assets are removed from the Balance Sheet when the rights entailed by the agreement are utilized, mature or are transferred to another counterparty. Financial liabilities are removed from the Balance Sheet when the agreement's obligations are fulfilled or if significant aspects of the loan terms are renegotiated.

Financial instruments are reported at the fair value or amortized cost, depending on the initial categorization under IFRS 9 Financial Instruments.

Changes to IFRS 9 resulting from the exchange of reference rates (interbank offered rates), "Interest Rate Benchmark Reform amendments to IFRS 9, IAS 39 and IFRS 7", have had no effect on these financial reports.

#### Valuation principles

#### Fair value

The fair value of derivatives is based on listed bid and ask prices on the closing day and on a discounting of estimated cash flows. Market prices for metals are taken from the trading locations of metal derivatives, i.e. the London Metal Exchange (LME) and the London Bullion Market Association (LBMA). Discount rates are based on current market rates per currency and time to maturity for the financial instrument. Exchange rates are obtained from the Riksbank (Swedish Central Bank).

When disclosing the fair value of liabilities to credit institutions, the fair value is calculated as discounted agreed amortizations and interest payments at estimated market interest rate levels. The fair value of trade and other receivables and trade and other payables is deemed to be the same as the reported value due to the short term to maturity, to the fact that provisions are made for bad debts, and to the fact that any penalty interest incurred will be debited. The fair value of cash and cash equivalents is deemed to be the same as the reported value, since the anticipated credit losses are insignificant. The general credit rating of the banks has been applied in order to calculate credit losses which have been deemed to be insignificant.

If changes in value cannot be determined for financial assets or liabilities reported at fair value, they are reported at the historical costs of the instruments at their time of acquisition, which corresponds to the fair value at the time of acquisition.

Boliden provides information on all financial assets and liabilities reported at fair value in the Balance Sheet on the basis of a three-level fair value hierarchy. Level one comprises instruments that are

listed and traded on an active market where identical instruments are traded. Level two comprises instruments that are not traded on an active market, but where observable market data is used for valuation of the instrument (either directly or indirectly). Level three comprises instruments where the valuation is, to a considerable extent, based on unobservable market data.

The assessments have been conducted on the basis of the circumstances and factors that apply with regard to the various instruments. Metal futures are classified as level two, in that the discounted prices are based on listed daily prices from the exchanges. Currency futures and interest rate swaps have also been classified as level two, with reference to the fact that the valuation is based on observable market data. The fair value of liabilities to credit institutions has been classified as level two, as these are calculated as discounted agreed amortizations and interest payments at estimated market interest rate levels. The fair value therfore essentially corresponds to the reported value. Shares and participations that are not listed have been classified as level three. Exceptions to classification on the basis of the fair value hierarchy are made for trade and other receivables, cash and cash equivalents, and trade and other payables where the reported value is deemed to constitute a reasonable estimation of the fair value.

#### Amortized cost

Amortized cost is calculated using the effective interest rate method. This means that any premiums or discounts, as well as expenses or income directly attributable to them, are distributed over the duration of the contract with the aid of the estimated effective interest rate. The effective interest rate is the rate that yields the instrument's historical cost as a result in conjunction with current value calculation of future cash flows.

#### Financial assets at amortized cost

The financial assets in this category include financial investments, cash and cash equivalents, and receivables not listed on an active market. These financial instruments are characterized by being part of a business model whose purpose is to be held until maturity and to collect cash flows from payments of principals and any interest.

#### Financial assets at fair value through profit or loss

Financial instruments in the category fair value through profit or loss are characterized by being part of a business model whose purpose is to be held until maturity or held for sale, and which are expected to be sold in a near future. Financial assets in this category are valued at fair value and changes in value are reported in the Income Statement. Shares for which the fair value cannot be established are reported at their historical cost, taking into account accumulated impairments.

## Financial assets and liabilities by valuation category

31.12.2020	Valuation hierarchy	Amortized cost	Fair value through profit or loss	Derivatives (hedge accounting)	Total reported value	Total fair value
ASSETS	,					
Financial assets						
Other shares and participations	3		6		6	6
Derivative instruments	2			6	6	6
Current assets						
Current receivables						
Trade and other receivables		3,631			3,631	3,631
Derivative instruments	2		69	68	137	137
Cash and cash equivalents		5,060			5,060	5,060
Total financial assets		8,691	75	74	8,839	8,839
LIABILITIES						
Non-current liabilities						
Liabilities to credit institutions	2	5,951			5,951	5,958
Derivative instruments	2			17	17	17
Current liabilities						
Liabilities to credit institutions	2	0			0	0
Trade and other payables		6,607			6,607	6,607
Derivative instruments	2		5	32	37	37
Total financial liabilities		12,558	5	49	12,612	12,619

Boliden's financial instruments, which are reported at fair value in the Balance Sheet, are classified as level two in the fair value hierarchy, with the exception of a small amount in other shares and participations that are classified as level three.

	V-bti		Fair value	Derivatives	T-4-1	
31.12.2019	Valuation hierarchy	Amortized cost	through profit or loss	(hedge accounting)	Total reported value	Total fair value
ASSETS						
Financial assets						
Other shares and participations	3		6		6	6
Derivative instruments	2			18	18	18
Current assets						
Current receivables						
Trade and other receivables		2,119			2,119	2,119
Derivative instruments	2		43	32	75	75
Cash and cash equivalents		1,373			1,373	1,373
Total financial assets		3,492	49	50	3,590	3,590
LIABILITIES						
Non-current liabilities						
Liabilities to credit institutions	2	3,261			3,261	3,265
Current liabilities						
Liabilities to credit institutions	2	2,242			2,242	2,242
Trade and other payables		6,391			6,391	6,391
Derivative instruments	2		12	117	129	129
Total financial liabilities		11,894	12	117	12,023	12,027

## Note 27 Financial derivative instruments and hedge accounting

#### Derivatives

Derivatives that are valued at fair value, and for which changes in the value are reported in net financial items, consist of currency futures and are not included in the hedge accounting.

#### Hedge accounting

Derivatives used in hedge accounting comprise derivatives valued at fair value included in fair value hedging or cash flow hedging. The derivatives comprise metals futures, currency futures and interest rate derivatives. The hedge relationship is identified and documented. For Boliden's risk management policies and strategy objectives for the hedge, see also "Risk management" in the Directors' Report on pages 54–57. An assessment of efficacy of the hedge is documented both when hedging commences and on an ongoing basis. Efficacy is assessed by means of an analysis of the economic correlation between the hedged item and hedging instrument, and by ensuring that the effect of the credit risk does not dominate changes in the value of underlying items and instruments. The hedge ratio for the hedge relationship is the same as in the actual hedge.

#### Fair value hedging (binding undertaking)

Changes in the value of financial derivatives used to hedge a binding undertaking are reported under the operating profit together with changes in the value of the asset or liability that the hedging is designed to counter. Parts of inventories constitute binding undertakings and are reported at market value as inventory value. Changes in the value of derivatives consequently effectively match the changes in value from hedged items in the Income Statement and Balance Sheet.

#### Cash flow hedging (forecast cash flows)

Hedge accounting is applied to financial derivatives that refer to the hedging of forecast flows. This means that the effective share of the unrealized market values is reported under Other comprehensive income up to the point in time when the hedged item, such as forecast metal sales, US dollar income and interest expenses, is realized and thus reported in the Income Statement. Realized profits/losses attributable to metal and currency derivatives are reported under net sales, while the profits/losses on interest rate derivatives are reported under net financial items. Any ineffective part of cash flow hedging is reported under net financial items.

#### Hedging of net investments

Hedge accounting is applied to the profit/loss on hedging in respect of net investments in overseas operations under Other comprehensive income. Any ineffective component of these hedges is reported under net financial items. In conjunction with the sale of overseas operations, associated hedging results are reported in the Income Statement, together with the translation effect of the net investment.

#### Offsetting of financial assets and liabilities

The offsetting of financial assets and liabilities is regulated by ISDA (International Swaps and Derivatives Association) agreements, which regulate both offsetting between contracted counterparties as part of operating activities and in conjunction with circumstances relating to breach of contract or early termination. See also the Risk management section for dealing with counterparty risk, pages 54–57.

	31.12.2	020	31.12.2019	
Outstanding derivative instruments, SEK m	Nominal amount	Fair value	Nominal amount	Fair value
Transaction exposure (binding undertakings) <sup>1)</sup>				_
Currency futures	<b>-</b> 5,787	54	-5,947	43
Raw material derivatives	<b>-</b> 2,187	48	-1,482	-88
Transaction exposure (forecast cash flow) <sup>1)</sup>				
Currency futures	85	-1	-434	-7
Interest derivatives	<b>-</b> 5,057	-12	-1,480	16
Total		89		-36

<sup>1)</sup> Find out more about the Group's transaction exposure in Risk management on page 56.

Hedge accounting, SEK m	2020	2019
Fair value hedging		
– Changes in value of hedging instruments in respect of binding undertakings	-1,058	-835
– Change in value of hedged item	1,058	835
Ineffectiveness of fair value hedging	-	-
Ineffectiveness of cash flow hedging	-	-
Ineffectiveness of hedging net investments in overseas operations	-	-
Total ineffectiveness	0	0

The effect on income for 2020 from effective cash flow hedges in respect of transaction exposure totaled SEK -2 m (2), relating to interest rate swaps.

#### Offsetting of financial assets and liabilities

Amount comprised by offsetting in

conjunction with insolvency, etc

Net debt

	31.12.2020	31.12.2019
Gross amount for financial assets	258	152
Amount offset in Balance Sheet	-115	-59
Net asset reported in Balance Sheet	143	93
Amount comprised by offsetting in conjunction with insolvency, etc.	-24	-34
Net asset	119	60
	31.12.2020	31.12.2019
Gross amount for financial liabilities	168	188
Amount offset in Balance Sheet	-115	-59

-24

30

-34

96

## Note 28 Risk information

See the section entitled "Risk management" in the Directors' Report on pages 54-57 for a description of Boliden's financial risks. The amounts reported refer to the Group.

#### Sensitivity analysis

#### Operating profit, excluding outstanding derivatives:

The table below presents an estimate of how changes in market terms will affect the Group's operating profit over the next 12 months. The calculation is based on listings on December 31, 2020 and on Boliden's planned production volumes. The sensitivity analysis does not

take into account the effects of metal price hedging, currency hedging, contracted treatment charges, or the revaluation of process inventory in Smelters.

		202	0			201	9	
Change in metal prices, +10% SEK m	Operating profit	Net financial items	Tax	Equity	Operating profit	Net financial items	Tax	Equity
Copper	815	13	-173	655	785	8	-170	623
Zinc	760	12	-161	611	750	8	-162	596
Gold	390	6	-83	313	400	4	-86	318
Silver	270	4	-57	217	185	2	-40	147
Nickel	230	4	-49	185	150	2	-32	119
Lead	130	2	-28	104	110	1	-24	87
Change in exchange rates, +10%								
USD/SEK	1,735	27	-368	1,394	1,600	17	-346	1,270
EUR/USD	1,110	18	-236	892	1,065	11	-230	846
USD/NOK	155	2	-33	125	165	2	-36	131
Change in treatment charges, +10%								
TC Zinc	90	1	-19	72	90	1	-19	71
TC/RC Copper	40	1	-8	32	65	1	-14	52
TC Lead	-10	0	2	-8	-10	0	2	-8
Change in market interest rates by +1% 1)		62	-13	49		58	-12	46

## Other Comprehensive Income, including outstanding derivatives:

The table on the right provides an estimation of the effect on Other Comprehensive Income (revenue and expense items including reclassification adjustments not reported in profits), before tax, from the change in value of outstanding derivatives based on closing day prices as of December 31, 2020. Changes in the value of financial derivatives relating to binding commitments and translation exposure, have very little or no effect on profit or on Other Comprehensive Income. Accordingly, the table on the right includes effects from changes in the value of derivatives that are intended to meet the Group's forecast exposure.

	Other Comprehensive Income		
SEK m	2020	2019	
Translation exposure in net investments in foreign operations, exchange-rate +10% <sup>2)</sup>			
EUR/SEK	1,636	1,615	
NOK/SEK	161	166	
Effect of interest rate +1%, USD/SEK +10%3)			
Interest-rate derivatives, interest rate swaps	125	37	
Foreign exchange derivatives, USD/SEK	18	11	

<sup>1)</sup> Based on closing loan portfolio excluding interest rate swaps on December 31.

<sup>&</sup>lt;sup>2)</sup> Based on closing balances on December 31.

<sup>&</sup>lt;sup>3)</sup> Based on outstanding derivatives as of December 31.

## Note 29 Financial liabilities and maturity structure

#### **ACCOUNTING PRINCIPLES**

Financial liabilities primarily consist of liabilities to credit institutions and trade and other payables. The anticipated term of trade and other payables is short, and the value is consequently reported at a nominal amount in accordance with the amortized cost method as the amount is held to correspond to the fair value. Liabilities to credit institutions are initially valued at amounts received, less any set-up fees, and are then valued at amortized cost. Interest expenses are reported on a rolling basis in the Income Statement with the exception of the part included in the historical cost for Property, plant and equipment. Capitalized set-up fees are reported directly against the

loan liability to the extent that the loan agreement's underlying loan guarantee has been utilized, and are allocated over time in the Income Statement under Other financial expenses over the contractual term of the loan. If a loan agreement is terminated or otherwise ceases to apply at a point in time prior to the end of the original contractual term, capitalized set-up fees are recognized as an expense. If a current agreement is renegotiated during the contractual term, any additional fees in connection with the renegotiation are allocated over the remaining contractual term of the loan.

