BOLIDEN

A century of exploration and innovation

Annual and Sustainability Report 2024

A century of exploration and innovation

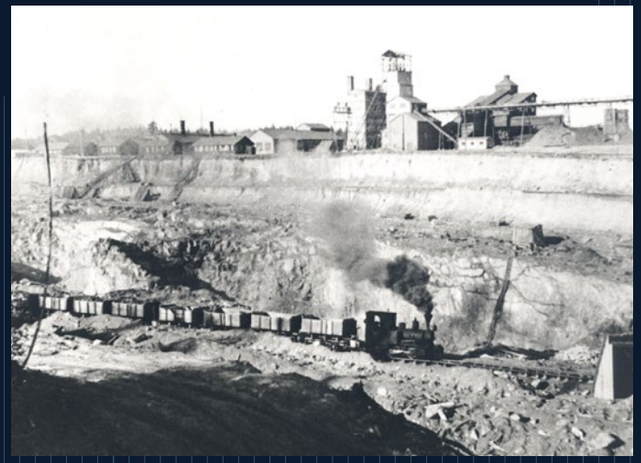
The Boliden Group's story starts with the gold discovery on December 10, 1924. At the time, Centralgruppens Emissionsbolag owned the ore body in Boliden and it was taken over by the bank that originally financed the business. The bank formed Västerbottens Gruvaktiebolag and Skellefteå Gruvaktiebolag. In 1929, the shares were sold to the Swedish businessman Ivar Kreuger. A merger of the two companies in 1931 formed Bolidens Gruvaktiebolag, the basis for what today is the Boliden Group. After Ivar Kreuger's bankruptcy in 1932, ownership was taken over by Skandinaviska Banken, until the company was listed on the Stockholm Stock Exchange in 1952.

In 1986 Trelleborg AB took over the company and Boliden started acquiring a number of companies in Spain, the Netherlands and Sweden. Ten years later, in 1996, Trelleborg AB decided to divest Boliden's mines, smelting plants, manufacturing facilities and services. The new company – Boliden Limited – established its head office in Toronto, Canada. In 1998, Boliden acquired the Westmin mining company including the Myra Falls mine in Canada and a copper project in Chile. Two years after the move to Toronto, a group-wide restructuring began, and the company was, in 1999, again listed on the Stockholm Stock Exchange.

In the early 2000s, Boliden's head office was moved back to Sweden and in a major deal with the Finnish company Outokumpu in 2003, Boliden acquired the Harjavalta, Kokkola and Odda smelting plants and the Tara zinc mine, and a new group was formed. The following year, the Myra Falls mine was sold off, along with all the shares in North Atlantic Natural Resources. Since 2010, Boliden has successfully continued to grow the business by making several investments in its operations, with the vision of being the most climate-friendly and respected metal provider in the world.

1975
Aitik haul truck driver
Maj-Britt Larsson

1929
Rönnskär aerial view



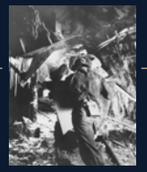
1920s
Boliden Area mining operations

1950s
Boliden town aerial view

↓ PDF print version

Timeline Boliden

400 b.c.
Mining operations start in Garpenberg.



1924
Dec 10, 1924, a gold ore body is discovered in Fågelmyran.

1930
Rönnskär copper smelter is commissioned, processing ore from the Boliden mine.

1936
The copper smelter at Imatra in Finland is commissioned.

1943
Establishment of the tin and lead smelting operation Paul Bergsoe & Son in Landskrona. From the outset, operations focus on metal recycling.

1944
The world's longest cableway – 96 kilometers – starts moving mined ore from Kristineberg to Boliden.

1944
The smelter at Imatra is dismantled and moved west to Harjavalta.

1949
The revolutionary flash smelting method is introduced at the Harjavalta smelter.

1955
An underground railway is built between Långsele and the concentrator in Boliden to transport ore. At the time, is is the world's deepest electric railway for ore transportation.

1957
Acquisition of Zinkgruvor AB, including Garpenberg and Saxberget. The fomer is one of the world's oldest mines in operation.

1924
Odda zinc smelter is established.

1968
Operations get underway at the Aitik mine. Over the years the open-pit mine becomes one of the largest copper mines in Europe.

1969
Operations begin at the zinc smelter in Kokkola.

1975
Boliden launches the Kaldo furnace in the mid-1970s and inaugurates the world's first lead Kaldo plant at Rönnskär.

1976
The Bergsöe lead recycling plant is acquired.

1977
Production starts at Tara, Europe's largest zinc mine.

1986
The first rock caverns for storage of jarosite are commissioned in Odda, part of an extensive environmental initiative.

1996
Åkulla Östra in the Boliden Area is the biggest gold deposit discovered in Sweden for 70 years.

1998
The Kokkola zinc smelter becomes the first smelter in the world to introduce the direct leaching method for concentrate.

2000
Official opening of the record expansion at Rönnskär. Copper production increases by 70%.

2001
Expansion of Kokkola making it one of the world's largest zinc smelters.

2003
In a merger with Outokompo, the Odda, Harjavalta and Kokkola smelters and the Tara mine join Boliden Group.

2010
Inauguration of the Aitik 36 expansion projects in the Aitik mine. Boliden invests SEK 5.2 billion.

2012
Production begins in the Kevitsa mine in northern Finland.

2012
Rönnskär's new electronics recycling facilities are inaugurated. Kankberg becomes Boliden's fifth gold mine. Decision to begin silver recycling in Kokkola.

2014
The official opening of the expansion in Garpenberg, making it one of the most modern facilities in the world.

2016
Boliden acquires the Kevitsa copper and nickel mine.

2021
Major expansion of the Odda zinc smelter begins, aiming to increase production by 75%.

2022
Waste disposal in Rönnskär's underground repositories starts.

2024
Boliden celebrates 100 years.

The statutory annual report and sustainability report comprise pages 34–58 and 60-129, respectively.

Our vision: To be the most climate-friendly and respected metal provider in the world

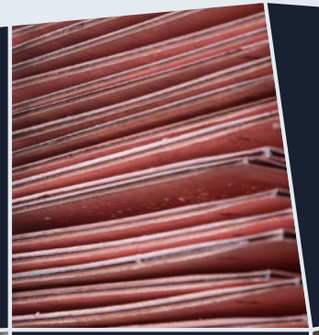
For generations to come

Boliden contributes to a sustainable future by extracting, producing and recycling metals that are essential to improve society for generations to come. With care for people and the environment, combined with experience gathered over a century and cutting-edge technology, our 6,000 employees have achieved leading productivity and one of the lowest carbon footprints in the industry.

Our core business is base metals

Throughout history, metals have contributed to mankind's progress in matters large and small. Demand for the base metals we produce is expected to be higher than ever as the climate transition progresses. Boliden is ready to provide them in the most sustainable way possible.

Copper
With its excellent ability to transmit power, more than 60% of the copper produced in the world is used to generate or conduct electricity, for example in electric vehicles.



Lead
The fully recyclable lead has long been essential for storing energy in everything from vehicle batteries to the backup batteries used in healthcare.

Nickel
More than two thirds of the world's nickel production is used in making stainless steel. Nickel is also an important component in modern battery technologies.

Zinc
Steel is galvanized with the help of zinc to protect the material, which increases resistance to harsh weather conditions. Therefore, zinc is used in, for example, wind turbines and vehicle chassis.

Pick of the year

- **We celebrated a century of exploration and innovation,** with December 10 marking 100 years since the original gold discovery in what was to become the Boliden Area.
→ Read more about our first century on pages 2–3.

- **We announced the acquisition of the Neves-Corvo and Zinkgruvan mines.** With completion expected in mid-2025, the transaction will increase Boliden's production of zinc and copper in concentrate by 95% and 43%, respectively, based on 2023 production figures.
→ Read more about the acquisition on pages 8 and 41.

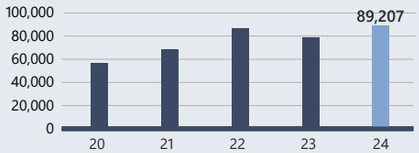
- **We invested SEK 15 billion.** The reinforcement of the Aitik dam was completed, while the expansion of Odda and the creation of the underground mining of the future - built for fossil freedom - approached the final phase. We also decided to invest in extending the life of the Boliden Area and a new tankhouse at Rönnskär.
→ Read more about our major investment projects on page 23.

- **We resumed operations at our Tara mine,** with a revamped business model focused on delivering 1.8 Mtonnes milled ore output while reducing cash cost by 25%.
→ Read about our business units on page 22.

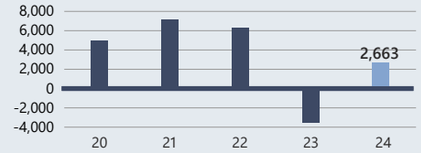
- **We launched Low-Carbon Nickel,** enabling our customers to reduce emissions from their nickel input by 85%. We also launched a pilot for producing a low-carbon cement substitute from metal production residue material.
→ Read more about our Green Transition Metals on page 25.

Key figures

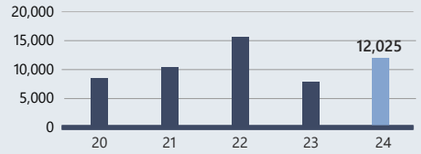
Revenues, SEK m



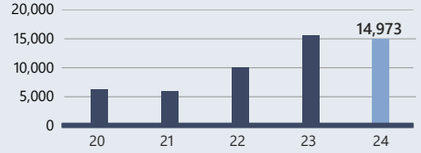
Free cash flow, SEK m



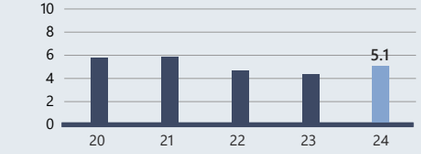
Operating profit excl. PIR, SEK m



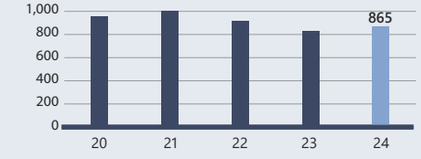
Investments, SEK m



Lost Time Injury Frequency



Greenhouse gas emissions (Scope 1-2), ktonnes CO_2e



A historic year with important milestones for continued success

What defined Boliden's 2024?

"Every year is special in its own way, but clearly this year has been particularly special. We have looked back on our now 100 years of operations, and we have also worked hard and put a lot of effort into laying the foundations for another century of competitive operations. Production has generally been stable, not least with our Finnish smelters as well as the Garpenberg and Boliden Area mines performing very well. In parallel, several projects have also developed positively. In terms of the more general trend, it can be noted that metal prices have developed positively, even though there is no sign of a strong industrial cycle globally. The cost inflation that has characterized the economy for a long period has more or less disappeared during the year, while Europe took clear steps towards prioritizing competitiveness and raw material supply, which is of course welcome."

Which events are particularly important to highlight?

"Although all the regulatory approvals are not yet in place, the acquisitions of the Neves-Corvo and Zinkgruvan mines will naturally be very significant for Boliden's development. Production of zinc concentrate will almost double, and production of copper concentrate will also receive a substantial boost. There are many reasons for the acquisitions, but to put it simply, we have a very positive view of what these two mines will contribute, both short and long term. Alongside this, it is also important to emphasize that we have completed the reinforcement of the dam at Aitik to make it compliant with the Global Industry Standard on Tailings Management. The expansion of operations at the Kristineberg mine in the Boliden Area is well under way and we have restarted operations at our Tara mine. At the Odda smelter, significant parts of the expansion have also been completed and the production rate has returned to the original 200 ktonnes of zinc per year. However, delays and cost overruns have occurred in the project, which has meant that ramping up to the new annual production rate of 350 ktonnes of zinc has been delayed. Finally, 2024 was also another year of fatality-free operations, now amounting to 17 years in a row."

How do you see the market for our base metals?

"Demand for base metals remains strong. Zinc, copper, nickel and many of our other metals are and will continue to be key components in the development of society. If we succeed in operating and continuously developing our units in a competitive manner, the future looks bright. Prices and terms go up and down in this industry, so short-term developments are always difficult to assess. What is clear, however, is that we have made extremely conscious choices, including which metals we are active in and the investments we have chosen to make, which we are also very satisfied with."

"We look to the future with optimism and confidence in our ability to continue to provide the metals necessary to improve society for generations to come."

What is most important for Boliden's continued competitiveness?

"Our operations should be characterized by continuous productivity development and a corporate culture where safety is a top priority. Important prerequisites for achieving this are that responsibility is delegated throughout the organization and that decisions are made as close to those affected as possible. Of course, there are many other factors that also have a bearing on the value creation of the businesses, but if any single factor is to be highlighted, it is the trust we give to each business unit to create its own future based on its own conditions. It may seem simple, but ensuring that decisions are made in the right part of the organization is a continuous process to which we pay great attention."

What investment projects might be considered in the future?

"Our focus is on making the best use of our existing assets. In recent years, we have put a lot of energy into futureproofing and improving several of our existing businesses. When all approvals hopefully fall into place, we will devote a lot of energy to incorporating the acquired businesses into our organization. This, in parallel with commissioning and scaling up production at Odda and ensuring that the new plan for mining at Tara is completed, is of course also in focus in 2025. In addition, the major investments at Rönnskär and in the Boliden Area are also continuing. Of course, we are also continuing with project development in the slightly longer term to have options also in the future, both in our mining and smelting operations."

How do you see Boliden's long-term development?

"Our vision is to be the most climate-friendly and respected metal provider in the world. My assessment is that in recent years we have taken many steps in the right direction. The last few years have by no means been perfect, sometimes we have been lucky, sometimes unlucky and sometimes we have failed to follow the plans we set out. But in the vast majority of cases, we have actually done what we said we would do in a way that I am very satisfied with. Challenges have been overcome and opportunities have been seized. We have a business and employees to be proud of! A big thank you to all our colleagues and all those involved in our activities for the past 100 years. We look to the future with optimism and confidence in our ability to continue to provide the metals necessary to improve society for generations to come."

Mikael Staffas
President and CEO

The original Boliden office, built 1926, continues to be used for meetings and conferences.

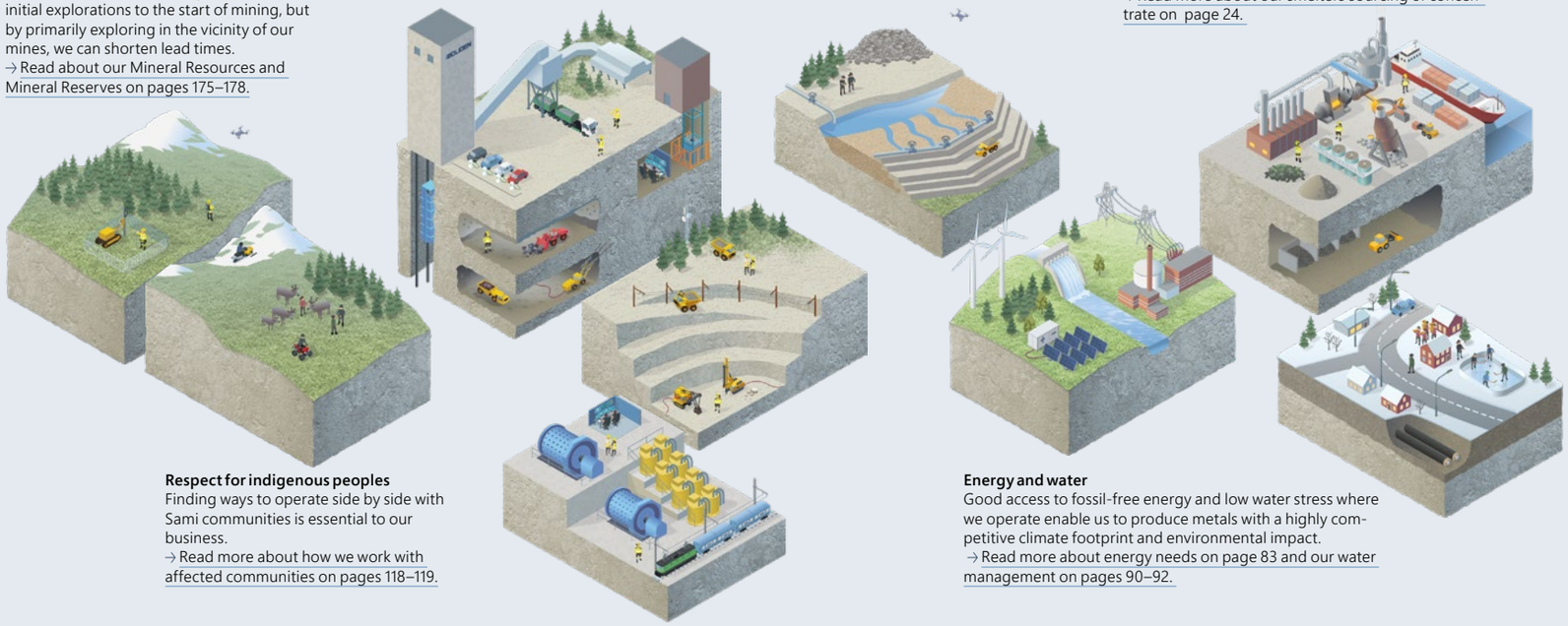
How we produce metals

With operations covering exploration, mining, concentrating and smelting, we create base metals with world-class sustainability performance. External factors of crucial importance include the land and bedrock that we mine, relations with indigenous people and other stakeholders, as well as a steady supply of fossil-free energy.

Exploration
Exploration is about finding, prioritizing, investigating and analyzing mineral deposits to examine the conditions for potential mining operations. It can take 5–20 years from the initial explorations to the start of mining, but by primarily exploring in the vicinity of our mines, we can shorten lead times.
→ Read about our Mineral Resources and Mineral Reserves on pages 175–178.

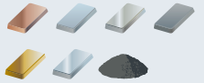
Mines and concentrators
With cutting-edge electrification and automation, we extract metals in underground mines as deep as 1,600 meters and in open-pit mines. Mined ore is processed into concentrate, with residue material deposited in tailings facilities adhering to the highest international standards.
→ Read more about our business units on page 22 and our tailings management on pages 97–100.

Smelters
Continuously exploring how to create more value from input material, our smelters turn concentrate – both newly mined and recycled from electronic waste and car batteries, into finished metals. With only a third of our smelter feed coming from internal mines, we put great emphasis on responsibly sourcing concentrate from partners globally.
→ Read more about our smelters sourcing of concentrate on page 24.

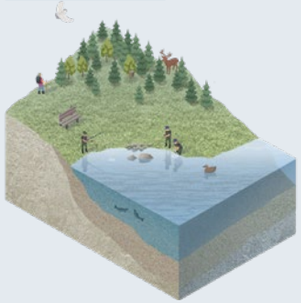


Respect for indigenous peoples
Finding ways to operate side by side with Sami communities is essential to our business.
→ Read more about how we work with affected communities on pages 118–119.

Energy and water
Good access to fossil-free energy and low water stress where we operate enable us to produce metals with a highly competitive climate footprint and environmental impact.
→ Read more about energy needs on page 83 and our water management on pages 90–92.



Base metals that enable societies
Our core offering consists of the base metals zinc, copper, nickel and lead, which are all crucial for societal functions such as, electricity generation and transmission, food production, transportation and healthcare. In the production of these metals, we also extract valuable by-products including, gold, silver, sulphuric acid, iron sand and more.
→ Read more about society's need for our metals on page 11 and market developments on pages 27–30.



Biodiversity and reclamation
Throughout our operations Boliden is committed to increasing biodiversity, both during the active phase and after closure, when mining areas are reclaimed and returned to nature.
→ Read more about our biodiversity work on pages 93–96.

Metals that enable

Societies have long relied on metals due to their durability and ability to conduct heat and electricity. As an enabler of the climate transition, demand is increasing and securing future metal supply is becoming a topic of strategic importance for Europe.

Everyday life
Metals and minerals are important for almost every aspect of our daily lives. They play a vital role in everything from agriculture, healthcare, communications, water and energy supply, transport and space technology to the construction of our cities. Without metals, our modern lives would simply not be possible.

Climate transition
Boliden produces many of the metals that are critical for the climate transition. Copper is necessary for generation, transmission and storage of energy, and thus needed for electricity grids and electrical and electronic equipment. Zinc is used to galvanize steel, which protects against corrosion and thereby, for example, extends the lifespan of offshore windfarms that are exposed to harsh conditions. Up to 40 kilograms of nickel can be required for the battery of a single electric car, while these vehicles also use smaller lead-based batteries for auxiliary purposes.

Circular economy
Metal circularity is an increasingly important aspect for companies and consumers as they make decisions based on total life cycle costs. Boliden recycles large volumes of copper, zinc and lead from electronics, steel mill dust and batteries. Recycled metal plays a crucial role in the total supply, but current volumes fall short of meeting global demand. Many metals used today won't be available for recycling for decades, as certain applications, such as powerlines, can have long lifespans exceeding 40 years.

Sustainable operations
Fossil fuels typically play a large direct role in metal production and are often used indirectly to generate electricity. Other challenges facing the industry include the management of waste, access to water, reclamation of industrial sites as well as human rights. Europe is often a forerunner in dealing with these issues through more stringent permit requirements for mining and metal industries.

Important part of the economy
Globally, the mining industry is a vital source of employment, creating jobs both directly and indirectly through investments and the procurement of goods and services. A single mining job generates indirect employment at the subcontractor and supplier level and leads to additional jobs through the spending of these individuals in supermarkets, restaurants, and public services. Metal production is also a significant source of tax revenue, especially in sparsely populated regions where operations are often located. In summary, responsible metal production plays a critical role in supporting both national economies and local communities.

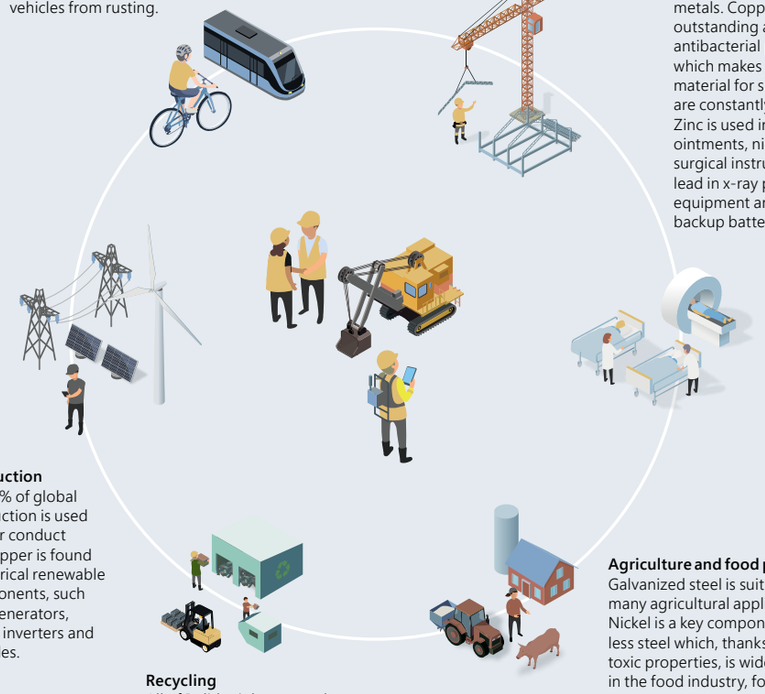
Metal availability
In light of the above, demand for metals is expected to increase with urbanization, prosperity and climate-friendly technologies. For the base metals that Boliden produces, Wood McKenzie estimates demand increases of 70% for copper, 48% for zinc, 74% for lead and 89% for nickel between 2024–2050.

Access to metal is thus essential to societal progress. In recent years, rising geopolitical tensions have underscored the strategic risks associated with over-reliance on single-country sources for metal supply. In response, the European Commission updated its 2023 list of critical and strategic metals – such as copper and nickel – establishing specific guidelines to increase European production and reduce import dependency.

Transportation
Our metals are crucial for the future of the transport sector. For example, a typical EV contains 30-40 kg nickel and 80 kg copper. Galvanized steel is used by the automotive industry to prevent vehicles from rusting.

Infrastructure
Galvanizing steel using zinc prevents corrosion and thereby extends the lifespan of anything exposed to weather, from buildings and infrastructure, to offshore windfarms.

Healthcare
There are many applications in the healthcare sector for Boliden metals. Copper has outstanding antiviral and antibacterial properties, which makes it an ideal material for surfaces that are constantly touched. Zinc is used in healing ointments, nickel in surgical instruments and lead in x-ray protective equipment and hospital backup batteries.



Energy production
More than 60% of global copper production is used to generate or conduct electricity. Copper is found in major electrical renewable energy components, such as turbines, generators, transformers, inverters and electrical cables.

Recycling
All of Boliden's base metals are recyclable. Our Rönnskär smelter is one of the world's largest recyclers of electronic scrap, while Bergsöe recycles lead from more than 4 million car batteries every year.

Agriculture and food production
Galvanized steel is suitable for many agricultural applications. Nickel is a key component in stainless steel which, thanks to its non-toxic properties, is widely used in the food industry, for example in milk truck tanks. Sulphuric acid, a by-product from Boliden's smelters, is used in the production of fertilizers.

Boliden as a sustainable investment

With the right expertise and financial position to develop mining and smelting operations, a sustainable value chain and a competitive product portfolio, we provide Europe with the metals needed for the climate transition.

Competitive product portfolio

Boliden provides the metals needed to improve society for future generations. Boliden's most important mines have long lifespans and the focus lies on mine-site exploration where the economic potential is the greatest. Our multi-faceted product portfolio makes us well equipped for the opportunities and challenges we face in the metal markets of today and tomorrow. The main metals are copper, zinc, nickel and lead. Copper and nickel are crucial for increased electrification. Lead is used in the storage of electricity, and zinc is necessary for improving corrosion protection, thereby reducing resource utilization. In addition, our by-products include gold, silver, platinum, palladium and sulphuric acid.

Industry-leading skills

Boliden's employees carry a valuable heritage of almost a century of experience from mining as well as smelting operations and have developed technical skills that generate good profitability despite low grade ores and a high-cost structure in the operating countries. High productivity and lowering costs are achieved through having a strong corporate culture based on personal responsibility and continuous improvements. We have the expertise to advance mining and smelting operations and drive innovation to remain in the forefront of technological development.

Sustainable value chain

We extract metals from both ore concentrates and secondary materials and take responsibility for the entire supply chain. Production takes place in Europe, where political risk is low. Our excellent technical know-how, combined with good access to fossil-free electricity, together make for manufacturing processes with world-class productivity and environmental performance. The sustainability focused partnerships we build with customers form an important local value chain in Europe. Boliden is a leader in methods for the reclamation of closed mines and the disposal of hazardous waste. We are working with proactive risk management and occupational health and safety topics to improve safety and well-being for employees and contractors.

Stable financial position

Boliden strives to maintain a healthy balance sheet and our financial targets are adapted to prepare for market fluctuations and value-creating investments. The value chain from mines to smelters creates synergies between the business areas and increases stability in our earnings potential. This stability is reinforced by the tendency of treatment charges to move in the opposite direction to variable base metal prices. Over time, precious metal prices also tend to have a negative correlation to those of base metals, and this increases the stability of our earnings potential. Acquisitions are made selectively, if and when the right opportunity arises.

↓ PDF print version

Strategy

Strategically rooted in our purpose, vision and values

Boliden supplies raw materials essential to sustainable and modern societies. The base metals and most of the by-products can be fully recycled and collaboration with partners across the value chain enhances productivity and optimizes resource use.

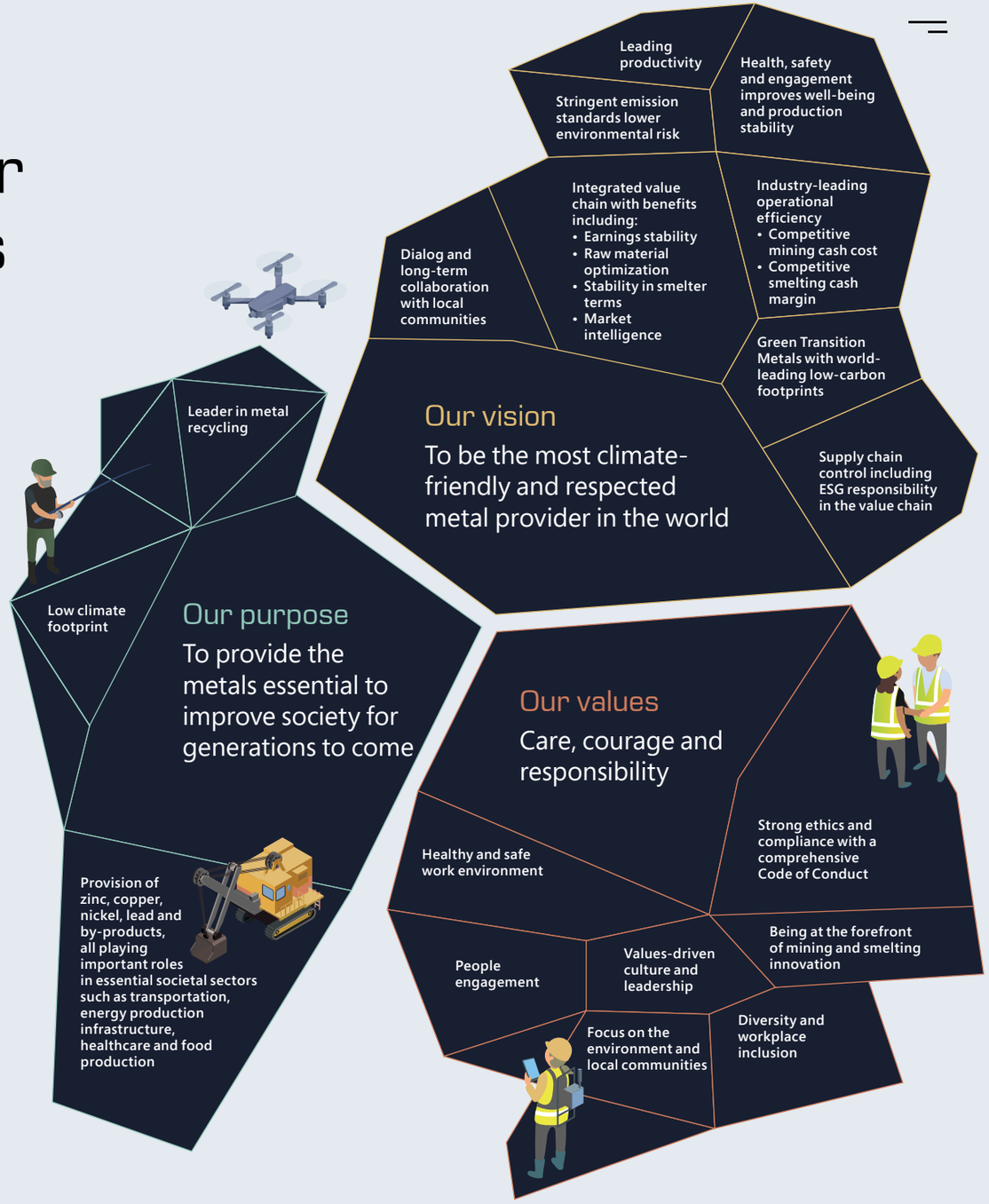
Each of our mining and smelting units operates as an independent profit center. This decentralized business model fosters empowerment, motivation, and localized decision-making, which in turn drives innovation and improved adaptation to market changes. This approach is also essential for managing the unique risks and opportunities each business unit faces. Boliden's risk management framework ensures alignment in assessing and mitigating these challenges across all levels of the organization. For more information, see the Risk management chapter on pages 42–46.

The Boliden's group strategy can be summarized in four focus areas:

- Profitable growth, including extended life of mine through exploration, organic expansions and selective acquisitions.
- Efficiency in production and investments, including supporting processes.
- Reduce climate footprint, including improved energy efficiency, which in turn reduces climate impact and cost.
- Care for people, environment and society in all operations and stakeholder relations.

Learn more:

→ Business model, income model, targets and outcomes, pages 15–20
→ How we produce metals, page 10
→ Financial performance, pages 34–41
→ Sustainability statement, pages 59–129



Business model

Boliden provides important raw materials for the functioning of sustainable and modern societies. The base metals and most of the by-products can be fully recycled and collaboration with actors throughout the value chain boosts productivity and resource utilization.

Inputs

People and know-how
- Average number of employees, FTE[1]: 5,808 (5,664)
- On-site contractors
- High expertise within automation and electrification
- Collaborations with suppliers and universities to strengthen talent base, improve climate performance and reduce waste
- Setting global standards through industry organizations

Natural resources and energy	2024
Mined concentrate, ktonnes	2,385
Recycled materials, ktonnes	329
Energy consumption, GWh	5,637
Water consumption[2], million m^3	7
Land managed, ha	29,024
Mineral Resources[3], Mtonnes	1,549
Mineral Reserves[3], Mtonnes	1,323

Capital	2024
Investments, SEK m	14,973
Capital employed, SEK m	80,058
Net debt/equity ratio, %	16

Value creation

Exploration

Mining
Metal grade
Zn: 3–7%, Cu: 0.2–1.6%

Concentration
Metal grade
Zn: 55%, Cu: 25%

Smelting
Metal grade
Zn: 99.995%, Cu: 99.9975%

Around one third of smelter concentrate input comes from Boliden's own mines.

Metal in concentrate production	2024
Zinc, ktonnes	164
Copper, ktonnes	91
Nickel, ktonnes	12
Lead, ktonnes	45
Gold, kg	5,880
Silver, kg	348,098

Metal production	2024
Zinc, ktonnes	454
Copper, ktonnes	159
Nickel in matte, ktonnes	40
Lead and lead alloys, ktonnes	66
Gold, kg	15,047
Silver, kg	258,648

Outcomes

Social
- Provision of metals that enable modern societies and the climate transition
- Major local employer in Sweden, Finland, Norway and Ireland
- Creation of indirect jobs in local communities

Environmental	2024
GHG emissions (Scope 1-2)[4], ktonnes CO_2e	865
SO_2 emissions to air, tonnes	5,938
Metall emissions to air intensity[5]	33
Metall discharges to water intensity[5]	59
Non-hazardous waste, ktonnes	287
Hazardous waste, ktonnes	1,009
Extractive waste, ktonnes	112,779

Economic	2024
Purchase of concentrate, SEK m	50,614
Other purchases, SEK m	30,534
Remunerations to employees, SEK m	6,307
Dividends to shareholders[6], SEK m	-
Financial expenses, SEK m	1,357
Tax paid, SEK m	2,171
Retained within Boliden, SEK m	2,663

1) The average FTE figure does not include the employees temporarily furloughed while Tara was placed under care and maintenance.
2) There is no shortage of water in the areas where Boliden conducts operations.
3) Mineral Resources include known and indicated resources. Mineral Reserves include proven and probable reserves. For complete details on Mineral Resources and Mineral Reserves, see pages 177–178.
4) Location-based method.
5) The intensity consists of tonnes emitted/discharged metal weighted in NCP metal equivalents divided by Mtonnes metal produced.
6) The proposed ordinary dividend.

Mines income model

An individual mine has natural variations in grades, waste rock dilution, energy requirements at different depths, equipment maintenance and other factors that result in the profit varying over time. These variations are often known in advance and are clearly defined in life-of-mine plans. Boliden provides guidance on major changes in grades in the larger mines when grades are expected to significantly deviate from the average reserve grades.

Payable metals
Payable metal includes revenues from metal concentrates, based on the London Metal Exchange (LME) price for each respective metal and calculated on the payable metal content (the proportion of metal in concentrate for which the mines can charge).

Deductions
Deductions include:
- Treatment charges (TC): the remuneration the smelter receives for handling and smelting the raw material
- Refining charges (RC): the remuneration the smelter receives for the refining phase
- Impurities in metal concentrates or secondary material

The levels of TC/ RC and impurity charges are determined in 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.

Metal concentrates are invoiced provisionally upon delivery, at metal prices and exchange rates applicable on the closing day. Final invoicing takes place when all parameters have been determined (concentrate, quantity, metal content, impurity content and price), about 1-4 months after the month of arrival to customers, depending on the metal concentrate. Open positions are revalued at current market prices at the end of each month.

Revenues
Revenues in Mines consist of payable metals less deductions and are affected by ore tonnage, metal grades, recovery during the concentration process, inventory changes, the price of concentrates in USD and exchange rate fluctuations.

Operating expenses
Operating expenses include mainly personnel, consumables, spare parts, external services, energy and depreciation.

Smelters income model

Smelters has a stable production over time, with the exception of 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 year ahead.

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

In our smelters, revenues consist of the following:
- Treatment and refining charges (TC and RC) from concentrates and secondary raw materials
- Penalties: compensation for impurities in the metal concentrates or secondary material
- Metal premiums: sold quantity x premiums (local adjustments of the LME/LBMA price)
- Income from free metals: price x (recovery of metal from concentrate - payable metal content)
- Income from the sale of 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 value of payable metal in the raw materials is hedged while it is processed in the smelter, to reduce the exposure to fluctuations in the metal prices. The volumes included in PIR (process inventory revaluation) are not hedged.

Raw materials
Raw materials are metal concentrate and secondary materials. Boliden's smelters can handle more metal concentrate than our mines produce, therefore significant volumes of concentrate are purchased from external mines. The sale of all metal concentrates between Boliden's mines and smelters takes place according to market terms.

Operating profit excl. PIR
Operating profit excluding PIR (process inventory revaluation) means revenues minus all costs attributable to the operations but excluding the effects of the revaluation of process inventory. The most important operating expenses are personnel, consumables, spare parts, external services, energy and depreciation.

↓ PDF print version

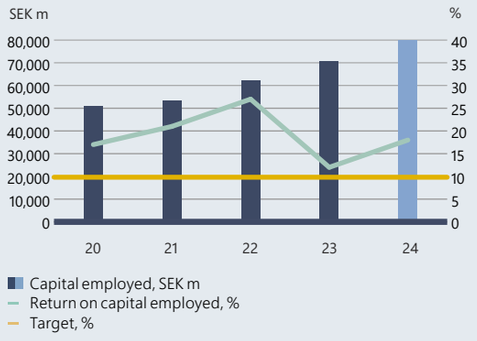
Strategic financial targets

Return on investments (ROI)

Return on investments (ROI) of at least 10%. Any projects must be in line with the strategy and available resources.

10%

Development



Outcome

The return on operating activities measured as a return on capital employed was 18% (12). During the period 2020–2024, the rate of return averaged 19% per year.

Definition

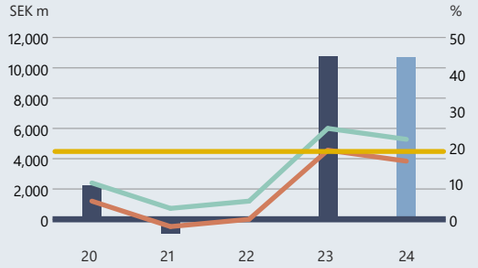
Project yield must exceed Boliden's weighted average cost of capital (WACC) adjusted for a risk premium (nominal WACC before tax is set at 12%, equivalent to 10% in real terms). Major, long-term projects are usually calculated in real terms. The calculations are based on forecasts of interest rates, metal prices, exchange rates.

Net debt/equity ratio

Net debt/equity ratio of approximately 20% in an economic upturn.

20%

Development



Outcome

At the end of 2024, the net debt/equity ratio was 16% (19). Furthermore, the net reclamation liability corresponded to 6 percentage points. The change in comparison to 2023 is due to higher earnings.

Definition

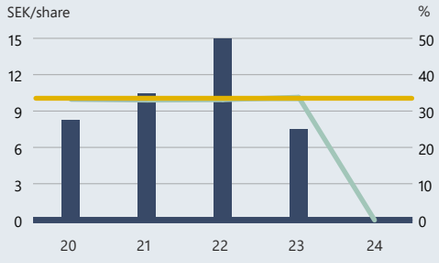
The target also includes net reclamation liability, see page 185 for definition.

Dividend

The dividend shall correspond to 1/3 of net profit for the year.

1/3

Development



Outcome

The proposed ordinary dividend is SEK 0 (7.50) per share, equivalent to 0% (33.8) of profit for the year. During the period 2020–2024, the ordinary dividend per share was 25.6% of the period's total net profit.

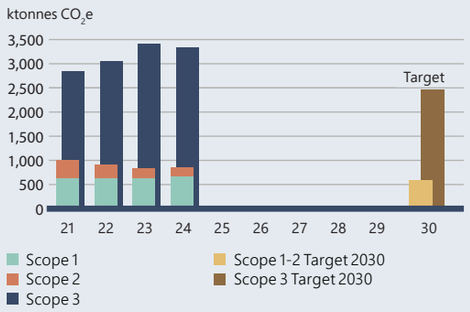
Strategic environmental targets

Greenhouse gas emissions

Absolute greenhouse gas (GHG) emissions for Scope 1-2 shall be reduced by 42% 2021–2030. Reduction of absolute Scope 3 GHG emissions with 30% from 2021-2030. Net zero Scope 1-2 emissions by 2050.

-42%, -30%

Development



Outcome

Scope 1-2 emissions were 864 (842) ktonnes, a 13% decrease from 999 ktonnes in 2021. The increase compared to last year is due to higher diesel usage and changed reduction obligations in Sweden. Scope 3 emissions were 3,335 (3,413) ktonnes, a 18% increase from 2,836 ktonnes in 2021, one of the reasons being the smelter expansion in Odda.

Definition

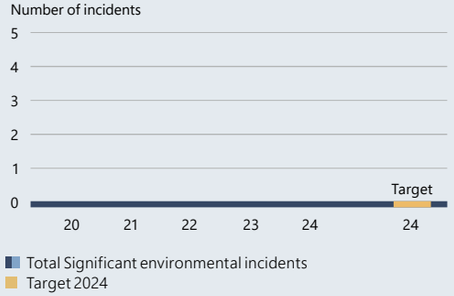
Scope 1 covers GHG emissions from own operations. Scope 2 covers purchased electricity, steam and heat. Scope 3 covers all other indirect sources occurring our value chain, such as business travel, employee commuting, external waste, purchased goods and services, further processing and waste handling of sold products.

Environmental incidents

No significant environmental incidents should occur.

0

Development



Outcome

No significant environmental incidents occurred during the year, which is in line with Boliden's target. We work systematically to control and manage environmental challenges in order to prevent environmental incidents.

Definition

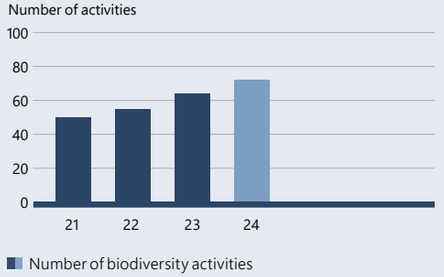
A significant environmental incident is an occurrence that causes, or potentially can cause, significant environmental harm.

Biodiversity impact

Contribute to increased biodiversity in all regions where we operate by 2030 with baseline 2020.

+

Development



Outcome

In 2024 we reported 71 biodiversity activities that are related to developed plans in the business units. We work together with several partners and academia to develop the way we work with biodiversity and restoration of habitats.

Definition

Measuring progress towards our target is a challenge. An activity can have a small or large impact, and comparison of numbers can be ambiguous. We are working on developing more appropriate metrics for biodiversity impact.

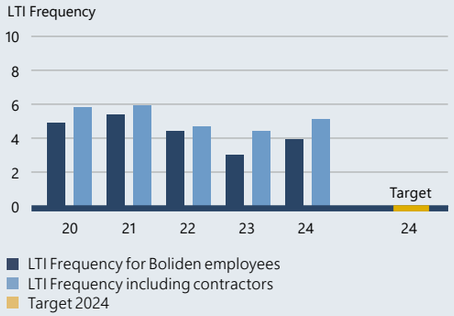
Strategic social targets

Lost Time Injury Frequency

No harm to people should occur in Boliden's operations. The Lost Time Injury Frequency (LTIF) should thus be zero.

0

Development



Outcome

In occupational health and safety, we focus on proactive measures and greater involvement on the part of management, employees and contractors in day-to-day safety work. The Lost Time Injury Frequency (LTIF) in 2024 was 5.1 (4.4) for Boliden's employees and contractors, which represented an increase compared to the previous year.

Definition

The Lost Time Injury Frequency (LTIF) is calculated as per one miliion hours worked and includes all injuries that result in one or more days of absence from work after the day of the injury.

Proactivity

Proactively identifying and mitigating risks is key to achieving zero harm to people. Therefore we should file five or more proactivity reports per reactive safety deviation.

>5

Development

Outcome

The proactivity index score including Boliden employees and contractors was 6.4 (6.7) in 2024, which was a decrease but still over the target level.

Definition

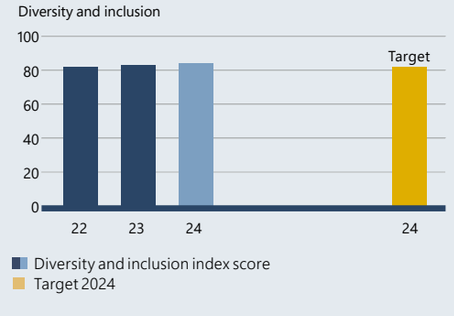
The number of proactive reports (risks, disorders) per reactive deviations (Lost Time Injury, Injury Without Absence, Near miss)

Diversity and inclusion

Promote greater diversity, gender equality and inclusion within Boliden's operations and achieve a Diversity and inclusion score in employee survey above benchmark.

>83

Development



Outcome

The Diversity and inclusion index score was measured for the third consecutive year as a part of Boliden's annual employee survey My Opinion. The result shows an improvement with a total score of 84 (83), which also exceeds the external 2024 benchmark score of 83.

Definition

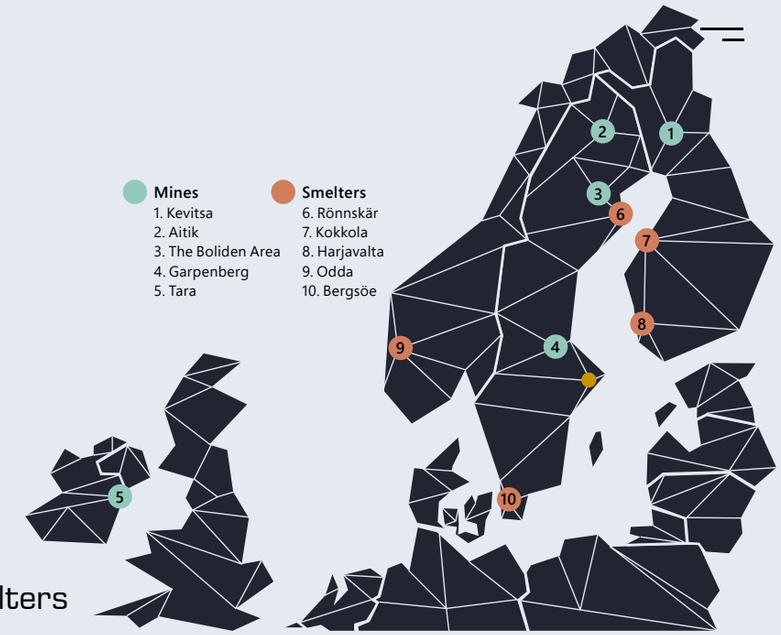
The result of the Diversity and inclusion index is an average score ranging from 0-100.

Operations

↓ PDF print version

Our mines and smelters

Boliden's business units are located in Europe and are characterized by high productivity and strong sustainability performance.



Boliden's mines

AITIK
The world's most productive open-pit copper mine
In Aitik, ore haulage has been automated to a high degree, which enables large-scale production while also ensuring a safe workplace with good climate performance. The open pit's reserves and planned production will provide a further 24 years of mining.

Metals: Copper, gold, silver
Milled volume: 40.8 Mtonnes
Employees: 858

THE BOLIDEN AREA
High-grade mines with high production stability
The Boliden Area, today including the underground mines in Renström, Kristineberg and Kankberg, is where the first gold deposit laid the foundation for Boliden's operations. With planned production, the mineral reserves will provide a further 9 years of mining.

Metals: Gold, zinc, silver, copper, lead and tellurium
Milled volume: 1.8 Mtonnes
Employees: 651

GARPENBERG
The world's most productive underground zinc mine
Garpenberg is one of Sweden's oldest mines still in operation and at the same time one of the world's most modern mines. With planned production the mineral reserve will provide a further 32 years of mining.

Metals: Zinc, silver, lead, gold, copper
Milled volume: 3.5 Mtonnes
Employees: 469

KEVITSA
One of Finland's largest open-pit mines
Kevitsa is one of Finland's biggest-ever mineral discoveries. It is a modern mine with automated, remote controlled and electrified operation. Mineral reserves and planned production will provide a further 10 years of mining.

Metals: Copper, nickel, palladium, platinum, gold, cobalt
Milled volume: 9.8 Mtonnes
Employees: 516

TARA
Europe's biggest zinc mine
Tara is Europe's largest zinc mine and has over the years provided as much as half of Boliden's zinc concentrate supply. In the second half of 2024, the mine was reopened after being placed under care and maintenance since mid-2023. With planned production the mineral reserve will provide a further 6 years of mining.

Metals: Zinc, lead
Milled volume: 156 ktonnes
Employees: 347

Boliden's smelters

BERGSÖE
Europe's biggest recycler of lead-acid batteries
Bergsöe in Sweden is the Nordic region's only smelter for secondary lead. Every year, about four million scrapped car batteries are recycled and the lead produced is primarily used in the production of new batteries – a true case of metal circularity.

Metals and by-products: Recycled lead
Production: Lead alloys 47 ktonnes
Employees: 87

HARJAVALTA
Increased nickel operations
Harjavalta is Europe's biggest nickel smelter. It is also one of the most efficient copper and nickel smelters in the world with one of the lowest sulphur dioxide emissions per produced tonne.

Metals and by-products: Copper, nickel in matte, gold, silver, platinum-group metals, sulphuric acid.
Production: Copper 159 ktonnes, nickel in matte 40 ktonnes, gold 8 tonnes, silver 20 tonnes, sulphuric acid 755 ktonnes, palladium concentrate 3 tonnes.
Employees: 516

KOKKOLA
Europe's second biggest zinc producer
Kokkola produces high-quality zinc products with good climate performance. The Kokkola smelter is a forerunner in automation and digitalization and robots are used in various tasks in the company's zinc production.

Metals and by-products: Zinc, sulphuric acid, silver
Production: Zinc 302 ktonnes, sulphuric acid 328 ktonnes, silver in concentrate 24 tonnes
Employees: 515

ODDA
Expansion for more climate-friendly zinc
Odda is one of the world's most sustainable zinc smelters. A major expansion project neared completion in 2024, increasing the annual production capacity by 75% and improving productivity by increasing the level of digitalization and automatization.

Metals and by-products: Zinc, sulphuric acid
Production: Zinc 151 ktonnes, sulphuric acid 131 ktonnes
Employees: 411

RÖNNSKÄR
One of the world's most efficient copper smelting plants
Beyond metal production from primary sources, Rönnskär is also one of the world's biggest recyclers of metal from electronic scrap. In 2023, a fire destroyed Rönnskär's tankhouse. In 2024 the investment in a new tankhouse was initiated, and production will ramp-up in the second half of 2026.

Metals and by-products: Copper, gold, silver, lead, zinc clinker, platinum-group metals, sulphuric acid
Production: Copper 0 ktonnes, gold 7 tonnes, silver 239 tonnes, sulphuric acid 560 ktonnes, palladium concentrate 1 tonnes
Employees: 881

Major investment projects

In order to be a leading supplier of metals for the climate transition, Boliden is constantly investing in expansion as well as new and more efficient methods of responsible production. In 2024, Boliden had several large investment projects ongoing. Total investments for 2024 amounted to SEK 15 billion.