	Financial liabilities			Maturity structure <sup>2)</sup>					
31.12.2020 SEK m	Currency Int	terest <sup>1)</sup> ,%	Reported amount	2021	2022	2023	2024	2025	2026+
Bilateral loans	EUR	1.24	2,108	26	23	337	559	554	731
Bilateral loans	SEK	1.86	3,093	51	58	59	2,536	602	
Bonds <sup>3)</sup>	SEK	1.35	750	10	10	10	755		
Leases, other			203	59	39	25	22	21	45
Trade and other payables			6,607	6,607					
Derivative instruments			54	37	1	7	9		
Total			12,815	6,790	131	438	3,881	1,177	776

.....

	Finar	cial liabiliti	es	Maturity structure 2)					
31.12.2019 SEK m	Currency Int	erest <sup>1)</sup> ,%	Reported amount	2020	2021	2022	2023	2024	2025+
Bilateral loans	EUR	0.77	1,503	169	107	105	333	332	494
Bilateral loans	SEK	1.75	1,166	17	585	9	9	9	602
Bonds <sup>3)</sup>	SEK	1.50	1,250	516	11	11	11	756	
Commercial paper <sup>3)</sup>	SEK	0.34	1,584	1,585					
Leases, other			268	92	78	58	19	7	29
Trade and other payables			6,391	6,391					
Derivative instruments			129	129					
Total			12,291	8,899	781	183	372	1,104	1,125

<sup>1)</sup> Weighted interest including interest rate swaps.

#### Loan portfolio 31.12.2020

Boliden has a number of utilized non-current loans from Swedish, Nordic and European institutions totaling SEK 5,201 m (2,669) and maturing between 2023 and 2028. On closing day, Boliden's MTN program with a framework of SEK 5,000 m, had SEK 750 m (750) outstanding, falling due in 2024. Boliden also has syndicated credit facilities totaling EUR 343 m and EUR 387 m maturing in 2022 and 2024 respectively. The utilized component of the syndicated credit facilities totaled SEK 0 m (0). On closing day, Boliden's commercial papers program with a framework of SEK 4,000 m, had SEK 0 m (1,585) outstanding. The average term of the loan facilities was 3.7 years (3.4) and the average interest rate in the debt portfolio total 1.6% (1.1). The fixed interest term on outstanding loans including

interest rate swap agreements, totaled 3.1 years (1.1). The above maturity analysis includes interest flows from interest rate swaps. Boliden's current liquidity, in the form of cash and cash equivalents and unutilized credit facilities with terms exceeding one year, totaled SEK 12,741 m (7,165). The maturity structure for the financial liabilities, including interest payments and accrued interest on derivatives, includes the undiscounted cash flows attributable to the Group's liabilities, based on the contracted remaining durations. Loan maturity has been calculated at the applicable closing price. Interest maturity, including interest rate swaps, has been calculated at the applicable closing interest rates.

<sup>&</sup>lt;sup>2)</sup> The duration analysis includes gross flows of loans and interest, including flows from interest rate swaps.

Outstanding commercial papers and bonds are officially reported under the Group's Parent Company, Boliden AB.

## Note 30 Other current liabilities

	31.12.2020	31.12.2019
Accrued salaries and social security expenses	1,073	953
Accrued interest expenses	17	7
Other accrued costs and prepaid income	1,455	1,869
Other operating liabilities	1,731	413
	4,277	3,242

## Note 31 Pledged assets and contingent liabilities

#### ACCOUNTING PRINCIPLES

A contingent liability is a potential undertaking that derives from events which have occurred and whose incidence is only confirmed by one or more uncertain future events. A contingent liability can also be an existing undertaking that has not been reported in the Balance Sheet because it is unlikely that an outflow of resources will be required or because the size of the undertaking cannot be reliably calculated.

	The G	Group	The Parent Company		
	2020	2019	2020	2019	
Pledged assets					
For own liabilities and provisions	None	None	None	None	
Contingent liabilities					
Parent Company sureties	-	-	6,014	5,575	
Other sureties and guarantees	5,157	5,154	1	1	
Pension liabilities	8	7	-	-	
Agreed residual values according to lease contracts	14	12	_	_	
	5,179	5,173	6,015	5,576	

The Parent Company sureties refer to guarantees issued for subsidiaries. SEK 6,014 m (5,575) refers to Parent Company sureties for external financial borrowing. Parent Company sureties in the above table have been booked in the utilized amounts. Guarantees in respect of unutilized credits total SEK 7,729 m (8,034).

Other surety undertakings and guarantees refer primarily to counter undertakings issued by Boliden to banks or other lenders. These have, in turn, with regard to states or authorities, guaranteed Boliden's proper completion of reclamation undertakings.

In addition to that specified above under the heading of contingent liabilities and the items included in the financial information, the possibility exists that the Group may incur environment-related contingent liabilities or contingent liabilities attributable to legal proceedings and claims, which cannot be calculated at present but which may, in future, entail costs or investments.

### Legal proceedings

#### Overview

Boliden may occasionally be involved in disputes and legal proceedings arising in the course of its operations. These disputes and legal proceedings are not expected, either individually or collectively, to have any significant negative impact on Boliden's operating profits, profitability or financial position, over and above that detailed below.

#### Disputes

# Disputes arising from the dam accident in Spain in the late 1990s In April 1998, a dam accident occurred at the Los Frailes mine in Spain, which was then owned by Boliden's subsidiary, Boliden Apirsa S.L. ("Apirsa"). Following the dam accident, a preliminary investigation and criminal proceedings were initiated. The preliminary investi-

gation was shut down and it was determined that the accident had been caused by design and construction errors in the dam, not by Apirsa's operations. Nevertheless, the Spanish Ministry of the Environment declared Apirsa liable to pay approximately EUR 45 m in clean-up costs, damages and fines. As a result, Apirsa initiated insolvency proceedings in January 2005, to ensure the orderly, coordinated closure of the company. In the context of the insolvency procedures, the official receiver have requested that Apirsa's parent company, Boliden BV, Boliden Mineral AB and Boliden AB be held liable for the deficiency in Apirsa in an amount totaling just over EUR 142 m. This amount not only includes the above-mentioned EUR 45 m, but also a disputed amount of just over EUR 89 m which the local government (Junta de Andalucia) claims it has the right to. This claim has been in dispute since 2002, when the local government sued Apirsa in its capacity as owner and operator of the mine at the time of the accident, and Boliden BV and Boliden AB in their capacities as the direct and indirect owners of Apirsa. The local government's case was taken up in several different courts and in various bodies, but was deemed invalid on formal grounds. Finally, the Supreme Administrative Court ruled that the matter should be heard in civil court. Accordingly, the local government brought a suit against the above companies in the Seville District Court in 2015. The suit is the same as that brought back in 2002 and the local government is demanding compensation for the costs it claims to have incurred in conjunction with the clean-up after the dam breach accident. All three defendants have contested the plaintiff's suit and the case has been dormant since then. The winding up of Apirsa has also been on hold for several years, pending the hearing of the local government's claim. The companies that were responsible for the design and construction of the dams, and against which Apirsa had previously brought suits and lost, have now submitted claims against Apirsa, seeking compensation for their legal costs. It is currently not possible to assess with any reasonable degree of certainty whether the claims for legal costs can be brought against any Boliden company other

Based on the legal advice and opinions given by the company's Spanish legal counsel, Boliden's overall view is that the company will not suffer any substantial financial loss as a result of the legal proceedings described. The company has made no provision, pending a final ruling.

#### Lawsuit arising due to exports to Chile in the 1980s

In 2013, a suit was brought against Boliden by a Swedish limited partnership, Arica Victims KB, claiming damages for the export of smelter sludge from the Rönnskär smelter between 1984 and 1985 to a company in Chile. Boliden won the dispute both in the district court and in the Court of Appeal, and the limited liability partnership was not granted leave to appeal to the Supreme Court.

## Boliden Kevitsa Oy's tax assessment increased for the years 2012-2016

The Finnish tax authorities have increased Boliden Kevitsa Oy's tax assessment for the years from 2012 to 2016, which would result in an increase in tax expenses of EUR 29 m. The increased assessment is attributable to the period prior to Kevitsa's acquisition by Boliden. The reassessment was laid down by the Finnish tax authorities, and Boliden has appealed the decision to the Finnish Administrative Court. In accordance with the provisions of the acquisition agreement, Boliden has requested that the seller, First Quantum Minerals FGM, should indemnify Boliden for any harm that Boliden may incur as a result of the increased tax assessment. Given these circumstances, the matter is not expected to have a significant impact on agringes.

## Proposed allocation of profits

The Board's proposed allocation of profits for 2020 and statement in accordance with the Swedish Companies Act, 18:4

Boliden's dividend policy requires approximately one-third of the profit after tax to be disbursed in the form of dividends. The Board of Directors proposes that the Annual General Meeting approve payment of a dividend of SEK 8.25 (7.00) per share or a total of SEK 2,256 m (1,915), corresponding to 33.2% of the profit after tax for 2020. The Parent Company's non-restricted equity totals SEK 10,215 m and the Group's total equity is SEK 45,625 m. The non-restricted equity in the Parent Company and the Group will total SEK 7,959 m and SEK 43,369 m, respectively, after payment of the proposed dividend to the shareholders. The Board has taken the cyclical nature of the industry and the risks associated with the operations into account in its dividend proposal.

Boliden has generated substantial cash flows over the past year and the financial position is strong. The Board of Directors' proposal, which will jeopardise neither Boliden's ability to handle any deterioration in market terms nor to finance additional growth, asks the Annual General Meeting to approve an automatic share redemption procedure whereby each share is divided into one ordinary share and one redemption share. The redemption share will then automatically be redeemed for

SEK 6.00 per share, corresponding to a total of SEK 1,641 m. This, in combination with the proposed ordinary dividend, will, subject to the approval of the Annual General Meeting, mean that shareholders receive SEK 14.25 per share, corresponding to a total of SEK 3,898 m. The non-restricted equity in the Parent Company after the ordinary dividend and the automatic share redemption procedure will total SEK 6,317 m. and the Group's equity will total SEK 41,727 m.

The remaining non-restricted equity in the Parent Company will be carried forward.

The Annual Accounts have been prepared in accordance with generally accepted accounting principles in Sweden and the Consolidated Accounts have been prepared in accordance with EU-approved International Financial Reporting Standards, IFRS.

The Annual Accounts and the Consolidated Accounts give a true and fair view of the Parent Company's and the Group's financial position and performance.

The Directors' Report for the Group and the Parent Company gives a true and fair overview of the Group's and the Parent Company's operations, position and financial performance, and describes the material risks and uncertainties faced by the Parent Company and the companies that make up the Group.

Stockholm, February 12, 2021

Anders Ullberg

Chairman

Helene Biström Board member Tom Erixon Board member Michael G:son Löw Board member

Perttu Louhiluoto
Board member

Elisabeth Nilsson
Board member

Pia Rudengren *Board member* 

Marie Holmberg *Employee representative* 

Kenneth Ståhl
Employee Representative

Cathrin Öderyd Employee Representative

Mikael Staffas President and CEO

Our Auditor's Report was submitted on February 12, 2021 Deloitte AB

> Jan Berntsson Authorized Public Accountant

## **Auditor's report**

To the general meeting of the shareholders of Boliden AB (publ) corporate identity number 556051-4142

## REPORT ON THE ANNUAL ACCOUNTS AND CONSOLIDATED ACCOUNTS

#### **Opinions**

We have audited the annual accounts and consolidated accounts of Boliden AB (publ) for the financial year January 1, 2020 to December 31, 2020 except for the corporate governance statement on pages 58-67 and the statutory sustainability report on pages 8-11, 22-23, 28-31, 33-37 and 54-57. The annual accounts and consolidated accounts of the company are included on pages 8-11, 16-18, 20-24, 26-31, 33-43 ans 54-100 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 parent company as of December 31, 2020 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 December 31, 2020 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 58-67 and the statutory sustainability report on pages 8-11, 22-23, 28-31, 33-37 and 54-57. 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 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/EU) Article 11.

#### Basis for Opinions

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. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our 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/EU) 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 opinions.

#### Key Audit Matters

Key audit matters of the audit 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, and in forming our opinion thereon, the annual accounts and consolidated accounts as a whole, but we do not provide a separate opinion on these matters.

## Recognition of revenues from sales of metals at the appropriate price and in the correct period

The group's sales of metals are to a large extent priced in US dollars and sales are often made to predetermined terms. Individual sales transactions may represent significant amounts. Taken together, this requires good practices to ensure that revenues are recognized at agreed terms and that revenues are recognized in the correct period.

For the group's accounting principles for revenue recognition and for the group's revenues by geographical area and product group please refer to note 4.

#### Our audit procedures

Our audit procedures included, but were not limited to:

- review of the group's accounting policy for revenue recognition for compliance with IFRS,
- evaluating the group's controls for recognizing revenues at appropriate prices and in the correct accounting period,
- analysis of revenues by metal based on sales volumes, metal prices and exchange rates, and
- on a sample basis testing of sales transactions against sales contracts, invoices and shipping documents to assess that revenues have been recognized at appropriate prices and in the correct accounting period.

#### Valuation of inventory

The group's inventory consists primarily of metal concentrate, materials tied up in the production process of the smelters and finished metal. The group's accounting and valuation of inventory is complex and requires judgment about stock levels, metal content, metal prices, exchange rates and internal profits.

For the group's accounting principles for valuation of inventory and for a breakdown of the group's inventory, please refer to note 2 and 19.

## Our audit procedures

Our audit procedures included, but were not limited to:

- review of the group's valuation policy for inventory and its compliance with IFRS,
- assessing the group's controls for inventory valuation,
- · observations of physical inventory counts,
- on a sample basis testing that the inventory has been valued to current metal prices and exchange rates,
- review of the process inventory revaluation and eliminations for intragroup profits in inventory.

#### Accounting and valuation of financial instruments

The group is exposed to changes in metal prices, exchange rates and interest rates. To reduce its exposure in larger investment projects and in contracted purchase and sales commitments the group uses various types of financial instruments, including derivatives. The group also manages its exposure to changes in interest rates by reducing or extending the interest duration period via interest rate swaps. The accounting for financial instruments is complex and may have significant impact on the group's earnings and financial position.

For the group's financial risks and management of these risks, please refer to page 55-56 and to note 26, 27, 28 and 29 for the group's principles for the valuation of financial instruments and for the group's financial derivatives.

#### Our audit procedures

Our audit procedures included, but were not limited to:

- review of the group's financial policy and hedging strategies,
- review of hedging activities to ensure that these have been properly authorized and accounted for in accordance with IFRS, and
- review of the relevance of market data and methodologies used to determine fair value of derivative contracts.

#### Capitalization and depreciation of deferred mining costs

In conjunction with excavation of waste rock and production of ore in open pit mines, the costs of waste rock removal, which improves access to the ore body are capitalized. Deferred mining costs are depreciated per push-back and the depreciation is based on the metal content in relation to estimated metal content for the entire push-back. Both the initial capitalization and the depreciation rate are dependent on planned production and estimated mineral reserves and, as a consequence among other things, expected future metal prices. Hence, the carrying value and depreciation of deferred mining costs are dependent on a number of complex assumptions and estimates.

For the group's accounting principles related to deferred mining and for the group's investments and depreciation of deferred mining costs, please refer to note 14.

#### Our audit procedures

Our audit procedures included, but were not limited to:

- review of accounting policy for deferred mining costs for compliance with IFRS,
- review of model used for capitalization and depreciation of deferred mining costs against production costs and production volumes, and
- analytical review of capitalization and depreciation in relation to production costs and production volumes.

#### Valuation of provisions for reclamation Provisions for reclamation costs

The group has commitments for reclamation of closed mines and for reclamation costs that are expected to arise for mines when the mine operations are decommissioned. The provision for these commitments is judgmental and dependent on several factors including cost estimates for different reclamation measures, life of mine, regulatory decisions, future inflation and discount rates. Any changes in these estimates and assumptions may have a significant impact on the group's earnings and financial position.

For the group's accounting principles for reclamation provisions and for this year's change in capitalized reclamation costs, and for the group's reclamation provisions, please refer to note 2, 14 and 25.

#### Our audit procedures

Our audit procedures included, but were not limited to:

- review of accounting policy for reclamation provisions for compliance with IFRS,
- evaluating the group's controls to account for reclamation provisions, and
- review of assumptions used to estimate the reclamation provisions for consistency with approved production plans, life of mines expectancies, and current financial conditions (inflation and interest rates).

#### Valuation of intangible and tangible assets

The group's intangible and tangible assets represent significant amounts. Impairment testing of these assets is based on production plans, which in turn are based on assumptions about future metal prices, treatment and refining charges, and exchange rates. Changes in market prices for metals, treatment and refining charges, and exchange rates have a significant impact on the group's future cash flows and thus the estimated recoverable value of intangible and tangible assets and any impairment needs.

For the group's principles to prepare impairment tests for intangible and tangible assets and for significant assumptions applied in the impairment tests, please refer to note 2, 13 and 14.

## Our audit procedures

Our audit procedures included, but were not limited to:

- review of the group's process and principles for preparing impairment tests for compliance with IFRS,
- evaluation of key assumptions such as estimated life of mines, production plans, metal prices, treatment and refining charges, and exchange rates and the sensitivity in these assumptions to any changes, and
- review of the model used to discount future cash flows for arithmetical correctness.

## Other information than the annual accounts and consolidated accounts

The other information consists of the remuneration report as well as the pages 1-7, 12-15, 19, 25, 32, 44-53 and 105-120 in this document that also contains other information than the annual accounts and conslidated accounts. The Board of Directors and the Managing Director are responsible for this other information. We expect to obtain the remuneration report after the date of this audit report.

Our opinion on the annual accounts and consolidated accounts does not cover this other information and we do not express any form of assurance conclusion regarding this other information.

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 Managing Director

The Board of Directors and the Managing Director 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. The Board of Directors and the Managing Director are also responsible 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 Managing Director are responsible for the assessment of the company's and the group's ability to continue as a going concern. They disclose, as applicable, matters related to going concern and using the going concern basis of accounting. The going concern basis of accounting is however not applied if the Board of Directors and the Managing Director intends to liquidate the company, to cease operations, or has no realistic alternative but to do so.

The Audit Committee shall, without prejudice to the Board of Director's responsibilities and tasks in general, among other things oversee the company's financial reporting process.

## Auditor's responsibility

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 company's 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 Managing Director
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting in preparing the annual accounts and consolidated accounts. We also draw a conclusion, based on the audit evidence obtained, as to 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 a company and 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 and 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 opinions.

We must inform the Board of Directors of, among other matters, the planned scope and timing of the audit. We must also inform of significant audit findings during our audit, including any significant deficiencies in internal control that we identified.

We must also provide the Board of Directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Board of Directors, we determine those matters that were of most significance in the audit of the annual accounts and consolidated accounts, including the most important assessed risks for material misstatement, and are therefore the key audit matters. We describe these matters in the auditor's report unless law or regulation precludes disclosure about the matter.

## REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS Opinions

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 Managing Director of Boliden AB (publ) for the financial year January 1, 2020 to December 31, 2020 and the proposed appropriations of the company's profit or loss.

We recommend to the general meeting of shareholders that the profit to be appropriated in accordance with the proposal in the statutory administration report and that the members of the Board of Directors and the Managing Director be discharged from liability for the financial year.

#### **Basis for Opinions**

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. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our 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 opinions.

## Responsibilities of the Board of Directors and the Managing Director

The Board of Directors is responsible for the proposal for appropriations of the company's profit or loss. At the proposal of a dividend, this 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 organization 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 organization is designed so that the accounting, management of assets and the company's financial affairs otherwise are controlled in a reassuring manner. The Managing Director shall manage the ongoing administration according to the Board of Directors' guidelines and instructions and among other matters take measures that are necessary to fulfill the company's accounting in accordance with law and handle the management of assets in a reassuring manner.

#### Auditor's responsibility

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 Managing Director 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 appropriations of the company's profit or loss, and thereby our opinion about this, is to assess with 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 appropriations of the company's profit or loss are 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 appropri-

ations 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 with starting point in risk and materiality. This means that we focus the examination on such actions, areas and relationships that are material for the operations and where deviations and violations would have particular importance for the company's situation. We examine and test decisions undertaken, support for decisions, actions taken 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 appropriations 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 that the corporate governance statement on pages 58-67 has been prepared in accordance with the Annual Accounts Act.

Our examination of the corporate governance statement is conducted in accordance with FAR's auditing standard RevU 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 opinions.

A corporate governance statement has been prepared. Disclosures in accordance with chapter 6 section 6 the second paragraph points 2-6 of the Annual Accounts Act and chapter 7 section 31 the second paragraph 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.

## AUDITOR'S REPORT ON THE STATUTORY SUSTAINABILITY REPORT

It is the board of directors who is responsible for the statutory sustainability report for the year 2020 on pages sidorna 8-11, 22-23, 28-31, 33-37 and 54-57 and that it has been prepared in accordance with the Annual Accounts Act.

#### The scope of the audit

Our examination has been conducted in accordance with FAR's auditing standard RevR 12 The auditor's opinion regarding the statutory sustainability report. This means that our examination of the statutory sustainability report is substantially different and 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 statutory sustainability report has been prepared.

Deloitte AB, was appointed auditor of Boliden AB by the general meeting of the shareholders on the April 28, 2020 and has been the company's auditor since May 5, 2015.

Stockholm, February 12, 2021 Deloitte AB

Jan Berntsson
Authorized Public Accountant

# Mineral Resources and Mineral Reserves

Mineral Resources and Mineral Reserves are the foundation for the future viability of a mining company's operations. They form the basis for the mines' long-term plans and constitute underlying data for many of the company's major investments. Reserves are reduced every year through mining activities, and new additions are vital to the viability of the operations.

Garpenberg and Aitik have Mineral Resources and Mineral Reserves where planned production will provide 30 years' mining. The situation in Kevitsa is also good with Mineral Reserves for more than 10 years' mining. The mines in Tara and the Boliden Area currently have planned mining for the next 5-10 years. In Tara, pilot drifts are still being driven towards the Tara Deep mineralization, approximately 2 km from the mine. Exploration towards the deposit continued to be successful and more Mineral Reserves have been added than were mined in 2020. Mineral Reserves in the Boliden Area decreased by slightly less than the amount mined during the year, while the Mineral Resources increased, mainly due to exploration toward the Rävliden mineralization in Kristineberg. Mining has ceased in the Kylylahti mine, which is being closed.

#### Mineral Resources and Mineral Reserves, 2020

Boliden follows the recommendations of the Swedish Mining Association (SveMin) for reporting exploration results, Mineral Reserves and Mineral Resources and strives to report according to the Pan-European Reserves and Resources Reporting Committee (PERC). The PERC standard is an internationally recognized reporting standard that has been recognized by the mining associations in Sweden (SveMin), Finland (FinnMin) and Norway (Norsk Bergindustri) for exploration and mining companies in the Nordic countries.

### About the classification

Mineral Resources and Mineral Reserves are estimated separately and broken down into different categories. Boliden's Mineral Reserves are not subsidiary amounts of the Mineral Resources, and when a Mineral Resource is upgraded to a Mineral Reserve, the quantity is removed from the Mineral Resource. Mineral Resources and Mineral Reserves are a concentration of minerals in the bedrock. For Mineral Resources, these must be in such a form, quality and quantity that there are reasonable prospects for eventual economic extraction. To be classified as a Mineral Reserve, appropriate valuations and studies must have been carried

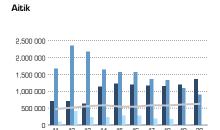
out, showing that extraction and refining can be carried out in accordance with the company's profitability requirements and that take into account such factors as waste rock dilution, ore losses, pillar offsets and process recovery rates.

#### Inferred Mineral Resource

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity, shape, grade or quality can be estimated with a low level of certainty. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a low level of certainty, but it is reasonable to assume that the majority of an Inferred Mineral Resource could be upgraded with continued exploration.

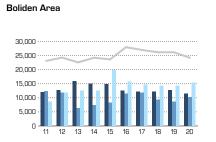
#### **Indicated Mineral Resource**

An Indicated Mineral Resource is a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are sufficiently well known to allow mine planning and technical profitability studies. Geological evidence derived

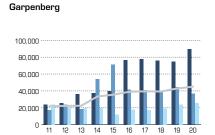


Totals reduced with mining in 2020.

Mineral Resources converted to Mineral Reserves.



Decrease in Mineral Reserve but increase in Mineral Resource.



Significant increase in Mineral Reserve but decrease in Mineral Resource due to conversion to Mineral Reserve.

Proven/Probable Mineral Reserves Measured/Indicated Mineral Reserves Inferred Mineral Resource Production ×15 All values shown in ktonnes.

from exploration, sampling and testing, carried out using appropriate technology, is sufficient to assume geological and grade or quality continuity.

#### Measured Mineral Resource

A Measured Mineral Resource is a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are sufficiently well known to allow detailed mine planning and final technical profitability studies. Geological evidence derived from detailed and reliable exploration, sampling and testing is sufficient to confirm geological and grade or quality continuity.

#### **Probable Mineral Reserve**

A Probable Mineral Reserve satisfies the requirements for indicated and, under certain circumstances, Measured Mineral Resources, where technical explorations and profitability studies demonstrate that it is technically and economically feasible to mine and refine the deposit on the basis of the company's profitability requirements.

#### **Proven Mineral Reserve**

A Proven Mineral Reserve satisfies the requirements for measured Mineral Resources, where technical explorations and profitability studies demonstrate that it is technically and economically feasible to mine and refine the deposit on the basis of the company's profitability requirements.

#### Aitik

No large-scale exploration is currently in progress in Aitik. On the other hand, mining preparation work is continuing with the Liikavaara deposit, around 3 km northwest of Aitik. Exploration and evaluation is also in progress in the Nautanen deposit, around 15 km north of Aitik, Mineral Reserves in Aitik, including Liikavaara, increased by 165 Mtonnes (14%) while Mineral Resources fell by 210 Mtonnes (19%). Design changes and a refined cost model have allowed the Mineral Resource to be converted to a Mineral Reserve. 42 Mtonnes of ore were milled during 2020. New calculations of resources in Nautanen during 2020 showed an increase of 5.7 Mtonnes (36%).

### The Boliden Area

In the Boliden Area, explorations toward the Rävliden mineralization in Kristineberg continue. Drilling, and test mining were carried out during 2020 and a new calculation has shown an increase in the Mineral Resource by 2.7 Mtonnes. The Mineral Reserve increased in Renström but fell in Kristineberg and Kankberg. In all, the Mineral Reserves fell by 1.2 Mtonnes (9%), which is a little less than was milled during the year (1.6 Mtonnes). The Mineral Resource increased by 2.7 Mtonnes (12%).

### Garpenberg

Garpenberg has good forward planning with Mineral Resources and Mineral Reserves. Exploration and studies were successful during the year, and the Mineral Reserve increased by 14.7 Mtonnes (20%). In Garpenberg, 3.0 Mtonnes were milled during 2020. Exploration in Garpenberg has contributed as much as was mined in 2020, but by converting such large tonnages to Mineral Reserves, Mineral Resources are reduced by 6.4 Mtonnes (9%).

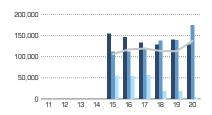
#### Kevitsa

In Kevitsa, the Mineral Reserve decreased by 12 Mtonnes (9%), where 9.5 Mtonnes was last year's mining. It is mainly design changes, including wider ramps and higher cut-offs for the next two years, that have caused the remainder of the reduction. On the other hand, the Mineral Resource increased by 22 Mtonnes (14%). New borehole information and a new geological model are the most important factors behind this increase.

#### Tara

Surveys of the Tara Deep mineralization continue with drilling from the surface, while drifting is underway toward Tara Deep at a depth of around 1,000 meters. They have come so far that drilling toward Tara Deep has begun underground. Drilling from the surface has been successful

## Kevitsa



Decrease in Mineral Reserve but increase in Mineral Resource tonnes and reliability (less inferred).