Odda expansion
In Odda, we invest in an expansion of the zinc smelter, enabling it to almost double the zinc production and at the same time reduce the greenhouse gas intensity. Most of the facilities will be expanded and alongside modernizing of the processes we are increasing digitalization and automation. Ramp-up towards the new production level will start at the end of the first quarter of 2025.

Project duration: 2021–2025
Total estimated investment:
EUR 1.05 billion

Aitik dam reinforcement
In Aitik we have invested in new infrastructure and a new dam construction method. The investments ensure long-term disposal of tailings and strengthen the current dam construction, to meet the best international industry standards. The project was completed in the end of 2024.

Project duration: 2023–2024
Total estimated investment:
SEK 5 billion

New Rönnskär tankhouse
In Rönnskär we invest in a new tankhouse, replacing the one destroyed in a fire in 2023. The new tankhouse will be designed and constructed to enable efficient expansion of production capacity in the future. Production of copper cathodes and precious metals will gradually increase to full capacity during the second half of 2026.

Project duration: 2024–2026
Total estimated investment:
SEK 4.8 billion

Boliden Area extension
In the Boliden Area, our investments enable production in the area to be extended by around ten years, until the end of the 2030s. Investments include dewatering and paste facilities in order to improve environmental performance, and using tailings as backfill material in the Kankberg, Renström and Maurliden mines. Investment pending environmental permit.

Project duration: 2024–2026
Total estimated investment:
SEK 2.5 billion

Kristineberg expansion
Investments in the Kristineberg mine include increased and prolonged production by expansion towards the Rävliden deposit. The project includes state-of-the-art technology in order to make fossil-free mining possible. Rävliden intends to be the world's first fossil-free mining operation with state-of-the-art underground electrification infrastructure. Production has started and planned commissioning of new infrastructure is in the first half of 2025.

Project duration: 2023–2025
Total estimated investment:
SEK 1.45 billion

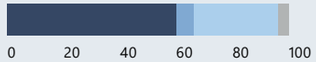
↓ PDF print version

Raw material sourcing

The concentrates coming from Boliden's own mines account for about one third of the raw materials feed to our smelters. External sourcing of the right raw material qualities, at the best commercial terms from business partners with high sustainability performance, is therefore essential to Boliden.

Zinc

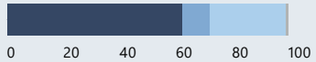
Raw material feed, 2024



External primary: 552 ktonnes (490)
External recycled: 56 ktonnes (64)
Internal primary: 274 ktonnes (341)
Internal recycled: 36 ktonnes (32)

Copper

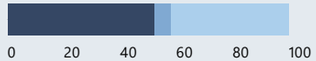
Raw material feed, 2024



External primary: 902 ktonnes (791)
External recycled: 148 ktonnes (155)
Internal primary: 393 ktonnes (401)
Internal recycled: 12 ktonnes (9)

Nickel

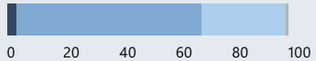
Raw material feed, 2024



External primary: 170 ktonnes (129)
External recycled: 18 ktonnes (14)
Internal primary: 138 ktonnes (152)
Internal recycled: 0 ktonnes (0)

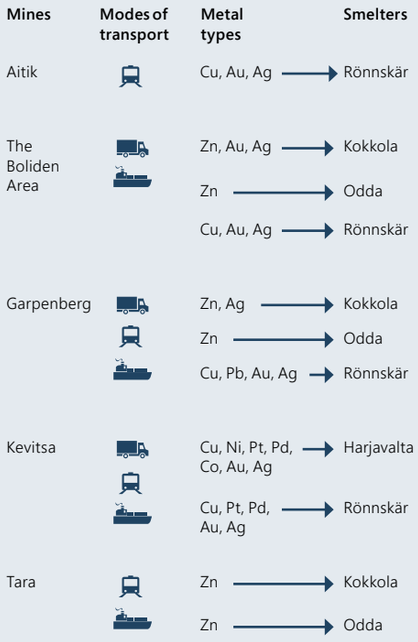
Lead

Raw material feed, 2024



External primary: 3 ktonnes (3)
External recycled: 50 ktonnes (55)
Internal primary: 22 ktonnes (35)
Internal recycled: 1 ktonnes (0)

Internal raw material sourcing



External raw material sourcing

External supply of raw materials crucial to smelter performance
Raw materials are selected to maximize the financial result within the technical constraints and minimize the carbon footprint of raw material supply. We enter into long-term contracts with suppliers to ensure the reliability and quality of the raw material feed mix for the smelters. Since our Tara was placed under care and maintenance in 2023, external mines supply about 60% of our smelters' raw material needs and this is sourced from a large selection of partners globally. Another 10% of the smelter feed consists of recycled materials like electronic scrap and spent car batteries. These are mainly sourced from European scrap collectors.

Sustainable partnerships with raw material suppliers
The ESG performance of all suppliers is evaluated to ensure adherence to internal standards and Boliden's Business Partner Code of Conduct. The risk-based evaluation includes a sanction screening and increasing levels of due diligence through data gathering, interviews and on-site audits depending on the risk level. We work actively to help our raw material partners improve in areas such as emissions to the environment, anti-bribery and corruption measures and human rights. Finally, we also build partnerships with key suppliers focused on increasing production of our low-carbon metals.

Recycling metals

With all of Boliden's metals being fully recyclable, we have made circular metal production from end-of-life electronics and car batteries an integral part of our core business.

A world-class recycler of electronics
Boliden's Rönnskär smelter is one of the world's largest recyclers of electronics with a capacity of recycling 120,000 tonnes of electronic scrap annually. This amount equals 2 million mobile phones every day. Boliden buys electronic scrap consisting of material such as printed circuit boards. The materials that are delivered to Boliden have been pre-processed by the suppliers. At Rönnskär, the material is crushed, smelted and refined in a Kaldo furnace. Boliden's unique Kaldo technology utilizes the energy in the plastics from the material, making the process energy efficient and enabling a multi-metal production from a number of different secondary materials.

Apart from electronic scrap recycling, the Rönnskär plant also takes care of the residual materials from steel mills, brass foundries and power and heating plants. What gets disposed of in society becomes new raw material at Rönnskär.

Enabling circularity in lead-acid battery technology
At our Bergsöe plant in Landskrona we recycle 50,000 tonnes of lead annually – equal to four million car batteries every year. Production of lead at Bergsöe is a story of a true circular economy as almost 100% of all lead produced at Bergsöe comes from secondary sources and most of it also goes back to where it came from – as the main material in lead-acid car batteries.

Recycled material in relation to total feed	2024	2023
Total secondary feed, ktonnes	329	330
Total feed (primary and secondary), ktonnes	2,714	2,645
Recycling input rate	12%	12%

Recycled smelting material, ktonnes	2024	2023
BERGSÖE, lead		
Battery raw material	50	55
RÖNNSKÄR, copper		
Secondary raw material	138	140
Of which electronics	75	69

↓ PDF print version

Green Transition Metals

Green Transition Metals is our portfolio of low-carbon and recycled products. It contains some of the most sustainable offerings on the global market – helping both us and our customers to improve climate performance.

In the production of our Green Transition Metals, we constantly challenge ourselves to find new ways of reducing our emissions, which in turn supports our customers' efforts to reduce total emissions for the products containing our metals. By sharing our know-how in this respect, we contribute to the climate transition in the entire mining and metals industry.

This endeavor goes beyond our core offering of base metals. It also includes existing by-products, such as sulphuric acid, and potential new products. For example, we are prototyping a low-carbon cement substitute made from metal production residue material.

Nickel matte from electric smelting furnace.

Low-carbon products

	Boliden CO_2e emissions per kg	Global average CO_2e emissions per kg
BOLIDEN Low-Carbon Zinc	Boliden Low-Carbon Zinc <1.0	Global average Zinc 3.6
BOLIDEN Low-Carbon Copper	Boliden Low-Carbon Copper <1.5	Global average Copper 4.1
BOLIDEN Low-Carbon Nickel	Boliden Low-Carbon Nickel 5.0	Global average Nickel 34.2
BOLIDEN Low-Carbon Lead	Boliden Low-Carbon Lead 1.0	Global average Lead 1.8
BOLIDEN Low-Carbon Sulphuric Acid	Boliden Low-Carbon Sulphuric Acid CO_2e emissions per kg 0.025	Global average Sulphuric Acid CO_2e emissions per kg 0.155

Recycled products

	Boliden CO_2e emissions per kg	
BOLIDEN Recycled Zinc	Boliden Recycled Zinc 3	Recycled from: Steel mill and electric arc furnace (EAF) dust
BOLIDEN Recycled Copper	Boliden Recycled Copper <1.5	Recycled from: Electronic waste
BOLIDEN Recycled Lead	Boliden Recycled Lead 1.0	Recycled from: Lead-acid car batteries

Market

↓ PDF print version

Developments on the metal markets

Global growth was driven by U.S. strength, contrasted with Eurozone struggles and China's slowdown. Volatile markets, geopolitical tensions, and limited climate progress defined the year.

Market trends
The global economy experienced growth in 2024, with GDP estimated to increase by 2.7%. The United States played a pivotal role in driving growth, supported by robust labor markets and higher consumer spending. In contrast, the Eurozone continued to struggle with weak manufacturing, subdued consumer confidence, and elevated energy costs. China's economy faced a slowdown, amid challenges in the housing market and potential deflationary pressures. Major central banks commenced interest rate cutting, as persistent cost inflation showed signs of easing. The shift provided some relief from elevated borrowing costs and positively impacted markets, though the threat of increased protectionism was a looming concern. Base metal prices saw significant volatility during the year, initially surging on the back of positive sentiment and economic optimism, and eventually returing to fundamentals by year-end. Gold and silver continued their strong performance supported by rate cutting, central bank buying and geopolitical risks, which continued to shape economic and political landscapes. Rising tensions between major powers, particularly between the United States and China, further complicated international trade and technological cooperation. Disputes over Taiwan remained a focal point, with increased military activities in the Indo-Pacific region, leading to heightened uncertainty in global markets. Similarly, Russia's continued actions in Ukraine and the accompanying Western sanctions sustained disruptions in energy markets and regional stability. In the Middle East, ongoing conflicts and political volatility created new challenges for energy supply chains, particularly as global demand rebounded. Whilst progress was made on key climate issues during the UN Climate Change Conference (COP29), immense challenges remain. The summit saw advancements in climate finance and carbon markets, but these fell short of the investments needed to achieve net-zero emissions by 2050. With emissions continuing to rise, increased efforts are required to align with emissions targets and the 2°C pathway.

Long-term metal demand
Historically, increased metal demand has been strongly linked to global economic growth and especially to developments in China, which accounted for the single largest source of demand for base metals. Although growth over the long term is expected to decline both globally and in China, metal demand is expected to increase to support the climate transition and electrification of societies. Fossil fuel phase-out is required to limit global warming, which demands major metal intensive investments related to electricity generation, power distribution infrastructure and electrical equipment. Global demand for base metals is expected to grow over the long term.

Long-term metal supply
Mines have limited lifespans and must be replaced by new ones, but this will only occur if mining companies believe future metal prices will yield profitable investments in new projects. The trend of increasingly comprehensive requirements from permit-issuing authorities and local communities, the larger scale of projects due to lower metal grades, and a growing need for infrastructure have gradually increased cost levels and capital intensity in the mining industry. Due to the above factors, developing a new mine usually takes many years, and the time from discovery to metal production is increasing. In current circumstances this could lead to future supply shortages for most of our main metals. While expansion in existing mines generally has lower capital intensity, it will only partially meet the future demand for metals. The smelting capacity expansion rate is based on the view companies have of demand in the regional market and the supply of raw materials. New capacity affects concentrate market balance and thus the terms between smelters and the mines. Metal recycling rates are expected to increase over time, but as with the expansion of existing mines, they are only able to meet part of the future demand for metals.

China's dominant position
China accounts for roughly half of all global base metal demand and a significant share of the world's metal supply. Economic development in the country is therefore of great importance for Boliden's markets. China's economy is expected to become more focused on services and less on infrastructure and real estate development, leading to lower future metal demand. At the same time, economic growth is expected to gradually decline. Smelting capacity expansion in China has developed at a fast pace in order to meet the rapid growth in demand for base metals. Metal imports are significant, and the Chinese smelting industry has become a major player in the global concentrate market, especially for copper. While China's position as the world's largest nickel producer was recently overtaken by Indonesia, this was through major investments controlled by Chinese interests. Global copper and zinc mining capacity has sometimes been a limiting factor when investment growth was high in China. Even during periods of slowdown in global economic activity or when extraordinary situations have affected the economy, demand from China continued to be strong, and as a consequence, periods of low copper and zinc prices were brief from a historical perspective.

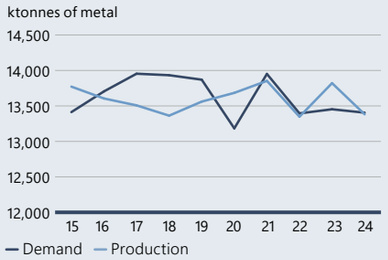
The zinc market

Stable demand
Global demand for zinc remained steady in 2024, compared to the previous year, but fell in Europe by 6%. Activity in the construction sector was sluggish outside the US, with most economies recovering from the effects of peak interest rates. Zinc prices developed positively, rising by an average of 5% during the year as mine production remained in slight decline.

Smelter margins under pressure
In Europe, some smelting capacity resumed production following the energy crisis, but remained below pre-crisis levels. Global production decreased by almost 4%, with the main effects coming from South Korea and China. Certain smelters in China with low utilization rates were shut down during the year due to lack of concentrates and profitability issues. LME inventories have been stable and remain historically low. Metal premiums decreased during the first half of the year and subsequently remained stable at close to the long-term average.

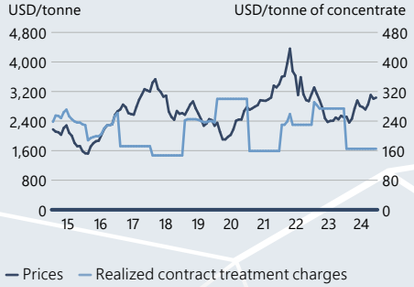
Suspended mine production
Global mine production decreased by 2% during the year. Several of the mines that were in care and maintenance during 2023 remained idle throughout most of 2024. Lower mine production put pressure on smelters, and the benchmark terms for treatment charges were reduced significantly to USD 165 (274) per tonne. As mine production remained low, and major projects expected to come online during the year experienced delays, smelters were under increasing pressure and the spot market treatment charges fell to negative levels. The average cash cost continued to fall in 2024, with the 90th percentile decreasing to USD 1,993 per tonne (2,178).

Global demand and production



Source: CRU

Prices and treatment charges (TC)



Source: Bloomberg, CRU

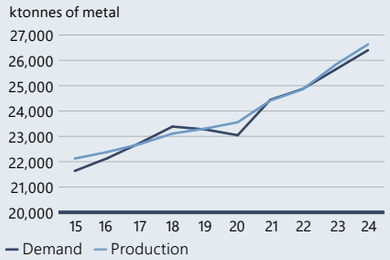
The copper market

Steady demand and price development
Demand for copper grew by 3% compared to the previous year, continuing to benefit from the trend toward increased electrification, battery charging and power transmission infrastructure. Demand in Europe was weak, but was offset by strong demand in China, where consumption increased by 4%. The copper price experienced significant volatility, influenced by speculative trading, supply chain disruptions, and shifting macroeconomic conditions. Prices peaked in May before returning to fundamentals by year-end, on average up by 8% compared to the previous year.

Constrained smelter production
Global production of finished copper metal increased by 3% in 2024, primarily led by China, where production increased by 5% through increased smelter capacity. Global stock levels were low at the beginning of the year and increased during the first quarter, remaining stable during the rest of the year. Chinese stocks remained elevated due to sluggish consumption, while European and US markets experienced oversupply. Metal premiums were relatively stable in Europe and more volatile in Asian markets.

Tight concentrate market
Mine production and the global supply of concentrates increased by 2% but experienced persistent tightness due to several supply disruptions in 2024, including the suspension of production at Cobre Panama, reduced mine output in Peru, and export restrictions in Indonesia. Although some new projects, such as Mantoverde and Kamoa-Kakula, began ramping up, they were insufficient to offset the shortfall. Smelters struggled to secure supply, leading to production cuts and extended maintenance periods. This tight supply-demand balance was reflected in sharply declining Treatment and Refining Charges (TC/RCs), which reached historical lows, occasionally entering negative territory for miner-to-trader transactions. The mid-year settlement between Antofagasta and Chinese smelters resulted in a record low TC/RC benchmark. Cash cost in the 90th percentile fell to USD 5,597 per tonne (5,806).

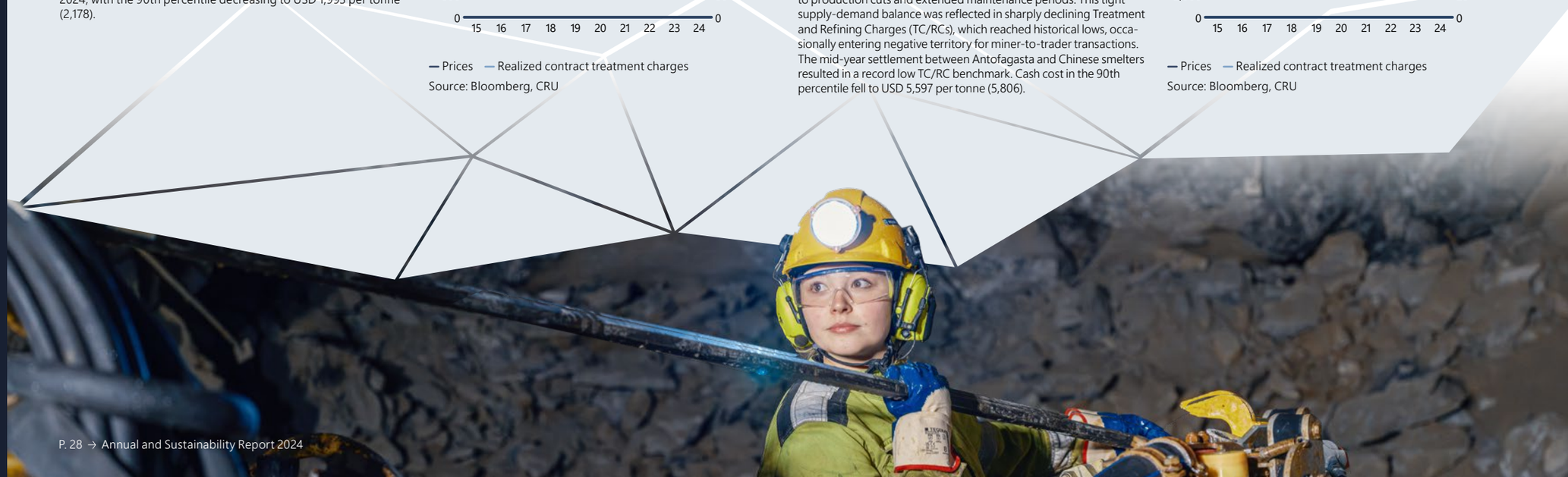
Global demand and production



Source: CRU

Prices and treatment charges (TC)

Source: Bloomberg, CRU



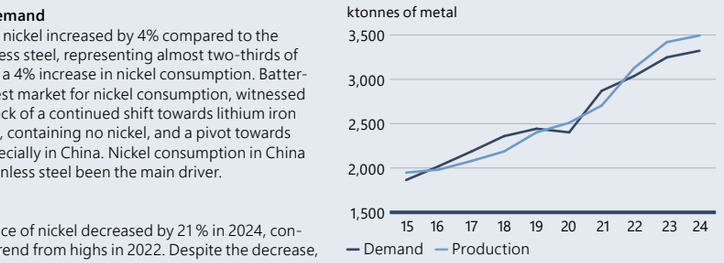
The nickel market

Slower growth in demand
In 2024, demand for nickel increased by 4% compared to the previous year. Stainless steel, representing almost two-thirds of global demand, saw a 4% increase in nickel consumption. Batteries, the second largest market for nickel consumption, witnessed no growth on the back of a continued shift towards lithium iron phosphate batteries, containing no nickel, and a pivot towards plug-in hybrids, especially in China. Nickel consumption in China rose by 3%, with stainless steel been the main driver.

Falling nickel price
The average LME price of nickel decreased by 21% in 2024, continuing a declining trend from highs in 2022. Despite the decrease, LME prices continued to trade at a significant premium to class 2 nickel products such as nickel pig iron (NPI).

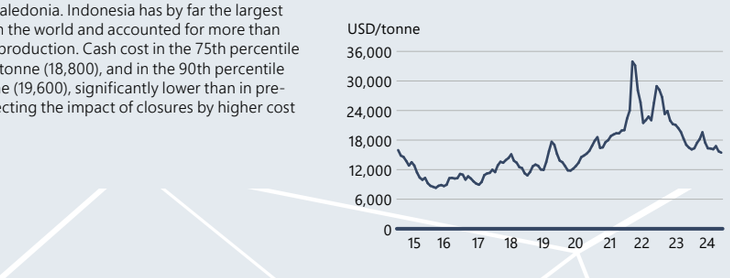
Continued expansion in Indonesia
Global production of nickel increased by 3% in 2024 through capacity additions in Indonesia and despite production cuts in Australia and New Caledonia. Indonesia has by far the largest nickel ore reserves in the world and accounted for more than 60% of global mine production. Cash cost in the 75th percentile was USD 16,000 per tonne (18,800), and in the 90th percentile USD 16,250 per tonne (19,600), significantly lower than in previous years and reflecting the impact of closures by higher cost producers.

Global demand and production



Source: CRU

Price

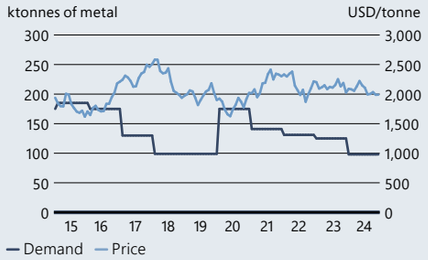


Source: Bloomberg

The lead market

Weak demand and short concentrate market
Global lead demand increased by 2% compared to the previous year. The supply of lead metal increased by 1%. The price of lead was generally stable during the year, which is typical relative to other base metals. Following weak demand from the automotive sector, the LME stocks of refined lead in Asian warehouses increased towards the end of 2023 and continued to rise during 2024, while European stocks remained low. A disconnect developed between the concentrate market and refined lead market, where high stocks of refined metal kept lead prices down, whereas the concentrate market has remained tight throughout 2024, due to suspension of several zinc mines during the year. Spot treatment charges were under pressure for most of the year with attractive (silver-bearing) qualities at negative levels due to the lack of primary lead concentrates.

Global demand and price



Source: Bloomberg, CRU

Precious metal markets

Gold and silver prices are governed by anticipated developments in the global economy and have often been sought-after metals in weak economic conditions or when unusual events affect the global economy. Central banks, particularly in China and Russia, increased gold reserves to diversify away from the U.S. dollar amid rising geopolitical tensions. Persistent global inflation further boosted gold's appeal as a hedge against currency devaluation and conflicts in the Middle East and Ukraine, reinforced gold appeal, given its status as a safe-haven asset. Additionally, the start of the rate cutting cycle reduced the opportunity cost of holding gold, which further contributed to the metal's strong performance. The average price increased by 23% compared to 2023. The silver price followed a similar trend, although the metal is more dependent on the economic cycle, as a significant proportion of demand is industrial. The silver price increased by 21% in 2024. The price of palladium fell by 26% during 2024, with platinum remaining largely unchanged.

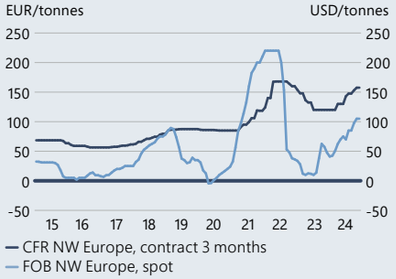
Gold and silver price

Source: Bloomberg

The sulphuric acid market

The sulphuric acid spot price gained consistently during the year, driven by robust global demand, a shortage of liquid sulphur in Europe and reduced smelter supply. The average spot price for 2024 was 164% higher than in 2023. Contract-based prices were more stable, increasing by 5% over the same period. Global consumption increased with higher demand from fertilizer production, the largest market for sulphuric acid, as well as the mining industry.

Sulphuric acid price



Source: CRU

About pricing

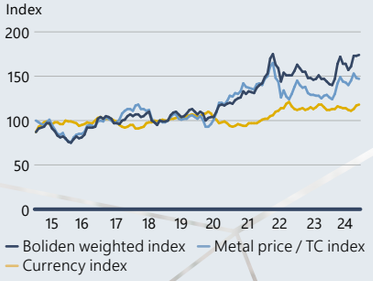
Metals
Prices for copper, zinc, nickel and lead are set daily on the London Metal Exchange (LME). In addition to the price, there is usually a premium. Its level is governed by the local balance between metal demand, smelter capacity, shipping costs and payment terms. Prices for gold, silver, palladium 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 supply of concentrates from the world's mines and smelter demand governs pricing between mines and smelters.

Boliden weighted index

The Boliden weighted index, which includes prices, terms and currencies that have the biggest effect on Boliden's earnings, increased by 7% in 2024, compared to the average of the previous year. The weighted metal price and treatment charge index also increased by 7%, while the currency index remained unchanged. Although not the case for 2024, currencies and metal prices often show a negative correlation, balancing Boliden's weighted index and earnings.

Boliden weighted index



Source: Bloomberg, CRU

Currency trends

The USD gained significantly towards the later part of 2024 on the back of robust U.S. economic performance, elevated interest rates, and investor expectations surrounding the incoming administration. The Federal Reserve's cautious approach to rate cuts further bolstered the dollar, which stands at record highs according to nominal trade-weighted exchange-rate index maintained by the Federal Reserve. Despite this, the USD was on average unchanged against both the EUR and SEK compared to 2023, due to synchronized monetary policy across major central banks.

Exchange rates

Source: Bloomberg

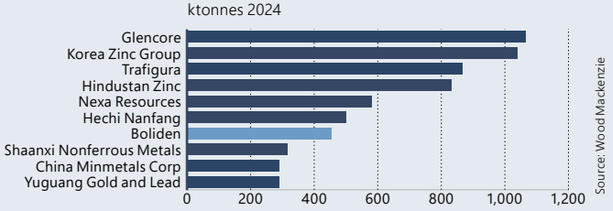
Market position

Boliden conducts business in a global marketplace and is one of the world's biggest zinc mining and smelting companies. In copper, we are a small but leading player in Europe, and we have built up a position in nickel in recent years.

Smelting companies – zinc

Boliden is the world's seventh largest zinc smelting company. The Kokkola smelter is a major zinc producer while the Odda smelter is medium-sized. The ongoing expansion at Odda will make the smelter a leading zinc producer.

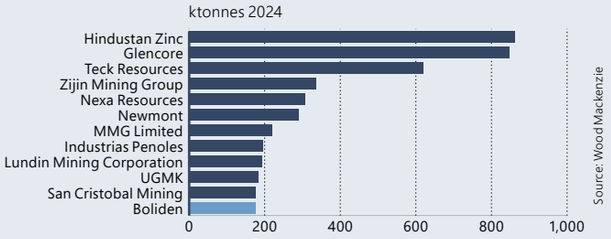
10 largest zinc smeling companies



Mining companies – zinc

Boliden is the world's twelfth largest zinc mining company measured on 2024 production, which takes into account the curtailment of production at Tara. Garpenberg and Tara, when fully operational, are major zinc mines by international comparison, and Garpenberg is also one of Europe's biggest producers of silver. The Boliden Area is a minor zinc producer.

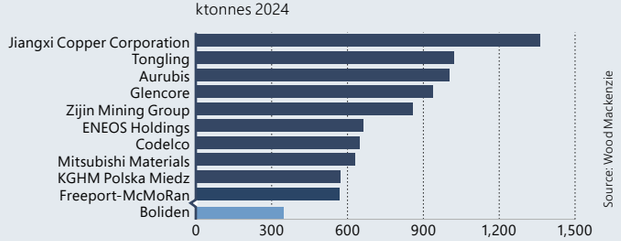
12 largest zinc mining companies



Smelting companies – copper

Combining production at the Harjavalta and Rönnskär smelters, Boliden is the twenty-third largest copper smelting company globally. With Rönnskär operating without a tankhouse since a fire in 2023, the production figure in the chart includes both finished copper cathodes and copper anodes sold for further processing. Elsewhere in this Annual and Sustainability Report, reported copper production includes only cathode production.

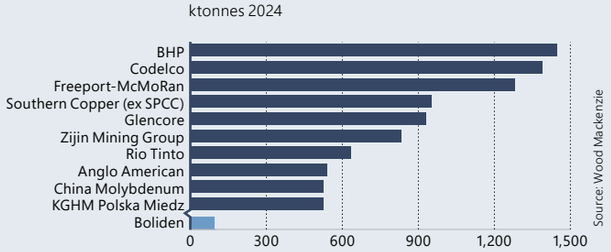
10 largest copper smelting companies



Mining companies – copper

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

10 largest copper mining companies



Mining and smelting companies – nickel

Since the acquisition of the Kevitsa mine, Boliden enjoys the same 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 matte, which is sold on for further processing. Harjavalta is the only nickel smelter in Western Europe.

Mining and smelting companies – lead

Boliden is an important lead mining company globally, but without a primary lead mine. Instead, lead is extracted as a by-product, mainly from the zinc mines. Boliden is a medium-sized smelter for primary lead and has a significant position in lead recycling in Europe through the Bergsöe smelter.

↓ PDF print version

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. Boliden's operations are sustainable and competitive thanks to leading-edge technological capabilities, high productivity, cost-efficiency and a limited environmental footprint.

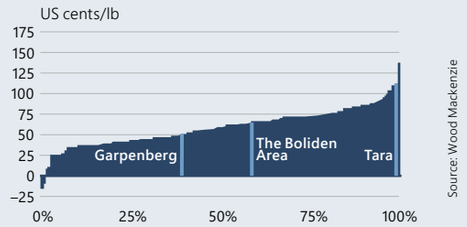
Metals are traded and priced on global exchanges. Competitive costs and sustainable processes are critical to long-term success as the metals are largely produced and traded in their pure forms without distinguishing properties. Boliden's operations are sustainable and competitive thanks to leading-edge technological capabilities, high productivity, cost-efficiency and a limited environmental footprint.

CASH COST FOR THE MINING INDUSTRY

Zinc – composite C1 cash cost

Garpenberg and the Boliden Area have large revenues from multiple metals and report according to pro rata costing. Tara reports according to normal costing. According to Wood Mackenzie, Garpenberg has world-leading productivity among underground mines.

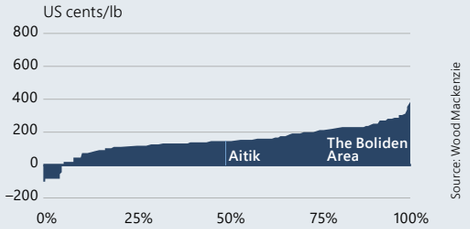
Share of mining industry production of zinc, %



Copper – composite C1 cash cost

Aitik has the world's highest productivity for open pit mines with 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.

Share of mining industry production of copper, %

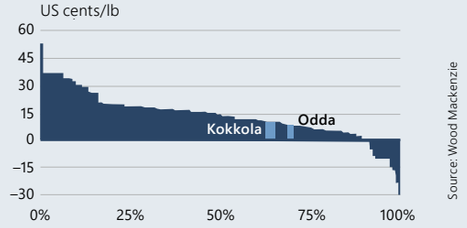


CASH MARGIN FOR THE SMELTER INDUSTRY

Zinc – cash margin

Boliden's zinc smelters benefit from economies of scale and low energy costs, but have low production of by-products. The cash margin curve is relatively flat and there is little difference between the smelters at lower and higher percentiles.

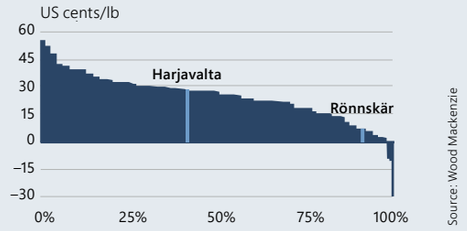
Zinc – cash margin



Copper – cash margin

Boliden's copper smelters enjoy a high cash margin due to its ability to process complex materials. In 2023, Rönnskär's position was negatively affected by the fire in the tank house. Harjavalta has significant revenues from its nickel business.

Copper – cash margin



Board of directors report

↓ PDF print version

Financial review

Boliden's earnings for 2024 increased compared to the previous year primarily due to the insurance income of SEK 3,335 m in Rönnskär. Volumes increased marginally due to higher ore grades in Mines and more free metals in Smelters. Costs increased primarily due to more external services and higher personnel expenses.

Financial performance

- Revenues amounted to SEK 89,207 m (78,554)
- Operating profit was SEK 13,692 m (8,287)
- Operating profit excluding revaluation of process inventory totaled SEK 12,025 m (7,810)
- Free cash flow was SEK 2,663 m (-3,354)
- Investments amounted to SEK 14,973 m (15,515)
- Earnings per share was SEK 36.65 (22.21)
- The Board of Directors proposes to cancel the ordinary dividend for 2024, in order to reduce the proposed share issue with the corresponding amount

Group

Sales revenues and operating profit
Boliden's sales revenues in 2024 totaled SEK 89,207 m (78,554) and operating profit totaled SEK 13,692 m (8,287). The insurance income of SEK 3,335, related to the fire in Rönnskär in June 2023, was accounted for in Smelters. Excluding process inventory revaluation, the consolidated operating profit was SEK 12,025 m (7,810). The operating profit for Business Area Mines was SEK 5,241 m (3,111), and the operating profit for Business Area Smelters excluding revaluation of process inventory was SEK 7,147 m (4,485). Scheduled maintenance shutdowns for Smelters burdened profits with SEK -400 m (-670) in the forms of lower production and higher costs. Consolidated operating costs before depreciation increased to SEK 22,056 m (21,551). Costs increased due to more external services and higher personnel expenses. Earnings for 2024 included included a positive impact of SEK 90 m from sold royalties in respect of the previously divested Canadian mine, Premier Gold. Earnings for 2024 also included one-off restructuring costs of SEK -358 m related to the reopening of Tara, and a total insurance income of SEK 3,335 m related to the Rönnskär fire. Earnings for 2023 included items affecting comparability of in total net SEK -95 m related to Tara, Rönnskär and Odda.

Capital expenditure
Boliden's capital expenditure in 2024 totaled SEK 14,973 m (15,515). In Mines the Aitik dam project was successfully completed in 2024, as well as the handover of the Liikavaara satellite pit with an Autonomous Haul System (AHS) driven truck fleet to the operations. In the Boliden Area, investments continued in the new dewatering and paste facilities. This will enable production in the Boliden Area to be extended until the end of the thirties. Mine sustaining capital expenditure, excluding the dam project in Aitik, amounted to SEK 3.7 billion (3.5). The largest investments in Smelters were the Odda expansion and the new tankhouse project in Rönnskär. The Odda expansion was at year end 2024 in its final stage while the new tankhouse in Rönnskär had about one and half year to go before the ramp-up stage.

Performance analysis

SEK m	2024	2023
Operating profit	**13,692**	**8,287**
Revaluation of process inventory	1,667	477
Operating profit excl. revaluation of process inventory	**12,025**	**7,810**
Change		**4,214**
Analysis of change		
Volumes		351
Prices and terms		1,582
Metal prices		2,629
By-product prices		118
Treatment and refining charges		-392
Metal premiums		-795
Exchange rate effects		23
Costs		-315
Depreciation		-669
Items affecting comparability		3,162
Other		103
Change		**4,214**

Result

SEK m	2024	2023
Revenues	89,207	78,554
Operating costs before depreciation	22,056	21,551
Depreciation	6,783	6,244
Operating profit excl. revaluation of process inventory	12,025	7,810
Operating profit	13,692	8,287

Capital structure and returns

SEK m	2024	2023
Balance sheet total, SEK m	116,192	101,957
Capital employed, SEK m	80,058	70,837
Equity, SEK m	65,012	56,420
Net debt, SEK m	10,662	10,728
Return on capital employed, %	18	12
Return on equity, %	17	11
Equity/assets ratio, %	56	55
Net debt/equity ratio, %	16	19

Investments

SEK m	2024	2023
Mines	7,867	8,742
Smelters	7,091	6,773
Other	14	0
Total investments	14,973	15,515

Cash flow

SEK m	2024	2023
From operating activities before changes in working capital	15,737	11,461
Changes in working capital	1,922	722
Cash flow from operating activities	17,659	12,183
Cash flow from investing activities	-14,996	-15,537
Free cash flow (before financing)	2,663	-3,354

Investments and cash flow from operating activities

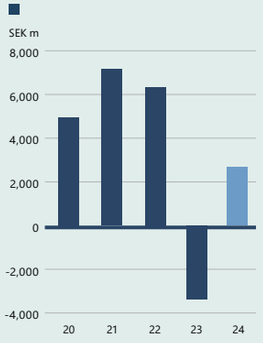
Cash flow from operating activities was SEK 17,659 m (12,183).

Cash flow
Cash flow from operating activities before changes in working capital was SEK 15,737 m (11,461). Including a change in working capital, the total was SEK 17,659 m (12,183). A decrease in working capital contributed positively to cash flow in the amount of SEK 1,922 m (722). Free cash flow totaled SEK 2,663 m (-3,354) and tax paid for the year was SEK 2,171 m (1,763).

Financial position
On December 31, 2024, Boliden's net debt was SEK 10,662 m (10,728), which corresponds to a net debt/equity ratio of 16% (19). Equity was SEK 65,012 m (56,420), including the mark-to-market of currency and interest rate derivatives in the amount of SEK 351 m (290) net after tax effect. The average term of Boliden's total approved loan facilities at year-end was 3.0 years (3.3). As of December 31, 2024 the average interest rate in the debt portfolio was 4.6% (4.3), and the fixed interest term was 1.6 years (1.1). At year end, Boliden's current liquidity, in the form of cash and cash equivalents and unutilized committed credit facilities with a term of more than one year, totaled SEK 16,446 m (14,843). For further information, see note 29.

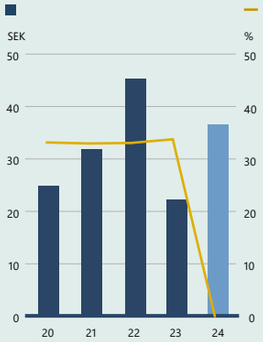
Exploration, research and development
Boliden's research and development primarily comprises exploration to find more ore within Business Area Mines. The expenditure for exploration in 2024, amounted to SEK 929 m (858) corresponding to 1.0% (1.1) of group revenues.

Free cash flow



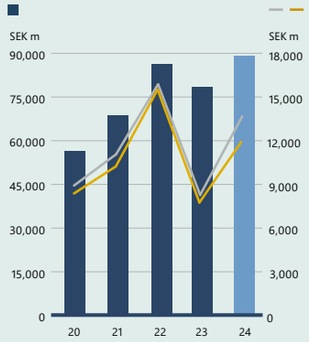
Free cash flow totaled SEK 2,663 m (-3,354).

Earnings per share and dividend payout ratio

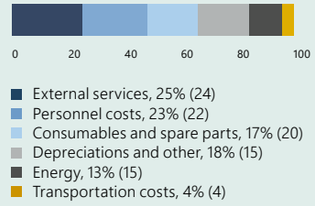


Earnings per share were SEK 65.65 (22.21) The proposed ordinary dividend is SEK 0 (7.50), which is a dividend payout ratio of 0% (33.8).

Revenues and operating profit



Breakdown of operating costs



Mines

Financial performance Mines

The majority of Business Area Mines sales are to Business Area Smelters, and take place on market terms. Revenues increased to SEK 21,202 m (18,683) of which external sales totaled SEK 3,547 m (1,331). The operating profit for Mines increased to SEK 5,241 m (3,111) mainly due to a combination of higher metal prices and grades. Total operating costs for Mines before depreciations were SEK 11,655 m (11,444). This corresponds to an increase of 2% (3) in local currency. External services contributed negatively while lower energy costs contributed positively. The fact that Tara was in care and maintenance had a large positive effect on costs. Capital expenditure totaled SEK 7,867 m (8,742). Major projects included investments in a new dam construction in Aitik, an Autonomous Hauling System (AHS) in Aitik's satellite pit, the expansion of the Rävliden deposit and new dewatering and paste facilities in the Boliden Area. Depreciations increased to SEK 5,060 m (4,488), driven by higher production in Kevitsa and the start of the Liikavaara satellite pit in Aitik.

The Boliden Area's operating profit reached a new record, primarily due to higher grades and the higher price of gold. Garpenberg's operating profit also set a new record despite the fact that milled production for the full year was capped due to its environmental permit. Higher zinc prices and production were the key drivers to Garpenberg's success. Kevitsa's operating profit increased substantially. Stable production, higher grades, improved recoveries and lower energy costs explained the sharp improvement. Tara had a negative result as a consequence of being in care and maintenance. The mine was in care and maintenance for a larger share of 2024 compared to 2023.

The first quarter of 2024 included a positive impact of SEK 90 m from sold royalties in respect of the previously divested Canadian mine, Premier Gold. On May 3, 2024, an agreement was reached between workers' unions and local management which enabled the process of reopening the mine at Tara. The second quarter of 2024 included one-off restructuring costs of SEK -358 m related to this reopening. The business area's earnings for

Key data

SEK m	2024	2023
Revenues, SEK m	21,202	18,683
Operating costs excl. depreciations, SEK m	11,655	11,444
Depreciations, SEK m	5,060	4,488
Operating profit, SEK m	5,241	3,111
Investments, SEK m	7,867	8,742
Capital employed, SEK m	40,310	34,751
Return on capital employed, %	14	9
Number of employees (FTE)	3,031	2,914

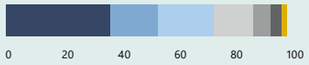
Operating profit

SEK m	2024	2023
Aitik	754	1,419
The Boliden Area	2,376	1,054
Garpenberg	3,740	2,473
Kevitsa	753	89
Tara	-968	-571
Mines other incl. exploration	-1,415	-1,354
Total	**5,241**	**3,111**

Performance analysis

SEK m	2024	2023
Operating profit	**5,241**	**3,111**
Change		**2,130**
Analysis of change		
Volumes		115
Prices and terms		2,832
Exchange rate effects		176
Costs		117
Depreciation		-578
Items affecting comparability		-391
Other		34
Change		**2,130**

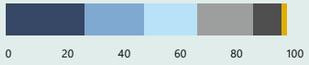
Breakdown of sales per metal



- Copper, 37% (38)
- Zinc, 17% (18)
- Gold, 20% (18)
- Silver, 14% (12)
- Nickel, 6% (7)
- Lead, 4% (5)
- Other, 2% (2)

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

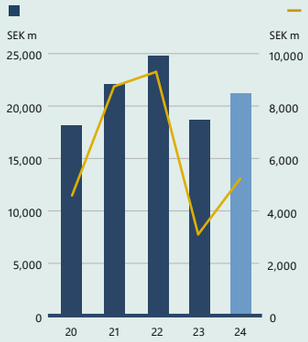
Breakdown of operating costs



- External services, 28% (27)
- Personnel costs, 21% (21)
- Consumables and spare parts, 19% (20)
- Depreciations and other, 19% (16)
- Energy, 11% (14)
- Transportation costs, 2% (2)

Operating costs, excluding depreciation, increased by 5% in local currencies compared to the previous year.

Revenues and operating profit



- Revenues
- Operating profit

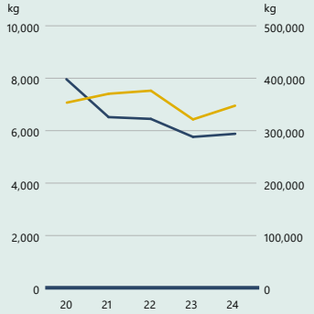
The increase in operating profit compared to 2023 is due mainly to prices and terms.

2023 included an item affecting comparability in the amount of SEK -53 m related to the early retirements in Tara. The Business Area's result for 2023 includes an item affecting comparability of SEK -53 million related to the early retirements and an insurance income of SEK 176 million in Tara. This insurance payment is related to the flooding in Tara in the fourth quarter of 2021.

Production Mines

The Business Area's milled volume was slightly lower in 2024 compared to 2023. Tara's care and maintenance situation had a negative impact. However, higher grades contributed positively, which resulted in a higher production of metal in concentrate for all metals except zinc, lead and palladium. The production of zinc in concentrate was negatively impacted by the fact that Tara stood still for a larger part of 2024 compared to 2023. Aitik had unchanged milled production relative to 2023. As such Aitik did not reach its designed annual production rate. The large projects (dam project, Autonomus Hauling System, and Liikavaara) together with a challenging sequence and geometry of the pushbacks in the Aitik pit had a negative impact. Kevitsas milled volume was stable relative to 2023 and in line with its environmental permit. Its grades were higher relative to 2023. Garpenberg's milled volume reached a new annual record at its environmental permit. Its grades were broadly stable. The Boliden Area's milled production was lower than 2023 but this was counteracted by higher grades. Tara's milled volumes fell sharply relative to 2023 as the mine was operational for a larger part of 2023 compared to 2024.

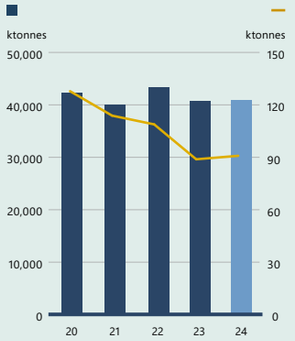
Gold and silver production



Metal in concentrate, gold
Metal in concentrate, silver

The increase in the production of gold in concentrate is explained by Boliden Area and the increase in silver in concentrate is explained by Garpenberg.

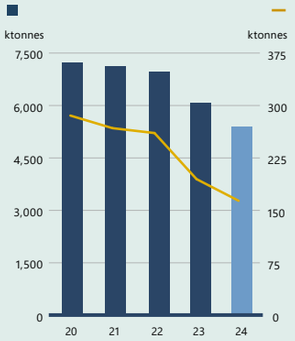
Copper production



Milled volume
Metal in concentrate

The production of copper in concentrate is in line with prior year.

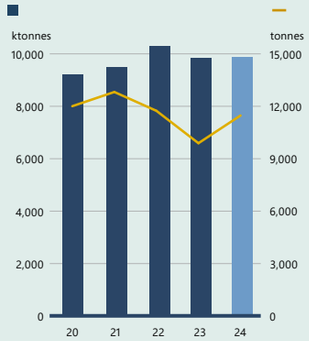
Zinc production



Milled volume
Metal in concentrate

The production of zinc in concentrate decreased mainly due to Tara in care and maintenance.

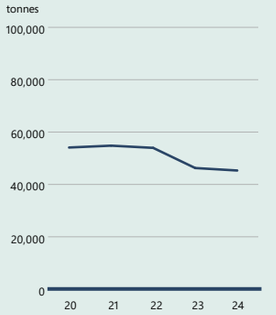
Nickel production



Milled volume
Metal in concentrate

The production of nickel in concentrate increased due to higher grade in Kevitsa.

Lead production



Metal in concentrate

The production of lead in concentrate decreased due to Tara in care and maintenance.

Smelters

Financial performance Smelters

Revenues for Business Area Smelters totaled SEK 85,629 m (77,197) and operating profit, excluding revaluation of process inventory, increased to SEK 7,147 m (4,485) primarily due to the insurance income of SEK 3,335 m related to the Rönnskär fire in June 2023. Including a revaluation of process inventory in the amount of SEK 1,667 m (477), operating profit totaled SEK 8,814 m (4,962). Total operating costs for Smelters before depreciations were SEK 9,906 m (9,635). This corresponds to an increase of 3% (12) in local currency. Costs increased largely driven by more external services and higher personnel expenses. However, energy prices were lower than in 2023. Operating profit was affected in the amount of SEK -400 m (-670) by planned maintenance shutdowns.

Capital expenditure totaled SEK 7,091 m (6,773). The largest investment in Smelters was the expansion in Odda followed by the new tankhouse project in Rönnskär. Depreciations were broadly unchanged at SEK 1,685 m (1,729). 2024 included an aggregated insurance income of SEK 3,335 m related to the Rönnskär fire, of which SEK 1,000 m contributed to cash flow for the year.

In 2024, as well as for the major part of 2023, the absence of a tankhouse had a clear negative impact on Rönnskär's profitability. Adjusted for the insurance income, Rönnskär barely reported black figures in 2024. This was due to lower metal premiums and refining charges, as well as a decreased volume of free metals. Harjavalta noted higher earnings compared to 2023, partly due to higher metal prices and less planned maintenance. Harjavalta's earnings increase should also be seen in the light of higher production and increased free metals, partly as a benefit of processing copper anodes from Rönnskär. Improved productivity in Harjavalta's nickel line also contributed positively. Kokkola reported strong earnings, albeit not as strong as 2023. Production was strong, costs were flat but lower zinc treatment charges had a negative impact. Odda reported a minor loss for the full year 2024 due to a negative mix of key variables. Production fell partly as a consequence of the expansion program. Costs increased due to more external services and higher personnel expenses, and prices and terms deteriorated due to both lower treatment charges and premiums. Bergsöe's earnings decreased compared to 2023. Lower production and lower premiums impacted negatively. The operating profit item "Other

Key data

SEK m	2024	2023
Revenues, SEK m	85,629	77,197
Operating costs excl. depreciations, SEK m	9,906	9,635
Depreciations, SEK m	1,685	1,729
Operating profit excl. revaluation of process inventory, SEK m	7,147	4,485
Operating profit, SEK m	8,814	4,962
Investments, SEK m	7,091	6,773
Capital employed, SEK m	41,329	36,155
Return on capital employed, %	22	14
Number of employees (FTE)	2,505	2,478

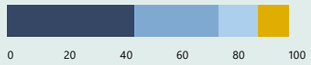
Operating profit excl. revaluation of process inventory

SEK m	2024	2023
Rönnskär	3,465	276
Harjavalta	1,874	1,093
Kokkola	1,230	1,927
Odda	-33	645
Bergsöe	86	158
Other Smelters	524	386
Total	**7,147**	**4,485**

Performance analysis

SEK m	2024	2023
Operating profit	**8,814**	**4,962**
Revaluation of process inventory	1,667	477
Operating profit excl. revaluation of process inventory	**7,147**	**4,485**
Change		**2,662**
Analysis of change		
Volumes		67
Prices and terms		-534
Exchange rate effects		166
Costs		-410
Depreciation		-82
Items affecting comparability		3,553
Other		68
Change		**2,662**

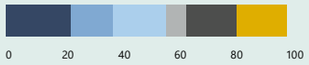
Breakdown of raw material contribution



- Free metals, 45% (38)
- TC/RC, 30% (34)
- Premiums, 13% (20)
- By-products, 11% (9)

Raw material contribution is revenues less cost of raw materials. Treatment charges and free metals accounted for 75% (72) of gross profit excluding revaluation of process inventory.

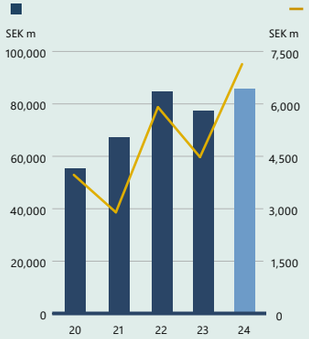
Breakdown of operating costs



- Personnel costs, 23% (21)
- Energy, 16% (18)
- Consumables and spare parts, 19% (21)
- Transportation costs, 7% (6)
- External services, 18% (16)
- Depreciations and other, 18% (17)

Operating costs, excluding depreciation, increased by 2% in local currencies compared to the previous year.

Revenues and operating profit



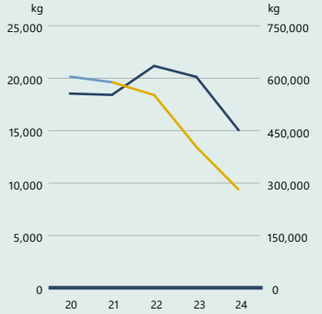
- Revenues
- Operating profit excl. revaluation of process inventory

Operating profit excluding revaluation of process inventory was higher compared to the previous year, mainly due to insurance revenue.

Smelters", which includes earnings from the Group's joint purchasing and sales companies, was higher in 2024 compared to 2023. This was due to improved prices and terms.

Production Smelters
The production of nickel in matte in Harjavalta reached a new record. This despite a 9-day strike in January, which impacted both copper and nickel feed negatively. Less planned maintenance, high nickel content in raw materials and a stable production process contributed positively. However, Smelters' production of precious metals reported sharp declines. The absence of a tankhouse in Rönnskär had a clear negative effect. Following the fire in June 2023, Rönnskär, only produced anode copper, which caused the business area's significant drop in its finished copper production. Zinc production was broadly flat in 2024 compared to 2023. Low availability of zinc concentrates, in the second quarter, and the planned closure of tankhouse 4 in late 2023 in connection to the Odda expansion project had a negative impact. Lead production decreased 14% relative to 2023. Production issues in both Bergsöe and Rönnskär impacted negatively. The production of sulphuric acid set a new record following recent investments.

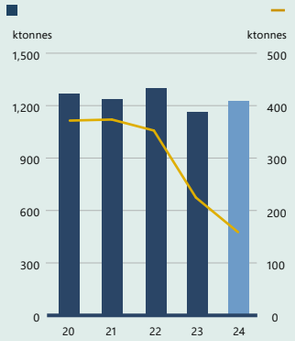
Gold and silver production



Metal production, gold
Metal production, silver

The absence of a tankhouse in Rönnskär had a negative effect on precious metal production.

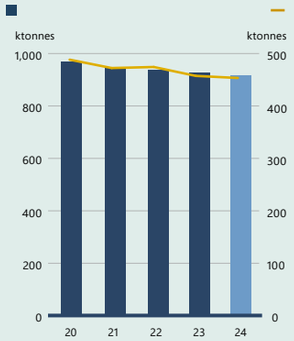
Copper production



Concentrate feed
Metal production

Copper production was lower compared to previous year due to Rönnskär operating without a tankhouse.

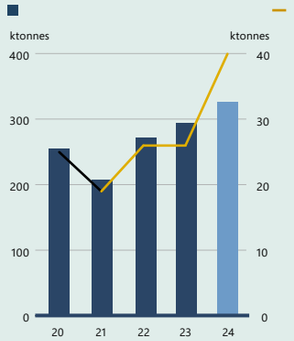
Zinc production



Concentrate feed
Metal production

Zinc production was slightly lower than previous year due to lower production in Odda.

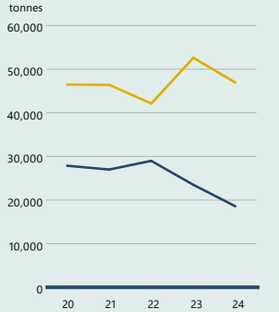
Nickel production



Concentrate feed
Nickel in matte

Harjavalta's nickel in matte production was higher than the previous year due to improved ingoing material.

Production of lead and lead alloys



Lead production
Lead alloys

Lead production was lower than the previous year due to lower production in Bergsöe.

Other events

Investment in a new tank house in Rönnskär
A decision to invest SEK 4.8 billion in a new tankhouse at Rönnskär was announced. The plant means that the production of copper cathodes and precious metals will gradually increase to full capacity during the second half of 2026. The investment, which is expected to be partially financed by potential insurance payout with a maximum amount of SEK 3.4 billion, began in 2024. The plant will have a capacity of 230 ktonnes, which is in line with the previous capacity and does not require a new environmental permit. Boliden has received confirmation that the secondary insurance company assumes Boliden's insurance claim to an amount of SEK 935 m.

Investment to get extended lifespan of the Boliden Area
Boliden decided to invest SEK 2.5 billion in the Boliden Area in dewatering and paste facilities in order to use tailings as backfill material in the Kankberg, Renström and Maurliden mines. This enables production in the Boliden Area to be extended by around 10 years until the end of the 2030s. The majority of these investments will be implemented between 2024 and 2026. Tests of this new technology show significantly improved environmental performance. In connection to this, Boliden filed an application to the Land and Environmental Court regarding an environmental permit for paste backfill in the closed open pits in Maurliden.

Technical breakthrough regarding supplementary cementitious material
A significant technical breakthrough by converting slag from existing metal production in smelters into supplementary cementitious material has been made. Compared to traditional cement production, this new technology means that the climate impact from cement production can be reduced by approximately 95%. An initial project has confirmed product and production performance, which has also been verified by established corporations in the cement industry. Patent applications have been submitted and a preliminary study regarding commercialization of this product has been initiated.

Introduction of Low-Carbon Nickel
Low-Carbon Nickel was added to Bolidens portfolio of green transition metals. This product has a minimal carbon footprint, measuring less than 5 kg of CO_2e per kg nickel equivalent – well below the global average of over 34 kg of CO_2e in 2024.

Dam safety measures in Aitik
In 2022 Boliden announced investments in total of SEK 5 billion to strengthen the Aitik dam construction. The purpose of this investment is to meet the best international industry standards and to create a stable foundation for future increases of Aitik's tailings facility. Since then, Boliden has carried out reinforcement works on the dam structures in Aitik and moved certain infrastructure which is affected by the works. In a verdict in July the Land and Environment Court approved Boliden's measures carried out so far and granted permission for continued dam safety works. The verdict has been appealed by the Swedish Agency for Marine and Water Management.

Application for a mining concession in Laver
A new application for a mining concession for the Laver deposit in northern Sweden was submitted. A mining concession, if granted, will give Boliden exclusive rights to the deposit. Laver is a large low-grade copper mineralization that also contains gold, silver, and molybdenum.

New environmental permit for Boliden Bergsöe
The Land and Environmental Court granted an environmental permit for increased production in Boliden Bergsöe. The new permit allows for an increased yearly production of 65,000 tonnes of lead. The permit has been appealed by the municipality of Landskrona.

Agreement to acquire the Neves-Corvo and Zinkgruvan mines
In December Boliden announced that it had entered into a definitive agreement with Lundin Mining to acquire the Neves-Corvo mine in Portugal and the Zinkgruvan mine in Sweden. The upfront cash consideration for the entities is USD 1,300 m plus contingent payments that can reach up to USD 150 m, on a cash and debt-free basis. The transaction, that considerably strengthens Boliden's mine production as well as internal zinc and copper concentrate supply, is subject to customary regulatory approvals and is expected to close in mid-2025.

Seasonal variations

Boliden's earnings are to a relatively limited extent subject to seasonal fluctuations. However, costs are lower in the third quarter, due to the vacation period. Periodical maintenance shutdowns in Smelters have the largest impact, as they involve production halts in the various units. Planned maintenance in Smelters is normally carried out in the second and third quarters.

Related-party transactions

See note 22.

The Parent Company

The Parent Company Boliden AB conducts limited operations and is in a tax agreement with Boliden Mineral AB. For further information, see page 135.

Guidelines for remuneration to the CEO and other senior executives

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

Share information and ownership

The total number of shares is 273,511,169. Each share has a quota value of SEK 2.12, and total share capital is SEK 578,914,338. Each share carries an entitlement to one vote at the annual general meeting. Transfer of shares is not restricted by law or by the company's articles of association. At year-end 2024, the number of shareholders was 121,813 (124,052). The largest individual shareholders were Blackrock (6.8%), Vanguard (4.2%) and Swedbank Robur Funds (3.6%). Boliden holds 40,000 treasury shares to ensure future delivery of shares to the participants in Boliden's long-term share saving program.

Proposed distribution of earnings

The following earnings are at the disposal of the Annual General Meeting:

SEK	
Retained earnings	8,707,481.736
Net profit for the year	6,065,701,635
Total	**14,773,183,371**

Boliden's policy states that the dividend shall correspond to one third of net profit for the year. However, for 2024 the Board of Directors proposes to cancel the ordinary dividend for 2024, in order to reduce the proposed share issue to finance the transaction with Lundin Mining, announced on December 9, 2024, with the corresponding amount.

Risk management

Boliden is exposed to various types of risks that could have a substantial impact on the Group. We continuously work to reduce and monitor risks through effective risk management where all business units have implemented processes to identity risks. As part of the risk work, a consolidated risk scenario is performed on an annual basis to identify and evaluate all risks within the Group. The tables on pages 43–46 describe the risks and how we manage them.

Overview of identified risks

Operational risks, read more on page 43	Market and commercial risks, read more on page 44	Financial risks, read more on page 45	Compliance risks, read more on page 46
• Health and safety	• Metal prices	• Exchange rate and metal price	• Legal
• Environmental impact	• Treatment charges	• Currency risk in translation exposure	• Non-compliance
• Water management and dam safety	• Customers	• Interest rate	• Confidence
• Climate change	• Credit risks in trade receivables	• Refinancing and liquidity	• Political
• Unscheduled production stoppages	• Raw materials supply	• Credit risks and financial operations	
• Skills supply	• Supply of goods and services		
• Cyber security	• Energy prices		

↓ PDF print version

Operational risks

Description of risk	Risk management	Comments on the year
Health and safety We handle large material flows both under and above ground, and from time to time our employees and contractors are exposed to heavy machinery, lifting, high temperatures and hazardous substances. Furthermore, many people work in shifts, which increases psychosocial risks. Deviations from established procedures, inadequate planning and deficient resource allocation can create dangerous situations and increase the risk of injury.	In order to achieve our target of accident-free operations and healthy workplaces, we focus on proactive risk reporting and learning from best practices both internally and externally, and we continue to work on strengthening our value-based behavior and culture.	Senior management and employees have participated in interactive training to better understand the importance of creating psychological safety at work. The aim of the training is to achieve a safe and healthy workplace as well as to improve production and financial results. More information on Boliden's impacts, risks and opportunities related to our own workforce and workers in the value chain can be found in the Sustainability statement, pages 59–129.
Environmental impact and biodiversity Our operations impact both the global climate, nature and the local environment. For both operational and decommissioned sites, considerable risks can be linked to emissions to air and water, the storage of waste, energy consumption and the significance of land use that has an impact on biodiversity. The risk is also linked to an increasing difficulty in getting environmental permits for our operations.	Boliden owns large land areas, which gives us the opportunity to utilize the land areas to compensate for our impact on the use of land and related nature values. Hazardous waste streams are stored in safe repositories underground or in mountain caverns to minimize harm on the environment. For other waste streams we are looking at opportunities to produce products from current waste streams. Compliance with our emissions targets is closely monitored and emissions generated by the operations are managed using the best available technology and according to environmental permits. Emergencies are prevented through continuous monitoring and systematic maintenance.	Boliden has assessed and identified its impacts, dependencies, risks and opportunities related to biodiversity and ecosystems through the Taskforce on Nature-related Financial Disclosures (TNFD) framework. Boliden is developing a biodiversity transition plan addressing our material nature-related aspects through impact mitigation strategies, forward-looking risk management practices and proactive implementation to support the health of the ecosystems we depend on. During 2024 a significant technical breakthrough for the Supplementary Cementitious Material (SCM) was made. The technology entails increased recovery of valuable metals and a potential to reduce large amounts of volume to landfill. More information on Boliden's impacts, risks and opportunities related to climate change, pollution, water and marine resources, biodiversity and ecosystems, and resource use and circular economy, can be found in the Sustainability statement, pages 59–129.
Water management and dam safety Tailings facilities and their dam structures are a risk in the mining industry. In case of a dam failure there is potential for major consequences for humans and the environment. The integrity of our tailings facilities will be affected by extreme weather conditions and changes in precipitation.	The Global Industry Standard for Tailings Management (GISTM) is being implemented for all our tailings storage facilities. The system will ensure that we comply with our Tailing Governance Commitments in the following areas: roles, responsibilities and competences, planning and resources, risk management, change management, emergency preparedness and response, audit and review. As a member of the International Council on Mining and Metals (ICMM) we always implement the latest international guidelines regarding tailings management and dam safety.	The implementation of GISTM is moving forward and by the end of 2024 our very high or extreme consequence facilities fully conformed with the standard. The rest of our facilities will be compliant during 2025.
Climate change Climate change leads to global warming and more frequent and severe extreme weather events such as heatwaves, droughts, floods, heavy rain or snowfall and wildfires. Related operational risks include damaged or destroyed vital equipment, facilities and infrastructure, operational issues, supply chain disruptions, increased costs and reduced revenue streams.	Boliden has ambitious targets and roadmap integrated in budgets and long-term planning to further reduce our absolute greenhouse gas emissions. We fully integrate climate considerations into decision-making processes and engage with stakeholders to communicate our commitment to climate resilience. The units evaluate their own weather-related operational risks and are responsible for conducting scenario analyses on the effects of the changing climate conditions in the relevant areas.	Boliden assesses climate-related risks annually. The latest assessment, conducted during the autumn of 2024, consisted of a cross-sectional workshop to evaluate our climate-related transitional risks. The workshop involved internal experts from our business areas and departments, ensuring a comprehensive review of operational sites and business activities. More information on Boliden's impacts, risks and opportunities related to climate change can be found in the Sustainability statement, pages 59–129.
Unscheduled production stoppages Our environmental performance and financial results can both suffer from unplanned production disruptions, for example due to technical problems, injuries, accidents or strikes. The pandemic years also demonstrated the risk of production disruptions due to societal restrictions and disturbances in our supply chains.	All Boliden units carry out preventive maintenance with the aim of minimizing the total cost for the Group. 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. The risk of unscheduled production stoppages are also managed through continuous evaluation of the Group's insurance solutions.	The political strike in Finland during the first quarter impacted our operations in the country. The strike affected Boliden's access to critical infrastructure such as railway and harbors, however, the impact on production was limited.
Skills supply Competition for skilled labor is still increasing in many of the areas where we operate, as a result of the industrial sector growth in those regions. At the same time, a major technology shift is taking place, with an increase in digitalization, process development and automation, which risks leading to skills shortages in many different occupational groups.	We work continuously to attract new employees with the right skills to join Boliden, for example by intensive employer branding activities directed to selected target groups. It is equally important to retain and develop current employees by systematically supporting career opportunities, providing development programs as well as working with people engagement. This is carried out both at the Group and unit levels within Boliden.	To be able to secure our future skills supply, we have continued to map our future skills needs in relation to technological development during the year. We also further strengthened our collaborations within the industry, relevant universities, and other local stakeholders. Joint efforts in promoting job opportunities increases incentives for people to relocate to the areas where we operate. Group-wide and local management development, trainee and apprenticeship and talent programs also continued. Focus areas were diversity and inclusion as well as people engagement. More information on Bolidens impacts, risks and opportunities related to our own workforce can be found in the Sustainability statement, pages 59–129.
Cyber security The risk of intrusion into the IT environment with ransomware or similar, which can bring IT systems to a halt, thus stopping production or other operations.	Since 2021, Boliden has run a program to systematically raise its security level. The program, called B-secure, runs for three years and is based on the NIST (National Institute of Standars and Technology) framework, which includes identifying and protecting against intrusions, as well as detection, management and recovery in the event of an intrusion. The program addresses both administrative IT and production IT.	The transfer and handover of the B-secure program to the line organization was done during 2024. Further improvements were made during 2024, focusing on vulnerability management, SOC (security operations center) monitoring of OT (operational technology) platforms, third-party risk management processes, business continuity and disaster recovery areas, which further strengthen our abilities to mitigate and manage these risks.

Market and commercial risks

Description of risk	Risk management	Comments on the year
Metal prices Changes in metal prices are a significant risk for Boliden's profit and cash flow.	The Group policy is not to hedge metal prices, but rather to allow changes to be reflected in profits. However, we hedge smelter metal price exposure of payable metals in the period between the purchase of the raw material and the sale of the corresponding metal.	See note 28 for a sensitivity analysis.
Treatment charges Treatment charges are determined by the supply and demand for metal concentrates, which represents a risk since they constitute a large part of the smelters' gross profit.	Benchmark treatment charges are negotiated annually by the major players in the mining and smelting industries. These terms are applied to our internal purchases, and in most contracts with external metal concentrate suppliers.	See note 28 for a sensitivity analysis.
Customers We are dependent on a few large customers for part of our product portfolio, and reduced demand from industrial customers would increase the risk of sales via the London Metal Exchange, resulting in reduced margins.	We manage this risk through a diversified portfolio with long-term customer relationships and regard for exposure to different end-user segments. At the same time, there are plans in place to convert production to products suited to the London Metal Exchange, if necessary.	The risk is considered to have increased as a result of the fire in Rönnskär in June 2023 and the adjustment in the business model from selling cathodes to selling anodes. The sale of anodes relies on relatively few customers due to the technical nature of the product. Anodes are not tradeable on the London Metal Exchange.
Credit in trade receivables The risk that our customers fail to fulfill their obligations constitutes a credit risk.	Boliden manages credit risks in trade receivables through an established credit rating process, active credit monitoring, short credit periods and, in certain cases, credit insurance. We have daily procedures for monitoring payments and we also constantly monitor the necessary provisions for expected credit losses.	The quality of trade receivables is deemed to be good and write-downs on outstanding receivables during the year occurred only in limited amounts. Further information provided in note 20.
Raw materials supply A stable, reliable raw materials supply is needed to enable the smelters to produce at high levels of capacity utilization and consistent quality. The implementation of barriers to international trade in metal concentrates is a related risk.	We manage risks with raw materials supply through long-term contracts and relationships with reliable external suppliers of metal concentrate and secondary materials, who also demonstrate high performance in sustainability. We engage with suppliers and collect information on their greenhouse gas emissions to promote reduction measures and to plan for possible changes in future trade flows.	In 2024 we saw fast-changing copper and zinc concentrate balances. Due to unexpected production cuts and delayed start-ups of new mine production, the concentrate market turned into a deficit which has been reflected in a rapid drop in spot treatment charges for concentrates purchases. Mapping of supplying mines' CO_2 footprint is progressing as well as the engagement with third-party mines to reduce their emissions.
Supply of goods and services Our operations depend on an ongoing supply of equipment, consumables and services, and as a consequence, sensitivity to disruptions in suppliers' production and supply chains are a risk for Boliden.	We work actively to reduce price and supply risks by having multiple qualified suppliers in each category and area. In cases where there is only one supplier, we reduce the risk through buffer stocks and by identifying alternative supply solutions. In this regard, the organization's ability to adapt rapidly has been a success factor.	Market volatility: Ongoing global challenges such as inflation, geopolitical conflicts and natural disasters continue to create significant market fluctuations, making accurate forecasting and procurement planning increasingly complex. Global supply chain uncertainty: Rising demand and political tensions, including trade disputes and restrictions between major economies and evolving EU regulations, introduce uncertainties and supply continuity risk across our supply chain (e.g. graphite and antimony). Technological dependencies: The success of our business plans relies on timely advancements in digitalization and automation. Delays in these areas could significantly affect project timelines, feasibility and sustainability.
Energy prices Since energy accounts for a significant part of operating costs, changes in energy prices constitute a significant risk for our financial performance.	In Norway, Odda has a long-term electricity agreement with inflation adjusted pricing clauses. The contract portfolios in Sweden, Finland and Ireland have shorter terms and the Group is partly more exposed to market prices, which has had a negative impact on the operating profit. We anticipate continued high price volatility in the electricity market, which is partly managed through longer electricity contracts, activated in 2023 and 2024, in Sweden and Finland. At the same time, we analyze opportunities for long-term contracts on an ongoing basis.	Due to Russia's invasion of Ukraine, there is still instability in the European gas market.

Financial risks

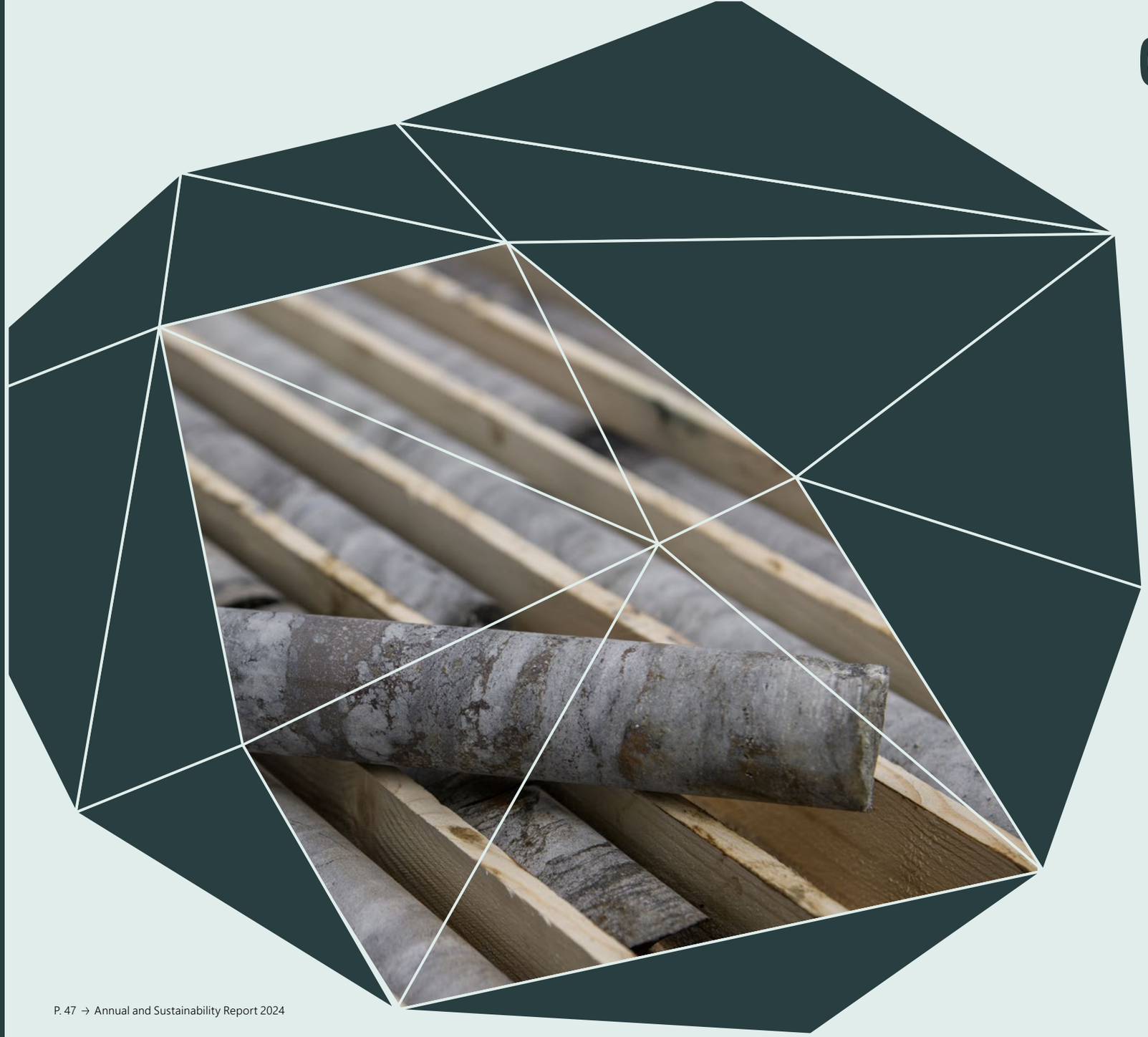
Description of risk	Risk management	Comments on the year
Exchange rate and metal price Pricing terms for products are based mainly on metal exchanges, and ours are priced largely in USD. As a result, transaction exposure arises from binding undertakings to our customers and suppliers, where the cost of raw materials and exchange rates may differ from the final sales value, or in fixed price offers made in different currencies long before delivery. Changes in exchange rates and prices have a major impact on Boliden's profit and cash flow.	Transaction exposure in conjunction with binding undertakings are hedged while the smelters process inventories are not hedged. Forward exchange contracts are used to hedge the sales price and exchange rate when purchasing input raw material, or in fixed price sales agreements. We make constant calculations concerning the way in which changes in metal and exchange rate markets affect Boliden's financial position. For major investments, the Group may enter into contracts to hedge forecasted sales from metal price and currencies. Future investment payments in currencies other than the local currency may be hedged under certain defined circumstances. See note 27 and the sensitivity analysis in note 28.	The risk is considered to have remained fairly constant during the year even as we have seen large fluctuations in exchange rates, interest rates and metal prices.
Currency risk in translation exposure A translation difference arises when converting net investments in overseas operations into SEK in conjunction with exchange rate fluctuations, which risks impacting other comprehensive income negatively within the Group.	Under our finance policy, we do not actively eliminate the effect of translation exposure through equity hedging. However, if an external borrowing requirement exists, the liability in foreign currency is used as equity hedge against the foreign asset pool. The main borrowing currencies are SEK, EUR and NOK.	
Interest rate Changes in market interest rates affect profits and cash flows.	Our finance policy allows an average fixed interest term of up to four years. Further information provided in note 29.	The Group's loan portfolio had an average fixed interest term of 1.6 years (1.1). Interest rate swaps are used to extend the fixed interest term.
Refinancing and liquidity There is a risk that Boliden will be unable to obtain the requisite financing or meet its payment obligations due to insufficient liquidity.	We limit refinancing risk through diversification of counterparties, financing sources and maturities, and through good governance to ensure compliance with loan agreement terms. Current liquidity is available in the form of unutilized credit facilities and is reviewed regularly.	The average term of total loan limits was 3.0 years (3.3) at year-end, and net payment capacity totaled SEK 16,446 m (14,843). The risk is considered to have remained fairly constant during the year as banks in general have kept a neutral risk appetite.
Credit risk and financial operations 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.	Our finance policy mandates a Standard & Poor's credit rating of minimum "A" for financial counterparties when entering into new transactions, and sets a maximum deposit of cash and cash equivalents per counterparty.	Credit quality and the counterparty diversification for derivatives were considered to have been good in 2024, and at year-end the credit risk in external derivative instruments had a market value of SEK 543 m (366).

Compliance risks

Description of risk	Risk management	Comments on the year
Legal Boliden's operations are subject to extensive laws and regulations, both general and industry-specific in each of the geographical markets in which Boliden operates. There is a trend towards stricter regulation, in particular in the field of environmental law. Compliance with such laws and regulations or the enactment of new laws and regulations and changes to existing laws and regulations may impact Boliden and its operations. Regulatory approvals, such as environmental permits and exploitation concessions, are required in all countries where Boliden has mining or smelting operations. Accordingly, regular permit assessments are required and, if Boliden seeks to increase or change its operations, it must in some cases apply for new or amended permits covering the affected operations. Necessary permits not being awarded or renewed at relevant time or on reasonable terms may constitute a risk to the operations continuing without disruption, or require large investments or result in increased costs.There is also a risk that we may be involved in commercial or other legal proceedings.	We monitor legal developments in relevant fields, and we implement, follow up and ensure compliance with applicable laws and regulations and our permit requirements on an ongoing basis. Boliden is an active member of domestic and foreign trade organizations and international and European organizations such as ICMM, the International Copper Association, the International Zinc Association, Euromines and Eurometaux, etc. and works through these channels to increase knowledge about our industry and to ensure conditions appropriate for it. 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.
Non-compliance Boliden may be exposed to legal or regulatory sanctions, material financial losses or damaged reputation as a result of any failure to follow applicable regulations.	We put high emphasis on compliance with external laws and regulations and internal policies. Specific focus areas include Boliden's Codes of Conduct for employees and business partners, as well as handling cases reported through Boliden's whistleblower system. Anti-corruption, trade sanctions, human rights, combating money laundering and terrorist financing, the protection of personal data, and compliance with competition law and regulations are other priority areas.	The focus on international sanctions has increased since Russia's full-scale invasion of Ukraine in 2022. One identified risk is the sharing of common utilities with Norilsk Nickel, a Russian company, in the Harjavalta industrial area. The degree to which macroeconomic and political factors may affect Boliden is uncertain and continues to present a risk to our operations.
Confidence Confidence in Boliden can be harmed by events such as serious incidents, or if employees or business partners fail to live up to business ethics and sustainability requirements.	Since we seek to be associated with ethical, sustainable business partners, we conduct systematic evaluations of and monitor customers and suppliers, both potential and existing, on the basis of criteria linked to business ethics and sustainability. Before concluding agreements, we review new business partners on a number of parameters. They are expected to adopt Boliden's Code of Conduct for business partners or undertake to comply with other relevant and generally accepted business standards before agreements are concluded, and where necessary, audits are carried out on suppliers' premises to ensure compliance.	To better detect and prevent possible fraud and corruption or other breaches we have initiated the establishment of a process to carry out audits on contractors and sub-contractors on Boliden's own sites. For external partners, and supplier audits, we already have a process for business partner ESG assessment with site visits/ audits in place.
Political Political decisions may have effects on our operations. Examples of such decisions include permit application processes for the mining industry.	Boliden and the trade associations in which we participate often act as referral bodies for upcoming political decisions that affect our operations, and this allows us to spread knowledge and information so that any decisions affecting us or our industry are appropriate and reasonable.	

↓ PDF print version

Corporate governance



↓ PDF print version

Focus areas of the Board's work in 2024

"The acquisition of the Neves-Corvo mine in Portugal and the Zinkgruvan mine in Sweden from Lundin Mining was the highlight of 2024 and a truly transformative transaction for Boliden. The acquisition is expected to nearly double Boliden's zinc concentrate output and increase its copper concentrate production by 43%, significantly bolstering its resource portfolio. Given the size and the importance of the transaction, several Board meetings were dedicated discussing, analyzing and evaluating the transaction and thereto related matters, such as its financing and its impact on Boliden as a whole and its strategic direction. Moving towards closing in 2025 (subject to necessary approvals and closing conditions) and thereafter integrating the assets into Boliden's operations, the transaction continues to remain at the top of the Board's agenda.

Other positive highlights during 2024 were the reopening of Tara and the successful completion of the Aitik dam reinforcement, one of our major infrastructure projects. The Board also continuously monitors the progress of the construction of Rönnskär's new tankhouse and the final phase leading up to the completion of the Odda expansion project. The last few years in Boliden's operations have been very capital intensive and the Board is looking forward to these investments bearing fruit and delivering good results in the coming years, making Boliden even more robust, profitable and sustainable."

Karl-Henrik Sundström
Chairman of the Board

Corporate governance

Governance of the Group
Boliden is a Swedish limited company listed on Nasdaq Stockholm.

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

In addition, we use our internal control tool Boliden Internal Control System (BICS) and a number of Group policies, in particular Boliden's Code of Conduct, which all employees are required to be familiar with and adhere to. Also, our operations work in compliance with management systems for occupational health and safety, environment, energy and quality.

Shareholders and the Annual General Meeting
Our largest shareholders are Swedish and foreign funds and institutions. At year-end 2024, the number of shareholders was 121,813 (124,052). The largest individual shareholders were Blackrock, Vanguard, Swedbank Robur Fonder and Nordea Fonder. 56% (57) of the shares were registered to foreign accounts. Further information about ownership structure is available on pages 189–190 and on our company website.

Boliden's shareholders exercise their rights by submitting proposals to, participating in and voting on the resolutions submitted to the Annual General Meeting (AGM) and any extraordinary general meetings. Shareholders may propose an item to the agenda of the AGM by sending a written request to the Board in due time before the issue of the notice for the AGM. Shareholders can also submit inquiries on company matters to the Board, the President and CEO, the auditor or the Remuneration or Audit Committees.

The AGM is the highest corporate decision-making body. The resolutions of the AGM include the election of members and Chairman of the Board and members of the Nomination Committee, the adoption of the income statement and balance sheet, appropriation of earnings and release from liability for members of the Board and the CEO, the approval of fees to members of the Board and auditors, and the approval of principles for remuneration of 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 Boliden's sites in Sweden combined with the possibility to participate through postal voting. In conjunction with the meetings, the shareholders can often participate in guided tours in Boliden's mines, concentrators or smelters to gain a deeper understanding of the operations and have an opportunity to meet Boliden's employees. The 2024 AGM was held in Boliden, see page 58 for more information.

Nomination Committee
The Nomination Committee represents the shareholders. It is tasked with preparing and submitting proposals to the AGM concerning 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 them and, where necessary, the process and the criteria that govern participation in and the work of the Nomination Committee. The focus of the Nomination Committee's work is to ensure that the Board consists of members who jointly possess appropriate and relevant knowledge and experience for the benefit of the company and its shareholders.

Accordingly, the Chairman of the Board presents the Nomination Committee with an evaluation of the work of the Board in its entirety and of the individual Board members during the past year as part of the process of identifying suitable Board members to be proposed for election by the AGM. The Nomination Committee usually also interviews and meets with the Board members. Supported by the Audit Committee, the Nomination Committee also prepares proposals for the election of auditors. Shareholders may submit proposals to the Nomination Committee in accordance with the instructions available on the company's website. The AGM passes resolutions on the principles governing the appointment and duties of the Nomination Committee.

The work of the Nomination Committee in 2024
The 2024 AGM elected Lennart Francke (Swedbank Robur Fonder), Karin Eliasson (Handelsbanken Fonder) and Patrik Jönsson (SEB Fonder) as members of the Nomination Committee. The Nomination Committee appointed Lennart Francke as Chairman. The Chairman of the Board was seconded to the Nomination Committee.

In accordance with the provisions of the Swedish Code of Corporate Governance, the Nomination Committee strives to ensure diversity and gender balance and has chosen to apply section 4.1 of the Code as its diversity policy. This means that the Board shall have a composition that is fit for the company's operations, development phase, future orientation and overall position. The Board members shall possess relevant multifaceted, broad and deep competencies, experiences and backgrounds. The requirement for the Board to have suitable, diversified skills and experience also calls for members proposed by the Nomination Committee to be evaluated on the basis of a number of different parameters. The Nomination Committee has extensive experience of conducting ambitious, qualified searches when selecting suitable candidates to allow for a comprehensive combination of all the necessary qualifications to be secured.

In 2024, 37.5% of the Board members elected by the AGM were women. The ambition is to maintain an even gender distribution as well as an appropriate Board composition fit for purpose and meeting the company's requirements. The Nomination Committee has not yet completed its work for the 2025 AGM when this Annual and Sustainability Report is released for publication. The Nomination Committee's proposals will be submitted in its motivated statement, which will be published in the notice of attendance for the AGM and on our company website.

The Board of Directors
The Board of Directors is appointed by the shareholders and is ultimately responsible for the company's organization and the management of the company's affairs and sustainability performance in the best interests of both the Group and its shareholders. Under the provisions of the articles of association, the Board of Directors must comprise a minimum of three and a maximum of ten members, excluding deputies, elected by the AGM. Employees have a statutory right to appoint three members and three deputies to the Board.

Since the AGM of 2024, the Board, which is elected for one year at a time, has comprised eight members elected by the AGM and three members appointed by the trade union organizations. Board meetings are attended both by the ordinary board members, the employee representative board members and the employee representative deputies. The President and CEO and the Executive Vice President and CFO are those Group management members who usually attend. Other members of Group management and other executives may also attend from time to time to present specialist issues as required. The General Counsel, Group Legal Affairs, is the Secretary of the Board.

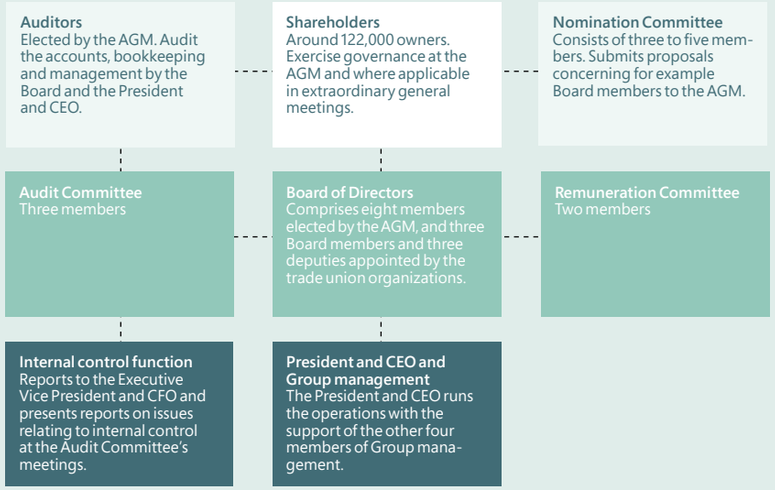
The Board members elected by the AGM are all independent in relation to major shareholders, the company and Group management. Thus, the Board complies with the requirements of the Swedish Code of Corporate Governance regarding independent members. The members of the Board are presented on pages 55–56 and on the company website. The Board decides the company's financial targets and strategy and 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 corporate 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. The allocation of duties between the Board and the President and CEO is set out in the instructions to the President and CEO adopted by the Board at the statutory board meeting.

The Chairman supervises the Board's work and ensures an open, constructive dialogue. The Chairman's duties also include monitoring and evaluating the expertise and work of individual Board members and their contribution to the Board.

The Board and its work are evaluated annually, and 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 2024 evaluation was conducted via the Board evaluation platform BoardClick.

An important part of the Chairman's work is to act as an interlocutor and support for the President and CEO and to make sure that the Board's decisions, instructions and directives are complied with and carried out. Prior to every Board meeting, the Chairman and the President and CEO prepare and review the agenda items for the respective Board meeting. Documentation in the form of memorandums on the topics on the agenda is sent to Board members one week ahead of each Board meeting and followed up by supporting Power point and oral presentations at the Board meetings.

BOLIDEN'S GOVERNANCE STRUCTURE



The work of the Board in 2024
The Board is kept updated about the company's affairs on a continuous basis through monthly reports tracking the company's performance with respect to safety, sustainability, and results. In addition to the monthly reports, the Board is provided with detailed information on the company's development at each Board meeting. Every ordinary meeting begins with a review of the operations of both business areas with focus on production, sales, projects and investments, macro data and industry trends, metal prices, treatment charges, demand for the company's products, financial performance, rules and regulations affecting the Group, possible challenges or risks that have been identified, and other relevant matters from time to time. In addition to these recurring topics, there are also a number of thematic items that are decided by the Board at the beginning of each year to highlight specific areas the Board wishes to focus on or requests deeper knowledge of.

Given the nature of the operations, an important part of the Board's focus at each meeting is sustainability-related topics and metrics such as the development of Lost Time Injuries (work-related accidents) and sick leave, emission levels and targets, permit and license to operate issues. In addition to recurrent follow-ups, these issues are also the subject of discussions and considerations linked to specific projects or investments and recurring in-depth studies.

The acquisition of the Neves-Corvo and Zinkgruvan mines from Lundin Mining was the topic that dominated the Board's agenda during the second half of 2024. Numerous meetings were dedicated to discussing and analyzing the potential transaction and its consequences for Boliden from all relevant aspects. Apart from merger and acquisition-related agenda items, the Board of Directors also dedicated significant time to monitor and follow up the completion of Boliden's large investment projects – in particular the expansion of the Odda zinc smelting facility, the dam reinforcement project at Aitik and the rebuilding of the Rönnskär tankhouse. Other important matters in focus for the Board concerned restarting the operations at Tara, submission of a new application for mining concession at Laver, the monitoring of working capital reduction, refinancing and capital structure, insurance-related matters, risk management and contingency planning and strategy. Sustainability matters continued to remain high on the agenda of the Board and Group management, with the implementation preparations of the new European Sustainability Reporting Standards (ESRS). The work of expanding Boliden's green transition metals portfolio as well as transforming iron silicate into cement products was also in focus, along with climate footprint reduction, biodiversity, indigenous people and communities, and sustainable waste management.

Given that in principle all of Boliden's operations are subject to permits and since permit application processes in recent years have become more complex and protracted, with appeals at several levels, securing important permits and licenses to operate on acceptable terms are the subject of ongoing information to the Board.

Boliden also monitors the general trends and developments in the sustainability field to ensure the best possible conditions for mining and smelting industries. We have been promoting awareness that our metals, in particular copper and nickel, are essential for the green transition and that responsible mining activities can be carried out in or close to Natura 2000 areas. Advocacy programs are pursued mainly through the European industry associations Eurometaux and Euromines, and with the help of domestic industry associations such as Svemin. The Board is informed on an ongoing basis about relevant national and international initiatives and proposed rules and regulations that may affect or be relevant for our operations. These initiatives or rules are presented to the Board by means of in-depth analyses to promote better understanding and knowledge, and thereby well-informed decisions.

The Board held 14 meetings in 2024, including the statutory board meeting and a number of extra board meetings.

Board committees
The overall responsibility of the Board cannot be delegated. However, the Board may set up internal committees to address issues in defined areas. In accordance with this, Boliden's Board has established an Audit and a Remuneration Committee. Committee members are appointed at the statutory Board meeting held after the AGM. Their work is governed by the respective committees' rules of procedure and instructions.

Audit Committee
The Audit Committee prepares certain accounting, finance and treasury-related issues for consideration by the Board and thereby supports the Board in the fulfillment of its responsibilities within the areas of internal control, financing solutions and confirming the quality of financial reporting. The company has an internal control department that works with identifying and following up on risk areas. The Audit Committee also monitors the procurement of services from the company's auditors, in addition to the audit, and where necessary it submits proposals to the Nomination Committee regarding the election of auditors. The Audit Committee has also been engaged in monitoring the company's work with implementation of the European Sustainability Reporting Standards. The committee meets prior to each quarterly financial report and as necessary. The Audit Committee comprises Pia Rudengren (Chair), Karl-Henrik Sundström and Tomas Eliasson.

The committee members have specialist competence, experience of and interest in financial and accounting issues. For further information, see Board assignments and previous positions on pages 55–56. The committee's meetings are also attended by the Group's Executive Vice President and CFO and the Head of Internal Control. The committee held ten meetings in 2024. During the year, special attention was paid to the acquisition of the two new mines from Lundin Mining and its financing. In addition, the committee continued to monitor and address issues relating to risk and risk management, insurances, strengthening internal controls, working capital reduction, environmental reclamation-related accounting matters and the procurement of a new auditor to be elected by the AGM 2025. The Committee works according to the instructions for the Audit Committee adopted annually and it reports the outcome of its work to the Board on an ongoing basis.

Remuneration Committee
The Remuneration Committee submits proposals for resolution to the Board regarding remuneration and other terms of employment for the President and CEO and follows up and evaluates programs for variable remuneration for the Group management team. The committee also approves proposals regarding salaries and other terms of employment for Group management, as proposed by the President and CEO. The Remuneration Committee draws up proposals regarding remuneration principles for the President and CEO and the 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 are also followed up by the committee, and the results of this evaluation are published on the company website. During 2024, the Remuneration Committee continued the work with a recurring long-term share-based incentive program for an extended group of senior employees. The proposal to launch the 2024/2027 LTIP program was approved by the Annual General Meeting of shareholders in April. 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, and it reports the results of its work to the Board. Following the statutory meeting in April, the Remuneration Committee comprises Karl-Henrik Sundström (Chair) and Per Lindberg. During the year, the committee held six meetings.

President and CEO and Group management
The President and CEO has the ultimate responsibility for Boliden's day-to-day business, compliance with and implementation of the Board's decisions and strategic direction, and for ensuring that risk management, control systems, organization and processes are all satisfactory. The President and CEO is supported in his work by the Group's management team which, in addition to the President and CEO, comprises the presidents of Boliden's two business areas, Mines and Smelters, the Executive Vice President and CFO and the Executive Vice President People and Sustainability. Group management meets at least once a month to follow up on operations and discuss group-wide issues, draw up proposals for strategic plans, business plans and budgets, which the President and CEO then presents to the Board for consideration.

Group management meets once per year for strategy planning. Group management and the management of the respective business areas also meet four times a year to review business area specific issues, including budgets and operations. For large projects, special steering groups are formed, which regularly meet for

updates and project information from project managers and other stakeholders. Furthermore, the President and CEO and the Executive Vice President People and Sustainability meet with the company's employee representatives and their deputies before every Board meeting, to discuss the agenda and other issues of current interest. See page 57 for a presentation of the Group management team.

Business management
The President and CEO is together with their Group management team responsible for implementing the decisions of the Board of Directors. This is done by delegating duties to business areas and the operating units. These delegation frameworks are defined in Boliden's policy documents, budget and strategic plan. The policy documents are available in the internal management system and include the Code of Conduct and a number of policies, including financial, tax, anti-corruption, competition law, insider, trade sanctions, anti-money laundering, whistleblowing, delegation and decision-making, third-party due diligence and Business Partner Code of Conduct, communications, privacy and personal data management (GDPR), and a wide range of environmental, health and safety related policy documents.

Sustainability governance
Boliden's sustainability work is based on the topics that are most important for the operations. These topics are managed by the Board through the President and CEO and Group management, business area management and management for the operational units. The Executive Vice President People and Sustainability, who is a member of Group management, is dedicated to topics that are related to People and Sustainability. The day-to-day responsibility for sustainability matters is decentralized to the respective units. Group functions in People and Sustainability (Climate and Sustainability Control, HR, Health and Safety, Ethics and Compliance, Communications, Environment and Quality) are responsible for developing structure and direction for the work, monitoring trends and performance, promoting best practice sharing and coordinating the work in the units. They report to the Executive Vice President People and Sustainability.

Sustainability topics are followed up and discussed at all Group management meetings, Board meetings and local management meetings. The sustainability topics are integrated into our strategy. Every sustainability topic has a long-term direction that guides and structures the work at every level in the company. Priorities are based on applicable regulations and the terms and conditions in our operating licenses but also the impact our operations have on people, the environment and society, expectations from internal and external stakeholders, risks and opportunities and relevant external trends. Boliden has committed to the UN Global Compact, UN's Sustainable Development Goals and the principles of International Council on Metals and Mining (ICMM).

We also support the Task Force on Climate-related Financial Disclosures (TCFD) and the Task Force on Nature-related Financial Disclosures (TNFD) and we have a management system that complies with the ISO standards for the environment, quality, energy and occupational health and safety. Important sustainability topics are also covered through participation in European and national industry organizations.

Sustainability is integrated in the strategy work, and each business area is responsible for setting local targets based on the Group's sustainability guidelines. Our sustainability work is value based, which means that action plans are not only determined based on legislation and regulatory requirements, but also on needs and identified activities that can improve the situation for people, the environment and our local communities. This means that investments with major environmental or safety benefits in relation to the amount invested are implemented independently of external requirements or obligations.

Boliden's Sustainable Finance Committee (SFC) was established in 2022 with the purpose to further integrate our sustainability and financing, and to ensure transparency and responsibility regarding sustainable financing. The SFC is responsible for the evaluation and selection process for financing under Boliden's Green Financing Framework to be adopted. The SFC is led by the Director of Treasury and consists of representatives from the business areas and relevant Group functions. The committee reports to Group management and ultimately to the Board of Directors.

The implementation of Boliden's values and leader and co-worker principles, developed by a large number of employees from all business units in 2020–2021, continues through various initiatives. The purpose is to further strengthen the company's value-based culture.

Business ethics is another important area that is always high on the company's agenda. The Ethics and Compliance function is responsible for ensuring compliance with laws and regulations concerning anti-corruption, competition, trade sanctions, money laundering, data privacy, human rights, whistleblowing, business partner due diligence and Boliden's Code of Conduct.

The new, more ambitious climate targets adopted in 2022 were validated and approved by the SBTi at the end of 2023, when Scope 1 and 2 roadmap activities also were integrated in budgets and long-term plans. Focus during 2024 has been on doing the same for Scope 3.

The sustainability report has been included in the annual report since 2017. The Group also compiled a Sustainability Index for the years 2018–2023, containing detailed sustainability information and has reported this according to the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), the UN Global Compact, TCFD and ICMM standards. From 2024, all sustainability disclosures are included in the Annual and Sustainability Report.

The new Corporate Sustainability Reporting Directive (CSRD) and the European Sustainability Reporting Standards (ESRS) were introduced by the EU in 2023 with implementation for the 2024 fiscal year, but the implementation was delayed in Sweden. Therefore, it was decided to officially continue to report according to the GRI with adjustments to prepare for future reporting requirements according to ESRS. The limited assurance will include comments on the compliance with ESRS as guidance for next year's report.

The ESRS requires a double materiality assessment where sustainability topics' impacts, risks and opportunities are rated based on both impact materiality and financial materiality. Our first double materiality assessment was approved by the Board in February 2024, setting the scope for the reporting according to ESRS.

Read more in our sustainability statement, on pages 59–129.

Auditors
The external auditor conducts independent audits of accounts to ensure that they provide a true and fair view of the company's position and financial performance in all material respects. The auditor also reviews the Board's and the President and CEO's administration and reports the findings to the Board. The auditor is in contact with Group management in conjunction with the audits or emerging issues. The auditor regularly attends Audit Committee meetings and meets with the Board once per year without the management team's presence.

The auditor also reports to the shareholders at the AGM. The auditing firm Deloitte AB was elected at the 2024 AGM to serve as the company's auditors until the conclusion of the 2025 AGM. Authorized public accountant Thomas Strömberg is auditor-in-charge. He is a partner at Deloitte Sweden and has auditing assignments for Ericsson, among others. At the 2025 AGM a new auditor will be elected in accordance with auditor rotation regulation. The proposal for a new auditor will be presented in the AGM invitation. Remuneration to the auditors is payable against approved invoices. See note 6 for information concerning remuneration.

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 and CEO 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
The Group 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 Executive Vice President and CFO and presents reports on issues relating to internal control at the Audit Committee's meetings. As part of the evaluation of the Group's internal control framework, the Audit Committee evaluates annually the need for an internal audit function. The role of Group internal control to evaluate compliance with the Group's internal control framework, and to report transparently on the results to the Audit Committee, is determined to be sufficient and no separate internal audit function is needed. During 2024 a new head of the internal control function was recruited, additional resources were added to the function and quarterly self assessments of the requirements in the Group's internal control framework were established.

Control environment
The control environment is characterized by relatively few but large operating units that have long operated according to well-established processes and control activities. To ensure a uniform approach and working methods, there are binding policies and indicative guidelines for delegated responsibility within the organization. An internal control framework exists which includes Boliden's Code of Conduct, decision-making and authorization instructions, and a financial manual covering financial policy, accounting and reporting instructions. In addition, each business unit maintains detailed instructions and descriptions of important processes. The Group has a uniform, standardized internal control framework known as BICS (Boliden Internal Control System) 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 all parts 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 2024. 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 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
Follow-ups, improvements and the development of systems, processes and controls take place on an ongoing basis. Annual tests are conducted on documented controls within the framework of BICS. Areas where room for improvement is identified in conjunction with the audits are documented, analyzed and actioned.

The work of the board 2024

Recurring matters dealt with at each Board meeting: Environment, sustainability, health and safety issues, review of operations, investments, cost control and specific in-depth thematic items. Listed below are the principal agenda items for 2024's Board meetings:

Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec

Q1

FEBRUARY
Final budget, year-end report, Annual and Sustainability Report, dividend proposal, Annual General Meeting preparation, Mineral Resources and Reserves, financing, IT security, environment, safety and sustainability work, Long Term Incentive Program 2024/2027, investments and information about potential litigations. Meeting between the Board and the auditors without the presence of management.