#### Tara



Increase in Mineral Reserve and Mineral Resource with a significant addition of Inferred Mineral Resource in Tara Deep.

Proven/Probable Mineral Reserves Measured/Indicated Mineral Reserves Inferred Mineral Resource Production x15 All values shown in ktonnes.

and the figure for Tara Deep is now estimated at 26 Mtonnes of Inferred Mineral Resource, compared with 22 Mtonnes in 2019, which has also contributed to an increase in Tara's total Mineral Resource of 4.7 Mtonnes (16%). Meanwhile, work on improving the geological models of the ore deposits and designing the stope in the Tara mine continues. Together with the contribution from drilling, this has resulted in the replacement of the entire year's mining output of 2.3 Mtonnes and an increase in the Mineral Reserve of 700 ktonnes (4%).

### Supplementary information on Mineral Resources and Mineral Reserves

Supplementary information in the form of a summary report per mine and project is available on Boliden's website under Operations – Exploration – Mineral Reserves and Mineral Resources.

# Regulations, codes and competent persons

Boliden follows the recommendations of the Swedish Mining Association (SveMin) for reporting exploration results, Mineral Reserves and Mineral Resources and strives to report according to the Pan-European Reserves and Resources Reporting Committee (PERC). The PERC standard has clearer requirements for documentation and the competent persons who must evaluate the information that companies report. The transition to the PERC standard is a process that takes place during a transitional period until the company has had time to switch to using the PERC standard. As far as possible, this review is carried out in compliance with the PERC standard, but the reporting does not claim to be complete in accordance with the regulatory framework. All summarizing reports for Mineral Resources and Mineral Reserves per project and mine are reviewed and approved by competent persons presented in the relevant report. This summary of Mineral Resources and Mineral Reserves has been reviewed and approved by Gunnar Agmalm, Competent Person and Head of Ore Base and Project Evaluation, Boliden, which is a member of The Australasian Institute of Mining and Metallurgy (AusIMM) and The Fennoscandian Association for Metals and Minerals Professionals (FAMMP), both of which are approved organizations for competent persons according to PERC.

February 2021

Gunnar Agmalm Competent Person

Planning prices	Long-term prices 2020	Change compared to 2019
Zinc	USD 2,400/tonne	_
Copper	USD 6,600/tonne	
Nickel	USD 16,000/ tonne	_
Lead	USD 2,100/tonne	_
Gold	USD 1,300/troy.	+100
Silver	USD 17/troy. oz.	-
Palladium	USD 1,200/troy. oz.	+200
Platinum	USD 1,000/t oz	_
Cobalt	USD 20/lb	_
Tellurium	USD 30/kg	_
Molybdenum	USD 8/lb	_
USD/SEK	8.0	_
EUR/SEK	9.35	_
EUR/USD	1.17	_



## Mineral Reserves as of December 31, 2020

		Quantity,	ktonnes					2020					
	•	2020	2019	Au 9/t	Ag 9/t	Cu %	Zn %	Pb %	Ni <sup>1)</sup> %	Co <sup>1)</sup>	Pt 9/t	Pd 9/t	Te 9/t
Aitik	Proven Probable	702,000 651,000	726,000 461,000	0.14 0.16	1.2 1.2	0.22 0.22							
Boliden Area													
Sulfide mineralizations													
Kristineberg	Proven	60	120	1.0	35	0.5	6.5	0.6					
	Probable	2,400	3,530	0.5	36	0.6	5.4	0.3					
Renström	Proven	350	300	2.4	141	0.5	5.6	1.0					
	Probable	4,200	3,690	2.4	122	0.3	6.3	1.2					
Total	Proven	410	430	2.2	125	0.5	5.7	0.9					
Sulfide mineralizations	Probable	6,600	7,200	1.7	91	0.4	6.0	0.9					
Gold mineralizations													
Kankberg	Proven	2.600	3.110	3.2	11								181
3	Probable	1,900	1,930	3.5	6								135
Garpenberg	Proven	23,500	21,000	0.23	97	0.03	3.1	1.2					
3	Probable	66,000	53,800	0.35	93	0.05	2.7	1.3					
Kevitsa	Proven	69,500	62,300	0.09		0.31			0.19	0.010	0.17	0.11	
	Probable	58,700	78,000	0.10		0.33			0.24		0.20	0.14	
Tara	Proven	1,000	1,100				4.7	2.2					
i di d	Probable	17,100	16,300				5.5	1.5					

 $<sup>^{\</sup>rm 1)}$  Kevitsa reports sulfide-bound Ni and Co.  $\,$  Figures may be rounded up or down.

### Mineral Resources as of December 31, 2020

		Quantity, I	ctonnes						2020					
		2020	2019	Au 9/t	Ag 9/t	Cu %	<b>Z</b> n %	Pb %	Ni¹¹ %	Co <sup>1)</sup>	Pt 9/t	Pd 9/t	Te <sup>2)</sup> 9/t	Mo 9/t
 Aitik area		2020	2013	3/ [	3/6	70	70	70	70	70	3/6	9/ [	5/ L	3/ L
Aitik	Measured	272,000	310,000	0.06	0.6	0.15								
	Indicated	623,000	782,000	0.09		0.17								
	Inferred	16,000	28,000	0.13		0.19								
Nautanen	Measured													
	Indicated	12,700	8,200	0.9	6	1.5								100
	Inferred	8,700	7,500	0.6	6	1.4								98
Boliden Area														
Sulfide mineralizations														
Kristineberg	Measured	50	50	0.7	45	1.3	4.2	0.2						
	Indicated	6,600	5,190	0.4	65	0.8	4.6	0.5						
	Inferred	7,800	6,120	0.3	60	0.8	3.4	0.5						
Petiknäs N	Measured													
	Indicated	360	360	8.1	72	1.6	2.8	0.3						
	Inferred	1,700	1,710	4.4	54	0.9	2.1	0.3						
Renström	Measured	3		0.6	39	0.04	1.7	0.3						
	Indicated	1,300	1,160	1.4	81	0.6	4.1	0.8						
	Inferred	980	1,510	1.4	74	0.5	4.8	0.9						
Total	Measured	50	50	0.7	45	1.2	4.0	0.2						
Sulfide mineralizations	Indicated	8,200	7,400	0.9	68	0.8	4.4	0.5						
	Inferred	10,500	9,400	1.1	60	8.0	3.3	0.5						
Gold mineralizations														
Kankberg	Measured	200	200	3.5	8								21	
	Indicated	670	670	4.0	8								62	
	Inferred	1,500	1,460	3.9	7							1	61	
Älgträsk	Measured													
	Indicated	1,100	1,070	2.8	5									
	Inferred	3,500	3,520	2.0	4									
Total	Measured	200	200	3.5	8									
Gold mineralizations	Indicated	1,700	1,700	3.2	6									
	Inferred	5,000	5,000	2.5	4									
Garpenberg	Measured	3,900	4,300	0.33	94	0.06	3.4	1.7						
	Indicated	32,600	40,000	0.35	89	0.05	2.7	1.3						
	Inferred	25,500	24,100	0.42	57	0.07	2.5	1.4						
Kevitsa	Measured	43,000	26,500	0.08		0.29			0.19	0.010	0.18	0.11		
	Indicated	132,400	112,900	0.07		0.34			0.23	0.010	0.13	0.07		
	Inferred	3,900	17,800	0.03		0.22			0.12	0.010	0.06	0.02		
Tara	Measured	100	30				4.7	2.2						
	Indicated	900	2,500				5.5	1.5						
	Inferred	34,100	27,800				7.8	1.6						
Laver	Measured	1,100	1,100	0.11	4	0.20								18
	Indicated	512,400	512,400	0.13	3	0.22								36
	Inferred	550,600	550,600	0.10	3	0.21								33
Rockliden	Measured													
	Indicated	800	800	0.08	102	2.1	4.4	0.90						
	Inferred	9,200	9,200	0.05	47	1.7	3.9	0.40						

<sup>&</sup>lt;sup>1)</sup> Kevitsa reports sulfide-bound Ni and Co. <sup>2)</sup> Te only in Kankberg. Figures may be rounded up or down.

Boliden reports Mineral Reserves exclusive of Mineral Resources to avoid double counting. This means that quantities converted to Mineral Reserves are removed from Mineral Resources.

# Ten-year overviews

# THE GROUP

	2011	20121)	2013	2014	2015	2016	2017	2018	2019	2020
Results, SEK m	2011	LOIL	2010	2014	2013	2010	2017	2010	2013	2020
Revenues	40,323	40,001	34,409	36,891	40 242	40.316	49,531	52 454	49,936	56 321
Operating profit before depreciations	6,674	6,731	4,632	6,035	7,112		13,617	13,933		14,628
Operating profit excl. revaluation of process	0,071	0,701	1,002	0,000	7,112	0,001	10,017	10,000	12,000	11,020
inventory	5,008	4,042	2,271	2,605	4,010	5,094	8,913	9,074	7,035	8,438
Operating profit	4,748	4,171	1,803	2,759	3,590	5,682	9,015	9,004	7,597	8,935
Profit after financial items	4,560	3,992	1,581	2,471	3,356	5,375	8,737	8,763	7,337	8,668
Tax	-1,171	-651	-288	-572		-1,135	-1,881	-1,562	-1,548	-1,867
Net profit for the year	3,389	3,341	1,294	1,899	2,641	4,239	6,856	7,201	5,788	6,801
Cash flow, SEK m										
Cash flow from operating activities	4,021	5,518	3,505	5,789	6,235	6,995	12,737	11,768	9,442	11,255
Cash flow from investing activities	-4,024	-4,129	-4,971	-4,206	-3,670	-9,795	-5,428	-6,076	-8,807	-6,297
Free cash flow	-3	1,389	-1,466	1,583		-2,801	7,309	5,692	635	4,957
Cash flow from financing activities	-464	-730	1,060	-1,355	-2,503	3,376	-6,304	-5,931	-1,538	-1,271
Cash flow for the year	-467	659	-406	228	63	575	1,005	-239	-903	3,686
Capital structure and return, SEK m										
Balance Sheet total	37,615	40,080	41,841	43,865	43,022	53,877	55,882	58,727	66,424	72,492
Capital employed	30,473	31,236	34,451	35,087	35,131	42,457	42,931	44,441	49,809	51,007
Return on capital employed, %	17	14	5	8	10	15	21	20	16	17
Equity				23,974	25,807		35,053	39,011	41,440	45,638
Return on equity, %	17	16	6	8	11	16	22	19	14	16
Equity/assets ratio, %	56	56	55	55	60	55	63	66	62	63
Net debt	6,063	6,276	8,673	8,283	5,827	9,339	3,752	2,034	5,493	2,236
Net reclamation debt	883	866	925	1,023	1,040	1,471	1,657	1,757	2,134	2,205
Net debt/equity ratio, %	29	28	38	35	23	32	11	5	13	5
Data per share, SEK										
Earnings for the period										
Basic	12.39	12.21	4.72	6.94	9.65	15.49	25.06	26.32	21.15	24.86
Diluted	12.39	12.21	4.72	6.94	9.65	15.49	25.06	26.32	21.15	24.86
Cash flow from operating activities										
Before dilution	14.70	20.17	12.82	21.17	22.80	25.57	46.57	43.03	34.52	41.15
After dilution	14.70	20.17	12.82	21.17	22.80	25.57	46.57	43.03	34.52	41.15
Equity	70.00	04.00	04.04	07.00	04.00	107.11	100.10	440 E0	154 47	100.01
Basic Diluted	76.90 76.90	81.68 81.68	84.31 84.31	87.63 87.63		107.44	128.13 128.13	142.59 142.59	151.47 151.47	166.81 166.81
Ordinary dividend <sup>2)</sup>	4.00	4.00	1.75	2.25	3.25	5.25	8.25	8.75	7.00	8.25
Redemption per share 2)	4.00	4.00	1.75		0.20	J.EJ	5.75	4.25	7.00	6.00
Share price, 31/12	100.5	122.1	98.45	125.5	142.9	237.9	280.6	192.0	248.5	291.4
Highest price paid	143.5	125.6	126.7	129.9	201.1	258.2	307.9	328.4	291.7	302.2
Lowest price paid	65.35	87.8	80.2	90.7	112.1	100	222.7	187.8	181.5	137.2
P/E ratio	8.11	10.0	20.9	18.09	14.8	15.4	11.4	7.3	11.7	11.7
Change in share price during the year, %	-26	21	-19	27	14	66	18	-32	29	17
Dividend yield, %	4.0	3.3	1.8	1.8	2.3	2.2	2.9	4.6	2.8	2.8
Total yield, %	-23	25	-16	30	15	70	20	-28	24	21
Number of shares, million										
Number of shares, 31/12	274	274	274	274	274	274	274	274	274	274
Average number of shares	274	274	274	274	274	274	274	274	274	274
Number of own shares held, 31/12	_	-	_	-	-	-	_	_	-	-
Employees										
Number of Group employees, total	4.597	4,795	4,815	4,881	4,878	5,477	5,684	5,819	5,997	6,071
Number of female employees	736	813	824	852	867	976	1,001	1,060	1,154	1,211
Percentage of women on the Board/in Group										
management, % Accidents per one million hours worked,	27/0	2//17	27/20	5//50	36/20	36/20	36/20	50/20	50/20	50/20
own personnel, frequency	4.9	6.6	7.0	5.8	6.6	6.7	5.0	3.1	4.0	4.9
Accidents per one million hours worked, incl contractors, frequency		9.1	8.9	7.9	8.9	7.9	6.3	5.1	4.4	5.8
Fatalities, own staff	0	0	0	0	0	0	0	0	0	0
Fatalities, contractors		0	0	0	0	1	0	0	0	0
Sick leave, %	3.7	3.7	3.9	4.3	4.6	4.4	4.5	4.5	4.3	4.8

Continued: Ten-year overview – Group	2011	20121)	2013	2014	2015	2016	2017	2018	2019	2020
Energy consumption										
Total energy consumption, TJ	15,579	16,140	16,415	17,231	16,813	19,061	19,788	19,650	18,884	20,304
Water withdrawal, total, km³	0.153	0.160	0.155	0.173	0.150	0.140	0.145	0.145	0.132	0.147
Emissions										
Direct emissions of greenhouse gases, ktonnes	499	574	578	554	559	594	605	644	598	544
Indirect emissions of greenhouse gases, purchased electricity, heating and steam, ktonnes	425	434	422	447	330	459	418	327	319	353
Carbon dioxide emissions, total, ktonnes	924	1,008	1,000	1,001	889	1,052	1,024	971	917	897
CO <sub>2</sub> Intensity <sup>3)</sup>	0.71	0.77	0.78	0.74	0.65	0.73	0.69	0.64	0.64	0.61
Emissions of metals to air, tonnes <sup>4)</sup>	23	92	75	126	88	100	109	92	69	60
Sulphur dioxide emissions to air, tonnes	7,410	8,240	6,410	7,320	7,210	7,060	7,360	7,720	6,240	6,310
Discharges of metals to water, tonnes <sup>4</sup>	14	21	23	21	18	13	9	8	51	37
Discharges of nitrogen to water, tonnes	205	253	219	225	261	300	236	240	228	201

<sup>1)</sup> The 2012 comparison year has been restated due to the changes to the IFRIC 20 and IAS 19 accounting principles in 2013.