Q2

APRIL
Interim report for the first quarter, global M&A trends and transactions in the mining industry, update on the Aitik dam facility project and the Green Zinc Odda project, financing, investments, annual update from the procurement function, annual update of lobbying and license to operate, special focus on biodiversity, My Opinion employee survey.

AGM and statutory Board meeting.

Q3

JULY
Interim report for the second quarter and review of the audit report.

AUGUST
Board meeting in Kevitsa, strategic focus Business Area Mines including exploration, dam safety and GISTM implementation, yearly update on reclamation, inventory management, financing update, investments and restart Tara.

Q4

OCTOBER
Interim report for the third quarter, strategic focus Business Area Smelters with emphasis on technical development, green metals, annual Corporate Responsibility and sustainability update, Green Zinc Odda project follow-up, risks and risk mitigation, update on financing topics, merger and acquisitions and investments.

DECEMBER
Acquisition of the Neves-Corvo and Zinkgruvan mines from Lundin Mining, strategic plan and budget, evaluations of the work of the Board, the President and CEO and senior executives, financing update and focus topics for 2025.

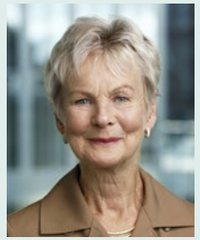
EXTRAORDINARY BOARD MEETINGS
A number of extraordinary Board meetings concerning primarily the acquisition of the Neves-Corvo and Zinkgruvan mines from Lundin Mining, the financing of this transaction and related matters.

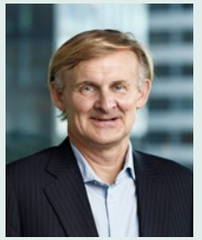
↓ PDF print version

Board of Directors







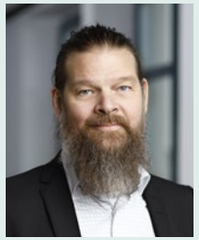
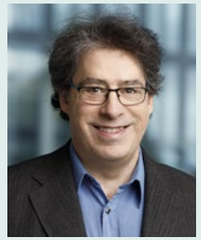
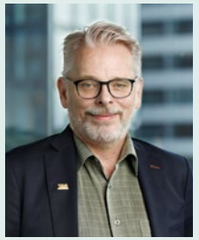
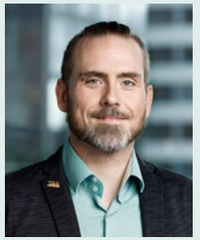
Name	**Karl-Henrik Sundström** Chairman of the Board	**Helene Biström** Board member	**Tomas Eliasson** Board member	**Per Lindberg** Board member	**Perttu Louhiluoto** Board member	**Elisabeth Nilsson** Board member	**Pia Rudengren** Board member	**Derek White** Board member
Education	B.Sc. Business Administration and Economics, Harvard Advanced Management Program	M.Sc. Engineering	B.Sc. Business Administration and Economics	M.Sc. Engineering, Ph.D. Industrial Management and Work Organization	M.Sc. Economics, LL.B.	M.Sc. Engineering Honorary Doctor, Luleå University of Technology	M.Sc. Economics	B.Sc. Geological Engineering, Chartered Accountant
Elected	2021	2020	2022	2021	2019	2015	2017	2024
Born	1960	1962	1962	1959	1964	1953	1965	1962
Other assignments	Chairman of the Finnish-Swedish Chamber of Commerce, and Mölnlycke. Vice Chairman of Vestas. Board member of NXP and the Marcus Wallenberg Foundation	Senior Vice President BA Wind, Vattenfall	Board member of Elekta, Telia and Millicom	Senior Advisor in Peymar Advisory. Chairman of Nordic Brass Gusum. Board member of Vattenfall and Valmet	CEO of Severn Glocon. Chairman of the board of Vaaka Partners	Chairman of the KK Foundation, Scandinavian Japan Sasakawa Foundation and the Vadstena Academy. Member of Hanaholmen's executive board. Special investigator	Chairman of Social Initiative and Laholm Stål. Board member of Hypex Bio Explosives Technology	Board member of Hayasa Metals, DLP Resources and Coda Trust
Previous positions	CFO of Ericsson and CEO of Stora Enso	Executive Vice President Commercial of Billerud-Korsnäs, CEO of Infranord, CEO of Norrenergi and Executive Vice President of Vattenfall	CFO of Sandvik, Electrolux and Assa Abloy	CEO of BillerudKorsnäs and Epiroc	CEO of Purmo Group, various executive positions in Metso and McKinsey & Company	County Governor, CEO of Jernkontoret (the Swedish Steel Producers' Association), board member of Exportkreditnämnden, and various senior positions within the SSAB Group	CFO of Investor and Executive Vice President of W Capital Management	President and CEO of Ascot Resources, Partner of Traxys Capital Partners, CEO of KGHM International, and a variety of senior positions in the mining industry globally
Number of shares[1]	6,000	2,000	1,650	2,000	0	1,000	1,000	0
Meeting attendance[2]	14 of 14	12 of 14	14 of 14	13 of 14	13 of 14	14 of 14	14 of 14	11 of 11
Committee work (attendance)[2]	Rem. Committee 6 of 6, Audit Committee 10 of 10	–	Audit Committee 10 of 10	Remuneration Committee 6 of 6	–	–	Audit Committee 10 of 10	–
Board fee[3]	2,025,000	675,000	675,000	675,000	675,000	675,000	675,000	675,000
Committe fee, SEK[3]	80,000 + 160,000	–	160,000	80,000	–	–	300,000	–
Total fee, SEK[3]	2,265,000	675,000	835,000	755,000	675,000	675,000	975,000	675,000
Independent from company and company management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Independent of major owner	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

1) Own holdings and those of related legal or natural persons, on December 31, 2024. 2) Board members' meeting attendance refers to the Board meetings they participated in during the calendar year 2024. 3) Board fee refers to the period from the date of election / reelection until the following AGM.

↓ PDF print version

Board of Directors



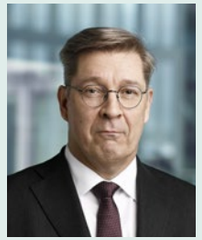
Name	**Ronnie Allzén** Employee representative, Board member	**Jonny Johansson** Employee representative, Board member	**Andreas Mårtensson** Employee representative, Board member	**Ola Holmström** Employee representative, Deputy member	**Gard Folkvord** Employee representative, Deputy member	**Mikael Norrby-Holtkamp** Employee representative, Deputy member
Assignment	Chairman of IF Metall (the Swedish Metalworkers' Union) Rönnskär branch, Vice Chairman of FSG (trade union cooperation, mines), insurance responsible of Gruvarbetarnas Branschforum	Representative for the Mine Chapter Aitik (IF Metall), member of FSG (trade union cooperation, mines), Gruvarbetarnas Branschforum	Chairman of Unionen Aitik, Boliden Area, Group, Commercial & Smelters Staff	Chairman of Mine Chapter Kristineberg (IF Metall), FSG (trade union cooperation, mines). Member of the board of Georange	Chairman of Odda Kjemiske Arbeiderforening. Member of the Industri Energi trade union Competency Committee	Chairman of Unionen Rönnskär, deputy board member in Unionen, deputy Chairman in PTK-L. Board member of ISF Sverige
Elected	2023	2022	2022	2017	2024	2024
Born	1979	1968	1973	1965	1969	1984
Number of shares[1)]	0	0	0	170	198	6
Meeting attendance[2)]	13 of 14	14 of 14	14 of 14	14 of 14	8 of 8	11 of 11

1) Own holdings and those of related legal or natural persons, on December 31, 2024.
2) Board members' meeting attendance refers to the Board meetings they participated in during the calendar year 2024.

Kieran Donaghy was an employee representative and a member of the Board from the 2024 AGM until June 30, 2024.

↓ PDF print version

Group management



Name	**Mikael Staffas** President and CEO	**Håkan Gabrielsson** Executive Vice President and CFO	**Åsa Jackson** Executive Vice President People and Sustainability	**Daniel Peltonen** President Boliden Smelters	**Stefan Romedahl** President Boliden Mines
Education	M.Sc. Engineering Physics, MBA	M.Sc. Business Administration	M.Sc. Business and Economics	M.Sc. Chemical Technology & Industrial Economy	M.Sc. Geotechnology
Employed	2011–	2009–2011, 2016–	2019–	2019–	1994–2003, 2013–2016, 2018–
Born	1965	1967	1964	1971	1967
Other assignments	Chairman of the boards of the International Zinc Association and the Employers' Association of the Swedish Mining Industry. Deputy Chairman of Svemin and the Swedish Association of Industrial Employers. Member of the Executive Board of the Confederation of Swedish Enterprise and member of the boards of the International Copper Association, ICMM, Industrikraft and Kemira	Board member of PRI association	Deputy board member CLC, Climate Leadership Coalition	Board member of Eurometaux	Board member of the Employers' Association of the Swedish Mining Industry, Svemin, SGU's Mineral Trade Council, and Euromines
Previous positions	President Boliden Mines and CFO Boliden, CFO Södra Skogsägarna, Partner McKinsey & Company	CFO Fagerhult, Director Group Controlling 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	President and CEO of Iggesund Paperboard, 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]	36,952	4,870	3,357	5,493	4,461

↓ PDF print version

Annual General Meeting 2024

The Annual General Meeting (AGM) was held on April 23 in Boliden. Shareholders had the opportunity to participate either in person, by proxy or through advance voting (postal votes). 1,531 shareholders, representing more than 133 million shares, participated in the AGM. The shares represented constituted approximately 49% of the total number of shares. All Board members, members of Group management and the auditor were present at the AGM.

The AGM resolved to re-elect the Board members Helene Biström, Tomas Eliasson, Per Lindberg, Perttu Louhiluoto, Elisabeth Nilsson, Pia Rudengren and Karl-Henrik Sundström. Derek White was elected as a new member of the Board. Karl-Henrik Sundström was re-elected as Chairman of the Board. The AGM also resolved to pay a dividend of SEK 7.50 per share, in total SEK 2,051 m (4,103), in accordance with the proposal by the Board.

In accordance with the proposal of the Nomination Committee, it was resolved that Board fees of SEK 2,025,000 shall be paid to the Chairman of the Board and SEK 675,000 to other Board members who are not employees of Boliden. The AGM also resolved to pay fees in the amount of SEK 300,000 to the Chairman of the Audit Committee and SEK 160,000 to each of the Audit Committee's other two members. The fee payable to each member of the Remuneration Committee was resolved to amount to SEK 80,000.

In accordance with the Nomination Committee's proposal, Deloitte AB was elected as auditor up until the end of the next AGM, and it was resolved that the auditors' fees be payable against approved invoice.

The Annual General Meeting also resolved on a new long term share-based incentive program for certain senior management team members and authorized the Board of Directors to resolve on acquisitions of up to 100,000 treasury shares and that treasury shares may be transferred to the participants in the program.

It was also resolved to appoint Lennart Francke (Swedbank Robur Fonder), Karin Eliasson (Handelsbanken Fonder) and Patrik Jönsson (SEB Fonder) as members of the Nomination Committee.

The meeting also decided to adopt the remuneration report presented by the Board.

The resolutions passed by the 2024 AGM are noted in the minutes of the meeting published on Boliden's website, where the minutes of previous AGMs are also published.

↓ PDF print version

Sustainability statement

↓ PDF print version

General disclosures

Boliden's operations have a significant environmental and social impact, making sustainability a crucial part of our strategy and business model. Our sustainability statement outlines our governance and performance on key sustainability topics, in order to disclose relevant information to our stakeholders.

The General disclosures chapter outlines the principles that guide our sustainability reporting, which are essential for preparing Boliden's sustainability statement and ensuring transparency and accountability. In addition, this chapter provides an overview of our strategy and business model, stakeholder engagement and the material sustainability topics identified in the double materiality assessment. It also includes a summary of the material sustainability topics' impacts, risks, and opportunities, as well as our policies and commitments, metrics and targets. Detailed information on each material sustainability topic is presented in the subsequent topic-specific chapters.

PRINCIPLES FOR SUSTAINABILITY REPORTING
The sustainability statement has been compiled to align with the leading sustainability reporting practices with adjustments to future reporting requirements where applicable. This approach is grounded in several key principles:

- Materiality: Ensuring focus on the most relevant issues
- Stakeholder Inclusiveness: Engaging with stakeholders to understand their concerns
- Accuracy: Providing precise and reliable information
- Clarity: Presenting data in an understandable manner
- Comparability: Enabling comparisons over time and with other organizations
- Timeliness: Offering regular updates
- Reliability: Ensuring the data is verifiable and trustworthy

These principles enhance transparency and accountability, and contribute to integrating material sustainability topics in our strategy and business model. The sustainability statement has been reviewed and approved by Boliden's Group Management.

Consolidated sustainability statement
The sustainability statement is consolidated at Group level, and the scope is the same as for Boliden's consolidated financial statements. The report is prepared once a year for the preceeding calendar year. It includes comprehensive data from Boliden's business units, Group functions, procurement and sales departments. In case different business segments have varying impacts, risks and opportunities that could be obscured by aggregating the information, specificity and context are provided to facilitate interpretation. Boliden is organized into two segments: Business Area Mines and Business Area Smelters. Business Area Mines contain five business units: Aitik, the Boliden Area and Garpenberg in Sweden, Tara in Ireland and Kevitsa in Finland. Business Area Mines is responsible for sales of its mined concentrates. Business Area Smelters includes six business units: the Swedish smelters Bergsöe and Rönnskär, the Harjavalta and Kokkola smelters in Finland, the Odda smelter in Norway, and Commercial. Business Area Smelters is responsible for sales of the smelters' products and manages raw material flows between the Group's mines, smelters and customers. This includes responsibility for purchases of metal concentrates and materials for recycling from external suppliers.

Reporting on value chain
Boliden operates within the metal market's two primary submarkets, which upstream in the value chain is the market where raw materials are extracted and sold from mines to smelters, and downstream in the value chain is the market where refined metals are sold primarily to industrial customers. Our material impacts, risks, and opportunities in the value chain have been identified in the Scope 3 greenhouse gas (GHG) emissions and the upstream activity of acquiring concentrates from external mines. These are described further in the chapters Climate change on pages 76–85 and Workers in the value chain on pages 111–114.

Omissions and exemptions
Boliden has not used the option to omit any specific piece of information corresponding to intellectual property, know-how or the results of innovation. Neither have we made any exemptions regarding impending developments or ongoing negotiations. The acquisition of the Neves-Corvo and Zinkgruvan mines was announced in 2024 but with closing expected in mid-2025 and is thus not included in the sustainability statement.

SUSTAINABILITY REPORTING MANAGEMENT
As a company with significant environmental and social impact, Boliden operates in an environment characterized by a framework of regulations and permits, each with specific conditions that must be met. This framework ensures that we operate under stringent oversight, with well-established control programs that are regularly reviewed and audited by regulatory authorities. To effectively manage these requirements and go even further to achieve our sustainability targets we have a management system that is integrated into our business. Boliden's management system (BMS) includes the ICMM Mining Principles as well as the quality, environmental, occupational health and safety, and energy management systems that Boliden's operations have adopted. Read more about certification of BMS on page 61.

Reporting process and risk assessment
Our certified management system supports comprehensive oversight, including data management for material sustainability topics. The system standards require a documented delegation of responsibilities at each site and the maintenance of relevant competencies. BMS with its governing and steering documents, including local instructions, guidelines and tools, is documented in a global system accessible to all employees on our intranet. The process for monthly, quarterly and annual sustainability reporting has a documented description and instructions and standardized templates for reporting to support consistent and reliable reporting. In 2024 we started the work to integrate sustainability reporting internal controls in the Boliden Internal Control System (BICS), which includes both financial processes and general IT processes.

Risk assessments for material sustainability topics are an integral part of the management system and one risk matrix is used for all topics and organizations. The matrix evaluates risks by plotting them based on their probability of occurrence and the potential consequences. Risks with high probability and severe consequences are prioritized for immediate action, while those with lower probability and less severe consequences are monitored and managed as needed. Although the focus is mainly on the actual risks to the environment and people, there is an increasing focus on the risks for errors in reporting. Identified risks include data inaccuracies, non-compliance with reporting standards and potential cybersecurity threats. Mitigation strategies involve implementing robust data validation processes, regular compliance audits and enhancing cybersecurity measures. Quality checks on data are performed at business unit, business area and Group level according to instructions in BMS.

Data collection
Occupational health and safety data and environmental data, including energy-related data, are collected monthly from the business units and consolidated at Group level. Additional environmental and social data is collected on a quarterly or annual basis from the operations and consolidated at Group level. A significant part

↓ PDF print version

of this data is collected in the same system as financial data. Other systems and processes for collecting data are the incident reporting system, the human capital management system, whistleblower and grievance mechanisms, and procurement systems. In 2024, most systems were connected to a joint platform from where data is then retrieved. The financial data presented in this sustainability statement originates from Boliden's audited annual accounts. The Boliden Group reports in Swedish kronor (SEK).

Quality control
In 2024, we increased our efforts on mitigating risk and enhancing quality assurance in data collection and consolidation. This included measures such as creating standardized templates and safeguarding sections of these templates to prevent unauthorized alterations and mitigating identified risks related to data accuracy through enhanced data validation protocols within our IT systems. Compliance findings are incorporated into our regular instructions and training programs for staff, ensuring that employees are aware of and adhere to the latest reporting standards and practices. In addition to the process descriptions, instructions, guidelines and templates in BMS, information on updates and changes are included in monthly reminders for reporting and in monthly meetings with business units, business areas, and Group functions within the People and Sustainability team. Corrective actions and continuous improvements regarding sustainability reporting are tracked and presented monthly to the Executive Vice President People and Sustainability and quarterly to the Group management team. This integration ensures that findings from risk assessments are systematically addressed within our internal functions.

SPECIFIC REPORTING CIRCUMSTANCES
Time horizons
The time horizons used in the sustainability statement are the same as for the financial statement unless otherwise stated. Medium-term time horizons are up to five years and long-term time horizons are more than five years. Time horizons are disclosed for sustainability matters when there is a significant difference in impacts, risks and opportunities over time. In the Climate change chapter, time horizons according to applicable standards and frameworks have been used and are described in that chapter.

Estimations
Estimations, assumptions, approximations, and judgements regarding metrics adhere to relevant regulations, standards, and frameworks, when available. When applicable these disclosures are made in the specific topic chapter and include the basis for the preparation of these metrics, the uncertainties, resulting level of accuracy and planned actions to improve accuracy in the future. This is mostly related to GHG emission metrics where estimations and assumptions are made in alignment with the GHG Protocol and are further described in the Climate change chapter on page 85.

Changes and errors
We continuously improve our measures and data gathering processes to ensure accuracy and reliability. In 2024, we made an adjustment to our Scope 3 emissions baseline, resulting in a 1% change in total Scope 3 emissions. This is further detailed on page 84. Political contributions is no longer considered material.

Standards used as base for the sustainability statement
The European Sustainability Reporting Standards (ESRS)
In 2023, Boliden began preparations to comply with the European Corporate Sustainability Reporting Directive (CSRD), aiming to report on environmental, social, and governance (ESG) aspects according to the ESRS starting in fiscal year 2024. The CSRD has since been incorporated into the Swedish Annual Accounts Act, and as these requirements will take effect for the fiscal year 2025, Boliden has postponed ESRS reporting by one year. The double materiality assessment conducted in 2023 sets the scope for our future ESRS reporting. For 2025, the focus is on compliance and providing relevant information to our stakeholders, with long-term goals of leveraging comprehensive and comparable data to enhance Boliden's sustainability performance.

The Global Reporting Initiative (GRI)
GRI is an international independent organization that provides a standardized framework for sustainability reporting. Boliden reports in accordance with the GRI standards foundational level to ensure a comprehensive overview of our sustainability efforts, including detailed data and performance metrics.

The ten principles of the United Nations Global Compact
Boliden is a signatory to the UN Global Compact, a strategic policy initiative for businesses committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labor rights, environment, and anti-corruption. We report our Communication on Progress in accordance with their requirements.

The International Council on Mining and Metals (ICMM) Mining Principles
ICMM is an international organization that unites mining and metals companies and associations to enhance sustainable development performance in the industry. As a member, Boliden aligns its sustainability work with ICMM's requirements and their Mining Principles. We also provide more detailed reporting on their principles at www.boliden.com.

The Organisation for Economic Co-operation and Development (OECD) Due Diligence Guidance
Boliden reports in accordance with the OECD guidelines, which provide recommendations to companies for preventing and addressing adverse impacts related to human rights, labor, the environment, and corruption in their global supply chains.

Certifications
Boliden's mining units in Sweden and Finland and smelting units in Sweden, Finland and Norway are certified in accordance with the ISO 14001 environmental management system, the ISO 45001 occupational health and safety management system and the ISO 50001 energy management system. Business Area Smelters is also certified according to the ISO 9001 system for quality management, the London Bullion Market Association - Responsible Gold Certificate and Responsible Silver Certificate. In addition, some of the smelters are certified according to the Copper Mark, Zinc Mark, Nickel Mark and OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. The certificates can be found at www.boliden.com.

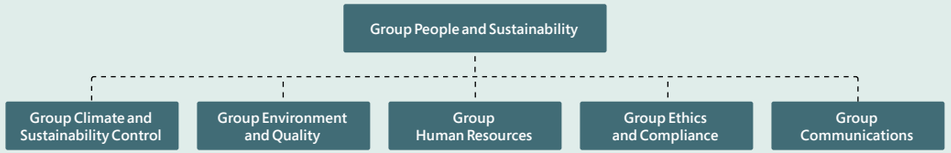
Incorporation by reference
Detailed information on the role of Boliden's Board of Directors and Group management, information provided to them and integration of sustainability-related performance in incentive schemes is outlined in the Corporate governance chapter on pages 49–57. An overview of specific sustainability governance aspects is reported on page 52.

SUSTAINABILITY GOVERNANCE
Boliden's Board of Directors oversees the company, ensuring proper governance structures and systems, while the President and CEO, supported by the Group's management team, is responsible for daily operations, strategic direction, and implementing Board of Directors decisions. The outcome of the materiality assessment is reviewed and validated on a yearly basis, while the performance against targets is assessed monthly and more in depth quarterly. To manage impacts, risks, and opportunities appropriately, the Board of Directors and Group management team are supported by ESG experts at sustainability functions in the organization.

↓ PDF print version

Sustainability functions and management

The Executive Vice President People and Sustainability is supported by the Group functions Climate and Sustainability Control, Human Resources, Health and Safety, Ethics and Compliance, Communications, Environment and Quality. These functions are responsible for developing structure and direction for managing impacts, risks and opportunities, monitoring trends, promoting best practice sharing and coordinating the work in the business areas. To ensure comprehensive oversight and specialized focus, councils for Health and Safety, Human Resources, Ethics and Compliance, and Environment, including a Climate Committee, have been established. These councils and the Climate Committee consist of experts and stakeholders within different ESG areas who provide guidance, set priorities, and drive initiatives in their respective areas. Sustainability topics are integrated into our strategy and are consistently addressed at each Board of Directors meeting and Group management meeting as well as business area and local management meetings. This comprehensive approach ensures that sustainability is not just a topic of discussion, but a key factor in guiding the organization's direction and policies. Boliden's certified management system, BMS, contains governing and steering documents, including local instructions, guidelines and tools, that integrate the management of impact, risks and opportunities in the relevant functions in different levels in our organization. This includes procedures for defining metrics and setting targets. Performance is monitored and followed up on monthly, quarterly or annual basis, and the effectiveness of the management system is evaluated as part of the annual management review according to the ISO 9001, 14001, 45001 and 50001 standards. Read more about the Board of Directors' and Group management team's roles and responsibilities on pages 49–57.



Sustainability policies and commitments

Boliden's Code of Conduct and Business Partners Code of Conduct define the overall ethical principles and standards that guide both Boliden's and our business partners' behavior and decision-making to ensure responsible and sustainable practices in our own operations and value chain. All material sustainability topics identified in the materiality assessment process, which consider the interests of key stakeholders, are significant for our strategy and therefore have a policy or commitment. Our policies and commitments cover both Boliden's business activities and operations and apply to employees, consultants and contractors working at or for Boliden. Everyone working for Boliden is individually responsible for reading, understanding, and following these policies and commitments. As part of our management system, BMS, we conduct an annual review of our policies and commitments to ensure their accuracy and compliance. Approval for continued use is granted by either Boliden's Board of Directors, the CEO or the Group management team, depending on the policy. Key performance indicators related to our policies and commitments are included in the overall management oversight measures and are followed up monthly, quarterly or annually. The effectiveness of policies is evaluated as part of the annual management review of BMS.

Policies and commitments related to sustainability often cover more than one material sustainability topic due to the interdependency between impacts on people and the environment, risks and opportunities. More details on the key content and general objectives of policies and commitments for specific material sustainability topics can be found in the respective material sustainability topic chapters under the Policies and commitments heading.

Policy/Commitment	Key content	Responsible function
Code of Conduct	Boliden's ethical standards, compliance requirements, and commitments to responsible business practices.	Group Ethics and Compliance
Business Partner Code of Conduct	Boliden's ethical standards and compliance requirements expected from our business partners.	Group Ethics and Compliance
Anti-Corruption Policy	Our commitment to preventing corruption and promoting ethical business practices.	Group Ethics and Compliance
Biodiversity and Nature Commitment	Boliden's strategies and actions to protect and enhance biodiversity and natural ecosystems in areas where we operate.	Group Environment and Quality
Climate Commitment	Boliden's strategies and actions to reduce greenhouse gas emissions and address climate change impacts.	Group Climate and Sustainability Control
Competition Law Policy	Our commitment to fair competition and compliance with antitrust laws.	Group Legal
Data Privacy Policy	Our commitment to protecting personal data and ensuring compliance with data protection regulations.	Group Legal, Group HR
Environmental Policy	Boliden's commitment to minimizing our environmental impact through sustainable practices and continuous improvement.	Group Environment and Quality
Group Tax Policy	Our commitment to transparent and responsible tax practices in compliance with applicable laws and regulations.	Group Tax
Health and Safety Policy	Boliden's commitment to ensuring a safe and healthy work environment through proactive risk management and continuous improvement.	Group HR
Human Rights Commitment	Our dedication to respecting and promoting human rights throughout our operations and supply chain.	Group Ethics and Compliance
Indigenous People Commitment	Our dedication to respecting the rights and cultures of indigenous peoples and avoiding adverse impacts and minimizing, managing or compensating for unavoidable residual impact.	Group Communication
Quality Policy	Boliden's commitment to maintaining high standards of quality in our operations, products, and services.	Group Environment and Quality
Tailings Governance Commitment	Boliden's strategies and actions to manage tailings responsibly and ensure the safety and environmental integrity of our tailings storage facilities.	Group Environment and Quality
UK Tax Strategy	Boliden's approach to tax compliance, risk management, and our commitment to transparent and responsible tax practices in the United Kingdom.	Group Tax
Water Management Commitment	Boliden's strategies and actions to sustainably manage water resources and minimize our water footprint.	Group Environment and Quality
Whistleblower Policy	Our procedures for reporting and addressing suspected misconduct or non-compliance, ensuring protection and anonymity for whistleblowers.	Group Ethics and Compliance

Our Policies and Commitments documents are available at www.boliden.com.

Third-party standards and initiatives Boliden commits to
Extractive Industries Transparency Initiative
Global Industry Standard on Tailings Management (GISTM)
Global Reporting Initiative (GRI) Standards
International Council for Mining and Metals (ICMM) Mining Principles
International Copper Association
ICMM Health and Safety Guidelines
ICMM Nature Commitment
ILO Declaration on Fundamental Principles and Rights at Work
ISO 9001, 14001, 45001 and 50001 standards
Joint Due Diligence Standard for Copper, Lead, Nickel and Zinc
Mining With Nature by Svemin
OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas
OECD Guidelines for Multinational Enterprises
Science Based Targets initiative (SBTi)
Svemin Position Statement
Task Force on Climate-related Financial Disclosures (TCFD)
The Copper Mark, Nickel Mark and Zinc Mark
United Nations Global Compact
United Nations Guiding Principles on Business and Human Rights
United Nations Sustainable Development Goals (SDGs)
Universal Declaration of Human Rights
Voluntary Principles on Security and Human Rights

Boliden has several certificates according to third-party and ISO standards accessible via www.boliden.com.

Sustainability-related incentive schemes
The variable remuneration paid to the President in 2024, was based on the Group's financial and sustainability targets. For other members of Group management, the variable remuneration for 2024, was based on the Group's targets and on their personal areas of responsibility, including financial and individual targets as well as climate targets and the accident rate trend. Disclosure on sustainability-related incentive schemes can be found in note 5, in the Corporate governance chapter on page 51 and the Climate change chapter on page 79.

External assurance
Boliden's policy is to use external assurance to ensure the high quality and credibility of the information we publish. The sustainability statement has therefore been subject to external limited assurance by the Auditor in accordance with ISAE 3000, as issued by the International Federation of Accountants (IFAC). The auditor's limited assurance report is included in this report.

STATEMENT ON DUE DILIGENCE

Core elements of due diligence	Pages in the sustainability statement
Embedding due diligence in governance, strategy and business model	49–57, 61–62, 66–68, 115–117
Engaging with affected stakeholders in all key steps of the due diligence	49–57, 62, 64–65, 69, 79, 86–87, 90, 94, 97, 102, 112, 119, 115–117, 121
Identifying and assessing adverse impacts (negative impacts on people and the environment)	66–69, 115–117
Taking actions to address those adverse impacts (negative impacts on people and the environment)	79–80, 87, 90–91, 94, 97–99, 104, 113–117, 119, 122–123
Tracking the effectiveness of these efforts and communicating	81–84, 88, 91–92, 95–96, 99–101, 104–110, 115–117, 123–124

STRATEGY, BUSINESS MODEL AND VALUE CHAIN
Boliden focuses on four overarching strategic areas. Firstly, it prioritizes care for people, the environment, and society in all its operations and stakeholder relations. Secondly, the Group is committed to reducing its climate footprint by improving energy efficiency, thereby lowering both climate impact and costs. Thirdly, Boliden emphasizes efficiency in production and investments, including enhancing supporting processes. Finally, it strives for profitable growth through strategies such as extending mine life via exploration, organic expansions, and selective acquisitions.

Boliden's business model encompasses the full value chain, from exploration and mining to concentrating, smelting, and recycling base and precious metals. We operate in two metal submarkets: supplying raw materials from our mines primarily to our own smelters and providing finished metals mainly to external industrial customers. Boliden runs its own mines and smelters, while also sourcing raw materials from external suppliers. With operations in Sweden, Finland, Norway, and Ireland, we rely on a global network for our supply of raw materials, energy, services and equipment. Operating in a global market, with different legislation, ethical approaches, working conditions and environmental standards requires an overarching approach for managing risks in the supply chain and to ensure operating permits are maintained. The main risks to people and the environment from our value chain is connected to acquiring concentrates from external mines and the Scope 3 GHG emissions. These are described further in the Workers in the values chain and Climate change chapters on pages 111–114 and 76–85 respectively. Our Business Partner Code of Conduct applies to all business partners, including customers and suppliers, and specifically addresses requirements within human rights, labor rights, health and safety, environment, responsible value chain, business ethics and anti-corruption, and it prohibits the use of conflict minerals. This comprehensive approach is central to our strategy and enhances our potential to ensure a sustainable and responsible value chain while meeting the demands of our stakeholders and investors.

Output from operations
The main metals produced are zinc, copper, nickel and lead, while by-products include gold, silver, platinum, palladium and sulphuric acid. These metals and minerals are used in areas such as agriculture, healthcare, communications, water and energy supply, transport and space technology, and the construction of our cities. Copper and nickel are used for electrification, lead for electricity storage, and zinc for corrosion protection. The precious metals gold, silver, platinum and palladium are used in financial markets and emission control, while sulphuric acid is used in the pulp and paper and fertilizer industries.

↓ PDF print version

In our Green Transition Metals portfolio, we offer Low-Carbon Zinc, Copper, Nickel, Lead and Sulphuric Acid as well as Recycled Zinc, Copper and Lead. These products are of significant strategic importance to Boliden, offering our customers the opportunity to improve their ESG credentials by lowering their carbon footprint and enhancing circularity. Our Low-Carbon Zinc and Low-Carbon Copper emit 1.0 and 1.5 kilograms of carbon dioxide equivalents per kilogram of metal produced, compared to global averages of 3.6 for zinc and 4.1 for copper. Low-Carbon Nickel, Low-Carbon Lead and Low-Carbon Sulphuric Acid have emission levels of 5.0, 1.0 and 0.025 kilograms of carbon dioxide equivalents per kilogram produced, compared to global averages of 34.2 for nickel, 1.8 kilograms for lead and 0.155 kilograms for sulphuric acid. Our Recycled Zinc, Recycled Copper, and Recycled Lead are produced from secondary materials, including end-of-life electronics and lead-acid car batteries, making an important contribution to circularity in metal usage.

In addition to the importance of the metals produced by Boliden, we often operate in rural areas, becoming a significant local employer and an important source of job opportunities. This impact is felt both directly and indirectly through investments and the purchase of goods and services. In Sweden, more than 7,000 people are directly employed by metal mining companies. An equal amount of indirect jobs are created at the subcontractor level, which in turn generates further employment opportunities in supermarkets, restaurants, cultural institutions and public services, all contributing to the development of local communities. Metal production is also a major source of tax revenue for both the state and the sparsely populated areas where mining companies operate. In 2024, Boliden paid SEK 2,171 million in corporate tax in its operating countries, excluding social security contributions.

Input to operations
The production of metals relies on several resources. The key requirements for Boliden's operations include land use for mines and their tailings ponds, energy, and skilled workforce. We significantly impact and depend on the environment, affecting local stakeholders such as indigenous people and neighboring communities. At Boliden we put considerable effort into effective reclamation of closed sites, with financial provisions at end-of-life and decommissioned mines amounting to SEK 11.218 billion. The energy used in our operations results in greenhouse gas (GHG) emissions and climate impact. To address this we have set a target of reducing absolute GHG emissions by 42% for Scope 1-2, and 30% for Scope 3 by 2030, with 2021 as the base year. In addition, we have targets for minimizing metal emissions to air, discharges to water, and environmental incidents. Highly skilled labor and technical expertise is crucial not only for delivering our products but also for minimizing potential negative impacts on the environment, and on the health and safety of our employees and contractors. In 2024 we employed 6,378 workers. Headcount per country can be found on page 105. Boliden has set several workforce safety, health and diversity targets. Read more about our stakeholder management on pages 64–65 and our targets and performance assessment on pages 66–68.

Operational challenges related to sustainability matters
The production of metals in alignment with our sustainability targets presents several key challenges. Mining and smelting require long-term environmental responsibility and engagement with stakeholders in our operational areas. Reclamation of active and closed sites is an ongoing effort, with actions detailed in the chapter on biodiversity and ecosystems on pages 93–96. Effective land use and reclamation also necessitate cooperation with stakeholders, particularly in areas where Boliden operates alongside indigenous populations with special rights. More information on our efforts to minimize the impact on these interests and rights can be found in the chapter Affected communities on pages 118–119.

Water discharges include excess water from dams and tailings ponds at our mines, as well as discharges from water treatment plants and the collection of surface water (rainwater) at our smelters and mines. More information on water management can be found in the chapter on water and marine resources on pages 90–92. Managing both water discharges and tailings requires significant effort. Further details on metal discharges to water and tailings management are available in the chapters on pollution on pages 86–89 and resource use and circular economy on pages 97–101. Achieving our climate targets and meeting our GHG emissions targets will require investment and innovation. A main challenge for decarbonizing our smelters will be to phase out fossil fuels, which are currently used as reducing agents in the smelting process. For our mines, the challenge lies in electrification of the open pit truck fleets, which are large contributors to GHG emissions. Read more in the chapter on climate change on pages 76–85.

A skilled workforce is essential to achieving our sustainability targets. This challenge is further increased by the ongoing technological shift towards increased digitalization, process development, and automation. In addition, the hazardous nature of work in mines and smelters presents significant challenges. Read more about our workforce policies and initiatives in the chapter on our workforce on pages 102–110. Fair treatment and safe working conditions for workers in our value chain are discussed in the chapter on workers in the value chain on pages 111–114. To ensure we uphold responsible business conduct in all our operations is crucial and our work on this is detailed on pages 120–124.

Resilience of strategy and business model in relation to sustainability matters
By systematically including an analysis of our key sustainability challenges in our strategy development process, we ensure resilience over different time horizons. This approach allows us to address immediate, medium-term, and long-term impacts effectively, adapting our strategies to maintain operational stability and capitalize on emerging opportunities.

INTERESTS AND VIEWS OF STAKEHOLDERS
The production of metals relies on many resources, environmental as well as social. Boliden impacts and depends on employees, local communities including authorities and indigenous peoples, suppliers, customers and capital markets. These groups are significantly affected by or significantly important to Boliden and are our key stakeholders. Stakeholders are identified throughout Boliden's business lifecycle, from exploration to closure of business site and stakeholder engagement plays a crucial role in identifying material impacts, risks and opportunities.

Engagement with key stakeholders
A structured stakeholder engagement process is in place that involves active dialogue, strategic planning and alignment with the business model and sustainability goals. The stakeholder engagement process is applicable for Boliden Group, the business areas and the business units. Each unit is responsible for identifying their stakeholders, the type of dialogue that should be carried out, and by whom. A stakeholder analysis is conducted to help Boliden's business units engage and strengthen dialogue with key stakeholders. Stakeholder engagement is conducted in different ways with specific groups, for example, through annual employee surveys, consultation meetings with the neighboring community, formal and informal meetings with authorities, as well as Capital Market Days and the Annual General Meeting. In addition, we have comprehensive grievance mechanisms in place for all stakeholders, enabling both employees and external parties to submit feedback and concerns through various channels, including a whistleblower function and a digital portal for stakeholder information requests, improvement proposals and grievances.

↓ PDF print version

Assessing ESG frameworks, standards and current and potential legislative trends is part of ensuring we capture the expectations of key stakeholders. The range of legal requirements, standards and guidelines Boliden adheres to covers transparency, accountability, and sustainability in business operations. They address various aspects such as environmental and social governance, labor and human rights, climate risk management, and responsible sourcing. Implementing these supports adherence to industry-leading practices. A list of third-party standards and initiatives Boliden commits to can be found on page 63.

By assessing the expectations of key stakeholders, we gather information on their interests and views that is essential for identifying material sustainability topics and integrating this into our business model and strategy. Stakeholder engagement is a vital part of our material assessment process, which is described on page 69.

Own workforce
Engagement with our own workforce occurs daily through health and safety pulse meetings, regular committee meetings, annual employee surveys, and union representatives. Health and safety committees, established at all workplaces with over fifty employees, identify hazards, recommend corrective actions, and follow up on them as part of ensuring the interests of our workforce. Complying with laws and frameworks on human rights is also a part of safeguarding the interests of our workforce. This work is led by the Group Ethics and Compliance function. Employees can file concerns through various channels, including direct managers, HR, the Group Ethics and Compliance function, and an independent third-party whistleblower system. These engagements aim to ensure a safe working environment, address health and safety concerns, and provide input on health and safety programs.

Results from workforce engagement activities are incorporated into Boliden's management system. For example, the results of the annual employee survey are analyzed by managers across the organization, with action plans developed together with all personnel and communicated with union representatives. Also, whistleblower reports are monitored by the Ethics and Compliance Council and shared with managers and relevant teams for further actions.

Workers in the value chain
Engagement with value chain workers is integrated into Boliden's supply chain due diligence process. Direct engagement takes place during site visits and involves semi-structured in-person interviews with legitimate representatives, typically local union representatives. If no union representation is present, a case-by-case assessment is made to identify legitimate worker representatives. The purpose of these engagements is to assess actual and potential impacts on value chain workers, ensuring their perspectives are considered in Boliden's decision-making and risk mitigation activities. The views of value chain workers are integrated into business partner due diligence reporting and ongoing risk mitigation plans. This ensures that their input is considered in Boliden's strategy and operations.

Affected communities
Engagement with affected communities occurs through close dialogues, consultations during project development, and regular follow-ups. This includes stakeholders near our operations and those in areas where we source materials. Boliden engages with affected communities through various channels, including national legislation and permitting processes, membership in organizations like the International Council on Mining and Metals (ICMM) and Svemin, and internal policies and commitments. Consultations are carried out by the general managers at our business units and relevant experts, and involve relevant stakeholders, including special consultations with indigenous peoples. The purpose of these engagements is to maintain and develop sound relationships with surrounding communities, manage risks and opportunities, and ensure compliance with national and international standards. The aim is to create an understanding of community concerns, adapt operations accordingly, and implement mitigations according to the hierarchy and avoid, minimize, restore and offset impacts. The outcomes of these engagements are integrated into Boliden's operational strategies. Community feedback is considered in project planning and impact assessments, ensuring that operations are adapted to minimize negative impacts and enhance positive contributions.

Amendments and next steps
Our multitude of stakeholder engagement activities, combined with materiality assessments, ensures that our strategy and business model integrate key stakeholder interests. We are enhancing our stakeholder engagement in certain areas, such as increasing dialogue with value chain workers, expanding training programs, and continuously developing our due diligence processes in preparation for future increasing requirements.

↓ PDF print version

MATERIAL SUSTAINABILITY TOPICS

Boliden conducted a comprehensive double materiality assessment in 2023, which has been continuously revisited and refined during 2024 to define the material topics and the scope of sustainability reporting. We have worked with materiality assessment for several years, and our strategy and business model are well established. Therefore there have been no significant changes in the identified impacts, risks and opportunities from the previous year.

The identified material topics are briefly described below with references to where more information on material impacts, risks and opportunities can be found. The material topics' interaction with Boliden's strategy, business model and value chain are described under Strategy, business model and value chain on pages 63–64. For an overview of Boliden's strategic Group targets, see pages 18–20.

	Climate change	Pollution	Water and marine resources
Why it matters	**Impact, risks and opportunities** Greenhouse gas (GHG) emissions from Boliden's own operations and value chain contribute to escalating climate change impacts. However, we can also contribute to a positive impact as climate change mitigation relies on metals for green technologies. In addition, there is a risk of increased financial costs for emitting GHG and reducing them while on the other hand, producing metals for the climate transition and offering low-carbon products comes with the opportunity of higher revenues and increased market share. Together these impacts, risks and opportunities make climate one of the most strategically important topics for Boliden. Our GHG emissions, climate risks, opportunities, and strategies to mitigate climate change are described in more detail on pages 76–85.	**Impact, risks and opportunities** Boliden's operations are environmentally hazardous and as such strictly regulated. Abnormal operations or accidents can lead to elevated levels of pollution of air, water and soil, impacting the environment, biodiversity, and local communities. We use substances of concern and of very high concern, that are highly regulated. Our emissions of pollutants and impact on the environment, efforts to substitute hazardous chemicals and approaches to reduce pollution are described in more detail on pages 86–89.	**Impact, risks and opportunities** Discharges of water from our operations can lead to reduced access to fresh water, overfertilization and bioaccumulation of harmful substances. Increased precipitation due to climate change poses challenges in water management and adapting our facilities to withstand heavy rainfall and flooding. Our water activities are a key consideration for governments and local communities. Boliden's water usage and impact on water quality, and practices to manage water, minimizing the quantity used and released after treatment are described in more detail on pages 90–92.
Policies	Code of Conduct Business Partner Code of Conduct Environmental Policy Climate Commitment Energy Policy (internal)	Code of Conduct Business Partner Code of Conduct Environmental Policy	Code of Conduct Business Partner Code of Conduct Environmental Policy Water Management Commitment
Actions	Boliden focuses on continuous emission reduction through investments in energy-efficient technologies and transitioning to energy sources free from fossil fuels. Key actions include electrification projects, energy efficiency improvements, and fuel switching. We also engage stakeholders and suppliers to enhance sustainability efforts and transparency. Financial resources are allocated to support these initiatives, which beyond improved environmental performance also often boost operational efficiency.	Pollution prevention actions include managing emissions, using best available techniques and maintaining a certified Environmental Management System. We adhere to the principle of caution regarding hazardous substances and have measures in place to control and limit the impact of incidents and emergencies.	Although Boliden operates in areas with good water access, we prioritize managing, treating and recycling water to mitigate risks. Site-specific plans ensure continuous improvement and compliance with environmental permits and proactive measures to manage water quantity and quality, addressing water-related risks and opportunities, and integrating water considerations into business planning.
Targets	• Scope 1-2: 42% lower GHG emissions in 2030 compared to base year 2021 • Scope 3: 30% lower GHG emissions in 2030 compared to base year 2021 • 100% copper production in 2030 with an average of 1.5 kg CO_2e per produced kg • 100% zinc production in 2030 with an average of 1.0 kg CO_2e per produced kg • Net zero Scope 1-2 greenhouse gas emissions by 2050	• Business unit water management plans in line with Group requirement by 2025 2024 targets • No significant environmental incidents should occur • Metal emissions to air, intensity ≤23 • SO_2 (sulphur dioxide) to air, tonnes <6 100 • Metals discharges to water, intensity ≤33 • N-tot to water, tonnes ≤237	• Business unit water management plans in line with Group requirement by 2025 2024 targets • No significant environmental incidents should occur • Metals discharges to water, intensity ≤33 • N-tot to water, tonnes ≤237
Performance	Scope 1-2 emissions were 865 (842) ktonnes, a 13% decrease from 999 ktonnes in 2021. The increase compared to last year is mainly due to higher diesel usage and changed reduction obligations in Sweden. Scope 3 emissions were 19% higher than the base year 2021, primarily due to the smelter expansion project at Odda. However, as the project nears completion, emissions have decreased by 2% compared to the previous year, reflecting for example, a reduction in the procurement of capital goods.	No significant environmental incidents occurred in 2024. The intensity of metals to air emissions increased to 33 (29). Boliden has relatively low metals-to-air emissions and works continuously at lowering them further. The sulphur dioxide emissions to air increased to 5,938 tonnes (5,749) while still being below the target. The intensity of metals to water emissions decreased to 59 (64). Boliden has in general low metals-to-water emissions and works continuously to reduce them further. The discharge of nitrous compounds to water decreased to 198 tonnes (235) and remained below the target.	No significant environmental incidents occurred in 2024. The intensity of metals to water emissions decreased to 59 (64). Boliden has in general low metals-to-water emissions and works continuously to reduce them further. The discharge of nitrous compounds to water decreased to 198 tonnes (235) and remained below the target.

	Biodiversity and ecosystems	Resource use and circular economy	Own workforce
Why it matters	**Impact, risks and opportunities** Boliden's ecosystem use through the transformation of natural habitats to mines or industrial areas leads to significant environmental impacts. Mining impacts ecosystem services, such as reducing reindeer lichen and grazing land, noise pollution affecting recreational areas and water pollution impacting fishing. We depend on several ecosystem services, notably clean freshwater for processing, plant cover for erosion control and dust suppression and microbial breakdown of pollutants. Our impact on biodiversity and ecosystems, strategies to protect them and opportunity to contribute to ecosystem restoration through our land holdings are described in more detail on pages 93–96.	**Impact, risks and opportunities** Boliden's operations are environmentally hazardous and as such strictly regulated. Mining involves the extraction of finite resources and resource efficiency is key. We see potential in recovering valuable metals from our own waste streams and in the recycling of metal scrap. Mining and smelting produce large amounts of waste, of which some can be a valuable resource, and other needs to be handled with caution. Our strategies for resource efficiency and waste management in a circular economy are described in more detail on pages 97–101.	**Impact, risks and opportunities** Boliden's operations have significant workplace hazards which is why occupational health and safety is the most important focus area as it affects the well-being of our employees and contractors. We need skilled and engaged employees with diversity in experience and perspectives to achieve strong business results and develop as a company. Diversity in our workforce also impact our ability to attract, retain, and develop talent for sustaining safe and efficient operations. Our workforce composition, diversity, inclusion, engagement and safety strategies are described in more detail on pages 102–110.
Policies	Code of Conduct Business Partner Code of Conduct Environmental Policy Biodiversity and Nature Commitment	Code of Conduct Business Partner Code of Conduct Environmental Policy Tailings Governance Commitment	Code of Conduct Business Partner Code of Conduct Data Privacy Policy Diversity Policy (internal) Health and Safety Policy Human Rights Commitment Whistleblower Policy
Actions	Boliden is committed to achieving a net-positive impact on biodiversity through a series of targeted actions. These include conducting environmental impact assessments for new projects to avoid impacts on species and habitats, implementing management strategies and extensive monitoring programs to minimize emissions and risks to air, water, soil, and biodiversity. In addition, we rehabilitate sites at the end of their life with ecological restoration principles to reestablish natural species and ecosystems and offset remaining impacts by protecting or restoring nearby habitats.	Boliden has developed processes to maximize the value extracted from material streams and ensure proper treatment of hazardous waste. We also invest in innovative solutions to extract more metals from raw materials and reduce waste. Research and development projects include creating supplementary cementitious materials with low carbon footprint from smelter residues and exploring the use of tailings for cement replacement. We are committed to the Global Industry Standard on Tailings Management (GISTM) and have made progress in conforming to its requirements.	Boliden adopts a zero-harm approach and fosters a culture of care, supported by health and safety committees at all major workplaces. These committees identify hazards, recommend corrective actions, and conduct regular inspections. Boliden's operations comply with ISO 45001:2018 standards, focusing on active risk reporting and safety inspections to prevent incidents. In addition, we support employee development through training, internal mobility, talent acquisition, recruitment, employer branding, and university collaboration and trainee programs.
Targets	• Contribute to increased biodiversity in all regions we operate by 2030 with 2021 as baseyear.	• Tailings/slag management in line with GISTM by August 2023 and August 2025	2024 targets • No harm to people, LTIF=0 • Proactivity index >5 • Diversity and inclusion index above benchmark 83 • Sick leave <4.0%
Performance	We work together with several partners and academia to develop the way we work with biodiversity and restoration of habitats. In 2024 we worked with 71 biodiversity activities that are related to developed plans in each business unit. Measuring progress towards our target is a challenge. An activity can have a small or large impact, and comparison of numbers can be ambiguous. We are working on developing more appropriate metrics for biodiversity impact.	Aitik and Kevitsa mines are fully in line with GISTM. In 2024 Boliden had a recycling input rate of 12%. Boliden has developed a technology that converts slag from metal production into supplementary cementitious material, significantly reducing the climate impact of cement production, enabling additional metal extraction and potentially decreasing landfill waste.	The lost time injury frequency (LTIF) in 2024 was 5.1 (4.4) for Boliden's employees and contractors. The proactivity index score, including Boliden employees and contractors was 6.4 (6.7). The Diversity and inclusion index score was 84 (83) which exceeded the external benchmark score of 83. The sick leave rate for the year was 5.2% (5.5) which is a slight decrease from the previous year.

↓ PDF print version

	Workers in the value chain	Affected communities	Business conduct
Why it matters	**Impact, risks and opportunities** Boliden's value chain spans across various geographic regions including high-risk areas and workers in our value chain can be impacted by unsafe working condition and rights violations. It is both a responsibility and an opportunity to leverage our business relationships to effect positive change. Our due diligence efforts, approach to responsible sourcing and sales practices, and management of impact and risks for our value chain workers, are described in more detail on pages 111–114.	**Impact, risks and opportunities** Boliden's use of natural resources significantly impacts local communities. As a large employer, we also have an economic influence in the areas where we operate. Furthermore, we have substantial operations in areas where special rights of indigenous peoples have been recognized. Our impact on local communities, community engagement strategies and contributions to local development are described in more detail on pages 118–119.	**Impact, risks and opportunities** Boliden is under increasing scrutiny from customers, banks and business partners who demand transparency about our internal ethics and compliance frameworks. With increasing requirements and expectations, especially regarding human rights and social issues, it is crucial for us to have a robust compliance framework. Our corporate culture, business ethics policies and anti-corruption measures are described in more detail on pages 120–124.
Policies	Code of Conduct Business Partner Code of Conduct Human Rights Commitment	Code of Conduct Business Partner Code of Conduct Tailings Governance Commitment Human Rights Commitment Indigenous People Commitment	Code of Conduct Business Partner Code of Conduct Anti-Corruption Policy Human Rights Commitment Sanctions Policy (internal) Whistleblower Policy
Actions	Boliden conducts thorough due diligence, including country of origin analysis and active engagement with business partners, to identify and mitigate risks. We collaborate with partners to improve practices and address adverse impacts, ensuring compliance with our Business Partner Code of Conduct. Actions taken include third-party reviews of grievance mechanisms, capacity building on responsible business practices and the creation of responsible sourcing questionnaires. In addition, we emphasize proactive engagement and continuous dialogue to manage labor rights risks and maintain high standards in our value chain.	Boliden is committed to long-term partnerships with affected communities, engaging in sponsorships to support social, environmental, and economic development. Boliden works to prevent, mitigate and remediate negative impacts through collaboration projects and follows extensive consultation processes and due diligence when sourcing concentrates, identifying and addressing risks. In addition, we are developing indicators for human rights issues and use a whistleblowing channel to report possible breaches.	Boliden has a robust compliance framework that includes evaluating potential business partners before agreements are concluded, involving risk screening based on sanctions, country risk and industry risk. Business partners must commit to Boliden's Business Partner Code of Conduct and undergo regular due diligence, including self-assessment questionnaires, interviews and on-site assessments. Boliden collaborates with partners to address any gaps through improvement plans and continuous monitoring. We adhere to the London Bullion Market Association's Responsible Gold and Responsible Silver Standard and ensure no conflict minerals are used in our supply chain.
Targets	2024 targets • No harm to people, LTIF=0 • Proactivity index >5	Our objective is to establish and maintain close relationships with surrounding communities, creating beneficial conditions for all while managing the significant impact of our mining and smelting operations, particularly in terms of land usage and transportation.	To track the effectiveness of our Code of Conduct we measure and follow up on incidents of corruption and training in business conduct.
Performance	The lost time injury frequency (LTIF) for Boliden's contractors was 6.8 (6.4) and has increased compared to the previous year. The Proactivity index for Boliden's contractors was 4.3 (5.6) and has decreased compared to the previous year.	We have engaged in close dialogues with stakeholders, conducted impact studies, and adhered to national and international standards. Our collaborative projects with indigenous communities and initiatives like the Sustainability Park near the Aitik mine have enhanced biodiversity and improved public access. Additionally, we have effectively managed risks and opportunities through due diligence processes and human rights assessments.	Boliden identified one case of employee non-compliance with its gift policy, resulting in disciplinary action, and terminated a contract with a business partner due to confirmed incidents of corruption or bribery. 92% of workers at risk of corruption and bribery completed training on the Code of Conduct.

↓ PDF print version

MATERIALITY ASSESSMENT PROCESS

A double materiality assessment is a comprehensive approach that evaluates both the financial and non-financial impacts of a company's activities. This assessment considers not only how sustainability issues affect Boliden's financial performance (financial materiality) but also how a company's operations impact the environment and society (impact materiality). By integrating these two perspectives, Boliden can ensure a more holistic understanding of its sustainability performance, leading to more informed decision-making and transparent reporting.

Business context and stakeholder mapping

Boliden's materiality assessment starts with understanding our business context, including the value chain, and customizing the methodology to fit our specific needs and challenges. We establish a detailed list of ESG topics based on current and upcoming legislation, as well as voluntary frameworks aligned with Boliden's values and targets. A key part of this phase is mapping stakeholder perspectives, recognizing diverse viewpoints, and identifying key contacts for thorough and inclusive engagement. This foundation ensures that our materiality assessment is well informed and supports integrating ESG best practices into Boliden's strategy.

Identifying material topics

To integrate ESG considerations into Boliden's strategy, we compile a shortlist of relevant topics from a comprehensive long list, based on external frameworks, trends and Boliden's reporting. This short list is reviewed with key internal stakeholders to ensure alignment with our values and targets. In addition, consultations with external ESG experts provide an outside perspective, ensuring the list is extensive and relevant.

Validating impacts, risks and opportunities

In the next phase of our materiality assessment, we systematically identify and define the actual and potential impacts, risks and opportunities (IROs) from the relevant topics. Internal ESG experts and business representatives participate in topic-specific workshops to ensure an in-depth understanding. These workshops facilitate an open dialogue, allowing stakeholders to share insights and perspectives, ensuring accurate assessment of IROs.

Assessing IRO significance

To assess the significance of IROs, Boliden engages ESG experts who evaluate various probabilities and consequences. These experts use their specialized knowledge to assess the severity of impacts based on scale, scope, irremediability and likelihood. Risks and opportunities are evaluated for their likelihood of occurrence and potential financial effects using Boliden's risk matrix. The significance rating of IROs is then gathered through topic-specific surveys, capturing nuanced expert perspectives.

Aggregating and validating results

In the next phase of our materiality assessment, we consolidate and calculate IRO-level ratings by aggregating assessment results. These results are then validated with key stakeholders to ensure accuracy and reflect relevant perspectives. Part of this validation involves testing materiality thresholds and examining their impact on the scope of identified material topics. We also consider human rights implications in relevant topics, recognizing their importance in the broader assessment. Finally, we review the relevance of disclosures related to non-material topics to ensure transparency.

The materiality assessment results will inform Boliden's strategy and reporting framework, aligning with stakeholder expectations and regulatory requirements. This will guide our reporting on sustainability issues, reflecting our significant impact on the economy, environment, and society, as well as the influence of sustainability trends on Boliden.

REPORTED TOPICS IN THE SUSTAINABILITY STATEMENT

Boliden's sustainability statement covers the topics Climate change, Pollution, Water and marine resources, Biodiversity and ecosystems, Resource use and circular economy, Own workforce, Workers in the value chain, Affected communities, and Business conduct. Our double materiality assessment shows that the topics material for us are mainly in areas that are more directly impacted by mining and smelting operations, such as environmental management, occupational health and safety, affected communities and human rights in the supply chain. Some other topics have been assessed and considered not to be material, as discussed under Omitted topics below.

Thresholds

The double materiality assessment process includes setting levels of significance based on probability and consequence. It also considers the insightful perspectives of ESG experts, as described under the heading Materiality assessment process. Given the complexity and diversity of ESG topics, a uniform threshold cannot be applied across all areas. Each topic requires a tailored approach to accurately assess its materiality. However, in all cases a sustainability matter is considered material when it is either significant for impact materiality or financial materiality, or both.

Omitted topics

Boliden does not consider consumers and end-users to be a material sustainability topic as we mainly operate in the upstream supply chain focusing on extraction, processing and initial distribution of raw materials and interact mostly with other businesses. Our influence on consumer behavior, preferences and end-user safety is minimal and the primary responsibility for consumer safety and satisfaction lies with downstream companies that use our metals. This is also reflected in the regulatory focus for metals and mining companies, which is placed on environmental impact, worker safety, and community relations rather than consumer protection.

EU taxonomy

The EU Taxonomy is a classification system that helps companies and investors identify environmentally sustainable economic activities to make sustainable investment decisions. It aims to scale up investments in projects and activities that are necessary to reach the objectives of the European Green Deal – the plan to make the EU's economy environmentally sustainable. The Taxonomy Regulation sets out six environmental objectives and four overarching conditions that an economic activity must meet in order to qualify as environmentally sustainable.

Climate and environmental objectives:
1. Climate change mitigation (CCM)
2. Climate change adaptation (CCA)
3. Sustainable use and protection of water and marine resources (WTR)
4. Transition to a circular economy (CE)
5. Pollution prevention and control (PPC)
6. Protection and restoration of biodiversity and ecosystems (BIO)

Overarching conditions:
1. Making a substantial contribution to at least one environmental objective;
2. Doing no significant harm to any of the other five environmental objectives;
3. Complying with minimum safeguards; and,
4. Complying with the technical screening criteria set out in the Taxonomy delegated acts.

The EU Taxonomy does not set mandatory requirements on environmental performance for companies or for financial products. Investors are free to choose what to invest in. However, it is expected that over time, the EU Taxonomy will encourage a transition towards sustainability to achieve the EU's climate and environmental goals.

EU sets performance criteria through delegated acts (so called "technical screening criteria") for activities covered by the EU Taxonomy to determine when an economic activity substantially contributes to one of the environmental objectives, while complying with the minimum safeguards and not doing significant harm to any of the other five objectives.

The minimum safeguards require companies to have due diligence processes in place that cover the following topics: human rights (including labour and consumer rights), taxation, fair competition, bribery, bribe solicitation, and extortion.

EU Taxonomy reporting at Boliden
Boliden is required to disclose to what extent our activities are covered by the EU Taxonomy (i.e., if they are Taxonomy-eligible) and comply with the criteria set in the Taxonomy delegated acts (i.e., if they are Taxonomy-aligned) and disclose our related revenue, Opex and CapEx amounts.

Since our mines and smelters are not yet included in the EU Taxonomy Regulation, only a small part of Boliden's operations within for example logistics, real estate and water treatment has been assessed as taxonomy-eligible, see further below.

Boliden is aware of initiatives that have been taken to include certain non-ferrous mining and/or smelting in the EU Taxonomy and to develop technical screening criteria to evaluate the sustainability of such activities. So far, none of these initiatives have resulted in legislation. Given the increasing recognition of the importance of sustainable metal production – both for the green transition and for EU's strategic autonomy – it is reasonable to expect mining and smelting to be included in the EU Taxonomy.

Relevant economic activities
The analysis of which of Boliden's economic activities are in scope of the EU Taxonomy was carried out on a company-by-company basis using the descriptions of taxonomy-eligible activities included in the regulation to identify eligible activities.

The proportion of Boliden's economic activities that are taxonomy-eligible in 2024 is shown in the tables on the following pages. As Boliden's core business is not eligible, no revenue has been identified to be eligible. Hence, the below activities have been identified as relevant for Boliden in 2024 from either a CapEx or OpEx perspective. Eligibility is based on primarily the climate change mitigation objective.

The CapEx and OpEx reported represents the proportion of capital and operational expenditures associated with taxonomy-eligible economic activities or related to the acquisition of products or services from taxonomy-eligible economic activities. When it comes to reporting of eligible investments, the focus has been to review the largest projects per site to assess taxonomy-eligibility. For all the Taxonomy-eligible activities Boliden has identified, none have been determined to be taxonomy-aligned.

↓ PDF print version

Economic activity		Comment
Construction of new buildings	**CCM 7.1** CCA 7.1	CapEx. Investments in construction of new buildings in Rönnskär and Odda.
Renovation of existing buildings	**CCM 7.2** CCA 7.2	CapEx. Opex. Improvements have been made on existing buildings during the year. Boliden includes smaller building renovations in its maintenance costs as Opex.
Installation, maintenance and/or repair of energy efficiency equipment	**CCM 7.3** CCA 7.3 CE 3.2	CapEx. Opex. Energy efficiency is a key element in reaching our climate targets and related investments have been done during the year in for example Odda.
Installation, maintenance and/or repair of charging stations/parking space for electric vehicles	**CCM 7.4** CCA 7.4	CapEx. OpEx. Electrification plays a substantial part in reaching our climate targets. Some investments and maintenance have been made related to this activity during the year.
Installation, maintenance and/or repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	**CCM 7.5** CCA 7.5	CapEx. OpEx. Energy efficiency is a key element in reaching our climate targets and related investments have been done during the year in for example Odda.
Installation, maintenance and/or repair of renewable energy technologies	**CCM 7.6** CCA 7.6	CapEx. This activity includes for example investment in district heating in Odda.
Production of heat/cool using waste heat	**CCM 4.25** CCA 4.25	CapEx, OpEx. During 2024 improvements were made in the facilities used to produce heat using waste heat for example in Rönnskär. No eligible turnover reported as it is reported as other income in our financial statements.
Manufacture, installation, and servicing of high, medium and low voltage electrical equipment for electrical transmission and distribution that result in or enable a substantial contribution to climate change mitigation	**CCM 3.20** CCA 3.20	CapEx. Electrification plays a substantial part in reaching our climate targets. Some investments have been made related to this activity during the year. For example, investments are made in infrastructure for our trolleys in Aitik and Rävliden.
Freight rail transport	**CCM 6.2** CCA 6.2	OpEx. Maintenance work related to railways.
Construction, extension and operation of water collection, treatment and supply systems	**CCM 5.1** CCA 5.1	CapEx. OpEx. Boliden has a water management commitment and are working proactively with water treatment. During the year several investments are made in water treatments activities on both mines and smelters. For example, part of the improved tailings dam in Aitik relates to water treatment and are included here (such as pumpstations).
Material recovery from non-hazardous waste	**CCM 5.9** CCA 5.9	CapEx. Invested in a new process step in Odda with the purpose to recover more metals and reduce waste.

EU taxonomy accounting principles
The information published in the context of the EU Taxonomy is determined based on the amounts included in IFRS financial reporting and include the same scope of companies as included in the Boliden consolidated financial statements. Doublecounting is avoided through only accounting for each taxonomy-eligible investment once in one chosen activity and either in CapEx or OpEx and as no turnover is reported the risk is minimal.

CapEx
Capital expenditures disclosed in accordance with the EU Taxonomy includes additions to tangible and intangible assets excluding goodwill. Please see Note 14 Property, plant and equipment) in our financial statements for reference.

Taxonomy-eligible CapEx amounted to 1,795 SEK m in 2024.

OpEx
Operating expenses reported under the EU taxonomy include non-capitalized research and development expenses, short-term lease expenses and maintenance and repair costs (including building renovation measures). Please see Note 7 Key expense items and 15 Leases in our financial statements for reference.

Taxonomy-eligible OpEx amounts to 430 SEK m in 2024.

Proportion of turnover from products or services associated with Taxonomy-aligned economic activities – disclosure covering year 2024

				Substantial contribution criteria						DNSH criteria ("Does Not Significantly Harm")									
Economic Activities (1)	Code(s) (2)	Turnover (3)	Proportion of turnover 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy-aligned (A.1) or eligible (A.2) turnover in 2023 (18)	Category enabling activity (19)	Category transitional activity (20)
		SEK m	%	Y; N; N/EL*						Y/N							%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (Taxonomy-aligned)																			
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		–	0%	–	–	–	–	–	–	–	–	–	–	–	–	–	0%		
Of which enabling		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Of which transitional		–	–	–						–	–	–	–	–	–	–	–		–
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL*															
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		–	0%	–	–	–	–	–	–								0%		
A. Turnover of Taxonomy-eligible activities (A.1+A.2)		–	0%	–	–	–	–	–	–								0%		

B. TAXONOMY-NON-ELIGIBLE ACTIVITIES

Turnover of Taxonomy-non-eligible activities	89,207	100%
TOTAL	**89,207**	**100%**

Y = Yes, Taxonomy-eligible and Taxonomy-aligned activity with the relevant environmental objective
N = No, Taxonomy-eligible but not Taxonomy-aligned activity with the relevant environmental objective
N/EL = Not eligible, Taxonomy-non-eligible activity for the relevant environmental objective
EL = Taxonomy-eligible activity for the relevant objective

PROPORTION OF TURNOVER/TOTAL TURNOVER		
	Taxonomy-aligned per objective	**Taxonomy-eligible per objective**
CCM	–	–
CCA	–	–
WTR	–	–
CE	–	–
PPC	–	–
BIO	–	–

↓ PDF print version

Proportion of CapEx from products or services associated with Taxonomy-aligned economic activities – disclosure covering year 2024

				Substantial contribution criteria						DNSH criteria ("Does Not Significantly Harm")									
Economic Activities (1)	Code(s) (2)	Capital expenditure (3)	Proportion of CapEx 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy-aligned (A.1) or eligible (A.2) CapEx in 2023 (18)	Category enabling activity (19)	Category transitional activity (20)
		SEK m	%	Y; N; N/EL*						Y/N							%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (Taxonomy-aligned)																			
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		–	0%	–	–	–		–	–	–	–	–	–	–	–	–	0%		
Of which enabling		–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	
Of which transitional		–	–	–						–	–	–	–	–	–	–	–		–
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL*															
Construction of new buildings	**CCM 7.1,** CCA 7.1	540	4%	**EL**	N/EL	N/EL	N/EL	N/EL	N/EL								0%		
Renovation of existing buildings	**CCM 7.2,** CCA 7.2	26	0%	**EL**	EL	N/EL	N/EL	N/EL	N/EL								0%		
Installation, maintenance and/or repair of energy efficiency equipment	**CCM 7.3,** CCA 7.3, CE 3.2	294	2%	**EL**	EL	N/EL	N/EL	EL	N/EL								4%		
Installation, maintenance and/or repair of charging stations/parking space for electric vehicles	**CCM 7.4,** CCA 7.4	4	0%	**EL**	EL	N/EL	N/EL	N/EL	N/EL								0%		
Installation, maintenance and/or repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	**CCM 7.5,** CCA 7.5	124	1%	**EL**	EL	N/EL	N/EL	N/EL	N/EL								1%		
Installation, maintenance and/or repair of renewable energy technologies	**CCM 7.6,** CCA 7.6	34	0%	**EL**	EL	N/EL	N/EL	N/EL	N/EL								1%		
Production of heat/cool using waste heat	**CCM 4.25,** CCA 4.25	132	1%	**EL**	EL	N/EL	N/EL	N/EL	N/EL								1%		
Manufacture, installation, and servicing of high, medium and low voltage electrical equipment for electrical transmission and distribution that result in or enable a substantial contribution to climate change mitigation	**CCM 3.20**, CCA 3.20	48	0%	**EL**	EL	N/EL	N/EL	N/EL	N/EL								1%		
Construction, extension and operatIon of water collection, treatment and supply systems	**CCM 5.1**, CCA 5.1	491	3%	**EL**	EL	N/EL	N/EL	N/EL	N/EL								4%		
Material recovery from non-hazardous waste	**CCM 5.9**, CCA 5.9	101	1%	**EL**	EL	N/EL	N/EL	N/EL	N/EL								0%		
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		1,795	12%	12%	–	–	–	–	–								11%		
A. CapEx of Taxonomy- eligible activities (A.1+A.2)		1,795	12%	12%	–	–	–	–	–								11%		

B. TAXONOMY-NON-ELIGIBLE ACTIVITIES

CapEx of Taxonomy-non-eligible activities	13,581	88%
TOTAL	**15,376**	**100%**

PROPORTION OF CAPEX/TOTAL CAPEX		
	Taxonomy-aligned per objective	**Taxonomy-eligible per objective**
CCM	–	12%
CCA	–	12%
WTR	–	–
CE	–	2%
PPC	–	–
BIO	–	–

Y = Yes, Taxonomy-eligible and Taxonomy-aligned activity with the relevant environmental objective
N = No, Taxonomy-eligible but not Taxonomy-aligned activity with the relevant environmental objective
N/EL = Not eligible, Taxonomy-non-eligible activity for the relevant environmental objective
EL = Taxonomy-eligible activity for the relevant objective

Proportion of OpEx from products or services associated with Taxonomy-aligned economic activities – disclosure covering year 2024

				Substantial contribution criteria						DNSH criteria ("Does Not Significantly Harm")									
Economic Activities (1)	Code(s) (2)	Operational expenditure (3)	Proportion of OpEx 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy-aligned (A.1) or eligible (A.2) OpEx in 2023 (18)	Category enabling activity (19)	Category transitional activity (20)
		SEK m	%	Y; N; N/EL*						Y/N							%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (Taxonomy-aligned)																			
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		–	0%	–	–	–	–	–	–	–	–	–	–	–	–	–	0%		
Of which enabling		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Of which transitional		–	–	–						–	–	–	–	–	–	–	–		–
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL*															
Renovation of existing buildings	**CCM 7.2,** CCA 7.2	382	8%	**EL**	EL	N/EL	N/EL	N/EL	N/EL								1%		
Installation, maintenance and/or repair of energy efficiency equipment	**CCM 7.3,** CCA 7.3, CE 3.2	3	0%	**EL**	EL	N/EL	N/EL	EL	N/EL								0%		
Installation, maintenance and/or repair of charging stations/parking space for electric vehicles	**CCM 7.4,** CCA 7.4	1	0%	**EL**	EL	N/EL	N/EL	N/EL	N/EL								0%		
Installation, maintenance and/or repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	**CCM 7.5,** CCA 7.5	3	0%	**EL**	EL	N/EL	N/EL	N/EL	N/EL								0%		
Production of heat/cool using waste heat	**CCM 4.25,** CCA 4.25	21	0%	**EL**	EL	N/EL	N/EL	N/EL	N/EL								1%		
Freight rail transport	**CCM 6.2**, CCA 6.2	2	0%	**EL**	EL	N/EL	N/E	N/EL	N/EL								0%		
Construction, extension and operation of water collection, treatment and supply systems	**CCM 5.1,** CCA 5.1	17	0%	**EL**	EL	N/EL	N/E	N/E	N/E								0%		
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		430	9%	9%	–	–	–	–	–								3%		
A. OpEx of Taxonomy eligible activities (A.1+A.2)		430	9%	9%	–	–	–	–	–								3%		

B. TAXONOMY-NON-ELIGIBLE ACTIVITIES

OpexEx of Taxonomy-non-eligible activities	4,118	91%
TOTAL	**4,548**	**100%**

Y = Yes, Taxonomy-eligible and Taxonomy-aligned activity with the relevant environmental objective
N = No, Taxonomy-eligible but not Taxonomy-aligned activity with the relevant environmental objective
N/EL = Not eligible, Taxonomy-non-eligible activity for the relevant environmental objective
EL = Taxonomy-eligible activity for the relevant objective

PROPORTION OF OPEX/TOTAL OPEX		
	Taxonomy-aligned per objective	**Taxonomy-eligible per objective**
CCM	–	9%
CCA	–	9%
WTR	–	–
CE	–	0%
PPC	–	–
BIO	–	–

NUCLEAR AND FOSSIL GAS RELATED ACTIVITIES		
Row	**Nuclear energy related activities**	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	No
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	No
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	No
	Fossil gas related activities	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	No
5.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	No
6.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	No

↓ PDF print version

Climate change

WHY IT MATTERS
Greenhouse gas (GHG) emissions from Boliden's own operations and value chain contribute to increased climate change. However, we also contribute to a positive impact as climate change mitigation relies on metals for green technologies. For Boliden, there is a risk of increased financial costs for emitting greenhouse gases and reducing them while producing metals for the green transition and offering low-carbon products can create higher revenue. Together, these impacts, risks and opportunities make climate change one of the most strategically important topics for Boliden.

Identified impacts, risks and opportunities for Climate change

Impact materiality on environment and people		Financial materiality for Boliden	
Negative impact	**Positive impact**	**Risk**	**Opportunity**
• GHG emissions from Boliden's own operations and value chain contribute to negative climate change impacts. • Boliden's energy-intensive operations can in the short-term contribute to a scarcity of energy, particularly renewables, for other entities and drive energy costs, while also necessitating a greater reliance on fossil fuels. Over the medium and long-term, this pattern can persist, leading to sustained energy shortages for various actors and continued increased inflation of energy prices. • Boliden's recycling processes for waste metals and industrial waste often result in increased GHG emissions due to the use of fossil fuels and the burning of plastics.	• The phase-out of fossil fuels and reduction of GHG emissions in Boliden's own operations and value chain will contribute to climate change mitigation in the medium and long-term. • Our metals are used in green technologies that support increased electrification and emissions reduction, and our low-carbon products can aid in climate change mitigation in global value chains from the short to long-term. • By channeling our surplus heat to district heating networks, we minimize energy waste, enhance energy efficiency, reduce GHG emissions, and lower expenses for the local community.	***Physical risks*** • Climate change can increase the severity and frequency of extreme weather events, impacting Boliden's assets through water stress, drought and flooding, which can lead to operational issues and damage vital equipment. • Extreme weather and other climate-related events can lead to operational and infrastructure issues that cause supply constraints, increased costs and reduced revenue streams. ***Transitional risks*** • The EU Emissions Trading System (ETS) 1 and 2 pose regulatory risks, as well as the phase-out of free allowances, potentially increasing costs and impacting financial performance. • The upcoming Carbon Border Adjustment Mechanism (CBAM) and the EU Taxonomy Regulation pose potential regulatory risks as these frameworks evolve. • Using biofuels to meet GHG reduction targets poses risks due to potential future regulatory changes affecting their zero-emission status. • Potential deceleration in grid and technology decarbonization poses a risk to our GHG emission reduction plans. High costs, slow advancements, and bottlenecks in accessing new technology also present potential risks. • Boliden's recycling processes for metals and industrial waste often increase GHG emissions due to fossil fuel use and plastic content, potentially leading to higher operational costs and financial impacts as we adapt to stricter regulations.	• Energy efficiency installations and cleaner energy operations offer significant opportunities for reduced costs, lower emissions and enhanced competitiveness and resilience. • Waste utilization reduces GHG emissions and creates new material loops, for example by converting slag and residues into supplementary cementitious material. • Future possibilities in carbon capture, utilization and storage (CCUS) could further enhance Boliden's sustainability performance. • Boliden's metal recycling and efforts to reduce our carbon footprint present opportunities to enhance profitability by furthering the demand for low-carbon and recycled metals. • Boliden's metals, crucial for electrification and renewable energy, play a key role in the transition to a fossil-free economy that in turn could increase profits, while collaborations with suppliers help reduce emissions and support sustainability efforts in other areas of society. • Boliden's commitment to sustainability creates opportunities for favorable financing, such as sustainability-linked loans and green bonds.

↓ PDF print version

Physical climate risks
From a physical climate risk perspective, there is a wide range of natural weather events that have the potential to impact Boliden's assets, and climate change can increase the severity and frequency of these extreme weather events in the future. The findings from our physical risk assessments (with scenario RCP 8.5) showed that the most significant climate hazards for our assets are water stress, drought and flooding, with the risks increasing towards 2030. For example, severe rainfall can increase water levels in tailings dam reservoirs, flooding can damage vital operating equipment and prolonged periods of water stress can lead to operational issues.

Transitional climate risks
Policy and regulatory risks
The EU Emissions Trading System (ETS) Phase 1 and 2, and the phase-out of free allowances, present regulatory risks potentially leading to increased costs and impacting our financial performance. To mitigate this, we are investing in energy-efficient technologies as well as exploring alternative strategies. Additionally, we are closely monitoring the developments of the upcoming Carbon Border Adjustment Mechanism (CBAM) and any developments of the EU Taxonomy Regulation. While these regulations are still evolving and their full impact on our industry areas cannot yet be assessed, we recognize the potential risks and opportunities associated with how these frameworks may be shaped. While reviewing the potential usefulness of biofuels to reach our GHG reduction targets, using biofuels could also pose a risk long-term due to uncertain regulatory developments that may no longer classify biofuels as a zero-emission source of energy in the future, leading to increased costs and compliance challenges.

Technological risks
Potential deceleration in electricity decarbonization in certain countries where we operate poses a technology risk to our GHG emission reduction plans. To address this, we are advocating for accelerated decarbonization policies and investing in fossil-free energy projects to ensure a sustainable and reliable electricity supply. High costs, slow advancements, and bottlenecks in accessing new technology could also present potential risks. We are fostering strong partnerships with suppliers and conducting due diligence before making investments.

Market risks
The high demand for low-carbon products, coupled with potential supply constraints, due to climate change's geographic physical effects, could impact our market position, GHG emission reduction plans and revenue streams. We are working with our product portfolio of low-carbon options and enhancing our supply chain management to ensure availability.

Our business is also vulnerable to infrastructure-related risks. Grid capacity constraints could limit our ability to access the necessary energy for our operations. We are exploring on-site fossil-free energy generation to mitigate this risk. Potential railway capacity constraints may hinder our logistics and supply chain efficiency. We are optimizing our logistics operations and exploring alternative transportation methods to address this challenge. Additionally, supply chain disruptions due to physical changes and geographical locations pose significant risks. We are enhancing our supply chain resilience by diversifying suppliers and improving logistics planning.

Boliden plays a key role in recycling metals and industrial waste. However, these processes often require fossil fuels, or the waste contains plastics which results in increased GHG emissions, potentially leading to higher operational costs and financial impacts as we adapt to stricter regulations. To mitigate the operational risk of increased GHG emissions from these processes, we are exploring alternative technologies and fuels, and optimizing energy efficiency.

Climate-related opportunities
Resource efficiency
Energy efficiency installations present a significant opportunity as they lead to reduced costs and lower emissions. Boliden is currently investigating and planning several energy-efficiency actions and conducting regular energy audits to identify further efficiency improvements. Additionally, waste utilization presents an opportunity as it not only reduces GHG emissions but also creates new material circular loops, potentially leading to new products and market opportunities.

Energy source
Fossil-free energy operations enhance our competitiveness by reducing our carbon footprint. Internal energy generation also reduces our dependency on external factors, bolstering our resilience by ensuring long-term operational stability. Boliden is investigating possible installments of on-site fossil-free energy generation systems and exploring opportunities for energy storage solutions to ensure a stable supply. The latest addition includes solar panels in Bergsöe, installed in 2023. Future possibilities in carbon capture, utilization and storage (CCUS) could further enhance our climate efforts.

Products and services
Being a global leader in metal recycling, combined with offering products with a low-carbon footprint, presents opportunities to tap into a market willing to pay a premium for low-carbon and recycled metals, thus enhancing profitability and contributing to a sustainable society. Under current market conditions, reducing the carbon footprint of Boliden's metals is expected to generate greater value for our customers. More information about our metal recycling can be found on page 98.

Markets
The metals we produce play a crucial role in enabling society's transition to a fossil-free economy, as metals are essential for the transition to a low-carbon society. Our low-carbon metals, such as zinc and copper, are essential for society's transition from fossil fuels to electrification by enabling, for example solar panels, wind turbines and electric vehicles. Engaging with suppliers to increase collaboration also helps both us and our suppliers to set and achieve emission reduction targets, share best practices, and support each other in our emissions reduction journeys. Our commitment to sustainable practices also present opportunities for favorable financing. One example of this occurred in 2024, where Boliden as one of the first mining and metals companies in the world, incorporated and linked climate goals validated by SBTi into an existing revolving credit facilities agreement.

Resilience of strategy and business model
The resilience of our strategy and business model is continuously assessed within Boliden, considering both our mining and smelting operations, as well as our upstream suppliers and downstream customers. This is managed through our annual strategic planning process that begins each spring with analysis of macroeconomic trends and assumptions and concludes in December with Board of Directors' approval of budgets and Long-Term Plans (LTP). As part of this, we consider previously identified physical and transitional risks and opportunities though our assessment of our strategic risks. Some critical assumptions in our budget and LTP include energy consumption, technology deployment, and current and pending EU legislation. Time horizons are strategic in nature, and aligned with climate goals and long-term global market trends. No identified material physical risks and transition risks have been excluded and we consider both short, medium and long-term horizons. Continuous assessment help us in making strategic and risk management decisions under complex and uncertain conditions, thus contributing to the development of greater strategy resilience and flexibility.

TRANSITION PLAN

To ensure we contribute to mitigating climate change, we have established ambitious near-term and long-term GHG emission reduction targets. Our near-term targets for Scope 1-3 by 2030 have been validated by the Science-Based Targets initiative (SBTi), confirming that our reduction targets are scientifically grounded and that our Scope 1-2 targets are consistent with limiting global warming to 1.5°C in line with the Paris Agreement. Additionally, we are committed to achieving net zero emissions for Scope 1-2 by 2050. Past mitigation efforts includes near-term Scope 1-3 targets that were updated with higher ambitions (for example further reduction) for Scope 1-2 to 2030, reflecting our proactive approach to continuously align our goals with the latest climate science and international agreements.

Locked-in emissions

Boliden's key assets are also sources of so called locked-in GHG emissions likely to be realized during the assets' lifecycles, primarily in energy-intensive processes required for the extraction and processing of metals. The long-term nature of these operations could potentially pose a challenge to achieving our GHG emission reduction targets if not managed effectively.

Categorizing planned actions

To reach our climate targets and mitigate risks associated with locked-in GHG emissions, Boliden has identified several climate mitigation actions, including installations of solar panels and deploying electric vehicles at our sites. We continuously monitor advancements in technology and remain open to adopting new solutions that can further our decarbonization efforts. While our product portfolio remains unchanged, we are actively working to increase the percentage of recycled materials in our smelters. This effort is part of our broader commitment to sustainability and resource efficiency. All Scope 1-2 actions have been categorized under decarbonization levers process and investment optimization, electrification, energy efficiency, fuel switching, use of renewables, heat and steam reduction, grid decarbonization and other external factors. All Scope 3 actions have been categorized as either process and investment optimization, indirect effects of Scope 1-2 decarbonization levers, supplier selection, internal technology developments and stakeholder engagement. Together, the levers make up Boliden's transition plan and ensure that we achieve our climate targets. Further information can be found under the paragraph Decarbonization levers on page 82.

Long-term financial plan

Boliden's operations are covered by the EU Paris-aligned Benchmarks. Our commitment to sustainability and climate action aligns with the criteria set by these benchmarks. Our roadmap is integrated into Boliden's long-term financial plan, and the budget and business plan including the transition plan are reviewed by the Board of Directors annually. Large investment projects also receive approval based on their maturity level. As our investments in new technologies and projects serve multiple purposes, it makes it difficult to allocate funds exclusively to decarbonization efforts. Our initiatives are designed to provide a wide range of benefits, including improved operational efficiency in symbiosis with improved sustainability performance. By aligning our capital and operational expenditures with the criteria for climate change mitigation and adaptation as established in the EU Taxonomy, we may increase our percentage of eligible and aligned activities. More information about planned activities can be found in the paragraph Future actions on page 80.

IDENTIFICATION OF IMPACTS, RISKS AND OPPORTUNITIES

General risk assessment

Boliden has a comprehensive approach to managing climate-related risks by conducting risk analyses and assessments, and considers these risks in our business strategy. We conduct analyses to identify climate risks as an integrated part of our management system. Operational risks are managed by our business units in compliance with the guidelines and instructions established by the Group for each Business Area and business unit. The most significant opportunities and risks are presented to Group management and compiled annually for the Board of Directors.

Impact, risk and opportunities assessments

Impact assessments

Boliden's climate-related impacts are assessed annually. We track progress and analyze GHG emissions from Scope 1-2 on a monthly basis, as well as Scope 3 data on an annual basis. Additionally, we revisit and internally review our GHG emission inventory boundaries and calculations annually to ensure compliance and consistency with international standards. An original screening of Boliden's activities was conducted in 2022 against Scope 1-2 and all 15 Scope 3 categories. All Boliden's activities were evaluated and, where applicable, assigned impact following the GHG Protocol Standard.

Physical risk assessments

In the process of assessing climate-related risks and opportunities, Boliden adheres to the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). We have conducted an overall climate risk assessment of all of our operational assets. Additionally, we conducted detailed climate-related scenario analyses on four business units between 2020-2023 and plan to conduct others in the future. The findings in the unit-specific assessments on physical risks have actively been incorporated into various processes, such as permit applications and insurance inspections. For the assessments, the IPCC's Representative Concentration Pathways (RCP) 4.5 and 8.5 scenarios were applied to three distinct time horizons: the present, 2030 and 2050.

The RCP 4.5 scenario simulates climate change that would result from a mild regression in GHG emissions, while the RCP 8.5 scenario is typically viewed as a worst-case scenario, predicting escalating emissions over time. Both are compatible with the climate-related assumptions made in the financial statements on climate-related risks, see pages 42–46, with particular emphasis on the RCP 8.5 scenario. The time horizon set for the present day represents a short-term outlook, while 2030 represents a medium-term (5-15 years) and 2050 a long-term perspective (>15 years). These were based on the anticipated lifespan of Boliden's units, climate targets and long-term financial plans. Examples of key drivers included existing mitigating measures, risks management processes and previous events. The climate hazards deemed applicable, and thus assessed, included extreme heat, extreme cold, storms, flooding, drought and water stress, wildfires and landslides. Both geospatial coordinates specific to the site locations and regional and national-level data were applied. The exposure risk for each identified hazard was then rated on a scale of low, medium and high-risk exposure for each time horizon.

Various climate-related risk assessments and scenario analyses are also carried out on a local site level, including in development projects and permit application processes within Boliden's operations. No climate-related physical risks along the upstream and downstream value chain have yet been assessed but will be taken into consideration in the future.

Transitional risk and opportunity assessments

Our climate-related transitional risks and opportunities are reviewed annually, in light of our GHG reduction targets (in line with limiting global warming to 1.5°C) and following short, medium and long-term time horizons. The scope includes Boliden's own operations, upstream and downstream processes. Each identified risk was rated based on its likelihood, magnitude and duration. The latest assessment, conducted in the autumn 2024, included a cross-functional workshop with internal experts from both business areas and various departments. Both operational assets and business activities were evaluated, and none was identified as incompatible with a future climate-neutral economy. However, we recognize that challenges still exist in the form of decarbonizing our processes. Alternative low-carbon technologies resulting from significant innovation are required to meet our 2050 climate target. We work proactively in this area and focus on research and development projects to find solutions. Since Boliden's mines and smelters are not yet included in the EU Taxonomy Regulation, our assets and business activities cannot yet be assessed for compatibility with a transition to a climate-neutral economy in accordance with the requirements set for Taxonomy-alignment under Commission Delegated Regulation (EU) 2021/2139. We continue to monitor developments. More information can be found in the EU Taxonomy chapter on pages 70–75.

POLICIES AND COMMITMENTS
Our climate efforts are guided by our Environmental Policy, Energy Policy and Climate Commitment. The Policies cover both Boliden's business activities and apply to all individuals working at or for Boliden. Everyone working for Boliden is individually responsible for reading, understanding, and following the policies. We conduct an annual review of all company policies to ensure they are accurate and followed. Read more about policies, commitments and third-party standards on page 62. Our policies and commitments are accessible via www.boliden.com.

Environmental Policy
Boliden's Environmental Policy states our commitment to minimizing our climate impact through sustainable practices and continuous improvement. It outlines the company's mitigation and adaptation efforts such as measuring, tracking and reducing our GHG emissions, limiting risks at sites, improving our energy efficiency and minimizing our dependency on fossil fuels.

Energy Policy
Boliden's Energy Policy outlines the company's mitigation and adaptation efforts such as improving our energy efficiency and minimizing our dependency on fossil fuels. While not outlined in our policies, our business units are encouraged to deploy renewable energy as part of their overall climate mitigation strategies.

Climate Commitment
The Environmental Policy is supplemented by the underlying Climate Commitment that contains Boliden's strategies and actions to reduce GHG emissions and address climate change impacts.

Code of Conduct
Our Code of Conduct and Business Partner Code of Conduct, along with other policies and commitments, set expectations on us and our business partners to prevent, mitigate, and remediate impacts and risks related to climate change.

CLIMATE-RELATED INCENTIVE SCHEMES
Boliden's management team receives an annual variable remuneration, a portion of which is linked to the progress made towards Boliden's GHG emission reduction targets as outlined in our transition plan. The portion of the annual variable remuneration tied to climate change is 5 percentage points.

Boliden currently operates two outstanding long-term performance-based share savings incentive programs (LTIPs), targeting the management team, general managers and certain key employees. One of the two performance conditions in each program is linked to sustainability. For both the LTIP 2023/2026 and the LTIP 2024/2027, the sustainability condition pertains to the progress made towards Boliden's GHG emission reduction targets as outlined in our transition plan. The portion of the condition tied to climate change is 20%.

Eligible employees can receive an annual variable remuneration, where the outcome depends on performance on certain variables. One of the variables can be related to the climate transition plan to reach Boliden's climate targets 2030. The portion tied to climate change is recommended to be 10%.

ACTIONS AND RESOURCES
Boliden has implemented a comprehensive strategy to address climate change through targeted actions and resource allocation in alignment with our climate targets for the reduction of GHG emissions. With established measurable targets for Scope 1-3, and monitoring and reporting mechanisms in place to track our progress, we focus on continuously lowering our emissions. This includes investing in energy-efficient technologies and transitioning to fossil-free energy sources where feasible.

Boliden's decarbonization levers are described further in the paragraph Decarbonization levers on page 82, within Scope 1-2 includes process and investment optimization, electrification, energy efficiency, fuel switching, use of renewables, and heat and steam reduction, grid decarbonization and other external factors. Levers within Scope 3 includes process and investment optimization, indirect effects of Scope 1-2 decarbonization levers, supplier selection, internal technology developments and stakeholder engagement. Planned initiatives and actions are categorized accordingly.

To enable the transition, financial resources are needed. As our investments in new technologies and projects serve multiple purposes, it makes it difficult to allocate funds exclusively to decarbonization efforts. Our initiatives are designed to provide a wide range of benefits, including improved operational efficiency in symbiosis with improved sustainability performance.

Actions taken during 2024
Throughout the reporting year, Boliden has continued to focus on sustainability and decarbonization. Our efforts to reduce our GHG emissions have resulted in several key actions, some of which are highlighted below.

Electrification
An underground fully battery-electric pilot trolley truck system was tested in the Boliden Area's Kristineberg mine, enabling diesel-free uphill haulage. The test track is 800 meters long underground with a 13% incline.

Boliden signed a contract with Komatsu, to become the first mining operation in the world to field trial a Komatsu power-agnostic mining haul truck, in Aitik. This is the first step towards battery truck operation in Boliden's open pits.

Energy efficiency
Project Ecolink, in which waste heat from our Rönnskär smelter is transferred to the district heating network of Skellefteå, entered its start-up phase in December. By utilizing more waste heat from the asset, instead of releasing it into the sea, the local energy company Skellefteå Kraft can reduce their usage of peat for heat production. Additionally, it also decreases Rönnskär's oil usage and improves the energy intensity by capturing additional heat.

Fuel switching
Alternative explosives were introduced in small amounts at Aitik, Garpenberg and the Boliden Area's Kankberg mine and are currently being tested for best optimization on the sites. Boliden plans to introduce this new hydrogen-based explosive in our mines, replacing the current nitrate-based explosives which have a higher climate impact.

Heat and steam reduction
At our Kokkola smelter, heat recovery from air compressors was installed, enabling a reduction of externally purchased energy.

↓ PDF print version

Internal technological developments
Progress was made in a waste reduction project aimed at converting slag and residue from metal production at Boliden's smelters into a supplementary cementious material. It offers a lower carbon footprint compared to traditional cement production. Patent applications have been submitted and a preliminary study on commercialization is underway.

As part of Boliden's goal to reduce its cement consumption in underground mining, in order to reduce Scope 3 GHG emissions, a shotcrete scanner testing trial was started in the Boliden Area's Kankberg mine. Using this scanner could reduce shotcrete usage by up to a third.

Stakeholder engagement
Boliden's procurement department launched a proactive initiative to start collecting supplier-specific emissions data, reinforcing our commitment to sustainability and transparency within our supply chain. By engaging our suppliers, we emphasized transparency, collaboration and accurate emissions reporting. As part of this initiative, sustainability seminars were also held for our procurement organization during the year, advancing our sustainability strategies, emphasizing the importance of fostering continuous improvement and close collaboration with stakeholders.

Use of renewables
At the Kokkola smelter, Boliden introduced biodiesel as well as renewable fuel oil in waste transportation to landfill sites to replace conventional fuels, lowering our fossil GHG emissions.

Extensive industrial tests to switch from fossil coal to biocoal and other alternative reductants in zinc recycling at Rönnskär has been performed with promising results.

Future actions
We have set a plan to reach our emission reduction targets and are continuously working on implementing various initiatives to lower our emissions. Below, we provide examples of some of the key actions planned.

Electrification
Boliden aims to deploy battery trucks in all mines in the future. We will focuse on three types of battery trucks: surface, underground and heavy transports on public roads. Aitik will be the first site where surface mining trucks will be deployed. The Boliden Area will expand trials with underground battery trucks in the near future. The implementation is highly dependent on the further development and availability of the technology and the allocation of resources.

Following the developments of electric trolley tracks in Aitik and Kevitsa in recent years, the existing trolley track in Kevitsa will double its capacity in 2025, reducing the usage of diesel even further. Additionally, an underground trolley will be inaugurated in Kristineberg during 2025, thus taking one step further to fossil free mining underground.

Rönnskär plans to install an electric boiler during 2027, minimizing the dependency on alternative fossil fuels.

Fuel switching
Boliden plans to further introduce hydrogen-based explosives in some of our mines when technically possible in the next couple of years, replacing the current nitrate-based explosives that have a higher climate impact. While still being thoroughly tested for best optimization on the sites, the ambition is to scale-up the usage in 2025, continuing with further trials in the Aitik and Garpenberg mine.

Heat and steam reduction
At our Kokkola smelter, we plan to install heat recovery from the leaching cooling process, which will reduce the need for externally purchased energy.

Internal technology developments
Test trial of a shotcrete scanner was conducted in Kankberg in 2024. If successful, trials with shotcrete scanning will be expanded to other mines in the future. Larger scale mining methods being tested will also reduce shotcrete usage.

Grid decarbonization and other external factors
Boliden is committed to supporting grid decarbonization. As we use the location-based method for our Scope 2 target fulfillment, we actively monitor market changes and advocate for improvements in national grid mixes. We are optimistic that future advancements will further align with our sustainability goals.

Stakeholder engagement
In 2025, our procurement department plans to focus on continuous work creating a reliable reduction roadmap in collaboration with our internal stakeholders and suppliers. Targets for selected suppliers, categories and products will be set, allowing us to monitor our progress and allocate resources efficiently as we strive to meet Boliden's Scope 3 targets.

In 2025, the raw material department plans to implement a supplier engagement program with the objective of reducing Scope 3 emissions in categories 3.1 and 3.4 by supporting selected business partners in their decarbonization efforts and enhancing data quality. This program will involve regular meetings with business partners, continuous monitoring of suppliers' emission factors, and continuous data collection. The goal is to support partners by focusing on high emitters and those with potential for low-carbon products.

Use of renewables
Boliden is actively exploring the implementation of renewable alternatives such as liquid biogas, hydrogen and biocoal at our smelters. These initiatives are currently in various stages of development, including detailed investigations, pilot and feasibility studies.

METRICS AND TARGETS
Boliden has set targets that are based on our strategic directions and policies.

Target: Near-term GHG emission reductions
In alignment with our objective to lower our GHG emissions, we have set near-term GHG emission reduction targets covering Scope 1-3 as described below.

- Scope 1 and 2[1), 2)]: 42% lower absolute emissions in 2030 compared to base year 2021
- Scope 3[1)]: 30% lower absolute emissions in 2030 compared to base year 2021

Our targets were developed internally in collaboration with a third-party and were approved by Boliden's Board of Directors in 2022. The base year was set to 2021, recognizing it as a year of stable and representative operations largely unaffected by external disruptions. In 2023, our Scope 1-3 targets for 2030 were validated by the Science Based Targets initiative (SBTi). This third-party validation confirmed that our Scope 1-2 targets align with the Paris Agreement's aim to restrict global warming to 1.5°C compared to pre-industrial levels. The targets and calculations align with the GHG Protocol Corporate Standard for Scope 1-2, and the Corporate Value Chain Accounting and Reporting Standard for Scope 3.

Our GHG inventory boundaries and calculations are revisited and reviewed annually to ensure consistency with set targets. Additionally, the calculations undergo an annual process of limited assurance. Tracking of target progress for Scope 1-2 is done through monthly reporting, evaluations and meetings gathering internal stakeholders at different levels. Tracking of the target progress for Scope 3 is evaluated annually. Progress towards our set targets is presented in the table GHG emissions on page 84.

Target: Net-zero GHG emissions
In alignment with our objective to lower our GHG emissions, we have set a long-term net-zero GHG emission reduction target covering Scope 1-2 as described below.

- Scope 1-2[2)]: Net-zero absolute emissions in 2050

While we do not rule out setting a net-zero target for Scope 3 in the future, nor having these targets validated by SBTi ensuring alignment with SBTi's Corporate Net-Zero Standard, our current focus is on prioritizing our near-term targets for 2030. The urgency of the climate situation requires us to concentrate our efforts on making impactful changes to lower our GHG emissions now. By addressing these near-term targets, we aim to reduce our overall GHG emissions and lay a strong foundation for our future long-term goals. Our GHG inventory boundaries and calculations are revisited and reviewed annually to ensure consistency with set targets. The calculations also undergo an annual process of limited assurance. The tracking of the targets for Scope 1-2 are managed by monthly reports, evaluations and meetings held at different levels. Progress towards our targets is also presented in the Metric: GHG emissions table on page 84. Additional comments on efforts required to reach net zero are listed under paragraph Removals on page 85.

Target: Product carbon footprint
In alignment with our objective to lower our GHG emissions, we have also set specific targets for our zinc and copper production. These targets are based on an intensity value of kg CO_2e per kg product, with baseline 2021 for copper and 2022 for zinc. The intensity values for our copper and zinc products are derived from third-party verified cradle-to-gate life cycle assessments, covering our own operations and upstream value chain, and are in accordance with the international standard ISO 14040. Progress towards these targets is monitored and reviewed monthly based on production volume and emissions data. The target was developed internally in collaboration with a third party. There have been no changes to the assumptions, limitations, or sources since the baseline year.

- 100% copper production in 2030 with an average of 1.5 kg CO_2e per produced kg[3)].
- 100% zinc production in 2030 with an average of 1.0 kg CO_2e per produced kg[3)].

Production of low-carbon metals, as a share of total production	2021 (Baseline Cu)	2022 (Baseline Zn)	2023	2024	Target 2030
Low-Carbon Copper (including recycled copper)	35%	37%	34%	28%	100%
Low-Carbon Zinc	N/A	12%	12%	21%	100%

Future developments
At Boliden we recognize that future developments of our production and business could potentially both increase and decrease our GHG emissions.

For the Business Area Smelters, we expect an increase in production volumes of copper, zinc, lead, and nickel. Furthermore, we expect to implement new technologies, for example, residue smelting and alternative slag handling with better reduction efficiency. Higher production and residue smelting could potentially increase GHG emissions, while reduction efficiency as well as energy efficiency could reduce the GHG emissions.

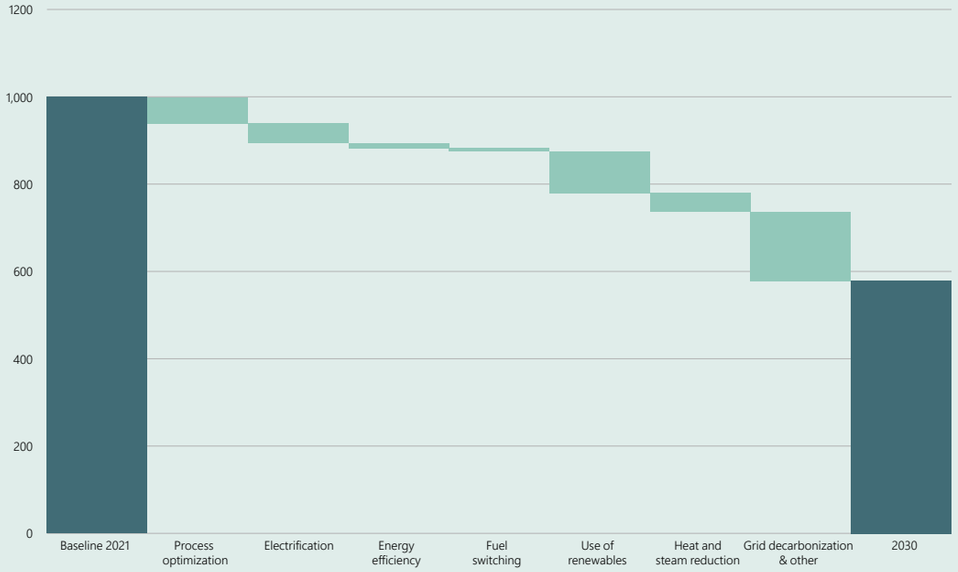
For the Business Area Mines, lower ore grades would result in increased mill volumes, which can be associated with increased emissions while a decrease in milled volumes would contribute to a reduction of emissions. New technologies reducing GHG emissions further are primarily the introduction of heavy battery-electric vehicles in open pit and underground mines as well as electrified heating systems. Additionally, mining operations may cease due to depleted reserves, be extended, or new operations may commence due to new discoveries. This dynamic could impact the company's GHG emissions.