## **MINES**

	2011	20121)	2013	2014	2015	2016	2017	2018	2019	2020
Production of metal in concentrate										
Zinc, ktonnes	283	271	272	294	299	329	305	290	290	286
Copper, ktonnes	81	79	79	78	85	103	143	140	121	128
Nickel, ktonnes	_	_	_	_	_	7	14	14	10	12
Lead, ktonnes	49	49	48	61	62	63	60	55	55	54
Gold, kg	3,681	3,644	3,849	4,379	4,922	5,766	7,237	7,678	7,257	7,963
Gold, troy. oz.	118,332	117,150	123,759	140,789	158,228	185,386	232,666	246,855	233,316	255,997
Silver, kg	231,388	229,791	261,804	323,325	418,489	446,826	413,238	402,349	372,199	353,973
Silver, '000 troy. oz.	7,439	7,388	8,417	10,395	13,454	14,365	13,286	12,936	11,966	11,380
Tellurium, kg <sup>2)</sup>	_	6,791	24,457	30,917	33,000	38,680	34,979	44,641	40,953	41,742
Financial data, SEK m										
Revenues	10,279	9,509	8,303	9,318	9,808	12,659	18,195	18,404	17,060	18,126
Operating expenses	5,189	5,008	4,924	5,417	5,842	6,833	7,947	8,481	8,849	9,173
Depreciation	1,110	1,669	1,917	2,264	2,520	3,172	3,487	3,708	3,824	4,403
Operating profit	3,913	2,974	1,598	1,299	1,429	2,804	6,681	6,451	4,484	4,594
Investments	2,338	3,570	3,763	2,732	2,394	2,755	3,722	4,482	6,409	4,439
Operational acquisitions <sup>3)</sup>	_	_	_	718	_	5,961	_	_	_	-
Capital employed	14,272	16,125	18,288	19,615	19,275	24,972	25,502	26,328	28,719	29,009
Greenhouse gas emissions										
Direct emissions of greenhouse gases,	407	404	400	400	4.04	400	400	007	470	4.45
ktonnes	107	124	129	133	131	168	192	207	173	145
Indirect emissions of greenhouse gases, purchased electricity, heating and steam, ktonnes	194	197	187	204	96	145	151	134	139	137
CO <sub>2</sub> Intensity <sup>4)</sup>	0.73	0.80	0.79	0.78	0.51	0.62	0.66	0.66	0.66	0.58
AITIK										
Milled ore, ktonnes	31,541	34,321	37,070	39,090	36,361	36,051	39,045	38,472	40,661	41,661
Head grades										
Cu, %	0.24	0.22	0.21	0.20	0.21	0.22	0.28	0.29	0.25	0.24
Au, g/tonne	0.14	0.11	0.10	0.09	0.11	0.11	0.13	0.14	0.13	0.13
Ag, g/tonne	2.15	2.50	2.28	2.14	2.45	2.11	1.98	1.82	1.17	1.06
Concentrate production										
Cu, ktonnes	267	270	292	277	307	320	394	404	377	368
Concentrate grade										
<u>Cu, %</u>	25.00	24.85	24.29	24.48	21.93	22.12	24.76	24.58	24.21	24.78
Production of metal in concentrate										
Cu, ktonnes	67	67	71	68	67	71	98	99	91	91
Au, kg	2,447	1,959	1,765	1,767	2,042	2,119	2,899	3,150	3,063	3,128
Au, troy. oz,	78,657	62,996	56,731	56,823	65,666		93,197	-		100,563
Ag, kg	45,040	51,698	53,612	54,854	61,452		61,862	54,894	37,991	34,616
Ag, '000 troy. oz.	1,448	1,662	1,724	1,764	1,976	1,820	1,989	1,765	1,221	1,113

<sup>2)</sup> The figures for 2020 comprise proposed dividend and share redemption amounts, respectively.

<sup>3]</sup> The CO<sub>2</sub> Intensity is the ratio of the total carbon dioxide emissions (Scope 1 and Scope 2) and the sum of production of metal in concentrate at Mines and metal production at Smelters.

<sup>4)</sup> The Natural Capital Protocol method has been used since 2019 to calculate metal equivalents. The period 2012–2018 refers to metal equivalents (tonnes). The period 2008–2011 refers to the mass of the metals (tonnes).

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Continued: Ten-year overview -					-					
Mines	2011	20121)	2013	2014	2015	2016	2017	2018	2019	2020
AITIK cont. Financial data, SEK m					-					
Revenues	4,549	4,170	3,593	3,427	3,292	3,273	5,487	6,017	5,818	6,295
Operating profit before depreciations	2,583	2,651	1,902	1,669	1,413	1,548	3,513	3,974	3,646	3,888
Operating profit	2,046	1,732	882	558	183	222	2,073	2,494	2,149	2,296
Investments	1,178	12071)	1,143	1,181	1,207	1,174	1,534	1,576	1,985	1,823
Cash cost USc/lb Cu C1, Normal	120	83	131	138	105	102	82	77	76	65
Proven and probable Mineral Reserv										
Mtonnes	710	702	1,085	1,126	1,227	1,194	1,161	1,148	1,187	1,353
Cu, %	0.25	0.25	0.22	0.22	0.23	0.23	0.23	0.22	0.23	0.22
Au, g/tonne	0.10	0.10	0.14	0.14	0.14	0.14	0.14	0.14	0.15	0.15
BOLIDEN AREA										
Milled ore, ktonnes	1,677	1,862	1,809	1,862	1,879	2,138	2,065	1,947	2,028	1,898
of which slag	134	241	301	245	301	300	264	199	272	283
Head grades										
Zn, %	2.87	2.15	2.61	3.00	3.82	4.16	3.99	3.54	3.57	3.54
Cu, %	1.03	0.84	0.61	0.60	0.41	0.40	0.38	0.36	0.34	0.39
Pb, %	0.27	0.23	0.28	0.30	0.44	0.44	0.42	0.36	0.39	0.41
Te, g/tonne <sup>2)</sup>	1 2	8.94	28.78	33.8	37.6	36.9	34.9	44.7	45.6	51.2 2.2
Au, g/tonne Ag, g/tonne	1.2 41	1.3 35	1.6 42	1.8 42.6	1.7 59.6	1.7 59.2	1.9 57.7	1.9 52.1	2.0 54.1	59.0
Concentrate production	41	ل ت	46	42.0	٥٥.٥	ع.د	٥/./	JE. 1	J <del>4</del> . I	JJ.U
Zn, ktonnes	69	56	63	82	103	129	123	103	107	96
Cu, ktonnes	60	47	31	32	20	23	20	20	18	19
Pb, ktonnes	3	3	3	5	9	12	13	9	11	7
Concentrate grade										
Zn, %	55.7	54.6	55.9	54.9	54.2	54.5	53.2	54.7	54.1	54.4
Cu, %	23.3	25.5	25.4	24.5	25.7	24.8	25.3	23.9	24.4	25.1
Pb, %	41.7	44.5	45.26	32.9	34.0	31.3	25.7	32.1	31.8	40.2
Production of metal in concentrate										
Zn, ktonnes	38	30	35	45	56_	70	66	57	58	52
Cu, ktonnes	14	12	8 1	<u>8</u> 2	5 3	<u>6</u>	5 3	5 3	4	5
Pb, ktonnes Te, kg <sup>2</sup> )	1	6,791	24,457	30,917	33,000	38,680	34,979	44,641	3 40,953	41,742
Au, kg	989	1,434	1,808	2,062	1,899	2,261	2,476	2,752	2,793	2,960
Au, troy. oz.	31,781	46,102	58,117	66,293	61,058	72,693	79,615	88,461	89,810	95,162
Ag, kg	45,318	41,405	45,212	47,421	64,846	84,911	80,781	72,154	75,123	73,173
Ag, '000 troy. oz.	1,457	1,331	1,454	1,525	2,085	2,730	2,597	2,320	2,415	2,353
Financial data, SEK m										
_										
Revenues	1,587	1,552	1,317	1,712	1,602	2,025	2,612	2,361	2,594	2,671
Operating profit before depreciations	659	554	1,317 250	1,712 474	437	2,025 924	2,612 1,267	1,149	2,594 1,162	1,308
Operating profit before depreciations Operating profit	659 530	554 369	250 19	474 188	437 108	924 548	1,267 868	1,149 756	1,162 738	1,308 872
Operating profit before depreciations Operating profit Investments	659	554	250 19 364	474 188 261	437 108 413	924 548 365	1,267 868 440	1,149 756 632	1,162 738 592	1,308 872 408
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata	659 530	554 369	250 19 364 72	474 188 261 78	437 108 413 68	924 548 365 64	1,267 868 440 79	1,149 756 632 78	1,162 738 592 75	1,308 872 408 48
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata	659 530	554 369	250 19 364	474 188 261	437 108 413	924 548 365	1,267 868 440	1,149 756 632	1,162 738 592	1,308 872 408
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata	659 530	554 369	250 19 364 72	474 188 261 78	437 108 413 68	924 548 365 64	1,267 868 440 79	1,149 756 632 78	1,162 738 592 75	1,308 872 408 48
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USc/lb Cu C1, Pro rata	659 530 565	554 369	250 19 364 72 264	474 188 261 78 216	437 108 413 68 167	924 548 365 64 112	1,267 868 440 79 143	1,149 756 632 78 153	1,162 738 592 75 147	1,308 872 408 48 142
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata	659 530 565	554 369	250 19 364 72 264	474 188 261 78 216	437 108 413 68 167	924 548 365 64 112	1,267 868 440 79 143	1,149 756 632 78 153	1,162 738 592 75 147	1,308 872 408 48 142
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserv Sulfide ores, ktonnes Zn, %	659 530 565	554 369 623 9,110 5.4	250 19 364 72 264 1,098	474 188 261 78 216 921 11,580 5.5	437 108 413 68 167 818	924 548 365 64 112 710	1,267 868 440 79 143 686 7,680 5.2	1,149 756 632 78 153 692	1,162 738 592 75 147 715	1,308 872 408 48 142 977 8,180 5.9
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserv Sulfide ores, ktonnes Zn, % Cu, %	659 530 565 //es 8,980 5.2 0.6	554 369 623 9,110 5.4 0.6	250 19 364 72 264 1,098 12,680 6.0 0.6	474 188 261 78 216 921 11,580 5.5 0.5	437 108 413 68 167 818 10,550 5.7 0.6	924 548 365 64 112 710 8,910 5.5 0.5	1,267 868 440 79 143 686 7,680 5.2 0.5	1,149 756 632 78 153 692 7,920 5.2 0.5	1,162 738 592 75 147 715 7,630 5.6 0.5	1,308 872 408 48 142 977 8,180 5.9 0.4
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserv Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes	659 530 565 /es 8,980 5.2 0.6 3,100	9,110 5.4 0.6 3,584	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274	474 188 261 78 216 921 11,580 5.5 0.5 3,500	437 108 413 68 167 818 10,550 5.7 0.6 4,300	924 548 365 64 112 710 8,910 5.5 0.5 3,680	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserved Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes Au, g/tonne	659 530 565 /es 8,980 5.2 0.6 3,100 3.6	9,110 5.4 0.6 3,584 3.8	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274 3.8	474 188 261 78 216 921 11,580 5.5 0.5 3,500 3.5	437 108 413 68 167 818 10,550 5.7 0.6 4,300 3.3	924 548 365 64 112 710 8,910 5.5 0.5 3,680 3.6	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500 3.7	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200 3.7	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040 3.4	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540 3.3
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserv Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes	659 530 565 /es 8,980 5.2 0.6 3,100	9,110 5.4 0.6 3,584	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274	474 188 261 78 216 921 11,580 5.5 0.5 3,500	437 108 413 68 167 818 10,550 5.7 0.6 4,300	924 548 365 64 112 710 8,910 5.5 0.5 3,680	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserved Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes Au, g/tonne	659 530 565 /es 8,980 5.2 0.6 3,100 3.6	9,110 5.4 0.6 3,584 3.8	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274 3.8	474 188 261 78 216 921 11,580 5.5 0.5 3,500 3.5	437 108 413 68 167 818 10,550 5.7 0.6 4,300 3.3	924 548 365 64 112 710 8,910 5.5 0.5 3,680 3.6	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500 3.7	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200 3.7	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040 3.4	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540 3.3 161
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserv Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes Au, g/tonne Te, g/tonne	659 530 565 /es 8,980 5.2 0.6 3,100 3.6	9,110 5.4 0.6 3,584 3.8	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274 3.8	474 188 261 78 216 921 11,580 5.5 0.5 3,500 3.5	437 108 413 68 167 818 10,550 5.7 0.6 4,300 3.3	924 548 365 64 112 710 8,910 5.5 0.5 3,680 3.6	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500 3.7	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200 3.7	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040 3.4	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540 3.3
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserv Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes Au, g/tonne Te, g/tonne  KYLYLAHTI <sup>©</sup> ) Milled ore, ktonnes Head grades	659 530 565 /es 8,980 5.2 0.6 3,100 3.6 165	9,110 5.4 0.6 3,584 3.8 177	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274 3.8 181	474 188 261 78 216 921 11,580 5.5 0.5 3,500 3.5 200	437 108 413 68 167 818 10,550 5.7 0.6 4,300 3.3 187	924 548 365 64 112 710 8,910 5.5 0.5 3,680 3.6 189	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500 3.7 175	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200 3.7 171	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040 3.4 162	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540 3.3 161
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserved Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes Au, g/tonne Te, g/tonne  KYLYLAHTI <sup>6</sup> ) Milled ore, ktonnes Head grades Cu, %	659 530 565 /es 8,980 5.2 0.6 3,100 3.6 165	9,110 5.4 0.6 3,584 3.8 177	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274 3.8 181	474 188 261 78 216 921 11,580 5.5 0.5 3,500 3.5 200	437 108 413 68 167 818 10,550 5.7 0.6 4,300 3.3 187	924 548 365 64 112 710 8,910 5.5 0.5 3,680 3.6 189 797	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500 3.7 175	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200 3.7 171 785	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040 3.4 162 716	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540 3.3 161
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserved Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes Au, g/tonne Te, g/tonne  KYLYLAHTI <sup>6</sup> ) Milled ore, ktonnes Head grades Cu, % Zn, % Zn, %	659 530 565 /es 8,980 5.2 0.6 3,100 3.6 165	9,110 5.4 0.6 3,584 3.8 177	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274 3.8 181	474 188 261 78 216 921 11,580 5.5 0.5 3,500 3.5 200 172 1.58 0.50	437 108 413 68 167 818 10,550 5.7 0.6 4,300 3.3 187	924 548 365 64 112 710 8,910 5.5 0.5 3,680 3.6 189 797 1.62 0.64	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500 3.7 175 809	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200 3.7 171 785	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040 3.4 162 716 0.74 0.35	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540 3.3 161 681 0.58 0.25
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserv Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes Au, g/tonne Te, g/tonne  KYLYLAHTI <sup>6</sup> ) Milled ore, ktonnes Head grades Cu, % Zn, % Zn, % Ni, %	659 530 565 /es 8,980 5.2 0.6 3,100 3.6 165	9,110 5.4 0.6 3,584 3.8 177	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274 3.8 181	474 188 261 78 216 921 11,580 5.5 0.5 3,500 3.5 200 172 1.58 0.50	437 108 413 68 167 818 10,550 5.7 0.6 4,300 3.3 187 733	924 548 365 64 112 710 8,910 5.5 0.5 3,680 3.6 189 797 1.62 0.64	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500 3.7 175 809	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200 3.7 171 785	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040 3.4 162 716 0.74 0.35 0.23	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540 3.3 161 681 0.58 0.25 0.28
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserv Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes Au, g/tonne Te, g/tonne  KYLYLAHTI <sup>©</sup> Milled ore, ktonnes Head grades Cu, % Zn, % Ni, % Co, %	659 530 565 7es 8,980 5.2 0.6 3,100 3.6 165	9,110 5.4 0.6 3,584 3.8 177	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274 3.8 181	474 188 261 78 216 921 11,580 5.5 0.5 3,500 3.5 200 172 1.58 0.50	437 108 413 68 167 818 10,550 5.7 0.6 4,300 3.3 187 733	924 548 365 64 112 710 8,910 5.5 0.5 3,680 3.6 189 797 1.62 0.64	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500 3.7 175 809	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200 3.7 171 785 1.01 0.41 0.21	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040 3.4 162 716 0.74 0.35 0.23 0.18	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540 3.3 161 681 0.58 0.25 0.28 0.16
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserv Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes Au, g/tonne Te, g/tonne  KYLYLAHTI <sup>6</sup> ) Milled ore, ktonnes Head grades Cu, % Zn, % Ni, % Co, % Au, g/tonne	659 530 565 /es 8,980 5.2 0.6 3,100 3.6 165	9,110 5.4 0.6 3,584 3.8 177	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274 3.8 181	474 188 261 78 216 921 11,580 5.5 0.5 3,500 3.5 200 172 1.58 0.50	437 108 413 68 167 818 10,550 5.7 0.6 4,300 3.3 187 733	924 548 365 64 112 710 8,910 5.5 0.5 3,680 3.6 189 797 1.62 0.64	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500 3.7 175 809	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200 3.7 171 785	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040 3.4 162 716 0.74 0.35 0.23	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540 3.3 161 681 0.58 0.25 0.28
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserved Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes Au, g/tonne Te, g/tonne  KYLYLAHTI® Milled ore, ktonnes Head grades Cu, % Zn, % Ni, % Co, % Au, g/tonne Concentrate production	659 530 565 /es 8,980 5.2 0.6 3,100 3.6 165	9,110 5.4 0.6 3,584 3.8 177	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274 3.8 181	474 188 261 78 216 921 11,580 5.5 0.5 3,500 3.5 200 172 1.58 0.50 - 0.67	437 108 413 68 167 818 10,550 5.7 0.6 4,300 3.3 187 733 1.72 0.70	924 548 365 64 112 710 8,910 5.5 0.5 3,680 3.6 189 797 1.62 0.64 - 0.81	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500 3.7 175 809	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200 3.7 171 785 1.01 0.41 0.21 0.20 0.98	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040 3.4 162 716 0.74 0.35 0.23 0.18 0.86	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540 3.3 161 681 0.58 0.25 0.28 0.16 1.14
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserved Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes Au, g/tonne Te, g/tonne  KYLYLAHTI® Milled ore, ktonnes Head grades Cu, % Zn, % Ni, % Co, % Au, g/tonne Concentrate production Cu, tonnes	659 530 565 7es 8,980 5.2 0.6 3,100 3.6 165	9,110 5.4 0.6 3,584 3.8 177	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274 3.8 181	474 188 261 78 216 921 11,580 5.5 0.5 3,500 3.5 200 172 1.58 0.50 - 0.67	437 108 413 68 167 818 10,550 5.7 0.6 4,300 3.3 187 733 1.72 0.70 - 0.75	924 548 365 64 112 710 8,910 5.5 0.5 3,680 3.6 189 797 1.62 0.64 - 0.81	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500 3.7 175 809 1.30 0.53 - 1.08	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200 3.7 171 785 1.01 0.21 0.20 0.98	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040 3.4 162 716 0.74 0.35 0.23 0.18 0.86	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540 3.3 161 681 0.58 0.25 0.28 0.16 1.14 25,408
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserved Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes Au, g/tonne Te, g/tonne  KYLYLAHTI® Milled ore, ktonnes Head grades Cu, % Zn, % Ni, % Co, % Au, g/tonne Concentrate production	659 530 565 7es 8,980 5.2 0.6 3,100 3.6 165	9,110 5.4 0.6 3,584 3.8 177	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274 3.8 181	474 188 261 78 216 921 11,580 5.5 0.5 3,500 3.5 200 172 1.58 0.50 - 0.67	437 108 413 68 167 818 10,550 5.7 0.6 4,300 3.3 187 733 1.72 0.70	924 548 365 64 112 710 8,910 5.5 0.5 3,680 3.6 189 797 1.62 0.64 - 0.81	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500 3.7 175 809	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200 3.7 171 785 1.01 0.41 0.21 0.20 0.98	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040 3.4 162 716 0.74 0.35 0.23 0.18 0.86	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540 3.3 161 681 0.58 0.25 0.28 0.16 1.14
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserved Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes Au, g/tonne Te, g/tonne  KYLYLAHTI® Milled ore, ktonnes Head grades Cu, % Zn, % Ni, % Co, % Au, g/tonne Concentrate production Cu, tonnes Zn, tonnes	659 530 565 7es 8,980 5.2 0.6 3,100 3.6 165	9,110 5.4 0.6 3,584 3.8 177	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274 3.8 181	474 188 261 78 216 921 11,580 5.5 0.5 3,500 3.5 200 172 1.58 0.50 - 0.67	437 108 413 68 167 818 10,550 5.7 0.6 4,300 3.3 187 733 1.72 0.70 - 0.75	924 548 365 64 112 710 8,910 5.5 0.5 3,680 3.6 189 797 1.62 0.64 - 0.81	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500 3.7 175 809 1.30 0.53 - 1.08	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200 3.7 171 785 1.01 0.21 0.20 0.98	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040 3.4 162 716 0.74 0.35 0.23 0.18 0.86	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540 3.3 161 0.58 0.25 0.28 0.16 1.14
Operating profit before depreciations Operating profit Investments Cash cost USc/lb Zn C1, Pro rata Cash cost USc/lb Cu C1, Pro rata Cash cost USD/troy. oz. Au C1, Pro rata Proven and probable Mineral Reserved Sulfide ores, ktonnes Zn, % Cu, % Gold ores, ktonnes Au, g/tonne Te, g/tonne  KYLYLAHTI <sup>6</sup> ) Milled ore, ktonnes Head grades Cu, % Zn, % Ni, % Co, % Au, g/tonne Concentrate production Cu, tonnes Zn, tonnes Concentrate grade	659 530 565 /es 8,980 5.2 0.6 3,100 3.6 165	9,110 5.4 0.6 3,584 3.8 177	250 19 364 72 264 1,098 12,680 6.0 0.6 3,274 3.8 181	474 188 261 78 216 921 11,580 5.5 0.5 3,500 3.5 200 172 1.58 0.50 - 0.67 13,275 756	437 108 413 68 167 818 10,550 5.7 0.6 4,300 3.3 187 733 0.70 0.75	924 548 365 64 112 710 8,910 5.5 0.5 3,680 3.6 189 797 1.62 0.64 - 0.81 61,155 5,283	1,267 868 440 79 143 686 7,680 5.2 0.5 4,500 3.7 175 809 1.30 0.53 - 1.08	1,149 756 632 78 153 692 7,920 5.2 0.5 4,200 3.7 171 785 1.01 0.41 0.21 0.20 0.98 42,107 2,334	1,162 738 592 75 147 715 7,630 5.6 0.5 5,040 3.4 162 716 0.74 0.35 0.23 0.18 0.86	1,308 872 408 48 142 977 8,180 5.9 0.4 4,540 3.3 161 681 0.58 0.25 0.28 0.16 1.14 25,408 766

Continued: Ten-year overview -										
Mines	2011	20121)	2013	2014	2015	2016	2017	2018	2019	2020
KYLYLAHTI <sup>6)</sup> cont.										
Production of metal in concentrate									1.000	
Cu, tonnes				2,546	11,835	12,123	9,686	7,353	4,826	3,609
Zn, tonnes	_			335	2,189	2,477	1,682	1,011	851	326
Ni, tonnes								518 278	731 425	989 447
Co, tonnes Au, kg				 82	421	477	674	605	480	623
Au, troy. oz.				2,624	13,542	15,347	21,657	19,435	15,419	20,029
Financial data, SEK m				2,024	10,042	10,047	21,007	13,400	13,413	20,023
Revenues	_			117	560	573	708	674	558	659
Operating profit before depreciations	_			31	192	164	267	241	108	216
Operating profit	_	_	_	7	74	-28	34	-31	39	151
Investments	_	_	_	36	137	97	24	10	4	1
Cash cost USc/lb Cu C1, Normal	_	_	_	190	150	143	153	198	145	-100
Proven and probable Mineral Reserv	es									
Ktonnes	_	_	_	3,900	2,900	1900	1,700	1,300	500	_
Cu, %	-	_	_	1.6	1.4	1.2	1.2	0.7	0.6	-
Zn, %	_	_	_	0.6	0.6	0.5	0.4	0.3	0.3	_
Au, g/tonne	_	_	_	0.9	1.0	1.1	0.9	1.0	1.2	-
GARPENBERG										
Milled ore, ktonnes	1,456	1,484	1,495	2,224	2,367	2,622	2,634	2,622	2,861	3,000
Head grades										
Zn, %	6.2	5.6	5.2	5.1	5.0	4.4	4.3	4.1	4.1	3.8
<u>Cu, %</u>	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pb, %	2.4	2.1	2.1	2.1	2.1	1.8	1.8	1.6	1.5	1.5
Au, g/tonne	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Ag, g/tonne	133	129	153	136	156	150	133"	135	118	108
Concentrate production										
Zn, ktonnes	148	136	127	182	196	200	201	191	205	201
Cu, ktonnes	2	2	3	3	5	5	5	5	5	6
Pb, ktonnes	39	35	36	58	60	54	55	50	51	52
Concentrate grade	EE O	E40			EE O	E40	E0 E	E0.0	E0.0	EO 4
Zn, %	55.0 19.1	54.8 17.7	55.4 18.0	54.6 14.8	55.0 16.3	54.3 15.2	53.5 16.3	52.9 13.7	53.0 13.8	53.1 15.7
Cu, % Pb, %	72.4	70.7	70.3	63.1	70.7	72.7	70.9	70.5	70.7	71.0
Production of metal in concentrate	76.4	70.7	70.0	00.1	70.7	7	70.3	70.5	70.7	71.0
Zn, ktonnes	81	75	70	99	108	109	107	101	109	107
Cu, ktonnes	0.4	0.4	0.5	0.4	0.8	0.7	0.8	0.7	0.7	0.9
Pb, ktonnes	28	25	25	37	42	39	39	35	36	37
Au, kg	246	250	277	468	559	580	541	542	514	668
Au, troy. oz.	7,895	8,051	8,911	15,049	17,962	18,661	17.406	17,413	16,522	21,477
Ag, tonnes	140	135	162	218	288	302	268	273	257	245
Ag, '000 troy. oz.	4,505	4,341	5,201	7,014	9,270	9,705	8,602	8,769	8,249	7,862
Financial data, SEK m	,							-,	-, -	,
Revenues	2,155	1,876	1,675	2,318	2,862	3,491	4,019	3,700	3,712	3,669
Operating profit before depreciations	1,506	1,262	1,025	1,319	1,896	2,509	3,049	2,685	2,555	2,456
Operating profit	1,314	1,033	776	919	1,452	2,063	2,606	2,225	2,079	1,942
Investments	660	1,459	2,045	916	336	317	377	395	573	537
Cash cost USc/lb Zn C1, Pro rata	-	-	46	56	45	43	46	47	51	54
Proven and probable Mineral Reserv	es									
Ktonnes	23,600	25,600	36,300	37,600	39,800	76,400	77,700	76,200	74,800	89,500
Zn, %	5.1	5.1	4.6	4.3	3.9	3.2	3.1	3.1	3.1	2.8
Ag, g/tonne	144	131	132	120	113	97	100	96	96	94
TARA										
Milled ore, ktonnes	2,486	2,502	2,493	2,287	2,197	2,603	2,311	2,200	2,461	2,316
Head grades										
Zn, %	7.0	7.0	7.1	6.9	6.4	6.0	5.9	6.3	5.2	5.8
Pb, %	1.4	1.4	1.5	1.6	1.3	1.2	1.1	1.2	1.0	1.0
Concentrate production										
Zn, ktonnes	307	305	298	267	243	268	239	242	223	230
Pb, ktonnes	34	41	39	42	34	37	31	29	29	27
Concentrate grade										
Zn, %	53.3	54.4	55.9	56.0	54.8	55.2	54.6	54.4	54.9	55.3
Pb, %	58.8	55.2	56.1	53.1	49.9	52.8	54.7	57.0	54.9	52.6