Beyond this, regulatory factors on how to measure and calculate GHG emissions could also be updated, leading to either increased or decreased emissions.

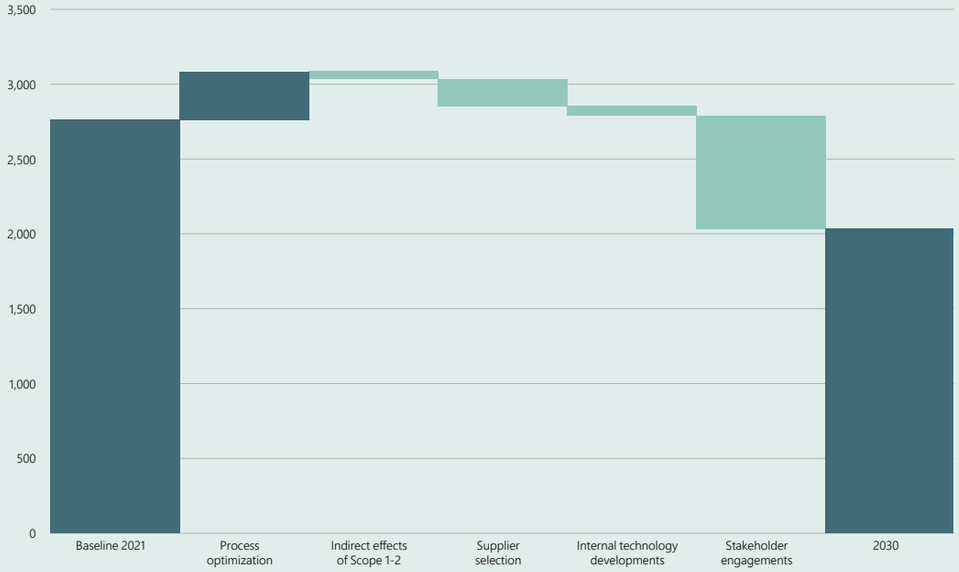
1) Covering GHG emissions CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, and NF_3. Validated by SBTi in 2023.
2) The same percentage reduction applies for Scope 1 and 2. The target boundary includes LUC emissions. The location-based method is used to calculate Scope 2 GHG emissions included in the target. Our base year value is 999 ktonnes CO_2e.
3) The intensity value of our copper and zinc products are based on cradle-to-gate life-cycle assessments and include GHG emissions CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, and NF_3.

↓ PDF print version

Decarbonization levers for Scope 1–2



Decarbonization levers for Scope 3



Decarbonization levers

We anticipate changes in production levels at mines and smelters. While some sites may experience production decreases, overall production is expected to rise. This would, without mitigation, lead to increased emissions. However, production change from high-carbon material to low-carbon material is also expected to reduce Scope 1-2 emissions. With increased energy-efficiency, less input material will be needed. We have developed decarbonization levers that will enable us to reach our climate targets, taking into consideration the climate scenario aligned with the Paris Agreement (limiting global warming to 1.5°C). We monitor and promote technological developments that can help us achieve our targets.

Main decarbonization levers set for Scope 1–2

- **Process and investment optimization:** Optimizing production processes, including optimization of coal usage and decreasing the amount of waste rock handled.
- **Electrification**: Transitioning away from fossil fuels, such as diesel, natural gas and heavy fuel oil to electricity for applications such as trucking, mine ventilation and shipping.
- **Energy efficiency**: Reducing emissions by decreasing energy use per unit of production, including more efficient heat use in smelting and optimized mine design.
- **Fuel switching**: Replacing fuels with less carbon-intensive sources, such as hydrogen-based explosives.
- **Use of renewables**: Substituting coal with biomaterials as reduction agents and using hydrotreated vegetable oil (HVO) as fuel.
- **Heat and steam reduction**: Collaborating with local power companies to lower GHG emissions in steam and heat production.
- **Grid decarbonization and other external factors**: Supporting the reduction of the emissions intensity of electricity production in our countries of operation.

Main decarbonization levers set for Scope 3

- **Process and investment optimization:** Aiming for optimizing production processes, increased emissions due to expansions resulting in more procured material**.**
- **Indirect effects of Scope 1-2 decarbonization levers:** Listed decarbonization levers for Scope 1-2 also have an indirect impact on Scope 3. For example, switching fuel also result in lower fuel production emissions.
- **Supplier selection**: We aim to closely follow market developments and favor a change of suppliers to purchase products with lower carbon footprints.
- **Internal technology developments**
  - Reduction of materials: We aim for internal improvements that will lead to increased overall equipment efficiency, in turn reducing the amount of shotcrete and other materials used.
  - Change of materials: We aim to replace purchased materials with internally obtained materials to lower dependency on external suppliers. Examples include cement with a lower carbon footprint.
- **Stakeholder engagement**
  - Supplier targets, supplier engagement and collaboration: Boliden engages with two supplier segments, those with GHG reduction commitments and those without. For committed suppliers, we support and monitor activities to enhance data quality and collaboration. For non-committed suppliers, we communicate its commitments, collaborates and supports them in setting targets. Boliden prioritizes low-carbon suppliers and works closely with them to reduce product carbon footprints.
  - Customer engagement: By actively encouraging our customers to adopt sustainable practices and innovative solutions, we aim to support them in lowering their emissions, which in turn contributes to reducing our downstream climate impact.

Metric: Energy

Energy consumption and mix	2024	2023	% 2024/2023
Fuel consumption from coal and coal products (MWh)	441,556	501,903	-12%
Fuel consumption from crude oil and petroleum products (MWh)	1,369,757	1,123,335	22%
Fuel consumption from natural gas (MWh)	29,787	29,939	-1%
Fuel consumption from other fossil sources (MWh)	9,930	0	
Consumption of purchased or acquired electricity, heat, steam, and cooling from fossil sources (MWh)	1,966,948	1,283,448	53%
Total fossil energy consumption (MWh)[1]	**3,817,978**	**2,938,625**	**30%**
Share of fossil sources in total energy consumption (%)[1]	59%	44%	
Total consumption from nuclear sources (MWh)	**1,354,837**	**1,835,276**	**-26%**
Share of nuclear sources in total energy consumption (%)	21%	28%	
Fuel consumption for renewable sources, including biomass (MWh)	116,668	295,974	-61%
Consumption of purchased or acquired electricity, heat, steam, and cooling from renewable sources (MWh)	1,215,344	1,573,577	-23%
The consumption of self-generated non-fuel renewable energy	62	23	166%
Total energy consumption from renewable sources[1]	**1,332,074**	**1,869,575**	**-29%**
Share of renewable sources in total energy consumption (%)[1]	20%	28%	
Total produced energy sold[2]	-868,429	-786,499	10%
Total energy consumption (MWh)	**5,636,460**	**5,856,976**	**-4%**

Energy production	2024	2023
Non-renewable energy production (MWh)	50,735	82,961
Renewable energy production (MWh)	1,588,473	1,449,203

Energy intensity per net revenue[3]	2024	2023	% 2024/2023
Total energy consumption from activities in high climate impact sectors per net revenue from activities in high climate impact sectors (MWh/EUR m)	723	856	-16%

1) While we in this table allocate energy between renewable and fossil sources using the market-based method, our general practice involves the location-based method. The location-based approach is integral to our calculations, including the establishment of our Scope 2 targets.
2) Total produced energy sold refers to the energy generated by our operations that is subsequently sold to external parties, thereby reducing our net energy consumption. While presented in a separate row, the produced energy sold is integrated into the total energy consumption percentage breakdown between renewable, fossil, and nuclear energy sources presented.
3) Financial figures available on page 131. Boliden's main operations, mining and smelting, are defined as high climate impact sectors in NACE Sections B and C, as defined in Commission Delegated Regulation EU 2022/1288.
4) The location-based method reflects the average emissions intensity of grids on which energy consumption occurs and is based on statistical emissions information and electricity output aggregated and averaged within a defined geographic boundary and during a defined time period. Under the market-based method, an energy consumer uses the GHG emission factor associated with the qualifying contractual instruments it owns. In contrast to the location-based method, the market-based allocation pathway represents contractual information and claims flow, which may be different from underlying energy flows in the grid. The certificate does not necessarily represent the emissions caused by the purchaser's consumption of electricity.

The total energy consumption decreased by 4% compared to the previous year, driven by several key factors. The smelter expansion project at Odda, which resulted in the temporary closure of Tankhouse 4, and the fire at Rönnskär in 2023 both contributed to reduced production levels in 2024. Additionally, there was a notable reduction in the use of heavy fuel oil (EO5) and coal at Rönnskär compared to 2023, and an increase in the amount of steam sold from Harjavalta. The Tara site was also placed under care and maintenance for most of 2024, further impacting the results.

The consumption of energy from fossil origins increased by 30% in 2024 compared to the previous year, partly due to the reduced reduction obligation in Sweden. The allocation of energy between renewable and fossil sources is based on the market-based method[4], for which Boliden uses supplier-specific emission factors along with national residual mix emission factors for unspecified supplies. In recent years, the electricity supply from unspecified sources has increased. Additionally, residual mixes have worsened in certain countries where we operate. Boliden favors the location-based method[4], which is integral to our calculations, including the establishment of our Scope 2 targets.

The total amount of energy produced remained largely unchanged, but the amount of energy from non-renewable sources decreased slightly compared to the previous year. This improvement is primarily attributed to the smelter at Rönnskär, where there was a reduction in the use of heavy fuel oil (EO5) in 2024 compared to 2023.

↓ PDF print version

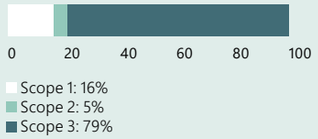
Metric: GHG emissions

	Retrospective				Milestones and target years			
	Base year 2021	2023	2024[1]	% 2024/2023	2025	2030	2050	% 2024/2021
Scope 1 GHG emissions								
Gross Scope 1 GHG emissions (t CO_2e)	624,794	627,845	657,646	5%		-42%[2]	-100%[2]	-13%[2]
Percentage of Scope 1 GHG emissions from regulated emissions trading schemes (%)	66%	64%	57%					
Scope 2 GHG emissions								
Gross location-based Scope 2 GHG emissions (t CO_2e)	374,644	214,536	207,146	-3%		-42%[2]	-100%[2]	-13%[2]
Gross marked-based Scope 2 GHG emissions (t CO_2e)	881,478	841,062	1,379,137	64%				
Significant scope 3 GHG emissions								
Total Gross indirect (Scope 3) GHG emissions (t CO_2e)	2,836,431	3,412,744	3,334,619	-2%		-30%		18%
1 Purchased goods and services	1,995,741	2,165,466	2,251,642	4%				
2 Capital goods	198,639	606,475	425,513	-30%				
3 Fuel and energy-related activities (not included in Scope 1 or Scope 2)	113,753	120,738	121,358	1%				
4 Upstream transportation and distribution	233,144	224,847	250,762	12%				
5 Waste generated in operations	7,868	9,440	9,601	2%				
6 Business travel	800	4,048	3,395	-16%				
7 Employee commuting	7,408	8,711	8,984	3%				
8 Upstream leased assets	N/A	N/A	N/A					
9 Downstream transportation	68,004	71,948	65,440	-9%				
10 Processing of sold products	168,756	160,479	160,143	-0%				
11 Use of sold products	N/A	N/A	N/A					
12 End-of-life treatment of sold products	42,281	40,551	37,741	-7%				
13 Downstream leased assets	N/A	N/A	N/A					
14 Franchises	N/A	N/A	N/A					
15 Investments	37	41	41	0%				
Total GHG emissions								
Total GHG emissions (location-based) (t CO_2e)	**3,835,869**	**4,255,115**	**4,199,411**	**-1%**				
Total GHG emissions (market-based) (t CO_2e)	**4,342,703**	**4,881,652**	**5,371,402**	**10%**				

GHG intensity per net revenue[3]	2024	2023	% 2024/2023
Total GHG emissions (location-based) per net revenue (t CO_2e/EUR m)	539	622	-13%
Total GHG emissions (market-based) per net revenue (t CO_2e/EUR m)	689	713	-3%

GHG emissions outside of Scope 1-3	2024	2023
Biogenic emissions (t CO_2)	32,743	77,738

Total GHG emissions 2024



1) Due to varying deadlines, there may be deviations in Boliden's EU ETS figures compared to reported figures in this report concerning GHG emissions.
2) Applicable for total Scope 1-2 emissions.
3) Financial figures available on page 131.

Developments during the year

Our Scope 1 emissions increased by 5% compared to the previous year, primarily due to factors such as the reduced reduction obligation in Sweden and increased diesel usage at Aitik. The increased use of diesel is partly attributed to the non-operational electric trolley line and the intensive work involved in the dam reinforcement project.

Scope 2 emissions decreased by 3% compared to the previous year. This is mainly due to grid decarbonization and decreased usage of energy.

Our Scope 3 emissions were 18% higher than the base year 2021, primarily due to the smelter expansion project at Odda. However, as the project nears completion, emissions have decreased by 2% compared to the previous year, reflecting a reduction in the procurement of capital goods.

Significant changes

In 2024, we made an adjustment to our Scope 3 emissions baseline, resulting in a 1% change in total Scope 3 emissions. This change was driven by improvements in our methodology, incorporating, for example, more activity data and supplier-specific information. The changes in the results are presented in the table below.

	New Scope 3 base year 2021	Previous Scope 3 base year 2021
Scope 3.1	1,995,741	2,142,000
Scope 3.2	198,639	202,000
Scope 3.3	113,753	78,000
Scope 3.4	233,144	148,000
Scope 3.5	7,868	26,000
Scope 3.6	800	500
Scope 3.7	7,408	10,000
Scope 3.9	68,004	83,000
Scope 3.10	168,756	93,000
Scope 3.12	42,281	29,000
Scope 3.15	37	-
Total ($t CO_2e$)	**2,836,431**	**2,813,000**

From July 2023 to late 2024, the Tara mine was placed under care and maintenance, lowering the GHG emissions and affecting the comparability of the company's Scope 1-3 emissions for 2023-2024 compared to the base year 2021.

Calculation methodology
Boliden's GHG emissions are calculated in accordance with the procedures laid down in the World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol Standards (GHG Corporate Accounting and Reporting Standard, the GHG Protocol Scope 2 Guidance and the Corporate Value Chain Scope 3 Accounting and Reporting Standard) together with additional guidelines from the EU and national authorities. The GHG emissions include the gases CO_2, CH_4, N_2O, HFCs, PFCs, SF_6 and NF_3. The operational control approach is applied, and the scope covers both consolidated and unconsolidated accounting groups (of which the latter has zero emissions). Boliden has no joint ventures. We use emission factors in line with global standards, with a majority originating from suppliers or internationally accepted databases such as Sphera, Ecoinvent, Exiobase, Swedish Procurement Authority and the International Energy Agency. No removals, or purchased, sold or transferred carbon credits or GHG allowances are included, nor were any external calculation tools used. Potential estimations and assumptions are made in alignment with the GHG Protocol and are further described under each specific scope below.

Scope 1
Scope 1 emissions include all direct GHG emissions that occur from sources that are owned or controlled by Boliden, including stationary combustion, mobile combustion, process emissions and fugitive emissions. We use the operational control approach to consolidate and report our direct GHG emissions. Direct GHG emissions arise from carbonaceous raw materials, from fossil fuels in metal extraction processes and fuels for heating, and from the use of fuels for mining operations and road transportation. Activity data is reported per site, and for activities reporting under the EU ETS, GHG emission calculations, follow the EU ETS methodology.

Scope 2
Scope 2 emissions include all indirect emissions from the generation of power, heat and steam purchased by Boliden units and are reported in accordance with both the location-based and market-based approach. For the location-based calculation, we multiply activity data with average energy generation emission factors for defined locations (grid average) not including any adjustments or removals. We use emission factors published by the International Energy Agency. This method is used for our Scope 1-2 target fulfillment. For the market-based approach, Boliden uses supplier-specific emission factors along with national residual mix emission factors for unspecified supplies provided by national authorities.

Scope 3
Scope 3, split into 15 subcategories (S3.1-S3.15), are calculated by using a variety of methods, including activity data, spend, and primary data from suppliers. 9% of the GHG emissions in Scope 3 are calculated using primary data obtained from suppliers or other value chain partners. S3.1 and S3.2 are calculated using a combination of supplier-specific emission data, activity data and spend-based data. S3.3 is calculated using activity data reported by the sites with emission factors from, for example, IEA and DEFRA. S3.4 is based on the distance-method with emission factors from NTM and DEFRA. For some parts, Boliden utilizes spend data and emission factors with distance included in S3.1, resulting in a slight decrease in S3.4 emissions as they instead can be found in S3.1. We are committed to refining this distinction in future reports to ensure more precise categorization between S3.1 and S3.4. Although S3.4 is presently slightly understated, the total Scope 3 emissions remain accurate, with the discrepancy accounted for in S3.1.

S3.5 is calculated based on activity data reported annually by sites with factors from Ecoinvent. S3.6 is calculated by Boliden's travel agency and is based on the distance-method with emission factors from DEFRA. S3.7 is calculated based on estimates of the distance travelled and travel type. S3.9 is calculated based on activity data on weights of sold products, transport mode and distances transported (with estimations where specific data could not be obtained). S3.10 is calculated based on company-specific data on weights sold combined with industry-average emission factors for processing. S3.12 is calculated based on weights sold and average global waste handling emission factors. S3.15 is calculated based on consumption data. Assumptions are made in alignment with GHG Protocol. S3.8, S3.11, S3.13 and S3.14 have been excluded, as deemed non-applicable during the initial screening of Scope 3.

GHG emissions outside of Scope 1-3
Carbon dioxide emissions from combustion or bio-degradation of biomass are considered net zero in accordance with the GHG Protocol. This is due to the carbon sequestration by the biomass during its growth phase, which offsets the carbon released during combustion. To ensure full transparency, we document these biogenic emissions separately from other scopes, as recommended by the GHG Protocol. For Scope 2, the emission factors do not separate the percentage of biomass or biogenic CO_2.

REMOVALS
Boliden does not currently utilize Carbon Capture and Storage (CCS) or Carbon Capture, Utilization and Storage (CCUS) techniques. However, we are exploring their potential use for the future, ideally at sites connected to our own operations and related to relevant frameworks. We have no GHG emission reductions or removals from climate change mitigation projects outside our value chain and have no plans to engage in any such activity. We have not purchased, nor do we intend to purchase, carbon credits.

Boliden is aligned with the International Council on Mining and Metals (ICMM) and shares its long-term goal of achieving net-zero GHG emissions by 2050. This commitment is in line with the ambitions set out in the Paris Agreement to keep the global temperature increase below 1.5°C. As a result, Boliden has committed to achieving Scope 1-2 net-zero emissions by 2050. While we do not rule out having these targets validated by SBTi ensuring alignment with SBTi's Corporate Net-Zero Standard in the future, our current focus is on prioritizing our near-term targets for 2030. More information can be found under paragraph Target: Net-zero GHG emission reductions on page 81.

The net-zero goal encompasses Boliden's Scope 1-2 emissions and involves several key strategies: full electrification of mines by 2050, electrification of smelters wherever feasible, utilization of biochar and other reduction agents for processes where electrification is not possible in smelters and ensuring a low-carbon electricity grid in the Nordic countries by 2050. While these efforts will significantly reduce emissions, any remaining small amounts will potentially be addressed through GHG-removal techniques directly connected to Boliden's own operations, which will be further explored in the coming years.

CARBON PRICING
In 2024, Boliden's internal shadow carbon pricing was set to EUR 100 per tonne of CO_2e for Business Area Smelters. Shadow pricing involves assigning a hypothetical price to carbon emissions for decision-making purposes, without directly charging the company. This pricing system supports decision-making and incentivizes the implementation of climate-related policies and targets by providing a stable price, enabling comparability of the climate effects of different investment scenarios, and integrating them into financial decision-making. The process and set price are reviewed annually. The current model encompasses EU ETS-covered operations (Business Area Smelters) and electricity usage. The pricing levels were determined based on factors such as ETS current and historical prices, anticipated supply through ETS free allowances and demand for emission rights, forecasted metal demand growth, and the cost of mitigating CO_2e emissions through technical solutions. The factors are used to anticipate minimum values expected through the supply and demand of ETS allowances. However, the price needs to be moderated by the effect of the cost of mitigating GHG emissions by investing in technical solutions. Business Area Smelters' internal carbon pricing applies to all smelter units for their Scope 1 EU ETS emissions. The EU ETS emissions cover 57% of Boliden's total Scope 1 emissions (374,562 t CO_2e) and indirect all of Scope 2 emissions (207,146 t CO_2e) in 2024. Carbon pricing at Business Area Mines is currently not needed as targets are sufficient to achieve the desired decarbonization, however a system of carbon pricing can be introduced when extra incentives are needed to reduce GHG emissions.

Pollution

WHY IT MATTERS
Boliden operates in the mining and smelting sector, where pollution prevention is a material topic in all our operations and in our value chain. Therefore it is managed in a responsible manner. Boliden's business activities are subject to legal compliance, including local environmental permits, as well as national and international regulations related to pollution prevention. Strict and continuously tightening environmental regulation will continuously challenge us in our daily operations and it may also cause significant economic impacts on our business.

Investments to reduce emissions and to avoid pollution are needed in short and long-term planning. Additionally, there is a risk of fines and remediation costs in case legal compliance is not achieved. In the worst case, our location-specific license to operate may be threatened, if permit or other legal obligations are not met.

To manage our pollution prevention in an appropriate manner we have set ambitious targets that are regularly monitored and reported on.

IDENTIFICATION OF IMPACTS, RISKS AND OPPORTUNITIES
Based on an extensive risk analysis approach, we map pollution-related impacts, risks and opportunities at each site. Pollution impacts are linked to direct and indirect operational emissions to air and water and accidental spills or leakages.

Pollution-related impacts, risks and opportunities include impacts and consequences on business sites, local surrounding environments and upstream and downstream in the value chain. Boliden aims to, in a systematic way, find the key areas for improvement to reduce pollution through ambitious plans and targets.

Consultations with affected communities are mainly done during environmental impact assessments and environmental permit processes. Public consultations with stakeholders and affected communities are regularly organized. Additionally, Boliden has meetings with affected communities to discuss how to manage potential risks and other relevant topics related to pollution.

The business units double materiality assessment covers impacts, risks and opportunities, considering inside-out and outside-in perspectives and the outcomes are integrated in the strategic planning. The double materiality assessment, with its conclusions is described in the General disclosure chapter on pages 66–69.

POLICIES AND COMMITMENTS
Environmental Policy
Our efforts to prevent and minimize pollution of air, water and land are guided by our Environmental Policy. The policy emphasis on the importance of performing continous improvements on our active and closed operations under normal operation, as well as under emergency situations, in such a way that we minimize negative environmental impacts, adhere to best practices and commit to the continuous improvement of our operations.

Code of Conduct
Our Code of Conduct and Business Partner Code of Conduct, along with other policies and commitments, outlines expectations on us and our business partners to prevent, mitigate, and remediate impacts and risks related to pollution of air, water, and land, including responsible waste and tailing management.

The Policies cover both Boliden's business activities and apply to all individuals working at or for Boliden. Everyone working for Boliden is individually responsible for reading, understanding, and following the policies. We conduct an annual review of all company policies to ensure they are accurate and followed. Read more about policies, commitments and third-party standards on page 62. Our policies and commitments are accessible via www.boliden.com.

Identified impacts, risks and opportunities for pollution

Impact materiality on environment and people		Financial materiality for Boliden	
Negative impact	**Positive impact**	**Risk**	**Opportunity**
• Increased nitrogen and metals emission to water bodies due to incidents can lead to overfertilization, reduced access of fresh water for local communities or disturbances in ecosystems and harmful bioaccumulation of metals in humans and organisms. • Abnormal operations or accidents can cause increased level of air pollution leading to harm on biodiversity and ecosystems. • Noise from mines has a negative impact on the surroundings causing health issues for employees and local communities and disturbance in ecosystems. • Pollution generated when recycling metal from electronic waste can lead to damage on water, living organisms and humans in the medium and long term.	• Through collaboration with science and academia, Boliden contributes to knowledge sharing, identification of potential improvements and scientific progress. • By including requirements in the supplier selection and procurement processes, we encourage suppliers in the value chain to prioritize pollution prevention and reduction efforts. • Extensive monitoring of soil conditions can create knowledge base identification of changes in soil conditions and support action to improve soil conditions.	• Failure to meet air, water and soil pollution permit levels could lead to reputational damage, fines and difficulties in obtaining new land and environmental permits. • Increased costs could occur for preventing pollution from legacy sites where Boliden is responsible for reclamation activities. • Legal banning or restriction of production-critical substances can lead to a stop in production, reduced productivity and/or increased cost of substitute substances.	• Boliden's efforts to actively reduce air pollution lead to an improved working environment for employees and contractors, increased employee satisfaction, ability to attract talents and to increased productivity and performance locally. • Through research, technology and innovation, Boliden can improve its mining techniques, strengthening its brand and market position and increasing revenues.

↓ PDF print version

ACTIONS AND RESOURCES

Actions taken during the reporting year

We develop environmental objectives and targets and communicate our actual environmental impacts and progress in a transparent way for all relevant stakeholders. We also adhere to the principle of caution regarding the use of substances considered hazardous to humans and/or the environment. We strive to avoid incidents and emergencies, but should they occur, we have measures in place to control and limit their impact on people and the environment.

Pollution-related actions in line with the mitigation hierarchy are planned to avoid, reduce, restore, regenerate and transform. Financial and human resources for planned actions are described and secured in each specific project plan. The plans also contain other details like success factors, objectives and time plans.

Pollution prevention

Boliden's pollutants consist mainly of metal and nitrogen emissions to water and air, as well as sulphur dioxide (SO_2) emissions to air. The air emissions are emitted both in gaseous and particulate forms. Diffuse emissions may contribute to the total emission load and must also be managed appropriately. Metal emissions occur during the production of metal concentrate at our mines and the processing of metal concentrate at our smelters. Sulphur dioxide emissions primarily occur at zinc and copper smelters. However, the purification of gases in these smelting processes decreases sulphur dioxide emissions and generates sulphuric acid as a by-product.

All smelters' operations fall under the scope of the EU's Industrial Emissions Directive (IED). Emissions monitoring measures and thresholds are set in Best Available Technique (BAT) conclusions, which are typically implemented in environmental permits for operations. Boliden smelters are required to apply these BAT conclusions in their processes to manage and reduce emissions, as mandated by site-specific permits controlled by authorities.

All Boliden operations have in place a certified environmental management system according to ISO 14001 standard. The management system is verified by an independent third party annually. Stakeholders and affected communities can use our whistleblower system as a communication tool to report environmental and social issues concerning Boliden operations. Additional information can be found under the heading Tracking effectiveness of policies and actions on page 89.

Chemicals management

Boliden has established environmental, health and safety requirements for chemicals. The purpose of the requirement is to ensure that chemicals and chemical products are always handled and stored to minimize risks on humans and the environment. The general manager at each business unit is responsible for ensuring that operations run in accordance with EU legislation such as REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) as well as other relevant legislations.

We are committed to:
- Review and approve all new chemical products, or new use of existing chemical products
- Follow the substitution principle for the replacement of hazardous chemicals
- Conduct a risk assessment of chemical products
- Ensure that the requirements are communicated and complied with

To implement these requirements there is a chemical coordinator or similarly responsible person appointed at each unit. There is also a chemical coordinator or similarly responsible person at each operational unit for coordination and assurance. Each business unit is responsible for issuing local instructions based on these requirements, if required. Any deviations from the requirements must be based on a local risk assessment.

All new chemicals need to be risk assessed and approved before being used in operations. This risk assessment includes evaluation of hazard class and possibilities for substitution.

Chemical working groups also exist on the business area and Group level to share knowledge and experience of chemicals management and development.

Emergency preparedness

Both our own employees and nearby communities can be impacted by pollution risks related to Boliden's operations. Effective emergency management is thus essential to protect people, the environment and operations. Every business unit has in place its own local emergency management plan, including routines for emergency situations and crisis management. The plan and procedures are reviewed and practiced regularly. If risks to external stakeholders are significant, the emergency management plan is developed in collaboration with the potentially affected stakeholders.

All Boliden operations that fall under the scope of the EU's Seveso-III directive are obliged to have in place safety reports and emergency preparedness plans in line with the legislation. Emergency preparedness plans are approved by authorities. They are updated regularly and also if there are significant changes in operations. The plans also cover emergency situations related to spills or gaseous leaks and how to manage these, including the procedures for controlling and limiting impacts on people and the environment.

Where risks to external stakeholders are significant, the emergency preparedness plan is prepared in collaboration with potentially affected stakeholders and consistent with established industry good practice. Boliden operations regularly develop emergency plans and test the procedures in training sessions.

Incidents and emergency situations are also managed accordingly with Boliden policies and commitments. Boliden operations are implementing and maintaining these requirements in Boliden's management system.

Legal compliance

Environmental non-compliances are reported whenever an incident or occurrence does not comply with legal requirements, environmental permits, or when a permit threshold is exceeded. These cases are based on monthly monitoring and are recorded in databases. Occurrences are reported on a monthly basis, and multiple occurrences related to the same permit threshold, such as exceeding a daily limit, are reported as a single case per month. Non-compliances with no or very minor consequences for the surrounding environment or local community have not led to further corrective actions requested by authorities. A typical example of such an occurrence is slightly exceeding the daily emission limit value. Non-compliances that may have significant consequences for the surrounding environment or have led to authorities' investigations and/or corrective actions, fines, compensations, or remediation actions are also reported. There were no significant non-compliances reported during 2024.

↓ PDF print version

METRICS AND TARGETS

Targets

Boliden has established targets for emissions to air, soil and water. The target for metals emissions aims to avoid increases in metals emissions to air, soil and water measured in intensity. The intensity consists of tonnes emitted metals weighted in NCP-metal equivalents, divided by Mtonnes metal produced. NCP is an impact factor for emissions to air and discharges to water based on the Natural Capital Protocol. For each of the metals emitted to water and air, a factor is applied to account for the different impacts on the environment and society. The impact factor 1 is credited to copper, and the other metals are given lower or higher factors according to their relative impact.

The target for sulphur dioxide (SO_2) emissions is to avoid an increase in emissions to air and soil and it is measured in absolute figures. Air emission targets relate both to prevention of pollution air and soil, while air pollutants deposit to soil. Additionally, target is in place related to incidents: "No significant environmental incidents". This target covers also spills of chemicals in the soil and aims to prevent such incidents. Emissions to land are not applicable for Boliden operations since there is not any waste that is subjected to land treatment or deep injection as defined in Annex IIA to Directive 75/442/EEC.

Boliden targets related to air and soil pollution prevention

Topic	Target	Target level 2024
Environmental compliance / incidents	No significant environmental incidents should occur	No permit violations and deviations
Metal emissions to air	Avoid increase in metals emissions to air	Metal emissions to air, intensity*) ≤ 23
SO_2-emissions to air	Avoid increase in sulphur emissions to air	SO_2 to air ≤ 6,100 tonnes

*) The intensity consists of tonnes emitted metals weighted in NCP metal equivalents, divided by Mtons metal produced.

Targets related to prevention and control of water emissions are set in the form of emission load, to avoid incidents and to develop systematic ways of water management. A compliance follow-up occurs on a monthly or yearly basis. The target for metals emissions aims to reduce metals emissions to water environment and is set in form of the specific load. To reduce nutrient emissions to the water environment, a target has been set for nitrogen emissions (N-tot.) in the form of total load. To develop and ensure systematic water emissions management, each business unit should have in place a water management plan by the end of 2025. Additionally, there is a target aiming to comply fully with permit and regulatory obligations.

Boliden targets related to prevention of emissions to water

Topic	Target	Target level 2024
Environmental compliance / incidents	No significant environmental incidents should occur	No permit deviations and violations
Water Management	Unit water management in line with Group water management plan by 2025.	
Metals discharged to water	Avoid increase in metals discharged to water	Metals discharges to water, intensity[1] ≤ 33
N-tot. discharged to water	Avoid increase in N-tot discharged to water	N-tot. to water ≤ 237 ton

1) The intensity consists of tonnes emitted metals weighted in NCP metal equivalents, divided by Mtons metal produced.

METRICS – EMISSIONS TO AIR

Consolidated emissions from Boliden facilities.

Emissions to air by pollutant	Unit	2024	2023
Cu to air	kg	1,304	955
Zn to air	kg	12,822	10,797
Pb to air	kg	1,521	1,357
Ni to air	kg	945	455
Cd to air	kg	108	118
As to air	kg	355	363
Hg to air	kg	24.6	26.0
Dust to air	tonnes	166	157
SOx to air (direct)	tonnes	5,938	5,749
NOx to air (direct)	tonnes	388	403
Metal emissions intensity	NCP metal equivalents in tonnes	33	29

In 2024 the intensity of metals to air emissions increased to 33 (29) compared to the previous year. Boliden has relatively low metals-to-air emissions and works continuously at lowering them further. The sulphur dioxide emissions to air increased to 5,938 tonnes (5,749) while still being below the target.

METRICS – EMISSIONS TO WATER

Consolidated emissions from Boliden facilities.

Emissions to water by pollutant	Unit	2024	2023
Cu to water	kg	1,156	1,325
Zn to water	kg	3,806	3,860
Pb to water	kg	198	174
Ni to water	kg	750	792
Cd to water	kg	38.7	39.3
Hg to water	kg	8.62	9.17
As to water	kg	943	1,057
N-tot to water	ktonnes	198	235
Metal discharges intensity	NCP metal equivalents in tonnes	59	64

In 2024 the intensity of metals to water emissions decreased to 59 (64) compared to the previous year. Boliden has in general low metals-to-water emissions and works continuously to reduce them further. The discharge of nitrous compounds to water decreased to 198 tonnes (235) and remained below the target.

↓ PDF print version

MEASURING METHODOLOGIES
Boliden smelters' emissions to air and water are monitored according to methods and frequency stated in NFM BREF-BAT-conclusions. The BAT conclusions are typically implemented in site specific environmental permits as such. Site-specific monitoring programs are approved and controlled by authorities and are part of the site-specific environmental permits. In cases whereby measurements do not follow the BAT conclusions, exceptions are approved by local or regional controlling or permitting authority. There are also site-specific monitoring programs at the mines that are approved by authorities as part of the environmental permit.

TRACKING EFFECTIVENESS OF POLICIES AND ACTIONS
Boliden has set targets that are based on our strategic directions and our policies. Tracking effectiveness of policies and actions is managed by monthly internal reports and by meetings organized at the different levels. We have a certified management system (e.g. ISO14001) in place and the effectiveness of policies is managed according to these standards and audited by a third party.

Boliden's management system support us to systematically control and develop our operations. The management system ensure that significant sustainability topics related to our operations are integrated into the strategic directions to minimize the risks and grasp the opportunities associated with mining and metals production. Our way of working also facilitates the adaptation to changing market conditions and preferences, while ensuring compliance with future legislation. Assessing and identifying sustainability topics enables us to set relevant goals, and to track and improve our performance.

Boliden has in place site-specific extensive monitoring programs approved by authorities and aiming to show the legal compliance related to emissions of air and water and to show the status compared with our internal targets. Emission limits are set in site-specific environmental permits and the outcome is controlled by local or regional authorities. Spills and leakages to soil are reported and recorded in our incident reporting system IA, where also corrective actions responsibilities are defined, and management of each case is followed in a systematic way.

Ecological thresholds
When setting water-related targets, Boliden considers the site-specific ecological status of the water district and compliance with thresholds set by EU and national regulations. The ecological thresholds for surface water and groundwaters are based on Environmental Quality Standards (EQSs) from the EU Water Framework Directive and National River Basin Specific Pollutants. The ecological status of surface water is assessed through biological, chemical, and physical indicators to ensure compliance with these thresholds.

Surface and groundwater-related ecological and chemical thresholds are determined at the EU level and implemented at the national and/or local level in accordance to permits issued by regulatory authorities. The ecological and chemical status of surface water and groundwater are frequently monitored, and the status is taken into account in site-specific and group-level target setting, as well as in impacts, risks, and opportunities materiality assessments. Extensive monitoring is conducted in water regions close to sites to understand the impacts of discharged water on water bodies and to define their ecological and chemical status.

Ambient air quality is monitored in the Boliden operations if the local authority concludes that monitoring is relevant or needed. Currently, ambient air quality is monitored in Kokkola and Harjavalta, close to the smelter areas and ambient air quality status is taken into consideration when setting local site-specific targets. Bioindicators and other relevant investigations are carried out at sites to get understanding of air emissions impacts in the environment surrounding the site. The trunk lichens of pines and the elemental concentrations of needles, moss and humus has been studied, for example. Additionally, the ambient air quality status is considered in site-specific environmental permits. Ambient air quality thresholds set in the Ambient Air Quality Directive aim to prevent harmful ecological impacts of air emissions in surrounding environment and health impacts in local communities.

Authorities are aware of local ecological status (surface water status, ambient air quality, etc.) and this is considered in site-specific environmental permits for example setting of emission limit values and monitoring requirements. Ecological thresholds are the responsibility of each business unit. On a business area and group level, the consolidated status is followed up regularly.

↓ PDF print version

Water and marine resources

WHY IT MATTERS
Boliden recognizes that water is a precious, shared resource with high social, cultural, environmental and economic value. Access to water has been recognized as a human right and is integral to the well-being, livelihood, and the spiritual and cultural practices of many communities. Water is also essential to the function of a healthy ecosystem and the services provided from within the ecosystem. Water is also recognized as vital input for all mining and metals operations.

IDENTIFICATION OF IMPACTS, RISKS AND OPPORTUNITIES
Based on an extensive risk analysis approach, Boliden aims to map water risks, negative impacts, opportunities and positive impacts at each operation. Water-related risks linked to indirect operational emissions to water are also assessed.

Related to water and marine resources, the focus is on impacts and consequences that we have on business sites and to local surrounding water and local communities, but also further upstream and downstream in the value chain. Through a risk-based approach Boliden is, in a systematic way, aiming to find the key areas with development needs and to set plans and targets to gain a high level of performance.

Consultations with affected communities are usually related to environmental impact assessments and environmental permit processes, where public consultations with stakeholders and affected communities are organized. Additionally, regular or occasional voluntary meetings with affected communities are held to discuss and present potential risks and other relevant topics.

Double materiality assessments that cover water management including pollution of water, water withdrawals, water consumption, water discharges, impact on state of species and impacts on ecosystems, are done on a regular basis. The site locations and business activities have been screened to identify the actual and potential water and marine-related impacts, risks and opportunities in Boliden's own operations and upstream and downstream, the value chain. The double materiality assessment with conclusions is described in the General disclosure chapter on pages 66–69.

POLICIES AND COMMITMENTS
Water Management Commitment
Boliden has established policies and commitments addressing the use and sourcing of water and marine resources in its own operations and in the value chain. Our Water Management Commitment is a water-specific commitment in line with ICMM's priorities and guidelines. As a member of ICMM, Boliden is committed to globally agreed to ICMM guidelines related to water management. In 2023 ICMM published a Water Stewardship Maturity Framework, a practical tool designed to help mining and metals companies embed water stewardship into everyday practice and ensure that we manage water resources in a socially appropriate manner.

Environmental Policy
In our Environmental Policy we are committed to minimizing negative environmental impacts and adhering to best practices and to drive continuous improvement in our operations. To cover the impacts in our value chain we encourage our business partners to adopt principles and behavior that are in line with Boliden's environmental policy.

Business Partner Code of Conduct
Our Code of Conduct and Business Partner Code of Conduct, along with other policies and commitments, set expectations on us and our business partners to prevent, mitigate, and remediate impacts and risks related to pollution of air, water, and land, including responsible waste and tailings management.

The Policies cover both Boliden's business activities and apply to all individuals working at or for Boliden. Everyone working for Boliden is individually responsible for reading, understanding, and following the policies. We conduct an annual review of all company policies to ensure they are accurate and followed. Read more about policies, commitments and third-party standards on page 62. Our policies and commitments are accessible via www.boliden.com.

ACTIONS AND RESOURCES
Boliden's Water Management
Responsible, sustainable, and efficient water management offers both economic and environmental benefits and is a critical priority for Boliden. While water is scarce in many parts of the world, the areas where Boliden operates generally have good access to water. Boliden's operations are situated in areas with little or no water scarcity, and no water sources are significantly affected by water withdrawal caused by Boliden's operations. None of Boliden's operations are located within areas of high or extremely high water stress as defined by the World Resource Institute. By managing, treating, and recycling water responsibly, we can mitigate risks to surrounding water areas. Ensuring that water, like our other assets, is utilized in the best possible way is also a business-critical issue for us. Our actions typically follow the mitigation hierarchy, aiming to avoid and reduce the use of marine resources, reclaim and reuse water, and restore and regenerate aquatic ecosystems and water bodies.

Identified impacts, risks and opportunities for water & marine resources

Impact materiality on environment and people		Financial materiality for Boliden	
Negative impact	**Positive impact**	**Risk**	**Opportunity**
• Discharged nitrogen and metals to water can lead to reduced access of fresh water for local communities and ecosystems, over-fertilization and harmful bioaccumulation of metals in humans and organisms. • Boliden's operations cause changes to the course of water bodies for example through damming, leading in the short and long-term to changes in local ecosystems.	• Boliden's high share of recycled water can lead to reduced water consumption. • Boliden has good access to water and operates in areas with low risk for water scarcity.	• Increased precipitation due to climate change can lead to challenges to comply with environmental permits, reduction of asset value, increased cost for adapting facilities to withstand heavy rainfall and flooding, strict dam construction requirements, stop in production and closing of facilities.	• Through research, technology and innovation partnerships Boliden can improve its mining technique (e.g., avoid extracting metals by blasting). This can lead to reduced water usage. For Boliden, it can also lead to an improved market position and a stronger brand.

Water management
Operations are guided by site-specific environmental permits, which include water emission limitations and obligations related to water management and impact monitoring. Each business unit is responsible for actions and investments aimed at continuous improvement and compliance with permit obligations, Boliden policies, and strategic direction. Financial and human resources for planned actions are detailed in action-specific projects, which also outline success factors, schedules, and objectives.

Water management commitment
Our water management commitment emphasizes the importance of conducting both active and closed operations in a way that proactively manages water quantity and quality to reduce potential socio-environmental impacts and realize opportunities that benefit all stakeholders. We identify, evaluate, and respond to water-related risks and opportunities at the catchment level, which means considering the entire area where all precipitation drains into a common outlet, such as a river, lake, or ocean. Clear responsibility and accountability for water management are allocated from the Board of Directors and Group management down to the site level at the business units. Water considerations are integrated into our business planning, including strategy, asset life, and investment planning. We also maintain a site-specific water balance and understand its relation to the cumulative impact of other users. To ensure effectiveness, we set contextual water targets or objectives for sites with material water-related risks.

Water management plans
All Boliden's units aim to implement water management plans by the end of 2025, taking into consideration water scarcity, pollution, and flooding. Regular water risk assessments are conducted to evaluate potential impacts on business, operations, revenue, and expenditure. Kevitsa mine and Harjavalta smelter finalized their water management plans in 2024. For business units with tailings facilities, having a water management plan is a requirement for compliance with the Global Industry Standard for Tailings Management (GISTM).

Emergency preparedness
Effective emergency management is crucial to protect people, the environment, and operations from water-related risks associated with Boliden's activities. Each business unit has a local emergency management plan, which includes routines for handling emergency situations and crisis management. These plans are regularly reviewed, practiced, and updated to ensure effectiveness. In cases where risks to external stakeholders are significant, the plans are developed in collaboration with those stakeholders. All Boliden operations that fall under the scope of the EU's Seveso-III directive are obliged to maintain safety reports and emergency preparedness plans, which are approved by authorities and updated regularly. These plans cover emergency situations related to excessive water discharge and dam failure, detailing procedures for controlling and limiting impacts on people and the environment.

METRICS AND TARGETS

Targets
Boliden's short- and long-term targets for water management are presented in the table below.

Topic	Target	Target level 2024
Systematic way of water management	Unit water management in line with Group water management plan by end of 2025	
Pollution prevention of metals discharges	N.A.	Metals discharges to water intensity[1] ≤33
Nutrient emissions to water environment	N.A.	N-tot. to water: ≤237 tonnes
Legal compliance	No significant environmental incidents	No permit deviations and violations

1) The intensity consists of tonnes emitted metals wieghted in NCP metal equivalents divided by Mtonnes metal produced.

Water metric	Unit	2024	2023
Total water consumption	m^3	6,596,000	-5,369,000
Total water consumption in areas at water risk	m^3	0	0
Total water recycled and reused	m^3	175,897,000	209,722,000
Total water stored	m^3	42,754,000	-
Changes in storage	m^3	8,782,000	-
Water intensity	m^3/net revenue	35,840	-

TRACKING EFFECTIVENESS OF POLICIES AND ACTIONS
Boliden's management system support us to systematically control and develop Boliden's water and marine resources. The management system ensure that significant sustainability topics related to water and marine resources are integrated into the strategic directions to minimize the risks and grasp the opportunities associated with mining and metals production.

MEASURING METHODOLOGIES

Total water consumption
Total water consumption is based on the difference in volume of total water withdrawal and discharged waters sent out from operations. Volume (m^3) of water withdrawal is continuously measured at all sites as well as the volume of discharged waters. Total water consumption includes consumptive losses associated with operational water and Other Managed Water (OMW). Total water consumption includes water that is removed by evaporation, entrainment in product or waste or other losses, and not released back to surface water, groundwater, seawater or a third party. Calculating water consumption considered as the sum of its constituent parts (evaporation, entrainment and other losses).

Total water consumption = (Operational water withdrawal + OMW withdrawal) - Total discharge - (± change in storage).

Two metrics are used to appropriately describe water withdrawal, including Operational Water Withdrawal (OWW) and Other Managed Water (OMW) withdrawal. Water withdrawal contains all water that is removed by evaporation, entrainment (in product or waste) or other losses, and not released back to surface water, groundwater, seawater or a third party. Evaporation rate is calculated by using a hydrological model or estimation based on pond surface area, beach areas, measured evaporation rate or typical pan-evaporation rate. Information may be based on data received from local or regional meteorological stations.

↓ PDF print version

Operational Water Withdrawal (OWW) includes all water that enters the operational water system used to meet the operational water demand. The water is available for use by the site within an operational task or activity. Any water that enters the operational water system used to supply the operational water demand will be classified as an operational water withdrawal. This water is theoretically available for use, and in many contexts is used to offset the need for additional active withdrawals, including imported water, make-up water or new water. Operational water withdrawal volumes are accounted and reported by source type (surface water, groundwater, seawater and third-party water) and water quality category (high and low quality).

Other managed water withdrawal (OMW) includes water that enters the operational boundary and is actively managed without intent to supply the operational water demand. This means the water is not used by the site within an operational task or activity. OMW withdrawal volumes are typically accounted for by source type (surface water, groundwater, seawater and third-party water) and by high and low water quality category.

Total water discharge includes water that is released to the water environment including surface water, groundwater or seawater or to a third party, including operational water and OMW. Total water discharge volumes are accounted and reported by destination type (surface water, groundwater, seawater and supply to third party). The volume of total water discharged is monitored continuously at the point where discharges are sent out to receiving water.

Total water consumption in m³ in areas at water risk
Boliden operations are not located in areas with water risks and hence this is not applicable.

Total water recycled and reused
Water that has been used in an operational task and is recovered and used again in an operational task, either without treatment (reuse) or with treatment (recycle).

Total water stored and changes in storage
Total volume of water stored is monitored as total volume in water storage basins. Measurements occur periodically or continuously, depending on the business unit. The net change (positive or negative) in the volume of water in storage (operational water and OMW) during the reporting period.

Ecological thresholds
To promote good ecological and chemical water conditions close to our operations, the status of aquatic environments are monitored regularly at several sampling points in the water regions where water is discharged. Aquatic environments that receive water discharges are monitored to assess their status compared with local, national and European environmental quality standards. The quality of water, sediment and biota in marine and freshwater environments is monitored according to monitoring programs approved by the local authorities.

Site-specific ecological status of water district and compliance with thresholds set in EU and in national regulation is taken into consideration in site-specific water related target setting.

Ecological thresholds considered are surface water and groundwaters: EQS's (EU Water Framework Directive, National River Basin Specific Pollutants) and surface waters ecological status and compliance with thresholds is used to check the status.

Surface and groundwater-related ecological thresholds are determined on the EU-level and implemented in an appropriate manner on national or community level, or for specific river basin district. Water and groundwater EQS are defined by the EU and implemented in national regulation. Surface water and groundwaters ecological and chemical status is monitored frequently and the status is considered in the site-specific and Group-level target setting and in impacts, risks and oppportunities materiality assessments.

Authorities are aware of local ecological status such as surface water status and ambient air quality and this is considered in site-specific environmental permits such as in setting of emission limit values and monitoring requirements. Responsibility for awareness and compliance with ecological thresholds lies with each business unit. On a business area and group level the consolidated status is followed regularly.

ICMM metrics
Water metrics reported according to ICMM guidelines.

Water metric	Total m³
Surface Water Withdrawal (OWW)	42,247,000
Ground Water Withdrawal (OWW)	13,323,000
Seawater Withdrawal (OWW)	82,174,000
Third-Party Water Withdrawal (OWW)	1,879,000
Rainfall Withdrawal (OWW)	37,166,000[1)]
Total Operational Water Withdrawal (OWW)	**139,622,000**
Total Other Managed Water Withdrawal (OMW)	**3,382,000**
Discharged to Surface Water	45,385,000
Discharged to Ground Water	2,798,000
Discharged to Seawater	78,261,000
Supply to Third-Party	1,182,000
Total discharged	**127,626,000**
Total consumption	**6,596,000**
Total Reuse / Recycle	**175,897,000**
Operational water use	**189,211,000**
Change in storage	**8,782,000**

1) Rainfall withdrawal is included in surface water withdrawal.

Biodiversity and ecosystems

WHY IT MATTERS
Nature is being lost at an unprecedented rate and Boliden recognizes that mining and metals operations and their value chains both depend on and impact nature. The regions where we operate have relatively high biodiversity intactness, and a large degree of protected areas. Consequently, mineral reserves and all mine sites, and most smelters are located adjacent to some form of protected area.

IDENTIFICATION OF IMPACTS, RISKS AND OPPORTUNITIES
Boliden has assessed and identified its impacts, dependencies, risks, and opportunities related to biodiversity and ecosystems in adherence to the Taskforce on Nature-related Financial Disclosures (TNFD) framework. Our activities are relevant to four of the five main drivers for nature loss:
- climate change
- pollution
- resource use
- habitat loss

By following the four steps recommended by the framework to Locate, Evaluate, Assess and Prepare (LEAP) Boliden has identified and assessed its material nature related issues, to ensure these are all addressed through targets and actions.

Boliden is dependent on ecosystem services provided by nature, including the provision of water, regulation of climate and protection from physical hazards, like floods and landslides.

We have identified a positive impact relating to restoration of nature on legacy sites, and development of new technologies that may decrease pressures on nature.

Stricter regulations related to impacts on biodiversity and ecosystems could impose new requirements on Boliden's operations and value chain, which in turn could have a financial or reputational effect. Expectations from stakeholders, customers, investors, and banks could affect Boliden's financial performance, cost of capital or access to finance in the medium or long-term. The effects could be both positive and negative, depending on the development of stakeholders' expectations and the impact of Boliden's activities related to our peers.

Biodiversity in own operations
Biodiversity impacts from Boliden's own operations have been identified as very high for ecosystem use related to conversion of natural habitats and for climate change related to high consumption of fossil fuels and energy. In addition, biodiversity is also impacted from pollution to air and water, from water and resource use. Impacts are being adressed applying the mitigation hierarchy to avoid, minimize, restore and offset impacts on ecosystems and species, in order to achieve net positive biodiversity impacts. Efforts to reduce greenhouse gas (GHG) emissions and pollution as well as efficient water and resource management also have a mitigating impact for pressures on biodiversity. Read more on these topics in the chapters Climate change on pages 76–85, Pollution on pages 86–89, Water and marine resources on pages 90–92 and Resource use and circular economy on pages 97–101.

Biodiversity in our value chains
Our nature-related impacts, dependencies, risks and opportunities have been evaluated for Boliden's upstream and downstream value chains.

In Boliden's upstream value chain, significant environmental impacts are evident in several industries, particularly in sectors such as mining, steel production, construction materials, oil and gas extraction and certain manufacturing processes. The most critical impacts, rated as high or very high through the ENCORE[1)] tool, are related to ecosystem use and change, resource depletion, climate change and pollution. To address the impacts and risks identified, we have committed to rolling out requirements for high-risk suppliers and engage in partnerships to help halt and reverse nature loss in our value chains.

For Boliden's downstream value chains, significant impacts on nature have been identified relating to GHG, water use and pollutants, in the metals production, steel and construction industries.

Identified impacts risks and opportunities for Biodiversity and ecosystems

Impact materiality on environment and people		Financial materiality for Boliden	
Negative impact	**Positive impact**	**Risk**	**Opportunity**
• Boliden's ecosystem use through transformation of natural habitats to mines or industrial areas. • Pollution to water, air as well as noise impact on ecosystems and species surrounding Boliden's sites through degradation of ecosystem functions or impacts on species fitness. • Contribution to climate change impacts biodiversity indirectly through expected changes in environment and increased severe weather events.	• Ecosystem restoration of closed mines and legacy sites is designed to create positive impacts on biodiversity as well as for local communities and indigenous people. • Promotion and management of species that thrive in sandy and rocky environments. • Extensive monitoring of emissions and impacts in surrounding environment makes it possible to see changes and steers the proactive preparedness.	• Severe weather events are expected to increase with climate change potentially causing flooding and erosion that risk disrupting operations. • Regulatory changes can lead to stricter requirements in permits. • Changes in perception and sentiment from stakeholders and the public due to competition for natural resources may impact communities and nature and result in failure to meet stakeholder expectations.	• Use of nature-based solutions to promote ecosystem services is an opportunity to create multiple benefits for biodiversity as well as control of dust, water and erosion. • Boliden owns large landholdings where we are able to set aside land for protection and ecological restoration, thereby making a positive contribution to biodiversity. • Research and innovation into new technologies or methods could lead to decreased pressures on biodiversity due to resource efficiency, circular use of materials or pollution prevention.

1) Exploring Natural Capital Opportunities, Risks and Exposure.

↓ PDF print version

POLICIES AND COMMITMENTS

Environmental Policy

In our Environmental Policy we are committed to minimizing negative environmental impacts and adhere to best practices and commit to the continuous improvement of our operations. To cover the impacts in our value chain we encourage our business partners to adopt principles and behavior that are in line with Boliden's environmental commitments.

Biodiversity and Nature Commitment

We are committed to contributing to a nature positive future through halting and reversing biodiversity loss in our four spheres of influence – direct operations, value chains, landscapes and system transformation. We are committed to avoiding exploration or mining in World Heritage properties, and respecting legally designated areas.

Code of Conduct

Our Code of Conduct and Business Partner Code of Conduct, along with other policies and commitments, set expectations on us and our business partners to prevent, mitigate, and remediate impacts and risks related to pollution of air, water, and land, including responsible waste and tailing management.

The Policies cover both Boliden's business activities and apply to all individuals working at or for Boliden. Everyone working for Boliden is individually responsible for reading, understanding, and following the policies. We conduct an annual review of all company policies to ensure they are accurate and followed. Read more about policies, commitments and third-party standards on page 62. Our policies and commitments are accessible via www.boliden.com.

ACTIONS AND RESOURCES

Net positive impact on biodiversity for our direct operations

Boliden is committed to achieving increased biodiversity and therefore we implement the mitigation hierarchy´s four steps to avoid, minimize, restore and compensate for impacts.

Avoid

Expansions or new mining projects are subject to environmental impact assessments (EIAs), with extensive surveys on species and habitats quality carried out at an early phase. The results will affect the project design in order to avoid impact wherever possible.

Minimize

If impacts cannot be avoided they are minimized through various management strategies. Extensive monitoring programs are set up during operations, both according to permits as well as voluntary programs. The programs ensure emissions and risks are limited and managed for:

- Air quality
- Water and sediment quality for sea, lakes and rivers
- Soil and groundwater quality
- Dust deposition
- Biological impacts related to air and water emissions for example, bioindicator studies of moss, tree navel, lichen, berries, fungi, reindeer grazing species, nesting of birds, needles loss, benthic fauna, fish, and the occurrence of specific species.

Restore

At the end of a mine´s life, the site is rehabilitated with principles of ecological restoration, aiming to reestablish naturally occurring species, structures and ecosystem functions. We continue to monitor and manage the areas that have been reclaimed for an indeterminate period, and this may, if necessary, entail implementing additional measures in already reclaimed areas. Where possible, reclamation is done in partnership with affected landowners.

Compensate

The remaining impacts on nature and biodiversity will be compensated when possible, through protection or restoration of habitats in the vicinity of impacts, according to the principle of like for like or better.

Mainstreaming biodiversity through our business

Biodiversity will be incorporated throughout all projects, operations and stages of mine life cycle to increase the biodiversity at our business sites by 2030. This will be achieved through developing relevant guidelines and tools, but also through staff training and allocating appointed persons at sites.

Biodiversity management plans

Biodiversity management plans are the main tool to ensure implementation of biodiversity in line with the mitigation hierarchy described above. The plans have been implemented at all mines, with a phase-in plan for smelters over the next years.

Red listed and protected species

Red listed and protected species have been found on most Boliden sites. A comprehensive list of species and habitats has been published in reports for each site on www.boliden.com. All our operational sites have undergone an environmental impact assessment, recommending mitigation measures for sensitive species and ecosystems.

Stakeholder engagement

Stakeholder engagement with indigenous peoples and local communities is an integral part of all nature-related projects, for example mine rehabilitation, ecological compensation, forestry or protection. Through close dialogue and the exchange of knowledge, we strive to create multiple and synergetic benefits for both stakeholders, biodiversity and other sustainability targets.

Our landholdings – an opportunity for restoring nature

Boliden is a large landholder. In addition our mines and smelters we own and manage large areas of forests, wetlands, lakes and legacy mine sites. We have committed to protecting or restoring 30% of our non-operational landholdings. This will be achieved through:

- Applying nature-friendly forestry practices, with a minimum of FSC[1]-aligned practices, but with increased care and management in suitable areas. Increased care may for example include promoting deciduous trees, continuity forestry or controlled burning to support biodiversity. By adapting forest management in areas used for outdoor recreation, social value can be created and maintained. Our ambition is for wildlife to coexist in harmony with forestry, hunting and other public interests.
- Increasing the areas of land dedicated to voluntary protection, focusing mainly on old forests or partially degraded land with potential for ecological restoration.
- Ecological restoration of our legacy sites. Boliden continues to take responsibility for and manage legacy mine sites, to minimize impacts on their surrounding environment. In some cases there are opportunities to improve rehabilitation and we then plan efforts for ecological restoration.

1) Forest Stewardship Council.

Biodiversity transition plan

Boliden is developing a biodiversity transition plan outlining the path toward our target, defining milestones, principles of work and activities for implementation both short and long term. The plan addresses our material nature related aspects through impact mitigation strategies, forward-looking risk management practices and proactive support the health of the ecosystems we depend on.

Research and development

Boliden aims to contribute to collaborative research and development initiatives together with universities, business partners and other stakeholders. There are still many areas related to nature and biodiversity where knowledge is lacking, or best practices have not been developed. Research building on many types of perspectives will be encouraged, including scientific methodologies, traditional knowledge as well as local knowledge, to develop and share solutions to industry-wide nature and biodiversity challenges.

METRICS AND TARGETS

Our overarching target is to increase biodiversity in all regions where we operate by 2030, from a 2020 baseline. Boliden's underlying metrics for biodiversity have been developed with an aim to make contributions to and align with the global goals for biodiversity, the EU biodiversity strategy as well as national targets for biodiversity.

Land cover, management and conversion over time

As our largest impact on biodiversity lies with conversion of natural habitat to mines, we report areas of land, area developed, area protected, area restored and offset. Boliden is currently testing the use of habitat quality metrics, CLIMB (Changing land use impact on biodiversity), which is developed from the Swedish SIS-standard for nature surveys.

Land cover, management and conversion over time

Land management of areas owned, leased or managed				Change in reporting year	
Management	**Sub category**	**Area 2024 (ha)**	**Area 2023 (ha)**	**Attribution**	**ha**
No management	Not available	4487.3	4478.7	Property sold Property acquisition Mine expansion Ecological restoration Ecological compensation	-17.7 37.5 -1.3 -3.8 -6.1
Foresty	Production forestry	9352.1	9121.5	Property sold Property acquisition Mine expansion New powerline	-54 318.5 -31.4 -2.8
	Increased care	1220.7	1221.2	Mine expansion New powerline	-0.4 -0.1
Agriculture	Grazing	26.1	26,1	-	0
	Meadow	8.5	8.5	-	0
	Crop	14.3	13.9	Property sales and aquisition	0.4
	Unspecified	561.4	536.0	Mine expansion Property aquisition	-3.2 29.1

Land management of areas owned, leased or managed				Change in reporting year	
Management	**Sub category**	**Area 2024 (ha)**	**Area 2023 (ha)**	**Attribution**	**ha**
Protected	Nature reserve	395.0	395.0	-	0
	Nature conservation contract	20.4	20.4	-	0
	Voluntary offset	1845.3	1825.8	Ecological restoration Property aquisition	3.8 15.7
	Ecological compensation	1036.5	1030.4	Ecological compensation	6.1
Mine closed	No reclamation	116.9	160.4	Technical reclamation	-45
	Technical reclamation	320.6	253.6	Technical reclamation	67
	Ecological restoration	416.6	416.6	-	0
	Unspecified	718.5	732.6	Technical reclamation	-14.1
Mine active	Not available	7309.0	7274.4	Technical reclamation Mine expansion	-9.2 38,5
Mine care and maintainance	Not available	218.7	218.7	-	0
Smelter closed	Technical reclamation	57.8	57.8	-	0
Smelter active	Not available	576.0	576.0	-	0
Built environmnents	Urban land	24.8	24.8	-	0
	Residence	19.9	20.0	Property sales and aquisition	-0.1
	Unspecified	63.4	64.8	Mine expansion	-1.4
Infrastructure	Roads	46.3	46.9	Mine expansion Property aquisition	-1.4 0.8
	Power lines	56.9	51.2	Property aquisition New power line	2.9 2.8
	Water dam	40.2	40.2	-	0
	Unspecified	71.4	72.0	Mine expansion	-0.6
Total		**29023.6**	**28687.2**		

↓ PDF print version

Protected areas and species
Site specific information on protected areas, species and biodiversity offsetting projects. Further details can be found in the site GRI reports on our website.

Sites	Operation	Country	Size (ha)	Protected area within the Boliden operating area	Protected area adjacent to Boliden's operations (closer than 5 km)	Protected area partly within the Boliden operating area	Operation has negative impacts with regards to land degradation, desertification or soil sealing	Ecological compensation projects (Name, Area, Purpose, Distance from site)	Number of red listed and/or protected species within 5 km of operating area
Aitik	Mine	Sweden	4635	Yes	Yes	No	Yes	Sarkanenä/Snjirra: Offset impact of mine expansion on old growth forest, 840 ha, 5 km from impact area	151
Bergsöe	Smelter	Sweden	13	No	Yes	No	Yes	No	71
Boliden Area	Mine	Sweden	935	No	Yes	No	Yes	No	89
Garpenberg	Mine	Finland	488	No	Yes	No	Yes	No	69
Harjavalta	Smelter	Finland	216	No	Yes	No	Yes	No	7
Kevitsa Mine	Mine	Finland	988	No	Yes	Yes	Yes	Peurasuvanto: Ecological compensation for impact on Carex Capitata at Kevitsa mine, 6 ha, 17 km from impact area.	50
Kokkola	Smelter	Finland	145	No	Yes	No	Yes	No	20
Odda	Smelter	Norway	49	No	No	No	Yes	No	52
Rönnskär	Smelter	Sweden	206	No	Yes	No	Yes	No	1
Tara	Mine	Ireland	393	No	Yes	No	Yes	No	77
Old mining areas	N/A	Sweden	907	Yes	Yes	Yes	Yes	No	N/A
Forests properties	Forests properties/ nature protection	Sweden	20 055	Yes	Yes	Yes	No	No	N/A

↓ PDF print version

Resource use and circular economy

WHY IT MATTERS
In a circular economy the value of materials and resources are maintained as long as possible, in order to minimize waste and the environmental impact of human activities. Metals can be recycled endlessly without deterioration of their quality. As a metal producer with mining, smelting, and metals recycling, Boliden thus plays an important part in the transition towards a more circular society.

By their nature, mining and smelting operations have the potential to impact natural environments, ecosystems and biodiversity – both directly and indirectly. Boliden's operations, like those of many mining and smelting companies, involve complex environmental considerations. While metal recycling plays an increasingly important role in global supply of the base metals Boliden provides, it is not enough to meet the demand, which is being further driven by the transition to fossil-free and electrified societies. Therefore the extraction of virgin metals remains a necessity, resulting in the exploitation of finite natural resources.

Our operations produce large quantities of extractive as well as process waste and industrial waste. In general, mining waste dominates the waste production. Appropriate management and exchange of waste to by-products is material for Boliden and can benefit society by increasing overall resource efficiency and by contributing to a more circular economy.

Large quantities of raw materials and supplementaries are purchased from external business partners. Upstream impacts, risks and opportunities are consequently of high importance to manage.

Properly processed waste can be turned into valuable resources. Boliden sees great opportunities to recover more valuable metals and critical raw materials from its current waste streams. In a circular economy, recycling of electronic materials and scrap metals is a high priority.

IDENTIFICATION OF IMPACTS, RISKS AND OPPORTUNITIES
Environmental impact assessment, including waste management, is required in environmental permitting processes and it is a crucial part in Boliden's ISO 14001 certified management system. Boliden has an extensive risk and opportunity identification and assessment process with the aim of mapping all the risks and opportunities connected to resource use, waste management and circularity. Risk assessments are carried out at business units and risks with the highest impact are brought to the business area to make a consolidated risk ranking. The business area risk ranking is further consolidated on Group level where risks and opportunities are assessed in relation to Boliden's strategy.

For resource and waste management-related impact, risks, and opportunities, the focus is on resource efficiency and reduction of waste from our own operations and to utilize ours and others´ waste as a resource. Boliden's process to identify impact, risks, and opportunities is a systematic way to find the key areas for prevention and improvement. This also includes identifying collaborations with universities and business partners to find innovative solutions that can boost the transition towards a more circular economy. In addition, more than half of Boliden's raw material supply comes from external supply, thus also creating material impacts, risks and opportunities related to resource use and circular economy upstream in our value chain.

POLICIES AND COMMITMENTS
Environmental Policy
Our Environmental Policy guides our efforts to manage material impacts, risks, and opportunities related to resource use and the circular economy. It states our commitments to minimize the use of resources, manage waste responsibly, ensure dam safety, and contribute to a reduced resource use and a circular economy

Tailings Governance Commitment
Our Tailings Governance Commitment outlines our approach to managing tailings facilities. It emphasizes our dedication to responsible waste and dam safety management, and our efforts to minimize resource use and promote a circular economy by reprocessing waste materials and recovering valuable resources.

Code of Conduct
Our Code of Conduct and Business Partner Code of Conduct, along with other policies and commitments, set expectations on us and our business partners to prevent, mitigate, and remediate impacts and risks related to pollution of air, water, and land, including responsible waste and tailing management. Read more on policies, commitments and third-party standards on page 62. Our policies and commitments are accessible via www.boliden.com.

ACTIONS AND RESOURCES
A circular approach to resource management is both viable and appropriate for our industry, as metals can be recycled endlessly without compromising their properties. Resource efficiency and circularity to optimize value creation of mineral reserves and secondary materials are key strategic focus areas for our mining and smelting operations.

We have developed processes to manage waste and resource use, designed to extract maximum value from material streams for example through creating products from materials previously considered as waste, and ensuring proper treatment and storage of hazardous waste to minimize environmental risks. Boliden also focuses on preventive measures and action plans to address environmental risks and improve sustainability in its operations.

Identified impacts, risks and opportunities for resource use and circular economy

Impact materiality on environment and people		Financial materiality for Boliden	
Negative impact	**Positive impact**	**Risk**	**Opportunity**
• Mining involves the extraction of finite resources. • Mining and smelting generate large volumes of waste. • Recycling can generate hazardous by-products and is energy intense.	• Ability to recycle metals from waste. • Metals produced are required for societal progress, especially for the climate transition. • Innovation turns waste into useful resources.	• Raw material scarcity can impact our capacity to meet demand. • Rising costs, especially for energy, can create an unsustainable business model. • Evolving regulations, on both national and EU level, can hamper our competitiveness in a global metal market.	• Increasing demand for recycled metals. • New revenue streams where waste can be transformed into by-products.

We strive to produce metals as resource efficiently as possible, to minimize waste and to create circular resource systems in our mining and smelting operations. We invest in innovative solutions with a focus on extracting the maximum amount of metals possible from raw material, while also reducing the amount of waste deposited.

We extract primary metals from our mines and recyclesecondary metals such as zinc, copper, nickel and lead. These metals are, in turn, sold to different industries. We are also constantly looking for new ways to create value from waste generated by our own operations and other industries.

We have developed processes to optimize the extraction of value from the material streams at our mines and smelters. Some of the process residues generated are sent to other Boliden sites for metals recovery or final disposal. What is considered waste for one operation can be a raw material for another. We use resource-efficient industrial synergies, and continuously find new methods of creating value from our own waste materials.

Boliden has created metals from recycled materials for many years and is one of Europe's leading recyclers of used lead batteries and scrapped electronics. Several of Boliden's smelters are specially equipped to process complex waste metals into "pure metals" that can then be used to create new components and products.

We manage risks and opportunities by integrating sustainability matters in our sourcing and procurement processes.

Recycling and reducing waste
Waste management and proper treatment are part of environmental permits at each site. Guided by our higher ambition level in policies and commitments we strive to maximize metal recovery from both virgin and recycled raw materials while minimizing waste through development of new processes and products. Both Boliden business areas' strategies include waste minimization and valorization as focused areas. We are working according to circular economy roadmaps, which includes several initiatives aimed at achieving the following objectives:
- Extracting value from waste
- Increasing the utilization of waste fractions that are currently being discarded
- Reducing the volume of waste deposited
- Ensuring safe and responsible waste deposition
- Developing sustainable solutions within the circular economy framework.

Boliden's Rönnskär smelter is one of the world's largest recyclers of electronics with a capacity of recycling 120,000 tonnes of electronic scrap annually. This amount equals two million mobile phones every day. Boliden buys electronic scrap consisting of material such as printed circuit boards. The materials that are delivered to Boliden have been pre-processed by suppliers. At Rönnskär, the material is crushed, smelted and refined in a Kaldo furnace. Boliden's unique Kaldo technology utilizes the energy in the plastics from the material, making the process energy efficient and enabling a multi-metal production from a number of different secondary materials. Our Harjavalta smelter has a secondary raw material feed, consisting of scrap and precipitated slag. The Rönnskär smelter has a leaching plant that enables waste materials that have been stored at the site since 1975 to be reprocessed and reduced by half.

Boliden's Bergsöe smelter has been recycling used lead-acid car batteries since 1942. At our Bergsöe plant in Landskrona we recycle 50,000 tonnes of lead annually – equal to four million car batteries every year. Production of lead at Bergsöe is an example of circularity as almost 100% of all lead produced at Bergsöe comes from secondary sources and most of it also goes back to where it came from – as the main material in lead-acid car batteries. At the Rönnskär smelter, the granulated copper slag is sold as a by-product for the construction of local roads and similar applications. Boliden's Odda and Kokkola zinc smelters use residual material from the scrap steel recycling industry as secondary feed.

Waste management
Mining and smelting operations generate residual waste consisting of waste rock, tailings, slag and sludge. We extract and process several different minerals and metals that can be toxic and environmentally harmful. For example, some of the tailings and waste rock generated are potentially acid generating, which requires adequate management to minimize the generation and release of acid rock drainage. There is considerable awareness of the importance of waste issues within Boliden, and we conduct selective waste management, waste sorting, recycling of process residues and scrap, reporting procedures and ongoing waste R&D projects. Our waste streams are managed in accordance with the EU Directive on the Landfill of Waste and the Extractive Waste Directive. At our smelters, the quality of landfilled waste is analyzed frequently according to a monitoring program that is approved by authorities to ensure that all the set criteria for landfilled waste are met. Progressive reclamation is applied where suitable, for example when waste rock facilities are covered and re-vegetated progressively to minimize weathering and leaching. Our extractive waste is handled in accordance with all applicable environmental permits that specify how and where it may be stored and how it shall be covered and reclaimed. Our operations also generate waste through water and gas purification processes, which are managed according to local requirements.

Tailings management
Tailings are a common waste stream from mining, created when ore is processed into metal concentrate at the mine's mill. Tailings management is thus a critical element in the development, design, operation, and closure planning of mines. A Global Industry Standard on Tailings Management (GISTM) has been issued on the initiative of the International Council on Mining and Metals (ICMM), the United Nations Environmental Program (UNEP) and the UN Principles for Responsible Investment (PRI). The standard (GISTM) strives to achieve the goal of zero harm to people and the environment caused by tailings. It focuses on tailings management and contributes to greater global transparency and uniformity in this area.

We are fully committed to GISTM and are in the process of implementing its 77 requirements. Significant progress has been achieved towards conformance, both to enhance our operations and minimize risk. For example, Boliden's mine sites have increased their tailings storage capacity with planned dam uplifts and risk assessments have been performed in accordance with current standards to minimize risks. We have worked on the implementation of a strengthened governance model and ensured that the necessary scheduled communication has been carried out to ensure that all key stakeholders are appropriately informed on the risks associated with tailings management. The objective is to ensure a life-cycle approach for all tailings facilities by evaluating innovations and technologies as an integrated part of our sustainable waste management research program.

Research and development
Turning waste into new products is a complex process, both in terms of navigating waste legislation, innovation and the implementation of new technologies. The research and development cycles are long and investment dependent. On the other hand, the potential outcomes in finding value in waste both supports sustainable business operations and contributes to a more circular economy and is therefore very appealing.

Ongoing projects within Business Area Smelters include developing a low-carbon supplementary cementitious material product from iron containing residues from our own production In addition, the process increases the recovery of valuable metals and can significantly reduce waste currently deposited to landfill.

Several projects within Business Area Mines are also exploring the potential to produce cementitious materials or geopolymers from tailings that could be used to replace cement in internal applications such as backfilling. This would promote resource efficiency and help to reduce emissions. Another example with potential for increased revenue and market expansion is our initiative to create by-products like pyrite concentrate from mining waste.

Actions taken during the reporting year

Tailings management

Throughout the year, all mine sites have made significant progress toward full conformance with the Global Industry Standard on Tailings Management (GISTM). Aitik completed a major remediation project and planned for long-term sustainable tailings storage. Both Kevitsa and Aitik achieved full conformance according to internal validated self-assessments. Knight Piésold have started conducting GISTM third-party independent assessments for Kevitsa and Aitik.

Supplementary cementitious material with a low climate footprint

Boliden has made a significant technical breakthrough where slag from existing metal production in smelters can be converted into supplementary cementitious material. With this new technology, the climate impact from cement production can be reduced immensely compared to traditional cement. The technology also enables additional metal to be extracted and there is potential to reduce volume to landfill with large amounts from iron containing residues that come as a waste stream at our smelters. A pilot project to produce low-carbon concrete blocks has confirmed product and production performance. This has has also been verified by established companies in the cement industry. Patent applications have been submitted and a preliminary study regarding the commercialization of this product has been initiated.

Boliden Area extension project

In the Boliden Area, we have decided to in investment in dewatering and paste facilities in order to improve environmental performance, and using tailings as backfill material in the Kankberg, Renström and Maurliden mines. The project includes a filtration plant next to the concentrator, transport of dewatered sand out to the mines and the use of binders to create paste. Granted environmental permits will allow production to be extended by around ten years, until the end of the 2030s.

Tailings and waste rock for carbon capture and storage

Boliden is exploring opportunities to use tailings and waste rock to capture and permanently store large quantities of carbon dioxide. This would promote both resource efficiency and help reduce emissions.

METRICS AND TARGETS

Boliden tracks the effectiveness of policies and actions through regular review of the roadmaps and related projects. Waste reduction in absolute amounts for each initiative is a given parameter when evaluating each project's potential and business value.

Resources and inflows

Material resource inflows related to Boliden's impacts, risks and opportunities include raw materials (primary and secondary) and associated process materials. Materials are mostly weighed when loading and/or charging (ore, concentrates and most smelting materials). The mined rock amount is based on calculations (waste rock and ore). A small proportion of the input materials are calculated from input and stock.
The total smelting material feed includes concentrates both from Boliden's own mines and from external mines, purchased secondary materials, and secondary materials sent from one smelter to another.

Materials used by weight, (ktonnes)	2024	2023
Mined rock	117,975	123,989
Milled ore	56,081	56,595
Concentrate produced	871	922
Smelting materials	2,714	2,645
Other materials[1]	834	617
Non-renewables[2]	176	178

[1] Including fuels, explosives and chemicals used in production processes.
[2] Such as oil, gas and coal.

The amounts of mined rock decreased as did the milled ore while the usage of smelting materials increased slightly in 2024, compared to last year.

We extract and recycle metals from by-products and residues sourced from our own operations and from suppliers. The recycling input rate shows the proportion of secondary materials in the total input to Boliden smelters. Recycled materials include secondary materials from external sources and secondary materials sent from one plant to another within the Group. By-products and non-product outputs recirculated internally at the sites, and slag sent from smelters to mines, are not included in these figures.

Recycled materials (tonnes)	2024	2023
Total secondary feed	329,000	330,000
Total feed (primary and secondary)	2,714,000	2,645,000
Recycling input rate	12%	12%

A circular economy also includes energy and water resources, eliminating pollution and regenerating nature. Read more in the other environmental sections of the sustainability statement.

Resource outflows

Extractive waste

Our mining operations fall under a separate EU legislation, the Extractive Waste Directive, that sets out implementing measures for the management of mining waste. Mining waste comes from extracting and processing mineral resources and includes waste rock and tailings. Some of this waste is inert and unlikely to damage the environment. Mining waste can also contain dangerous substances, such as heavy metals and can result in acid or alkaline drainage.

In underground mining operations, tailings and waste rock are used as backfill, as reinforcement and to optimize the mineral extraction process. About 5% of the tailings and 30% of our waste rock were reused in 2024. This decreased the number of tailings and amount of waste rock that needed to be deposited above ground. Selective waste rock management makes it possible to use a proportion of the waste rock by complying with set criteria to allow it to be used as construction materials, both on and off site. Tailings and waste rock used for backfilling are not considered to be waste and are not reported as such. At open pit mines, we selectively manage overburden and topsoil, which are stored separately and used in the reclamation of the different sites. Some of the concentrates produced in Boliden's mines are sold to external parties.

Waste from extractive industries (tonnes)	2024	2023
Reuse – backfilling of mine		
Waste rock	1,722,000	1,532,000
Tailings	1,392,000	1,870,000
Reuse – construction material		
Waste rock	8,364,000	15,507,000
Tailings	1,611,000	1,141,000
Waste rock (landfill dumps)	47,528,000	45,499,000
Sold waste rock	6,000	6,000
Tailings management facility	52,156,000	52,814,000
Total	**112,779,000**	**118,369,000**

Waste diverted from disposal

At Boliden's industrial operations we continuously identify opportunities for internal and external recycling or landfill solutions for any process waste generated. We receive significant amounts of waste from external parties for recycling, construction purposes or safe deposition in landfill. The export of waste to landfill or for recycling is extensively regulated. We have also developed procedures for monitoring and following up on the receiving party's processing operations to ensure that their waste processing is acceptable from a health and environmental perspective. As there are no significant waste losses in the production processes at Boliden's units, the waste Boliden generates is considered the same as waste that is either diverted from or directed to disposal, as presented in the below tables. Each business unit is responsible for reporting the waste they consider most significant in their waste streams.

Waste diverted from disposal by treatment method (tonnes)	2024	2023
Non-hazardous waste, total	**72,156**	**81,785**
Recycling (external)	9,448	8,152
Used for construction (external)	0	352
Used for backfilling (internal)	1,500	1,500
Other recovery operations (external)	61,208	71,782
Hazardous waste, total	**41,959**	**37,593**
Recycling (internal)	14,432	10,559
Recycling (external)	2,403	1,832
Construction (internal)	5,300	0
Slag to further enrichment (external)	1,818	2,289
Other recovery operations (internal)	23,306	22,879
Other recovery operations (external)	0	33
Total	**114,114**	**119,378**

Non-hazardous and hazardous waste generated at Boliden's industrial operations are sorted at the respective sites and collected by authorized waste management companies for further processing or final deposition following applicable legislation. Smaller amounts of everyday waste, such as waste generated from canteens, are sent for municipal treatment. There were no significant incidents associated with hazardous materials and waste management during the year.

Waste directed to disposal by treatment method (tonnes)	2024	2023
Non-hazardous waste, total	**214,882**	**179,375**
Incineration with energy recovery (external)	2,265	1,916
Storage before final disposal (external)	5,772	6,122
Landfill (internal)	205,814	170,017
Landfill (external)	54	199
Other disposal operations (external)	977	1,120
Hazardous waste, total	**966,725**	**886,766**
Incineration with energy recovery (external)	661	366
Incineration without energy recovery (external)	2,224	2,463
Storage before final disposal (internal)	1,782	1,397
Storage before final disposal (external)	1,726	1,267
Deep-well injection/underground deposit (internal)	159,647	177,156
Deep-well injection/underground deposit (external)	17,178	16,544
Landfill (internal)	713,675	681,957
Landfill (external)	69,786	5,525
Other disposal operations (external)	46	91
Total	**1,181,607**	**1,066,141**

↓ PDF print version

Recyclability
Metals can be endlessly recycled so recyclable content is 100% for all Boliden metal products.

The recyclability of sulphuric acid is dependent on its usage. In large-scale uses, such as in the pulp and paper and fertilizer industries, the acid becomes non-recyclable post-use since it often undergoes chemical reactions that change its composition. However, in other applications, there is potential for recycling as the acid is not degraded. This means that while not all sulphuric acid streams are recyclable, there is a possibility to refine contaminated acid into high-grade, depending on the impurities involved.

Besides non-metal minerals, our waste streams in both mines and smelters operations might contain very small amounts of rare-earth elements and other critical raw material. Some of these elements are measured for environmental regulations, economical optimization and/or process stability.

Non-recycled waste	2024	2023
Percentage of non-recycled process waste	91%	90%

↓ PDF print version

Own workforce

WHY IT MATTERS
Boliden is committed to providing a safe, healthy, diverse, and inclusive workplace. We focus on proactive measures to foster a culture of care, courage, and responsibility, enhancing employee engagement.

Our operations rely on skilled, committed employees who take personal responsibility. In return, we are responsible for providing accident-free, healthy, and inclusive work environments, leveraging new technologies and innovations for sustainable work conditions as well as safeguarding human rights for all employees. Our automation processes improve safety, productivity, and profitability, with a systematic approach to health, safety, and work environment management.

Diversity in experiences, perspectives, and ideas is crucial for strong business results and innovative teams. We aim to increase gender diversity in a male-dominated industry and strive to be the preferred employer by attracting, developing, and retaining qualified and motivated individuals.

A safe, healthy, competent, and motivated workforce is essential for our quality and efficiency. Our culture and strategy in talent acquisition, learning, leadership, and diversity support our strategic priorities.

POLICIES AND COMMITMENTS
Boliden identifies and monitors its impact on employees and contractors. The policies related to our own workforce apply to all employees and contractors working at Boliden or within our operations. Read more on policies, commitments and third-party standards on pages 62–63. Our policies and commitments are accessible via www.boliden.com.

List of policies related to own workforce:
- Code of Conduct
- Health and Safety policy
- Diversity policy
- Data Privacy policy
- Human Rights Commitment
- Whistleblower policy

Human Rights Commitment
Boliden has several human rights-related policies and commitments relevant to its own workforce. Our Code of Conduct explicitly highlights our dedication to ensure freedom of association, the right to collective bargaining, elimination of forced or compulsory labor, effective abolition of child labor, and elimination of discrimination in employment and occupation, among other critical issues. In our work with human rights, we are guided by internationally recognized instruments such as UN Guiding Principles on Business and Human Rights, the ILO Fundamental Principles and Rights at Work and the OECD Guidelines for Multinational Enterprises.

Discrimination
All our employees and business partners shall refrain from all forms of discrimination and harassment based on gender, ethnicity, age, disability, religion, sexual orientation or any other factor. Our Diversity Policy states that if a discrimination incident should occur it should be reported to their manager, their manager´s manager, local HR, Group Ethics and Compliance or via our whistleblower function.

Boliden and its employees shall:
- Refrain from all forms of discrimination and harassment based on gender, ethnicity, age, disability, religion, sexual orientation, or any other factor
- Always focus on the person's competence and abilities, and disregard gender, ethnicity, age, disability, religion, sexual orientation, or other attributes
- Strive to ensure that Boliden is perceived as an equal opportunity employer in every respect described above
- Support employees in their ambition to achieve a healthy work-life balance
- Forcefully act against and counter any incidents of discrimination or harassment
- Under no circumstances may forced, compulsory or child labor be employed or used in our operations, directly or indirectly through business partners

Identified impacts, risks and opportunities for own workforce

Impact materiality on environment and people		Financial materiality for Boliden	
Negative impact	**Positive impact**	**Risk**	**Opportunity**
• Shift work can increase psychosocial risks • Pollution (nitrogen oxides, sulphur oxides, metals) and dust can negatively impact health, causing serious health issues, infertility, and death • Exposure to heavy machinery, lifting, high temperatures and hazardous substances can lead to injuries and illness • Failing to uphold diversity and equality commitments can harm the brand, reduce talent attraction, lower employee engagement and increase capital costs	• Ensuring good working conditions (e.g., safe environment, adequate wages, work-life balance) contributes to employee health and wellbeing • By employing around 6,300 employees and summer workers, Boliden reduces local unemployment and increases tax payments • Advocating awareness on preventing harassment and discrimination helps prevent such incidents within the workforce • Prioritizing diversity and gender equality (e.g. advancing the position of women) influences industry actors to improve gender equality and diversity performance	• Non-compliance with health and safety and work-related rights policies can lead to sanctions, fines, a harmed brand, loss of business contracts or permits and reduced ability to attract and retain talent • High competition for skilled labor (e.g., in digitization, process development and automation) can result in a lack of talent, deteriorating working conditions, difficulty attracting and retaining talent, and interrupted operations • Failing to uphold diversity and equality commitments can harm the brand, reduce talent retention and attraction, and increase capital costs	• Improvement of working conditions can lead to increased employee satisfaction locally, increased ability to attract and retain talent, and enhance innovation and productivity • Better sustainability performance and work environment (e.g., hazard mitigation) lead to meaningful work, a better brand and increased employee satisfaction and productivity • By prioritizing automatization, digitalization and innovation in our processes we can provide safe workplaces • By prioritizing diversity and gender equality, Boliden can increase its ability to attract and retain talent

↓ PDF print version

Health and safety
Health and safety standards align with ISO standards, and incidents are reviewed to ensure learning. Employees engage in health and safety through network meetings, while diversity and inclusion are addressed in reviews and initiatives.

We have a responsibility to create structures, procedures and other conditions for a safe work environment. Equipment, instructions, risk assessments, incident reporting, safety inspections all help safeguard an individual's safety. We continuously invest in automation and new technology to improve safety and productivity. Boliden has a proactive approach to health and safety by acting when risks are identified, and improvements can be made. However, no matter how much effort is put into new and improved systems and techniques, we still require individuals to behave in a safe manner.

As Boliden competes for a limited supply of competent employees and often operates in rural areas, the ability to offer safe and healthy working environments that promote well-being is crucial for the business. Low absence and injury rates and employee well-being also promote productivity and profitability.

Occupational health and safety management system
All Boliden units have occupational health and safety management system in line with ISO 45001:2018. Current certificates are available at www.boliden.com.

Diversity
Boliden's commitment to diversity is clearly stated in its Code of Conduct and in its Diversity Policy. The Code of Conduct has been approved by Boliden's Board of Directors.

We want to take the lead as a role model in the industry for gender equality by advancing the position of women and providing better conditions for their professional development. In 2024, the proportion of female employees was 22.9% (22.0). The proportion of women among Boliden's top 100 managers, was 34% (33) and 2 (2) of Boliden's 10 mines and smelters were led by women at the end of 2024.

In June 2023, Boliden joined fellow members of ICMM (International Council of Mining and Metals) in making a collective commitment (position statement) to improving diversity, equality and inclusion in the industry and positively influencing the local communities that we are part of. To help us fulfill this commitment, Boliden continued to work together with the other members of the ICMM in 2024 to accelerate action, set goals, increase transparency and collaborate for greater effect.

Impacts on diversity and inclusion are identified and monitored through our employee engagement survey My Opinion, which is carried out annually.

PROCESSES FOR ENGAGING WITH OWN WORKFORCE AND WORKERS REPRESENTATIVES
Since 2023, Boliden has had a human rights working group, led and governed by the Group Ethics and Compliance department, that coordinates operational activities throughout the Group to ensure compliance with laws, regulations and international frameworks relating to human rights. The working group consists of representatives from Ethics and Compliance, HR, metal sales, raw material sourcing, and procurement. The working group primarily bases their work efforts on identified salient risks and on identified gaps against international frameworks such as UN Guiding Principles on Business and Human Rights. Boliden has also embedded human rights due diligence into the management systems by integrating it into various business processes, including ethics and compliance risk assessment, Group and local human rights impact assessments, as well as the annual Group risk process.

Collaborating with unions and employee representatives
Engagement occurs both directly and with the employees and through employees' representatives via collective agreements with Industrial associations and the co-determination act. Boliden has good relations with the different unions. Boliden supports active cooperation between employers and employees and their respective representatives in every area of shared interest. For many years, we have had an agreement with trade union organizations about union-related cooperation at all levels within the Group.

At a local level, employee representatives are part of several different councils relating to employee management, production planning, and health and safety. The frequency of dialogue ensures a constant flow of relevant information, enabling the unions to understand how Boliden is performing and to promote a two-way dialogue on strategic matters.

We have a European Works Council comprising employee representatives from all the countries in which Boliden operates, in line with the European Workers' Council Directive. Boliden's Group management met with the European Works Council representatives four times during 2024.

The employees have three representatives and three deputy members on Boliden's Board of Directors.

Annual employee survey – My Opinion
It is important that all Boliden employees have the chance to make their voices heard and provide feedback, input and promote improvement suggestions. Our employee survey is therefore very important for Boliden to be able to develop as an employer and as a company. The survey is also an important part of assessing engagement with all employees. The survey is conducted annually and in 2024, 89% (84%) of all employees answered the survey. In 2024, the survey was carried out for the fourth consecutive year, using a digital tool with manager portals, giving all Boliden managers access to the results, focus reports and an action plan tool to support the work with the results for their respective teams.

All employees were engaged to work with the survey results in workplace meetings during the year. A dashboard with the overall results of the survey is accessible for all employees. It is mandatory for all managers to produce action plans based on the results to identify and to work with improvements.

The overall results of the My Opinion survey were analyzed by the Group Management and action plans based on the results were presented to the Board of Directors. The results and overall actions related to the survey results were also communicated to the employees representatives via the Boliden Workers' Council.

My Opinion results 2024-2023 (Index 0-100)

Index	2024	2023
Safety	76	75
Leadership	78	77
Engagement	77	76
Inclusion and Diversity	84	83
Ethics and Compliance	81	78

PROCESSES TO REMEDIATE NEGATIVE IMPACTS AND CHANNELS FOR OWN WORKERS TO RAISE CONCERNS

Boliden's own workforce may file a concern to their direct manager, the manager's manager, their local HR function or the Group Ethics and Compliance function. A report may also be filed online, by phone or in a meeting via the whistleblower function is provided by an independent external third-party whistleblower. Information about these channels and our investigation routines is described in Boliden's Code of Conduct handbook, Complaints and Grievance Mechanism and Whistleblower Policy which can be found on Boliden's external website or on the intranet.

Our complaints and grievance handling mechanisms are described in an internal steering document, which outlines all complaints channels and the process for how a reported concern will be handled. The complaint procedure consists of four steps: receipt, evaluation, investigation, resolution and monitoring. In case the complainant is not satisfied with the outcome, he/she may file a new complaint via Boliden's whistleblower function. The whistleblower function, including the handling procedure, is described in our Whistleblower Policy on our external website. All incoming complaints, grievances as well as whistleblower reports, are regularly monitored by Boliden's Ethics and Compliance Council.

Whistleblower reports are also reported to and monitored by Group management and the Board of Directors regularly.

ACTIONS AND RESOURCES

Boliden has a comprehensive approach to managing risks related to our own workforce, by conducting risk analyses, risk assessments and considering these risks in our business strategy. Boliden conducts analyses to identify risks as an integral part of its management system. Operational risks are managed by our operational units in compliance with the guidelines and instructions established by the Boliden Group for each business area and business unit. The most significant opportunities and risks are presented to Group management and are compiled annually for Boliden's Board of Directors.

Boliden has a zero-harm approach and a culture of care, courage and responsibility philosophy regarding occupational health and safety. A strong safety culture is characterized by a values-driven leadership that trusts employees' ability to act in relation to risk, health, safety and well-being.

There are health and safety committees at all workplaces where over fifty employees work regularly. The health and safety committees identify and evaluate potential hazards, recommend corrective actions and follow-up action. The committees also hold regular meetings and carry out workplace inspections. Committee members are available to receive worker concerns and recommendations, discuss problems and provide input on existing and proposed health and safety programs. All employees, contractors and visitors not directly represented by a health and safety committee are encouraged to submit suggestions for improvements.

Handling large material flows underground and above ground means that employees and contractors can potentially be exposed to heavy machinery and lifting, high temperatures, and substances harmful to health. In the event of deviations from established routines, or the inadequate planning and allocation of resources, dangerous situations can arise and people may be at risk of injury.

Many employees and contractors work in shifts, which increases the psychosocial risks related to stress and an unhealthy workload. Boliden always complies with local legally required limits when assigning regular and overtime working hours. Boliden employees have access to occupational health services and regular health checks.

All Boliden units have occupational health and safety management system in line with ISO 45001:2018. Current certificates are available at www.boliden.com.

Hazard identification, risk assessment and incident investigation

Our operations include different work activities with potential risk for personal injury and illness. The focus is therefore on active risk reporting at daily pulse meetings and regular safety inspections to detect and mitigate serious hazards and risks before incidents occur.

We also promote initiatives designed to engage employees more informally by encouraging them to submit suggestions for health and safety improvements. In 2024, employees and contractors submitted 21,390 (22,083) risk reports.

Actions taken during the reporting year

At Boliden, engaged employees and a learning organization are highlighted as critical success factors in achieving our business goals. To this end, we focused on strengthening employee performance and enhancing company culture. Significant efforts were made to support a learning organization, actively work in change management, enhance talent supply and workforce planning, and increase employee engagement through value-based leadership.

The most significant competency and working culture change journeys were related to Odda's expansion, the reopening of Tara Mine, and the Modern Rönnskär project. These efforts in upskilling and employee engagement were not limited to these sites but extended to all locations, thereby widely contributing to the wellbeing and personal development of Boliden's employees.

Progress in these areas is reflected in the results of our annual Employee Engagement Survey, My Opinion, where Boliden achieved an exceptionally high response rate of 89% (compared to 84% in 2023 and 82% in 2022). We also made progress in all index figures.

METRICS AND TARGETS
Social Targets 2024 and beyond

Occupational health and safety	Zero harm by creating a Culture of Care resulting in better well-being and no absence from work
Proactive approach to safety	Proactivity Index higher than 5.0
Sick leave	Sick leave less than 4.0%
Diversity and inclusion	Inclusion and Diversity index (DII) from annual employee survey > 83
People management	Staff turnover less than 6.0%

To further monitor developments, several targets have been identified, listed below.

Boliden targets related to own workforce

Focus Area	KPI	Definition	Outcome 2024	Target 2024	Outcome 2023	Target 2023
Attract and Retain	eNPS	Employee Net Promoter Score	3	12	-6	12
	MFPP	Ratio of external male/female applicants per open position	65/27%	55/25%	67/23%	55/25%
Culture and Leadership	LSI	Leadership index	78	81	77	81
	OSI	Organizational and social work environment index	75	76	74	74
Diversity and Competences	MFpp	Proportion of Male/Female	77/23%	76/24%	77/23%	77/23%
Improvements and Change	EI	Engagement index (clarity and energy)	77	85	76	84
	IM	Number of movements among newly hired (<2 years)	9%	8%	7%	7%

The developments of these HR related targets are monitored on a quarterly basis at the HR council meetings. In 2024, a People leaderboard was launched making relevant HR data on a Business unit level accessible for all managers and employees.

CHARACTERISTICS OF OWN WORKFORCE
Reporting principles
The data for this section was compiled through the Boliden Group common HR IT system Workday. The data is quality assured by the local HR organization each month, and annually by Group HR. The employee data for indicators related to the number of employees and characteristics of our own workforce refers to the actual number of employees measured on December 31 for the years 2023–2024, by headcount, not by using full-time equivalent (FTE) measures.

Temporary employees include all fixed-term employees but exclude contractor employees. Part-time employees include all people being employed in positions that are not full-time (less than 100%).

The employee gender is classified based on the information registered in Boliden's group-wide HR IT system Workday, where there is an opportunity for all employees to change gender setting (male, female, other). Data regarding total, permanent and temporary employees are based on data from Workday. We do not employ non-guaranteed hours employees, and there are no significant variations in the numbers reported due to seasonal variations in production in Boliden's operations.

Total number of employees by gender and country
The tables present the total number of employees, including temporary employees, by country and gender. Employees from Germany, Denmark and United Kingdom are summarized in the category Other, regarding country.

	2024	2023
Country	**Total number of employees**	**Total number of employees**
Sweden	3,697	3,677
Norway	538	533
Finland	1,757	1,719
Ireland	370	595
Other	16	17
Total	**6,378**	**6,541**

	2024	2023
Gender	**Total number of employees**	**Total number of employees**
Female	1,462	1,438
Male	4,916	5,103
Other	0	0
Not reported	0	0
Total	**6,378**	**6,541**

Total number of permanent, temporary and non-guaranteed hours employees and breakdown by gender and country

No employees within Boliden are hired with a non-guaranteed working hours contract.

	Reporting period: 2024				
	Female	Male	Other	Not disclosed	Total
Total number of employees (head count)	1,462	4,916	0	0	**6,378**
Number of permanent employees (head count)	1,357	4,636	0	0	**5,993**
Number of temporary employees (head count)	105	280	0	0	**385**
Number of non-guaranteed hours employees (head count)	0	0	0	0	**0**
Number of full-time employees (head count)	1,417	4,856	0	0	**6,273**
Number of part-time employees (head count)	45	60	0	0	**105**

	Reporting period: 2023				
	Female	Male	Other	Not disclosed	Total
Total number of employees (head count)	1,438	5,103	0	0	**6,541**
Number of permanent employees (head count)	1,322	4,836	0	0	**6,158**
Number of temporary employees (head count)	116	267	0	0	**383**
Number of non-guaranteed hours employees (head count)	0	0	0	0	**0**
Number of full-time employees (head count)	1,292	4,790	0	0	**6,082**
Number of part-time employees (head count)	30	46	0	0	**76**

	Reporting period: 2024					
	Sweden	Norway	Finland	Ireland	Other	Total
Total number of employees (head count)	3,697	538	1,757	370	16	**6,378**
Number of permanent employees (head count)	3,558	419	1,642	358	16	**5,993**
Number of temporary employees (head count)	139	119	115	12	0	**385**
Number of non-guaranteed hours employees (head count)	0	0	0	0	0	**0**
Number of full-time employees (head count)	3,665	503	1727	364	14	**6273**
Number of part-time employees (head count)	32	35	30	6	2	**105**

	Reporting period: 2023					
	Sweden	Norway	Finland	Ireland	Other	Total
Total number of employees (head count)	3,677	533	1,719	595	17	**6,541**
Number of permanent employees (head count)	3,544	400	1,637	560	17	**6,158**
Number of temporary employees (head count)	133	133	82	35	0	**383**
Number of non-guaranteed hours employees (head count)	0	0	0	0	0	**0**
Number of full-time employees (head count)	3,509	394	1,611	553	15	**6,082**
Number of part-time employees (head count)	35	6	26	7	2	**76**

Total number of employees who have left the undertaking during the reporting period and rate of turnover during reporting period

The termination rate regarding employees leaving Boliden includes all permanent employees leaving Boliden during the year regardless of reason but does not include temporary employees. The turnover rate for 2024 is calculated as a ratio of the average number of employees during the year divided by the number of people leaving Boliden.

	2024	2023
Total number of permanent employees leaving	537	428
Total turnover rate, %	8.9%	7.0%

New employee hires

We aim to have a diverse workforce in all our operations. In 2024, 30% (30%) of all our new permanent employee hires were women. The table below shows the number of newly hired permanent employees by age group, gender and region during the full years of 2023–2024.

Total number and rate of new permanent employee hires by age group, gender and region

	2024		2023	
	Number	%	Number	%
<30 years	138	43	135	42
30–50 years	144	44	164	50
>50 years	41	13	27	8
Men	225	70	227	70
Women	98	30	99	30
Sweden	232	72	211	65
Norway	26	8	33	10
Finland	60	19	82	25
Ireland	5	1	0	0
Other countries	0	0	0	0
Group total	**323**		**326**	

Distribution of total number of employees by employee category and by age group: under 30 years old, 30–50 years old, over 50 years old

The table below shows the distribution in percentages of the total number of employees, by employee categories: blue-collar and white-collar and by gender and age groups.

Employees	2024	2023
Blue-collar, %	62	63
White-collar, %	38	37
Female, %	23	22
Male, %	77	78
<30 years, %	19	16
30–50 years, %	51	54
>50 years, %	30	30
Total, number	**6,378**	**6,541**

COLLECTIVE BARGAINING COVERAGE AND SOCIAL DIALOGUE

Reporting principles

All employees, permanent and temporary, at all Boliden sites in Sweden, Norway, Finland and Ireland are covered by collective bargaining agreements. Data in the table below is collected via the Group HR IT system, Workday.