Continued: Ten-year overview – Mines	2011	20121)	2013	2014	2015	2016	2017	2018	2019	2020
TARA forts.										
Production of metal in concentrate										
Zn, ktonnes	164	166	166	150	133	148	131	132	122	127
Pb, ktonnes	20	23	22	22	17	20	17	17	16	14
Ag, kg	909	1,673	1,197	2,433	1,273	1,076	1,344	1,160	1,578	918
Ag, '000 troy. oz.	29	54	38	78	41	35	43	37	51	30
Financial data, SEK m										
Revenues	1,757	1,727	1,542	1,743	1,492	2,085	2,691	2,727	2,143	1,832
Operating profit before depreciations	503	421	595	479	470	947	1,275	1,160	598	110
Operating profit	268	100	195	56	95	476	942	798	283	-252
Investments	372	268	201	313	274	299	379	592	508	383
Cash cost USc/lb Zn C1, Normal	72	69	68	75	76	69	70	78	86	93
Proven and probable Mineral Reserv	es									
Ktonnes	15,700	14,000	13,100	15,300	17,000	16,500	19,500	19,000	17,400	18,100
Zn, %	7.1	7.1	7.0	6.6	6.3	6.3	5.8	5.7	6.0	5.5
Pb, %	1.8	1.7	1.6	1.5	1.5	1.6	1.4	1.5	1.6	1.5
KEVITSA <sup>8)</sup>										
Milled ore, ktonnes	_	_	_	_	_	4,518	7,911	7,582	7,536	9,186
Head grades										
Cu, %	-	-	_	_	_	0.35	0.42	0.39	0.29	0.33
Ni, %	-	-	-	-	-	0.24	0.25	0.26	0.19	0.18
Co, %	_	_	_			0.01	0.01	0.01	0.01	0.01
Au, g/tonne	_	_	_			0.14	0.16	0.15	0.11	0.13
Pd, g/tonne	_	_	_	_	-	0.19	0.20	0.22	0.13	0.13
Pt, g/tonne		_			_	0.29	0.32	0.36	0.24	0.25
Concentrate production										
Cu, ktonnes						55	112	110	80	110
Ni, ktonnes						80	139	145	105	129
Concentrate grade										
Cu, %	_	_				25.8	26.8	25.1	24.6	25.0
Ni, %						9.3	9.9	9.6	8.6	8.6
Production of metal in concentrate									40.700	
Cu, tonnes			_		_	14,217	29,957	27,498	19,763	27,402
Ni, tonnes			_			7,442	13,777	13,948	9,021	11,074
Co, tonnes	_		_	_	_	322	587	591	445	495
Au, kg						328	647	630	407	584
Au, troy. oz.	_		_			10,558	20,790	20,261	13,095	18,767
Pd, kg			_	_		559	1,021	1,157	699	858
Pd, troy. oz.			_			17,965	32,838	37,209	22,470	27,572
Pt, kg	_	_	_	_		750	1,418	1,576	953	1,276
Pt, troy. oz. Financial data, SEK m						24,118	45,573	50,683	30,651	41,039
Revenues						1,210	2,680	2,922	2,231	2,999
Operating profit before depreciations						500	1,502	1,686	1,079	1,721
Operating profit							893	974	67	320
Investments						166 473	939	1,221	2,716	1,264
Cash cost USc/lb Ni C1, Normal						150			8	-140
Cash cost USc/lb Ni C1, Normal						340	278	315	392	305
Cash cost USc/lb Cu C1, Pro rata						155	139	146	150	131
Proven and probable Mineral Reserv						100	103	140	100	131
Ktonnes			_			1/6 200	133 200	128 600	1/10 200	128,200
Cu, %						0.34	0.34	0.34	0.32	0.32
Ni, %						0.34	0.34	0.22	0.32	0.32
1 111, 70						J.LE	J.LL	J.L.E	J.L4	J.L I

<sup>1)</sup> Comparison figures for 2012 have been restated due to changes in accounting regulations. Investments at Aitik increased by SEK 383 m.

<sup>2)</sup> Tellurium production started in 2012.

<sup>3)</sup> Operational acquisitions: Kylylahti 2014 (SEK 718 m), Kevitsa 2016 (SEK 5,961 m).

<sup>4)</sup> The CO<sub>2</sub> Intensity for Mines is the ratio between the total carbon dioxide emissions (Scope 1 and 2) and the metal content in concentrate produced at Mines.

<sup>5)</sup> Aitik's figures for 2013 are updated in accordance with the press release published on May 6, 2014.

<sup>6)</sup> The acquisition of Kylylahti was completed in October 2014.

<sup>7)</sup> Due to incorrect calculation data, Garpenberg's figure for Ag g/tonne in 2017 has been corrected from 113 to 133.

<sup>8)</sup> The acquisition of Kevitsa was completed in June 2016.

# **SMELTERS**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Metal production										
Zinc, ktonnes	461	467	455	468	469	461	457	486	486	489
Copper, ktonnes	336	339	325	347	332	336	353	364	322	372
Lead, ktonnes	11	19	24	25	26	28	28	29	26	28
Lead alloys, ktonnes (Bergsöe)	41	43	45	44	45	46	50	47	49	46
Nickel in matte, ktonnes <sup>1)</sup>					17	31	25	31	26	25
Gold, kg	12,848	16,175	16,177	17,368	17,608	17,638	17,776	16,653	14,976	18,537
Gold, troy. oz.	413,052	520,011	520,094	558,382	566,102	567,077	571,501	535,381	481,477	595,961
Silver, kg <sup>2)</sup>	488,147	575,959	537,941	626,767	680,600	626,331	569,474	563,051	466,738	605,376
Silver, '000 troy. oz. <sup>2)</sup>	15,964	18,517	17,294	20,151	21,881	20,137	18,309	18,102	15,006	19,463
Aluminum fluoride, ktonnes 3)	35	36	34	35	31	32	0	0	0	0
Sulphuric acid, ktonnes	1,597	1,634	1,564	1,659	1,665	1,642	1,613	1,630	1,534	1,730
E										
Financial data, SEK m	00 474	00.750	00.440	05.004	00.040	00 540	47.004	EO CO 4	40 EEC	EE 000
Revenues	38,471	38,753	33,410	35,894	38,948	38,516	47,691	50,634	48,556	55,283
Gross profit excl. revaluation of process inventory <sup>4)</sup>	7,160	7,288	6,908	7,869	9,167	9,376	9,776	10,088	10,969	12,062
Operating expenses	5,358	5,330	5,346	5,370	5,536	5,696	6,004	6,490	7,070	6,922
Depreciation	823	891	913	1,012	1,002	1,026	1.114	1,220	1,253	1,273
Operating profit excl. revaluation of				.,0.2	.,	.,025	.,	.,	.,200	.,_, 3
process inventory <sup>4)</sup>	1,051	1,095	679	1,518	2,692	2,759	2,732	2,435	2,716	3,975
Operating profit	790	1,224	210	1,672	2,272	3,347	2,834	2,364	3,277	4,472
Investments	1,627	993	1,200	768	1,248	1,372	1,862	1,656	2,398	1,835
Capital employed	16,213	15,569	15,791	15,592	15,878	17,838	18,018	18,237	21,175	21,977
Greenhouse gas emissions										
Direct emissions of greenhouse gases, ktonnes	392	450	448	421	428	426	413	436	425	398
Indirect emissions of greenhouse	002	400		761	420	420	410	400	420	000
gases, purchased electricity, heating										
and steam, ktonnes	231	237	235	243	234	313	267	194	179	217
CO <sub>2</sub> Intensity <sup>5)</sup>	0.70	0.76	0.77	0.72	0.71	0.78	0.71	0.63	0.63	0.62
RÖNNSKÄR										
Smelting material										
Copper, ktonnes										
Copper concentrate	651	624	605	661	642	626	631	665	606	658
Secondary raw materials	175	221	209	184	172	171	180	171	169	161
Of which electronics	64	108	109	82	86	82	77	86	81	72
Copper, total	826	844	814	845	814	798	811	835	774	819
Lead, ktonnes										
Lead concentrate	11	27	38	40	38	41	39	43	41	43
Secondary raw materials	5	2	1	1	1	1	2	2	1	1
Lead, total	17	29	39	41	39	42	41	45	42	44
Production										
Cathode copper, ktonnes	219	214	206	217	206	207	219	224	201	226
Lead, ktonnes	11	19	24	25	26	28	28	29	26	28
Zinc clinker, ktonnes	36	36	36	39	36	33	34	31	33	33
Gold, tonnes	11	13	12	13	13	14	13	13	12	14
Gold, '000 troy. oz.	341	403	402	419	425	443	421	429	398	434
Silver, tonnes	415	448	437	479	539	508	485	472	384	524
Silver, '000 troy. oz.	13,344	14,395	14,051	15,392	17,322	16,337	15,590	15,165	12,346	16,837
Sulphuric acid, ktonnes	571	553	536	564	533	503	505	518	463	506
Liquid sulphur dioxide, ktonnes	42	38	39	42	37	45	50	61	54	49
Palladium concentrate, tonnes	2	3	2	2	2	3	2	2	2	2
Financial data, SEK m										0:
Revenues	2,226	2,398	2,029	2,417	2,678	2,759	2,883	3,045	3,153	3,631
Operating profit before depreciations		832	374	748	1,038	1,135	1,221	1,091	850	1,646
Operating profit	470	535	53	405	727	852	900	756	519	1,327
Investments	1,074	481	345	147	383	398	356	403	978	939

Continued: Ten-year overview –										
Smelters	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BERGSÖE										
Smelting material, ktonnes										
Battery raw material <sup>6)</sup>	43	45	46	46	47	47	51	50	52	51
Production, ktonnes										
Lead alloys	41	43	45	44	45	46	50	47	49	46
Financial data, SEK m	707	000	745	700	047	000	4.004	4 470	4.454	004
Revenues	787	698	715	783	817 37	882	1,221	1,172	1,154	981
Operating profit before depreciations	95 75	52	57	64 45		126	124	61	110 97	<u> </u>
Operating profit Investments		34 10	39 12	10	18 11	109 26	110 66	8 49	64	11
IIIVESCITIETICS		10	16	10	11		00	43	04	11
HARJAVALTA										
Smelting material, ktonnes										
Copper concentrate	456	516	471	551	528	552	543	522	488	612
Secondary raw materials	14	16	26	21	23	27	24	27	24	26
Copper, total	471	532	497	572	551	579	566	549	512	638
Nickel concentrate	259	248	251	239	282	294	259	296	266	254
Production										
Cathode copper, ktonnes	116	125	119	130	126	129	133	139	120	146
Nickel in matte, ktonnes <sup>1)</sup>					17	31	25	31	26	25
Gold, tonnes	2	4	4	4	4	4	5	3	3	5
Gold, '000 troy. oz.	72	117	119	139	141	124	150	106	83	162
Silver, tonnes	73	128	101	142	126	101	66	73	63	62
Silver, '000 troy. oz.	2,350	4,122	3,244	4,577	4,042	3,247	2,134	2,351	2,012	2,005
Sulphuric acid, ktonnes	600	639	590	658	667	703	677	671	620	769
Liquid sulphur dioxide, ktonnes	35	37	37	37	37	33	35	37	36	34
Palladium concentrate, ktonnes	0.84	0.54	1.47	1.91	2.15	2.57	2.90	2.66	2.80	2.85
Financial data, SEK m Revenues	1,552	1,666	1,631	1,746	2,214	2,281	2,353	2,897	2,816	3,083
Operating profit before depreciations	373	479	496	485	943	935	953	1,315	1,067	1,427
Operating profit  Operating profit	222	324	316	279	736	704	707	1,043	746	1,095
Investments	229	215	246	225	396	432	808	680	813	385
IIIVESUITICITUS				LLO	- 000	702		- 000	010	000
KOKKOLA										
Smelting material, ktonnes										
Zinc concentrate	600	589	602	577	584	547	560	566	560	574
Production, ktonnes										
Zinc	307	315	312	302	306	291	285	295	291	297
Silver in concentrate, kg				5,651	16,079	17,180	18,188	18,205	20,147	19,316
Silver in concentrate, '000 troy. oz.				182	517	552	585	585	648	621
Sulphuric acid	302	313	319	314	343	315	326	322	326	328
Financial data, SEK m										
Revenues	1,818	1,778	1,795	2,004	2,350	2,223	2,363	2,344	2,842	3,044
Operating profit before depreciations	417	432	398	639	943	789	921	711	1,180	1,315
Operating profit	246	261	248	459	739	572	688	461	912	1,031
Investments	237	210	318	216	166	297	322	343	296	289
ODD 4										
ODDA Smelting material, ktonnes										
Zinc concentrate						-				
(incl. zinc clinker)	283	279	263	302	310	339	338	366	384	382
Production, ktonnes	200		200	302	310	000	000	300	304	302
Zinc	153	153	143	166	163	171	172	191	195	192
Aluminum fluoride <sup>3)</sup>	35	36	34	35	31	32	0	0	0	0
Sulphuric acid	125	128	119	123	123	121	104	119	126	127
Financial data, SEK m			. 10		, _ 0		,,,,	. 10	.20	127
Revenues	1,212	1,184	1,070	1,395	1,554	1,522	1,309	1,322	1,687	1,743
Operating profit before depreciations	123	184	116	355	522	461	383	338	647	729
Operating profit	-25	31	-26	209	390	314	225	168	467	548
Investments	44	61	269	166	283	214	298	152	221	182
						·				

<sup>1)</sup> Nickel in matte at Harjavalta is included as of July 1, 2015.

<sup>2)</sup> Silver in concentrate at Kokkola is included in the production figure shown as of 2014.

<sup>3)</sup> The aluminum fluoride operations at Odda were divested in 2017.

<sup>4)</sup> Process Inventory Revaluation.

<sup>5)</sup> The CO<sub>2</sub> Intensity for Smelters is the ratio between total carbon dioxide emissions (Scope 1 and Scope 2) and the metal production at Smelters.

<sup>6)</sup> As of 2020, used battery raw material is reported excluding plastics, which were previously included. Adjustments to the background history have been made accordingly.

# **Definitions and industry terms**

### FINANCIAL DEFINITIONS

Return on equity Profit for the year as a percentage of average equity in the last 13 months.

Measured after tax.

Return on capital employed Operating profit divided by the average capital employed. The average capital employed for each year consists of an average of the closing capital employed in the last 13 months. Measured before tax.

Balance sheet total The sum of the assets side or the sum of the equity and liabilities side of the Balance Sheet.

**Dividend yield** Dividend per share as a percentage of the share price.

**Equity per share** Equity divided by the number of outstanding shares.

Free cash flow Cash flow from operating activities including cash flow from investment activities.

FTE - Full-time equivalent A metric that corresponds to one employee working full time for one year.

**Cash flow per share** The cash flow for the period divided by the average number of outstanding shares.

Cash flow from operating activities Cash flow generated via the operating profit, adjusted for items not affecting cash flow, tax paid and change in working capital.

**Net debt** Interest-bearing current and longterm liabilities (including pension liabilities) less financial assets (including cash and cash equivalents)

Net debt/equity ratio Net debt divided by

**P/E ratio** Share price divided by earnings per share

**Cash flow per share** The cash flow for the period divided by the average number of outstanding shares.

Operating profit (EBIT) Revenues less all costs attributable to the operations but excluding net financial items and tax.

Operating profit (EBIT) excluding revaluation of process inventory Revenues less all costs attributable to the operations but excluding the effects of the revaluation of process inventory, net financial items and tax.

**Equity/assets ratio** Equity as a percentage of the Balance Sheet total.

Capital employed The Balance Sheet total less interest-bearing investments, tax receivables and non-interest-bearing provisions and liabilities

**Total return** The sum of the share's performance during the year plus dividend paid divided by the share price at the beginning of the year.

Explanations and calculations for the following financial metrics are available at www.boliden.com: Operating profit [EBIT] excluding revaluation of process inventory, Operating profit [EBIT], Free cash flow, Net debt, Return on capital employed, Return on Equity, Net debt/equity ratio, and Equity/Assets ratio. These financial metrics are used by Boliden but are not defined in accordance with IFRS regulations.

# DEFINITION CASH COST

Boliden uses the Wood Mackenzie's cash cost metrics, C1 Normal costing and C1 Pro rata costing, to measure the mines' cost position in relation to other mines worldwide. The lower a mine's cash cost, the better its cost position. Cash cost is expressed in USc/lb. of metal and can be multiplied by 22.0462 (rounded off) to obtain the price in USD per metric ton of metal.

### Normal costing

In normal costing calculations, the costs are allocated in their entirety to one main metal and then reduced by the net revenue<sup>1)</sup> of other metals, known as by-metals.

- Mining operations, concentration and administration costs<sup>2)</sup>
- + Costs of freighting concentrate to smelters
- + Treatment and refining charges (TC/RC)
- Deductions for net revenue of by-metals
- = Cash cost C1 Normal costing

### Pro rata costing

In pro rata cash costing, the costs are divided up between the various metals on the basis of the individual metal's share of the total net revenue.

### Composite costing

In composite costing, mines are included using either normal costing or pro rata costing on the basis of criteria based on the metals' net revenue. If a metal accounts for 65% or more of the total net revenue, the cash cost is calculated using normal costing, while if a metal accounts for less than 65% of the total net revenue, the cash cost is calculated using pro rata costing.

- + Income from payable metal
- The metal's freight cost
- The metal's treatment and refining charges
- The net revenue for the metal

# DEFINITION OF CASH MARGIN

Boliden uses Wood Mackenzie's cash margin compilations to measure the smelter's cost position in relation to other smelters. The cash margin is the difference between income and cash cost, expressed in USc/lb of metal, and can be multiplied by 22.0462 (rounded off) to obtain the price in USD per metric ton of metal. The income comprises treatment and refining charges, free metals and income from by-products.

The income for zinc smelters includes income generated by sales of surplus energy, while for copper smelters, the income generated by the sales of sulphuric acid and surplus energy is added as a credit when calculating the cash cost.

The calculations for copper smelters are expressed as unit of metal produced from concentrate, while for zinc smelters it is expressed as unit of finished metal produced. Income is normally included if it is regarded as having been derived from the main process during the production of metal and the product is saleable.

<sup>1)</sup> Calculating the net revenue of mines' metals

The net revenue is the payable income from the metal, less freight costs and treatment and refining charges

<sup>2)</sup> Administrative costs attributable to the mine

### INDUSTRY-SPECIFIC TERMS AND EXPLANATIONS

**Concentrator** A plant in which ore is processed mechanically and/or chemically to extract and produce a concentrate of the valuable minerals.

**Base metals** The most common metals, e.g. zinc, copper, lead, nickel and aluminum.

Payable metal content The percentage of the metal content of the concentrate for which the smelters pay when purchasing concentrate.

Cash cost Common measurement used to show the costs affecting a mine's cash flow, converted into US dollars (average rate for the measurement period). Usually shown in cents per ounce. To show the cash cost in USD per metric ton, multiply by 22. Used to compare the mine's cost position in relation to other mines. See Definitions

**Open pit** A method of mining mineral deposits located near the surface. The waste rock is stripped and the ore mined directly at the surface.

Free metals The percentage of metal concentrates bought in that an individual smelter can process, over and above the payable metal content. This percentage generates income without incurring a raw material cost.

Galvanizing An electrochemical process whereby a metal is coated with a thin layer of another metal, such as zinc. Galvanizing is commonly used to protect against corrosion (rust).

**Waste rock** Economic term for rock which, unlike ore, contains no valuable material.

**Gold Doré** A gold/silver alloy cast as bars in the concentrator. Further processed to pure gold and silver at a smelter.

**Jarosite** A mineral primarily comprising iron sulfate, which is a common waste product of zinc production.

Kaldo furnace Rotating and tippable furnace for the smelting and process treatment of copper, lead and precious metals, etc., including the recycling of metals from electronic scrap. The plastic present in the scrap is used to smelt the metals, thereby reducing the process energy requirement.

**Complex ore** Ore that contains several metals, e.g. zinc, copper, lead, gold and silver.

**Copper cathode** An end product from copper smelters in the form of 99.99% pure copper plate

**LBMA** London Bullion Market Association. International market responsible for the daily pricing of precious metals.

**Alloy** Substance with metallic properties which is composed of two or more chemical elements, at least one of which is a metal.

**LME** London Metal Exchange. International market where non-ferrous metals are bought and sold. Trading on the LME is used as the basis

for the daily pricing of metals worldwide. It also holds warehouse inventories of the metals traded

**Ore** Economic term for minerals, rock types or other bedrock components that can be profitably mined to extract metals or other valuable substances

Metal equivalents Used to describe the environmental impact of emissions and discharges of metals to air and water. The metal equivalent (Me-eq) takes into account the toxicity of each metal (relative to Cu) and provides a better metric of the environmental impact than the combined weight of the metals.

**Ore grade** The average quantity of valuable metals in a metric ton of ore, expressed as grams per metric ton for precious metals and as a percentage for other metals.

Metal content The quantities of e.g. zinc, copper, lead, gold and silver contained in concentrates. Zinc concentrates generally contain approximately 50% zinc metal, while copper concentrates generally contain approximately 25% copper. The lead content of mined concentrate is usually around 65%.

Metal concentrate Also known as dressed ore or mined concentrate. Metal concentrate is the result of the concentration processes that separate out the financially valuable minerals present in ore from those with no financial value.

**Metal premium** The price agreed in advance, over and above the LME price, and paid by customers for specifically adapted metal that is freely delivered.

**Mineralization** A concentration of minerals in the bedrock.

Mineral reserves Those parts of a mineral resource that can be mined and processed in accordance with the company's profitability requirements, taking into account factors such as waste rock dilution and the percentage of metal in an ore that can be extracted in the concentration process, are transferred to mineral reserves and hence eliminated from the mineral resources. Mineral reserves are divided into two categories: probable mineral reserves and proven mineral reserves.

Mineral resource A concentration of minerals in the bedrock that may become commercially extractable. Mineral resources are divided into three categories: inferred mineral resources, indicated mineral resources and measured mineral resources.

Price escalators (PP) Also known as price-sharing clauses. The clauses in the agreements for zinc smelting charges that distribute changes in metal prices between mines and smelters. There have been no price escalator clauses in copper treatment and refining charges for many years now.

Raw materials feed A smelter's raw material input, i.e. the amount of metal concentrate or secondary materials processed and refined.

Secondary material Various types of recycling materials from which metals can be recovered, e.g. electronic and metal scrap, metal ashes, slag, dust and scrap lead batteries.

Treatment and refining charges (TC/RC) The price of concentrate is defined as the LME price less treatment and refining charges, which comprise the remuneration received by the smelter for refining the smelting material (concentrate and secondary materials) and extracting metals. Copper smelters' processes can be broken down into a treatment phase and a refining phase, while zinc smelters' processes only involve a treatment phase, and hence zinc smelters' remuneration only comprises a treatment charge (TC).

**Smelter** A plant in which metal raw materials, metal concentrates or secondary materials are processed to separate metals from impurities.

Underground mine A mine where the ore is mined using underground tunnels. The mining methods used in Boliden's underground mines include the cut-and-fill method and sub-level stoning

**Recovery** The percentage portion of the quantity of a given metal in an ore extracted during the concentration process.

**Zinc ingot** An end product from zinc smelters with detailed specifications with regard to degree of purity, weight and size.

Precious metals Metals that are less commonly present in the earth's crust than base metals and which are regarded, to a greater extent, as a type of investment asset by financial sector players. The most common precious metals are gold, silver, platinum and palladium.

### **ABBREVIATIONS**

Lb = pound = 0.4536 kg

Troy ounce = 31.1035 grams

USD = US dollars

USc = US cents

c/Lb = cents per pound = 1/22 USD/ metric ton

SEK = Swedish kronor

NOK = Norwegian kroner

EUR = euro

Ag = silver

Au = gold

Cu = copper

Ni = nickel

Ph = lead

Zn = zinc

# **Annual General Meeting**

Boliden's Annual General Meeting will be held on April 27, 2021. The AGM will be held through mandatory postal voting under the provisions of Section 22 of the Act (2020:198) on temporary exceptions to facilitate the execution of general meetings in companies and other associations.

### **Participation**

Shareholders wishing to participate in the AGM must both be registered in the shareholders' register kept by Euroclear Sweden AB on Monday, April 19, 2021 (for details of the re-registration process for nominee shareholders, please see below) and have notified the company of their intention to participate, either via Boliden's website, www.boliden.com, by telephone on +46 8 32 94 29, or by writing to the company at the following address: Boliden, c/o Euroclear Sweden AB, Box 191, SE-101 23 Stockholm, Sweden. Notice of participation must be received by the company no later than Monday, April 26, 2021.

When giving notice of participation, shareholders must state their name, identification or registration number, address and telephone number. The information provided will be processed and used only for the purpose of the Annual General Meeting.

### Nominee shares

In order to be entitled to participate in the Annual General Meeting, nominee shareholders must, no later than Monday, April 19, 2021, have their shares temporarily re-registered in their own

names with Euroclear Sweden AB. All such requests for registration in the shareholder's own name must be submitted to the relevant trustee well ahead of this date.

### Complete convening notice

A complete notice convening the AGM, as well as financial and other information, can be found at www.boliden.com. Printed financial information may also be ordered via the website or from Boliden AB, Box 44, SE-101 20 Stockholm, Sweden.

#### Financial information

April 27, 2021 Interim Report for the first quarter of 2021

February 11, 2022 Q4 Interim Report and Year-End Report 2021

### Questions

Any questions concerning the content of Boliden's financial information can be submitted to:

Boliden's Investor Relations Phone +46 8 610 15 00 or

e-mail: investorrelations@boliden.com



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### Boliden Annual and Sustainability Report, 2020

Boliden's Annual and Sustainability Report is published in Swedish and in an English translation. The Swedish version takes precedence in the event of any discrepancies between the two versions.

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