Reporting on the collective bargaining coverage in Non-European Economic Areas (Non-EEA countries) is not applicable since Boliden only has employees in England outside EEA, and which are less than 50 employees.

Share of Boliden's total number of employees covered by collective bargaining agreement

	Reporting period: 2024		
Country	Total number of employees covered by collective bargaining agreements	Total number of employees, permanent and temporary	Percentage of employees covered by collective bargaining agreements
Sweden	3,697	3,697	100%
Norway	538	538	100%
Finland	1,757	1,757	100%
Ireland	370	370	100%
Total	**6,362**	**6,362**	**100%**

Share of Boliden's total number of employees covered by collective bargaining and social dialogue

	Reporting period: 2024		
	Collective bargaining coverage		Social dialogue
Coverage Rate	Employees EEA Countries	Employees Non-EEA Countries	Workplace representation (EEA only)
0–19%			
20–39%			
40–59%			
60–79%			
80–100%	Sweden, Finland, Norway, Ireland	Not applicable	Sweden, Finland, Norway, Ireland

DIVERSITY

Reporting principles

Data on diversity metrics is gathered through the Boliden Group common HR IT system Workday. Diversity data for the Board of Directors and Boliden Group Executive Management are counted annually, at the end of each of the reporting periods. Top management level refers to the Boliden's top 100 group which includes leaders down to two levels below the Boliden Group management team.

The gender distribution at top management levels

	2024				2023			
Management levels	Total number, Male	Total number, Female	Male (%)	Female (%)	Total number, Male	Total Number, Female	Male (%)	Female (%)
Board of Directors	8	3	70	27	7	3	70	30
Boliden Group management	4	1	80	20	4	1	80	20
Top management level	78	40	66	34	72	35	67	33
Total	**90**	**44**	**67**	**33**	**83**	**39**	**68**	**32**

Distribution of total number of employees by age group: under 30 years, 30–50 years, over 50 years

	2024		2023	
Age distribution	Number of employees	%	Number of employees	%
Under 30 years old	1,191	18.7	1,047	16.0
30–50 years old	3,254	51.0	3,532	53.9
Over 50 years old	1,932	30.3	1,962	30.1
Total	**6,377**	**100**	**6,541**	**100**

ADEQUATE WAGES

All Boliden's employees are paid an adequate wage in line with applicable collective agreements and benchmarks in the countries where we operate and internal reviews are performed to ensure adequate wages are paid.

↓ PDF print version

TRAINING AND SKILLS DEVELOPMENT

Performance and career-development reviews

Our aim is for 100% of our employees to receive an annual performance- and career-development review. During 2024, a competence and personnel-planning tool was used for performance reviews for all white-collar employees across the Group to improve the development of performance management, competence planning and succession planning.

Percentage of permanent employees that received regular performance and career development reviews, by gender and employee category

Category	2024	2023
Male, %	92	91
Female, %	93	92
White-collar, %	93	91
Blue-collar, %	NA	NA
Total, %	**93**	**91**

Training and skill development

For career and skill development, our approach is to facilitate skill development during regular working hours. We have not set targets for the average number of training hours for different job categories. Individual needs determine the methods and extent of training activities.

Average number of hours of training per employee by gender and by employee category

Category	2024	2023
Male, %	10.2	10.1
Female, %	11.0	18.4
White-collar, %	10.6	16.5
Blue-collar, %	9.3	7.7
Total, %	**10.4**	**11.9**

Global training programs provided by Boliden Group HR

Keeping all employees updated about technological, functional and leadership skills is essential to our performance. Every employee should be able to influence their own development and Boliden should provide resources and opportunities to make sure that employees have the right skills to perform their work safely and efficiently.

There are several internal group programs for career and skills development:
- High Potential Development Program
- Female Professionals
- Boliden Trainee Program
- Executive Leadership Program

Local training and competence development

At all Boliden business units, the focus on competence is high due to ambitious automation, digitalization, and development programs. At business units, where the company is building new equipment and reorganizing operations, the reskilling programs are targeted to all employees. The content of these programs extends from change management to automatization and multiskilling. In addition, there are leadership development programs for middle and first line managers such as My Leadership in Change program in Business Area Smelters, Transformative Leadership program in Business Area Mines and numerous change management and other local management training programs.

HEALTH AND SAFETY

Reporting principles

Reports are compiled every month at Business Unit, Business Area and Group level using the Group HR IT system Workday, IA, which is a web-based system for reporting deviations in work environment as well as data from the local payroll systems. The reports include detailed information on employee safety engagement indicators and the number of accidents and serious risk situations. They also contain information related to short-term and long-term sick leave. All employees at Boliden are covered by the health and safety management system.

Health and safety performance

The number of accidents resulting in absence from work, including contractors, increased during last year to 89 (77). The number of workdays of absence due to accidents among Boliden employees was 528 (709). The most common types of accidents included slips, trips and falls, and finger/hand injuries while working with hand tools. The number of serious accidents increased during 2024.

Work-related fatalities are very rare within Boliden. No work-related fatalities have occurred on sites or areas controlled by Boliden since 2008.

LTI Frequency Boliden employees[1)]

Frequency	2024	2023
Sweden	2.9	2.5
Norway	10.5	5.7
Finland	4.9	4.1
Ireland	0.0	0.0
Group	**3.9**	**3.0**

LTI Frequency Boliden contractors[1)]

Frequency	2024	2023
Sweden	6.4	6.9
Norway	5.8	3.6
Finland	9.7	8.2
Ireland	0.0	4.5
Group	**6.8**	**6.4**

↓ PDF print version

Lost day rate[1] Boliden employees
Lost days due to injury per 1,000,000 working hours

Frequency	2024	2023
Sweden	66	81
Norway	45	212
Finland	49	25
Ireland	0	0
Group	**57**	**69**

Sick leave rate[1] Boliden employees (GRI)

Frequency	2024	2023
Sweden	4.8	4.9
Norway	7.6	9.1
Finland	5.6	5.4
Ireland	3.5	7.4
Group	**5.2**	**5.5**

1) The Lost Time Injury Frequency (LTIF) is calculated as per one million hours worked and includes all injuries that result in one or more days absence from work after the day of the injury. To calculate the injury rate (IR) and lost day rate according to GRI, the frequency/rate stated is divided by five. The number of absent days for contractors is not reported. The sick leave rate is the total number of hours of absence due to injury or disease divided by the total number of scheduled working hours.

Work-related fatalities, employees and contractors

Percentage	2024	2023
Employees	0	0
Contractors	0	0
Total	**0**	**0**

COMPENSATION METRICS

Boliden offers comprehensive and competitive market-rate salaries, benefits and bonuses. Boliden's remuneration to senior executives, general managers, directors and other managers consists of a fixed salary, variable remuneration, pension benefits and other benefits. The variable remuneration in 2024 was based on the Groups' return on equity, accident trend within the Group and on the personal spheres of responsibility, which in 2024 was related to climate for all employees.

The profit-sharing program for all employees entails that a profit share is payable when the return on capital employed reaches 8%. The maximum share of SEK 40,000 per full-time employee is payable when the return on capital employed reaches 18%.

While the benefits offered by Boliden are similar at all Boliden operations, they are not identical due to legislative differences between different countries. Examples of these differences include parental leave, and opportunities for employees with young children to work shorter shifts.

Boliden works to ensure that every employee receives competitive compensation aligned with local industry standards, embracing a holistic, performance-oriented, transparent, fair, and objective approach. Salaries for all employees in the organization are reviewed regularly according to local collective bargaining agreements.

INCIDENTS, COMPLAINTS, AND SEVERE HUMAN RIGHTS IMPACT METRICS

Reporting principles

Since January 1, 2024, a new process of collecting data related to incidents, complaints, and severe human rights impacts within our own workforce has been implemented. Each quarter the local HR managers gather and report data into a common complaints and breaches report. The data in the report is quality assured and signed off on the Business Area level and Group level by the responsible human resources managers. The validated data is aggregated on a Group level and then reviewed by the Group Ethics and Compliance function.

The report also contains the data on the total amount of fines, penalties and compensation for damages as a result of the issues reported.

Incidents, complaints and severe human rights impacts

	Q1	Q2	Q3	Q4	Full year 2024
Number of incidents of discrimination and harassment	3	1	5	22	**31**
Number of complaints filed through channels for Boliden's employees to raise concerns	9	0	0	30	**39**
The total amount of fines, penalties and compensation for damages for discrimination incidents and complaints	EUR 0	EUR 0	EUR 0	EUR 0	**EUR 0**
The number of severe human rights incidents	1	0	0	0	**1**
Number of cases of non-respect of the UNGPs, ILO declaration of fundamental principles and rights at work or OECD Guidelines for Multinational Enterprises	0	0	0	0	0
Fines, penalties and compensation for severe human rights incidents	EUR 26,557	EUR 0	EUR 0	EUR 0	**EUR 26,557**

During the reporting period, a severe human rights incident was reported within our own workforce. The incident involved a workplace accident attributed to neglect on Boliden's part, resulting in irreversible injuries to an employee. Boliden applies a wide definition of severe human right incidents that can include workplace accidents.

↓ PDF print version

OTHER DISCLOSURES

Proportion of senior management employed in the local community

Boliden reports this indicator for each business unit, which corresponds to the main locations where we operate. Senior managers are defined as members of the local management teams at Boliden's business units. Managers are considered to be employed in the local community if they are permanent residents in the geographical vicinity of their place of work and not commuting from other regions.

Proportions of senior management hired from local communities

	2024		2023	
Business unit	**Number of senior managers on site**	**Senior managers employed in the local community %**	**Number of senior managers on site**	**Senior managers employed in the local community %**
Aitik	8	50	9	44
Boliden Area	11	100	10	100
Garpenberg	7	71	6	100
Tara	6	83	6	83
Kevitsa	9	78	10	80
Rönnskär	7	100	7	100
Bergsöe	6	100	6	100
Odda	8	100	7	100
Kokkola	7	86	6	83
Harjavalta	7	100	8	100
Total	**76**	**87**	**75**	**88**

↓ PDF print version

Workers in the value chain

WHY IT MATTERS
With approximately 6,000 suppliers and more than 200 customers worldwide, Boliden recognizes the significant direct or indirect impact we may have on workers in the value chain and as such, we aim to actively contribute towards a responsible and just working environment within our entire value chain. Boliden respects and promotes a safe and just working environment, which includes occupational health and safety, secure employment, working hours, social dialogue, and work-life balance. We take action to promote positive opportunities and to mitigate risk within the value chain, as described within this chapter.

Boliden's global value chain consists of the procurement of products and services as well as the sourcing and sales of metals and minerals. All business partners commit to Boliden's Business Partner Code of Conduct, covering, inter alia, important prescriptions on labor rights in line with ILO Conventions. However, within Boliden's supply chain, we recognize the elevated labor and human rights risks inherent in certain industries and/or geographies. Therefore, a risk-based due diligence process is fully integrated into Boliden's management system in order to identify, assess and mitigate ESG risks. Enhanced evaluation is undertaken when red flags are identified, including any red flags relating to rights of workers in the value chain.

Description of workers in Boliden's value chain
All value chain workers are in the scope of Boliden's disclosure. However, circumstances of value chain workers can vary depending on industry, nature of work undertaken, geography or other inherent characteristics of workers. As such, understanding the actual circumstances of value chain workers is key in order to achieve impactful and positive outcomes in engagement. Impacts, whether positive or negative, can be both caused or contributed to by Boliden or otherwise linked to our business undertakings further in the value chain. Our value chain workers can be broadly specified as follows:

- Workers in Boliden's value chain, active at our site include; contractors, sub-contractors and a broad range of service providers, including maintenance, construction, engineering, mining and other services at our mines, smelters and exploration sites
- Workers working for entities in our upstream value chain, primarily consisting of workers involved in the extraction of raw materials or those handling secondary raw materials, production of materials procured for our operations, such as tools and consumables, bulk commodities and mobile equipment as well as workers within the logistics and transportation industry, including road, rail and sea transport
- Workers working for entities in our downstream value chain, primarily consisting of logistics providers within road, rail and sea routes and workforce of our downstream customers

Certain groups of workers may face heightened vulnerabilities. In order to identify vulnerable workers, an assessment is undertaken when engaging with prospective high or critical risk business partners within the metals and minerals value chain, combined with country analysis, established industry research and knowledge. While noting that the identification of vulnerable workers requires effective due diligence, and will depend on the particular circumstances of the worker in the value chain, we however also take note of industry knowledge and research, whereby the particular vulnerability of women, young persons, migrant workers and persons with disabilities are recognized and taken into account as part of the Business Partner Due Diligence process.

Heightened vulnerability of workers is also assessed on the basis of geography. Boliden has an established high-risk country methodology. It includes a defined human rights risk pillar, whereby countries may be categorized as high-risk due to risk of child labor, forced labor, prevalence of artisanal mining in-country or other broad-scale restriction of rights. Based on this risk methodology, any business activity in high-risk countries will require enhanced assessment and escalated decision-making before engagement.

Finally, heightened vulnerability of workers may also be specific to particular commodities. On the basis of industry knowledge, Boliden recognizes the heightened risk, also as it relates to rights of workers, within high-value supply chains, such as gold-bearing materials. Responsible sourcing of gold and silver is subject to yearly third-party audits in accordance with London Bullion Market Authority (LBMA) responsible sourcing standards.

IDENTIFICATION OF IMPACTS, RISKS AND OPPORTUNITIES
Due diligence is the process through which Boliden is able to identify and assess risks and decide on appropriate measures to adequately prevent or mitigate risks in the value chain as well as where applicable, support remediation of impacts. Our value chain due diligence program is aligned with OECD Guidelines for Multinational Enterprises and OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. See pages 115–117 for Boliden's compliance with the OECD five-step framework for its metals and minerals value chain.

Identified impacts, risks and opportunities for workers in the value chain

Impact materiality on environment and people		Financial materiality for Boliden	
Negative impact	**Positive impact**	**Risk**	**Opportunity**
Labor rights and working conditions in the value chain leading to • short term: rights violations and unsafe working conditions • medium term: rights violations and unsafe working conditions • long term: rights violations and unsafe working conditions	By implementing concrete actions to promote labor rights, in line with applicable laws and standards, as well as adequate working conditions, will contribute to a • short term: safe and compliant working environment • medium term: safe and compliant working environment, good international practices promoted and pursued • long term: safe and compliant working environment, good international practices pursued and integrated in action	• Negative impacts affecting workers in Boliden's value chain can limit the Business Partners that Boliden can work with, including from whom Boliden can source materials from. Further to this, increased scrutiny would be expected from authorities and in the long term more difficult to develop a competitive operation.	• Improved labor rights and working conditions in the value chain can improve local business conditions through both access to competence, supplier base and long-term partnerships.

Though our value chain is global, our mindset is local. Our approach to impact-driven due diligence leans on principles of local solutions, appropriate to the context of operations. Within our risk-based due diligence programs, care is placed to work with business partners, as appropriate, to take necessary actions to identify, assess, prevent and mitigate risks or address material impacts.

Appropriate action can also vary according to whether we are causing or contributing to a material impact or whether the material impact is directly linked to our operations, products or services through a business relationship.

Boliden incorporates its Business Partner Code of Conduct into all contracts with contractors and suppliers, adding site-specific health and safety clauses for contractors. All subcontractors need approval from the procurement department, and individual contractors must complete training on Boliden's local health and safety procedures. Regular meetings are held with contractor companies to identify and address health, safety, labor rights and environmental matters.

For workers in entities or operations outside our direct control, we seek to leverage our business relationships to identify, assess and manage risks and material impacts. Dedicated staff work to continuously engage with business partners, in an effort to identify risks to value chain workers, for which Boliden exercises no causal relationship yet is linked to through its business activities. This process includes both desktop analysis as well as a risk-based engagement with business partners online as well as on-site. In such cases, to the degree possible, we exercise leverage, including for example requiring corrective actions prior to contract signing, mitigation actions to address risks as a contractual obligation and provide active support and/or advice to our business partners within our value chain to mitigate risks and advance positive impact in line with established Risk Mitigation Plans.

Process for engagement with workers in the value chain
The perspectives of value chain workers inform Boliden's business partner risk assessment and is integrated into decision-making as well as risk mitigation activities aimed at managing the actual and potential impacts on value chain workers. Direct engagement is integrated into the metal and mineral supply chain due diligence process and takes place during on-site assessments to high or critical risk business partners.

During the reporting year, Boliden formalized the engagement framework as one of the site-visit pillars and has committed toward engagement with workers in the value chain during site visits for all prospective high or critical risk metals or minerals suppliers or customers.

Engagement takes place, in principle, with legitimate representatives who are usually local union representatives on site. If no local union representation is present on site or specific circumstances warrant engagement with other legitimate representatives, then a case-by-case assessment is made as to workers, at site, legitimately representing the voice of workers. Further to this, and on the basis of prior risk assessment and context, Boliden will engage directly with workers in the value chain who may experience heightened vulnerabilities including, for example, female workers. Engagement is carried out in the form of a semi-structured in-person interview and occurs during the business partner due diligence assessment before a business partner is onboarded. Follow-up engagement may occur on a need basis as well as during a follow-up site visit during periodic reassessment. Effectiveness of the engagement is assessed through successful mitigation of risks identified, as part of the dialogues. Risk mitigation activities are defined by time-bound and outcome oriented targets for business partners.

An important component of Boliden's due diligence findings and decision-making comes from the direct input from workers in the value chain. Their input is integrated into the business partner due diligence reporting and depending on findings, will be further integrated into an ongoing risk mitigation plan with a business partner.

Principle of Do No Harm forms the baseline for engagement, including respect for voluntary engagement and confidentiality.

Processes to remediate negative impacts and channels for value chain workers to raise concerns
Boliden is committed to an OECD-aligned due diligence framework within its products' value chain, including the provision of or support towards effective remediation for adverse impacts as appropriate. Our approach to remediation is aligned with the UN Guiding Principles on Business and Human Rights and takes note of inter alia the effectiveness criteria therein.

See Business conduct chapter on pages 120-124 for an overview of Boliden's grievance mechanisms, which are accessible to our business partners and all stakeholders. Workers in our value chain can access Boliden's whistleblower channel online and anonymously. During the reporting year, 8 grievances were lodged within the whistleblowing channel by workers in the value chain.

While workers in our value chain may contact Boliden through the whistleblowing channel directly, workers may primarily seek out reporting channels at their place of employment, particularly so when Boliden's business activity does not extend to an on-the-ground presence where workers in the value chain are located. Boliden engages with all metals and minerals value chain business partners to assess the availability of grievance mechanisms and validates their existence. For other business partners, outside the metals and minerals value chain, such assessment is done within a risk-based approach.

Where risks are identified, we will engage with business partners to assess the effectiveness of access and trust in grievance mechanisms and the scope of the remedies available. This includes physically verifying grievance channels, obtaining evidence of how grievances are handled, as well as engaging with legitimate representatives of workers in the value chain directly to gain insight into awareness of and trust in reporting channels available to workers. Where appropriate, a Risk Mitigation Plan is established, with regular follow-up on grievances received and remedy provided. Throughout the reporting year, Boliden had 5 Risk Mitigation Plans containing actions to monitor or improve grievance mechanisms.

Additional channels to raise concerns, provide feedback and occurrence management are established and supported. This includes access to value chain workers at Boliden's sites to an internal occurrence and deviation management system, dialogues with union representatives at sites as well as recognizing other mechanisms, such as OECD National Contact Points (NCPs). Dialogue processes with legitimate representatives of value chain workers further support the assessment on the effectiveness of available channels.

POLICIES AND COMMITMENTS
Human Rights Commitment
Our human rights commitment applies to both our own operations and the value chain. During the reporting year, the commitment has been updated with a renewed commitment towards remedy, a key pillar of responsible business conduct.

Business Partner Code of Conduct
Boliden has expectations on all its business partners regarding responsible business conduct and these are described in the Business Partner Code of Conduct and aligned with internationally recognized instruments relevant to value chain workers, including the UN Guiding Principles on Business and Human Rights (Guiding Principles) (Further information in Business conduct chapter on pages 120-124). If, in the course of due diligence, cases of non-respect of the Guiding Principles or other fundamental frameworks referenced to within the Business Partner Code of Conduct are identified, Boliden will establish a Risk Mitigation Plan with time-bound corrective actions to mitigate and/or remediate the situation.

Our Code of Conduct and Business Partner Code of Conduct, along with other policies and commitments, set expectations on us and our business partners to prevent, mitigate, and remediate impacts and risks related to workers in the value chain. Read more on policies, commitments and third-party standards on pages 62–63. Our policies and commitments are accessible via www.boliden.com.

ACTIONS AND RESOURCES
Actions taken during the reporting year
Actions to mitigate risks in the value chain
Workers in Boliden's value chain can be materially impacted through Boliden's strategy and business model. When sourcing raw, intermediate or secondary materials to our smelters or procuring the necessary products and services for all our operations, the choice of business partner affects our profitability as well as our sustainability work. Where necessary and where material risks are identified, adaptations are made to address such risks in the value chain through adjusted sourcing and sales practices.

Due to Boliden's global value chain, number of business partners and broad scope of products and services sourced, impacts on value chain workers can originate in Boliden's strategy or business model in different ways and care is taken to proactively mitigate risks to the extent possible. We regularly undertake proactive country of origin analysis, traceability of material origin, as well as active business partner engagement. Purchasing or sales practices with unknown material origin or destination are not undertaken. Scheduled maintenance work is carried out to minimize the need for unscheduled and/or high-speed deliveries of materials and services in such a way that puts pressure on labor rights.

Boliden places emphasis on effective due diligence within the full value chain and proactive engagement prior to contract signing as well as continued dialogue throughout a business relationship to ensure labor rights risks are identified and addressed, in line with Boliden's Business Partner Code of Conduct. Due diligence is both ongoing by nature throughout the entire business relationship as well as fully re-done periodically, based on business partner type and risk level.

No widespread or systematic material negative impacts to value chain workers have been identified during the reporting year though widespread risks are recognized in certain geographies. During the reporting year, Boliden set up one corrective action plan with a new concentrate supplier due to heightened risks to labor rights. Where labor rights risks are identified, adequate mitigation strategies are implemented. If not possible, a business relationship would not be entered into or if already ongoing, a business relationship would be responsibly terminated. In other words, Boliden uses its leverage to the extent possible towards improved practice and a positive impact. We therefore recognize the importance of long-term partnership and cooperation to leverage improved labor practices within the value chain.

During the reporting year, Boliden directly engaged with 19 business partners in the metals and minerals value chain, both online and in-person. Examples of positive impacts resulting from activities to mitigate risks include:
- Third-party review undertaken by a business partner of its grievance mechanisms
- Third-party engaged in capacity building on responsible business practices at a mine site in a high-risk country
- A responsible sourcing questionnaire created by a business partner, covering inter alia questions on labor rights and human rights
- Outcomes of Boliden's direct engagements with legitimate representatives of value chain workers shared with business partners while maintaining workers' confidentiality
- Engagement with legitimate representatives of workers led to the integration of similar dialogues within business partner's ways of working, following Boliden's site visit

Positive impacts are geographically diverse across Boliden's value chain.

Impacts on value chain workers, may also bring material risks to Boliden. Labor and human rights risks are inherent in certain industries and/or geographies and may become evident in the form of, for example, labor strikes with a potential impact on Boliden's supply chain. During the reporting year, direct dialogue with three potential business partners of whom labor strikes had impacted their operations in the past three years, with the intention of obtaining a deeper understanding into the risks. This would guide the development of a risk mitigation plan if a business relationship is pursued. Further to this a national strike occurred in one of Boliden's country of operations, though with limited impact on our operations. Cooperation between Boliden's sites, including enabling the movement of materials between our smelters further strengthens the stability and effectiveness of our operations.

Severe human rights issues and incidents
Boliden takes note of human rights risks in its value chain and takes measures to address any adverse impacts occurred. During the reporting year, Boliden's due diligence process identified one serious human rights incident at an external mine within Boliden's value chain. The incident was not caused by Boliden. It was identified as part of the implementation of an active risk mitigation plan and corrective action has been taken by the business partner to address the impact.

Actions to mitigate risks at own sites
Boliden relies on certain specialized services, specific to its own operations, for which available business partners may be limited. Specialized services could include maintenance work of certain equipment for example. Regular and ongoing planning is undertaken to ensure that specialized services can be arranged in a manner that does not place undue pressure on business partners, with an objective towards realizing Boliden's commitment towards respect and promotion of labor rights at our own sites and in the value chain. No material impacts on Boliden, based on dependency on value chain workers for specialized services were however identified in the reporting year.

Beyond this, Boliden tracks and reports incidents using the Lost Time Injury (LTI) metric and employs a proactivity index to minimize site risks. Alcohol and drug testing are crucial to ensure workers are not under the influence during working hours. Additionally, Boliden's procurement department evaluates suppliers for goods, materials and services for ESG-related risks on an ongoing basis using internationally recognized risk indices, within a risk-based approach, and with the objective of advancing the fulfillment of Boliden's Business Partner Code of Conduct.

Performed engagement with workers in the value chain
During the year, Boliden held four consultations with workers in the value chain. One of these was an in-person consultation with female workers in a country with elevated gender risks. Two engagements have resulted in specific corrective action requirements by a prospective business partner. One example includes a recommendation for improved internal grievance mechanisms to build trusted and safe reporting channels for workers at the business partner's facilities. This recommendation arose from direct workers' feedback.

As a decentralized organization, modalities of engagement with legitimate representatives of workers in our value chain is site-specifically tailored on basis of operational setup. Recurring meetings with representatives of value chain workers are held at our sites, in the form of supplier forums. Engagement is prioritized on the basis of risk. All workers at Boliden's sites undergo an initial mandatory safety induction as well as additional training as appropriate. Boliden's local HR engages with unions acting as representatives and advocates for the well-being of workers in the value chain at our sites.

↓ PDF print version

Actions to mitigate risks and impacts of external factors
Boliden's climate work and commitments, further elaborated on in the Climate change chapter on pages 76–85, entail a commitment to a just transition, whereby we engage with business partners to build awareness and capacity in our value chain. During the year, Boliden has continued to evolve its ongoing due diligence efforts towards inclusion of risks and opportunities as they relate to climate, including the identification, assessment and mitigation of impacts on workers in our value chain, who may be at a particular risk with regard to climate events and a just transition.

Impacts of external factors, such as serious health crisis or other large-scale events with impact on workers in the value chain, are monitored and mitigated to the extent possible, with processes followed. This includes country analysis, third-party and industry engagement as well as improving internal monitoring mechanisms throughout a business relationship to promptly identify risks requiring further actions. No material impacts of a serious nature were identified during the year, though continuous engagement with business partners identified as at-risk for such events, including for example the Mpox outbreak or significant weather events.

Future Actions
Capacity Building
During the year, we initiated the development of training material to secondary raw material suppliers (recycled materials) with an objective of building capacity around ESG and responsible business conduct. The training package will be formally rolled out in 2025.

Due Diligence
Impact-driven due diligence is a process which Boliden continuously reviews and improves on, in line with international best practices. Boliden will continue to evolve its ways of working to ensure our processes are effective and measurable, to mitigate risks and drive positive impact where possible.

Tracking and Monitoring
In the next reporting year, Boliden's metals and minerals value chain will launch new and improved Key Performance Indicators to track and measure performance in the value chain as well as a strengthened monitoring framework in order to enhance Boliden's ability to target the most salient risks in the value chain.

Targets
Lost Time Injury (LTI) metric
Boliden therefore tracks and reports incidents using the Lost Time Injury (LTI) metric, including for value chain workers at our sites. The long-term goal is 0 LTIs with a sub-goal to reduce LTI accidents by 30% from the previous year's accident frequency (LTIF) and a proactivity index of 5. This means that when the organization has proactive risk reporting with five times more risk reports compared to the number of incidents, we have observed a trend of reducing incidents.

Risk Mitigation Plan
With regards to business partners with whom an active Risk Mitigation Plan is in place, time-bound and outcome-oriented targets for improved action are specific to the circumstances of each evaluation. During the year, all Risk Mitigation Plans have progressed in line with defined plans of action. Targets per risk mitigation plan are specific to its circumstances though all have an objective of preventing, mitigating and/or remedying adverse impacts to people, communities or the environment within a business partner's area of responsibility. Targets are time-bound and risk-based whereby most salient risks require action within six months. Each plan has a monitoring framework, typically consisting of third-party engagement, regular follow up dialogues and/submission of verifiable evidence of performance in line with required mitigation actions.

Direct Engagement
During the year, Boliden incorporated direct engagement with representatives of value chain workers within its site-visit protocol and set an ambition to engage with all legitimate representatives for workers of business partners for whom on-site assessments are organized as part of the metals and minerals value chain.

Access to Remedy
Boliden is continuously adapting and improving its channels for complaints and feedback as well as exploring external mechanisms through which additional insights into working conditions within our value chain can be achieved. Due to the scope and complexity of a global value chain, effective access to remedy is complemented by information gathered through industry associations as well as possible strategic advocacy therein, peer exchanges, reputable country analysis and other publicly available information to gain an understanding on risks of adverse impacts affecting workers within the value chain. In particular, understanding available judicial and non-judicial channels for remedy in high-risk geographies remains an area of focus as part of Boliden's value chain due diligence efforts in the future.

↓ PDF print version

OECD due diligence report

The scope entails the Mineral Supply Chain of Boliden smelters, Rönnskär, Kokkola, Harjavalta and Odda, in accordance with the Joint Due Diligence Standards for Copper, Lead, Nickel and Zinc.

IMPACT-DRIVEN DUE DILIGENCE
Boliden is committed to maintain an impact driven responsible sourcing program. Responsible sourcing is our commitment to consider the impact of our business activities and supply chains on people, the planet and society as part of our core business strategy. We aim for long-term cooperation within the value chain. To achieve this, we work closely with suppliers to build due diligence capacity along the full value chain. Further to this, Boliden engages in various industry associations, networks and with third-party experts as well as an important measure, with local stakeholders and workers' representatives as part of site-visits and during corrective action plans, as appropriate.

BOLIDEN MANAGEMENT SYSTEM
Our vision is to be the most climate friendly and respected metals provider in the world. To achieve this, we must ensure that our value chain is responsible. Boliden expects everyone we conducts business with to comply with all applicable laws, regulations and internationally recognized standards and to act in accordance with high ethical integrity.

To ensure responsible sourcing to our smelters, potential risks are identified in line with Boliden's Business Partner Code of Conduct and the fundamental framework referenced therein. The Business Partner Code of Conduct is approved by Boliden's CEO. Read more on the Business Partner Code of Conduct in the Business conduct chapter on pages 120–124 or access the code at Boliden's website, together with the company's Joint Due Diligence compliance reports as well as Compliance reports from LBMA. The Business Partner Code of Conduct is communicated to all prospective business partners, either through the main Boliden contact or through the self-assessment questionnaire, and business partners are expected to commit to its requirements.

To ensure our Business Partner Code of Conduct is translated into action in our organization, we use a process for ESG due diligence and evaluation of business partners. Roles and responsibilities together with a governance structure for escalation have been determined, as seen in the illustration on page 115.

GOVERNANCE STRUCTURE

Business Partner Risk Level	Review and Recommendation	Decision and Accountability: Line Organization	Advisory
Critical Risk	Group Remittance Committee	BA Smelters Board	All topic Boards
High Risk	Smelters Remittance Committee	BA Smelters President	All topic Councils
Non-Critical Risk	ESG Team	Sales- or RMA Director	

Once a year, the ESG Program Lead reports on supply chain due diligence performance to the Business Area Board. In 2024, one presentation was delivered in addition to one dedicated follow-up presentation on conflict-affected and high-risk area methodology. Senior management is involved in the review and decision-making for all high and critical-risk business partners, and remains informed of the full supply chain on a continuous basis.

All Boliden employees that are involved in the risk screening phase undergo training in the process. During 2024, the following trainings were performed:
- OECD due diligence framework, steps 1–3 – one half-day in-person training
- Training on countries of origin – one two-hour online training
- Training on the Stratsys tool for ESG process management – a three-part online training series, 45 minutes each
- Awareness raising session with Smelters sustainability network on value chain due diligence– one-hour session

All prospective business partners with whom Boliden wishes to enter or renew/renegotiate contractual agreements with, undergo a risk assessment to determine the appropriate level of due diligence and risk mitigation activities. To check the supply chain, control systems are in place in the form of:
1) Country risk analysis using established conflict-affected and high-risk area (CAHRA) methodology in line with EU Conflict Minerals Act
2) Compliance screening, consisting of sanctions screening and analysis as well as adverse media screening
3) A Know your customer (KYC) process with questionnaires sent out to business partners with built-in red flag alerts

All three steps are collectively designed to identify country, industry and/or supplier related red flags in the areas of anti-bribery and corruption, anti-money laundering, business ethics, ownership structure, environment, human rights, labor rights, occupational health and safety, licensing, payment of taxes and the payment of other applicable funds.

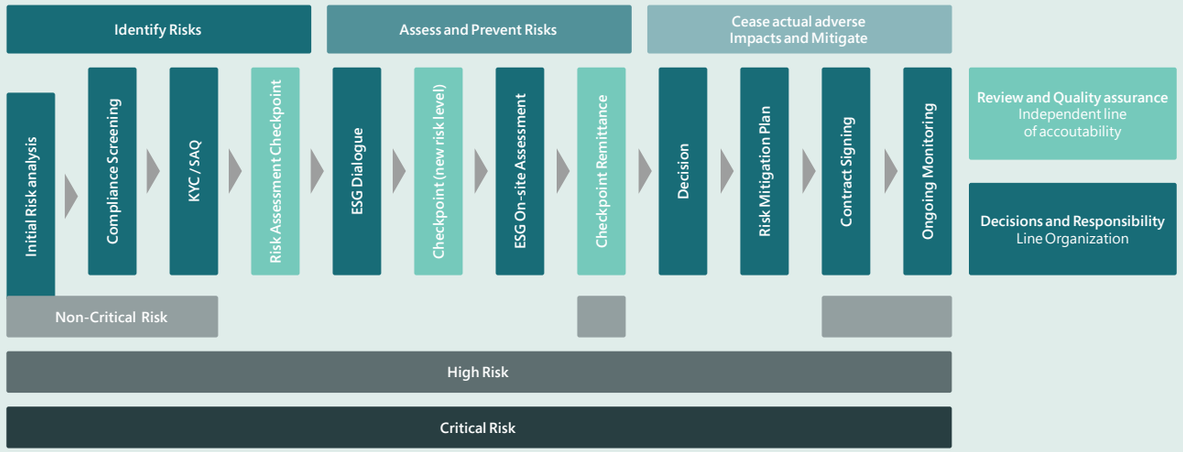
The follow-up work of the ESG due diligence process is determined on the basis of risks found in the first three steps. Enhanced due diligence will involve ESG dialogue between Boliden and suppliers' specialists on identified risk areas and/or ESG on-site assessments. In addition to internal experts, free of commercial considerations, involved in the ESG due diligence process, Boliden further engages third-party subject matter experts on a need basis.

Identified and assessed risks requiring mitigation will be incorporated in a business partner's ESG risk management plan that is communicated to and accepted by the business partner. All information documented throughout the process is used to decide on how to proceed with the business partner. The illustration on page #116# clarifies the steps a case goes through based on the risk level.

The supplier's risk level is determined by parameters such as the size of the business partner and what countries the business is connected to. Beyond this, Boliden undertakes a broad and holistic assessment on risks in line with Boliden's Business Partner Code of Conduct, going beyond OECD Annex II risks. High-risk determination involves findings of risk that can reasonably be mitigated with an action-oriented and time-bound risk mitigation plan while a critical risk rating concerns suppliers for whom significant risks have been identified that can partially be mitigated within a risk mitigation plan. Boliden aims to adopt a tailored set of measures per supplier in order to target our internal resources effectively and efficiently and apply preventive measures that are reasonable and proportionate to the nature of risks identified.

↓ PDF print version

BOLIDEN BUSINESS PARTNER EVALUATION PROCESS



All steering documents connected to the ESG Due diligence process at Boliden Smelters are documented in the Boliden Management System, which is available to all employees. The process is managed in the online Stratsys due diligence tool, which documents the compliance screenings and self-assessment questionnaires sent out to suppliers and customers. Preparatory frameworks for site visits are available in the system as well as a deviation handling step, where requests for corrective actions can be sent out and the supplier or customer can reply in the tool. There is also a module for the documentation of risk management plans to support with planning, documentation and follow-up.

Boliden is annually press releasing its report of payments to government agencies in accordance with Swedish Law (2015:812) on the reporting of payments to government agencies. The report encompasses payments made to government agencies in Sweden, Finland and Ireland that pertain to extractive industry operations.

Performance activity – annual update of Business Partner Code of Conduct
The Business Partner Code of Conduct is aligned with the requirements of the UN Guiding Principles on Business and Human Rights and ensures that OECD Due Diligence Guidance (DDG) requirements cover all minerals sourced to Boliden's operations. The Business Partner Code of Conduct was last updated in December 2023.

Performance improvements in 2024
- Performance indicators – number of employees who received training in the process and understanding of risks related to the sourcing of minerals: 53
- Performance activity – improvement activities during the year:
- Update to Boliden's Human Rights Commitment elaborating in more detail the company's commitment to effective and accessible remedy
- Update to Boliden's list of conflict-affected and high-risk countries and risk thresholds per each pillar

RISK IDENTIFICATION AND ASSESSMENT
To identify risks, we first look at indicators related to country, compliance, sanctions ownership, previous wrongdoings, the business partners' awareness of relevant standards and their own management systems.

Information received from suppliers is as much as possible verified against publicly available information. The risks in our supply chain are mainly related to deliveries from high risk countries.

The identified risks are then assessed. Internal Boliden experts, free of commercial considerations, assess the risks. We also regularly appoint external expertise for further assessment. We have a risk-based approach where existing red flags necessitate further evaluation steps, which cumulatively lead to the final risk determination on basis of severity and likelihood of risks. This assessment takes into account risks to people, communities and environment, and to what degree the business partner is able to prevent, mitigate and/or avoid such risks.

Performance activity - third-party engagement in risk identification and assessment
- A local environmental expert undertook one site visit in a high-risk country
- Third-party compliance and human rights experts engaged in one ESG evaluation in a complex market
- A satellite company engaged in one ESG evaluation in a complex market
- Contribution towards the launch of a report on risk assessment in the metals recycling value chain a
- Ongoing consultation with external due diligence experts on the identification and assessment of supplier risks

Performance activity – improvements during the year
- Inclusion of direct engagement pillar as part of site-visit protocol, see chapter Workers in the value chain on pages 111–114
- Launch of a pilot risk assessment methodology for all enhanced due diligence assessments
- Update to the governance structure, process flow and key instructions in order to strenthen the management system

The procedure for the on-site assessments includes the specification of triggers for an assessment to be made. For example, Boliden shall conduct ESG on-site assessments where possible and/or found data gaps result in a lack of sufficient and credible information available to us in order to determine the presence of Business Partner

↓ PDF print version

Code of Conduct risks and adherence to national laws and other relevant legal instruments. It also states that the on-site assessment must be performed before any transactions occur or a maximum of six months after the business relationship commencement. The instruction addresses the need for the collected data to be verified and up to date. The on-site assessment instruction also demands competence for the assessment team, who collectively need to have knowledge of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas as well as audit/assessment principles, procedures and techniques.

- Performance activity – number of business partners with ESG dialogues and enhanced engagement: 12

ESG dialogue is considered an important tool both for the identification and mitigation of risk. During 2024, dialogue meetings were held with both new and active suppliers – including both primary and secondary raw material suppliers. We also saw positive developments from our engagement with suppliers during the year. As an example, following a series of ESG dialogues, one business partner began implementing an OECD-framework aligned management system to support its raw material supply chain due diligence.

RISK MANAGEMENT

For high and critical risk business partners, a risk management plan is typically established. This includes corrective actions to mitigate risks, regular dialogues with the business partner, capacity building support by Boliden to business partners as well as engagement of third-parties on a needs basis. Appropriate contract clauses requiring action in the event of a serious breach of the Business Partner Code of Conduct are also established as well as additional contractual clauses to support risk mitigation actions as necessary.

- Performance activity – Number of on-site assessments of raw material suppliers: 4
- Performance activity – Cases of risk management plans during the year: 6

On-site assessments are conducted with new suppliers deemed as high or critical risk and during 2024 several visits were completed. This included on-site assessments to zinc, copper and, precious metals suppliers in South America and Africa. Boliden further visited 2 ports, within its supply chain.

Risks were identified as part of the visits in various sub-areas, including human rights, occupational health and safety, labor rights, environment and governance. For one prospect supplier, serious risks were identified, requiring corrective action prior to potential contract signing. In all instances, Boliden has, or will upon completing the full evaluation, set up risk mitigation plans, with time-bound plan to take corrective actions, with an objective of meaningful and impact-driven progress.

Several good examples of progress have been identified following site-visits and the establishment of risk mitigation plans. This includes one supplier, who has set up an engagement framework with local Unions, a second supplier whom now receives long-term ESG capacity building on-site support from an independent third-party upon Boliden's engagement and a third prospective business partner whom has began the establishment of a compensation framework for local stakeholders impacted by mine project activities. To continue to learn from each other and to effectively monitor any changes and progress; regular meetings are held with suppliers throughout a contractual relationship. Full re-evaluations are undertaken every 1, 3 or 5 years depending on the risk level and follow up site assessments are undertaken on a needs basis.

INDEPENDENT THIRD-PARTY AUDIT

An independent third-party audit found that Boliden has implemented an effective management system. The latest assessment reports for Boliden's assurance against the Joint Due Diligence Standard for Copper, Lead, Nickel and Zinc can be found on the Copper Mark website.

↓ PDF print version

Affected communities

WHY IT MATTERS
Boliden aims to have close relationships with surrounding communities where we operate and seeks to create conditions beneficial for all. Currently we operate five mines and five smelters located in the northern part of Europe. As capacity in our smelters is greater than our own mine production, we also purchase mining concentrate as well as secondary raw material from external business partners. In our mining operations, the exploration activities we carry out might affect local communities and we also have responsibility for a larger number of small, decommissioned mines located in the Nordics.

Mining and smelting operations in general have a large impact on surrounding communities. When developing a mine project or when expanding the operations, a variety of stakeholders naturally might have conflicting interests since the operations require, for example, land usage and transports. Boliden´s focus within exploration is to identify and develop deposits containing copper, zinc and nickel, all metals deemed to be crucial for the climate transition. In order to develop such deposits, bimetals are also identified and in many cases also a part of the future operations. In that way, one mine can serve several needs in society when it comes to metal usage.

ENGAGING WITH COMMUNITIES
In order to maintain and develop a sound relationship with surrounding communities Boliden seeks to have close dialogues with all relevant stakeholders. This includes both stakeholders close to our own operations as well as stakeholders to parties from which we purchase mine concentrate or secondary raw material. Apart from national legislation and permitting licenses that stipulate how our operations should be carried out, Boliden is also an active member in several organizations such as International Council on Mining and Metals (ICMM) and Svemin, which holds principles and standards related to affected communities. Lastly, several of our own policies and commitments regulate how risks and opportunities with regards to affected communities should be managed.

Since Boliden´s own operations are limited to a few countries in northern Europe, the communities where we operate are similar in contrast to other mining and metals companies where ownership of operations often stretches over several continents. In general, these societies are in rural areas where both mining and smelting operations have been active for at least decades, on many occasions much longer. Due to the rural nature, Boliden is often the major private employer in the area and is of course dependent on both sound relations with local authorities as well as the supply of workforce. For historical and practical reasons, smelters are located close to harbor infrastructure, and therefore more populated. Since Boliden purchases concentrates from other continents, mainly the Americas, the affected communities can differ much from our own operations. In general, however, mining operations in these countries are also characterized by being in rural areas.

As for our mining operations, including decommissioned operations and exploration, we often share the same geographical area with other interests such as the forestry industry, farmers and residents which live close to operations or along the infrastructure which we use for transports down the value chain. In large areas of Sweden and Finland where we operate, indigenous peoples (in form of the Sami population) also have special rights and reindeer husbandry is an interest at risk where we must demonstrate special concern. Other groups with high vulnerability are also present in areas where we purchase concentrate.

Today, a smaller proportion of concentrate contracts are in high-risk areas. Apart from land usage and traffic these groups also risk dust and pollution from mining or smelting operations. Accidents such as dam breaches and leakages or fires at smelting operations are also large salient risks.

IDENTIFICATION OF IMPACTS, RISKS AND OPPORTUNITIES
To develop an understanding of affected communities Boliden conducts a variety of activities depending on circumstances. Among the activities that are carried out are, for example, impact studies on reindeer husbandry, human rights impact assessments and due diligence processes. As for risks related to indigenous people, Boliden applies the mitigation hierarchy in line with commitments from its own policies, Svemin and ICMM as well as United Nations (UN) Guiding Principles on Business and Human Rights. Apart from these, the Code of Conduct, Business Partner Code of Conduct, Tailings Governance Commitment and Human Rights Commitment are related to managing impacts in the area. In mining operations Boliden also conducts social and socioeconomic sustainability analyses when applying for permits.

Boliden engages with affected communities on several occasions, depending on the circumstances. When developing projects, studies and impact assessments are carried out at an early stage with the involvement of stakeholders. These consultations are regulated by national law and all stakeholders are invited. As for indigenous peoples, special consultations are carried out, also in early stages, in order to learn how adaptations could be made and how the mitigation hierarchy should be implemented. These consultations with stakeholders are then followed up by operations on a regular basis. It is the responsibility of the general manager at each unit that these consultations are carried out in a correct way. In addition, each operating unit has a whistleblowing

Identified impacts, risks and opportunities for affected communities

Impact materiality on environment and people		Financial materiality for Boliden	
Negative impact	**Positive impact**	**Risk**	**Opportunity**
• Pollution from Boliden's operations leading to reduced access to freshwater and health issues • Inadequate stakeholder dialogue leading to marginalization of indigenous groups and violation of human rights • Boliden's use of land and water for mining operations leading to reduced access to nature and land for livelihood, recreation, and culture for indigenous communities	• Boliden's emphasis on rights of indigenous peoples and engagement in active stakeholder dialogue can influence other industry actors to improve on this • Boliden's operations in rural areas leading to job creation within Boliden, in the value chain and in community functions, tax payment, and improved infrastructure	• Loss of public acceptance can lead to difficulties in recruiting skilled workforce, increased scrutiny from authorities, reduced access to land, and in the long term more difficult to develop a competitive operation	• Improved relationships with affected communities can improve local business conditions through both access to competence as well as an improved local supplier base • Collaboration and creation of synergies between Boliden and indigenous communities can improved employer brand and increase trust in Boliden

↓ PDF print version

channel and mining operations also provide a portal for where the public can file grievances and ask questions. For concentrate supply, the general manager of the commercial department is responsible for conducting a due diligence process and, when applicable, also a Human Rights Impact Assessment, including monitoring and following up on the results.

Since Boliden has many years of experience, the channels for communication with affected communities are well established. Apart from meetings and grievance mechanisms, which follow international standards from ICMM that are available on the corporate website, there are a number of local initiatives and engagements at each site stimulating communication between the unit and the surrounding community. When conducting exploration activities, Boliden also follows publicly available work plans and informs residents through advertisements. All communication activities are conducted with the aim of improving the understanding between operations and communities and to improve insights and decision-making within the corporation. Remedies for material negative impact are evaluated and decided on a case-by-case situation. When it comes to relocation of inhabitants, however Boliden follows established standards within the mining industry.

Within Boliden´s decentralized business model, much of the responsibility for its own operations lies with the general manager of the operations, with the support of local organizations as well as experts within the Business Area and at Group level. In the Business Area, there are experts on indigenous peoples, exploration and experts on tailings management. When sourcing concentrates a remittance board, consisting of various experts related to the due diligence process, have been established. In our own operations as well as within the supply chain, Boliden also engages consultants in order to responsibly evaluate risks and opportunities.

POLICIES AND COMMITMENTS
Several policies and commitments are related to Affected communities. Our Code of Conduct and Business Partner Code of Conduct, along with other policies and commitments, define the requirements on us and our business partners to prevent, mitigate, and remediate impacts and risks related to Affected communities. Read more on policies, commitments and third-party standards on pages 62–63. Our policies and commitments are accessible via www.boliden.com.

In addition to these, the following commitments are of special importance for Affected communities:

Tailings Governance Commitment
Our Tailings Governance Commitment describes how we govern our past and present tailings facilities. For Affected communities, this is especially important since it is a salient risk and the Global Industry Standard on Tailings Management (GISTM) also requires transparency and dialogue with stakeholders.

Human Rights Commitment
For Affected communities this is especially important due to the fact that a majority of Boliden's metal concentrate is procured from external mining companies.

Indigenous People Commitment
For Affected communities this is especially important since some of Boliden's operations are located in the northern part of the Nordics where the Sami population have special rights.

ACTIONS AND RESOURCES
Boliden advocates long-term commitment to the partnerships established with affected communities. When engaged in sponsorships, Boliden seeks to strengthen the social, environmental or economic development within the communities where we operate. Therefore, we have many local sponsorships related to culture, sports and other initiatives. In addition to sponsorships Boliden works to prevent, mitigate and remediate the negative material impacts on affected communities in several ways. One example is the collaborative project between Boliden and Mausjaur sameby which identified several actions linked to dialogue in the early stages between Boliden and the Sami village. Another example is the Sustainability Park close to the Aitik mine where Boliden has made efforts to strengthen biodiversity as well as facilitate access to the area for the public. When purchasing concentrates from other mines, the due diligence process often identifies areas of improvement for the supplier and the mitigation plans are formulated and discussed with the supplier.

To identify the best possible activities within the mitigation hierarchy, Boliden follows an extensive process for consultations and dialogues with affected communities. When sourcing concentrates, Boliden follows well-established templates identifying risks related to the country, business partner and industry. The effectiveness of these activities is then monitored and assessed, and in many cases evaluated within permitting processes.

Boliden is also engaged in a large number of national and international organizations that seek to improve sustainability performance as well as establish standards on how to operate, including relationships with affected communities. Some of these organizations are ICMM, International Copper Association, International Zinc Association and Euromines. Initiatives related to these organizations are the Global Industry Standard on Tailings Management (GISTM) which improves tailings management as well as Copper and Zinc Mark.

The first step in the mitigation hierarchy is avoidance, which is why Boliden avoids certain geographical areas in exploration activities. Boliden also avoids exploration at certain times during the year in order to reduce conflicting interests with, for example, reindeer husbandry. When sourcing concentrates, and after a careful due diligence process as well as human rights assessment, it could often be better to engage than to avoid. This engagement, however, relies on the fact that Boliden has purchasing power to influence the development of operations outside our own organization. Currently, Boliden is developing indicators to identify severe human rights issues and incidents related to the value chain as well as an internal reporting structure. In Boliden's own operations, the whistleblowing channel is used to identify similar breaches internally. During the reporting period no severe human rights issues or incidents concerning affected communities or indigenous peoples were reported.

↓ PDF print version

Business conduct

WHY IT MATTERS
Boliden is under increasing scrutiny from customers, banks, and business partners who demand transparency about its internal ethics and compliance (E&C) frameworks. With increasing requirements and expectations, it is crucial for Boliden to have a robust compliance framework. Merely stating compliance with ethical standards is no longer sufficient. Demonstrating compliance is both a legal requirement and a stakeholder expectation.

Ethical breaches are one of our biggest risks. Not only can it damage our business and cause severe reputational damage to our brand, but it also poses the risk of prosecution, fines, and imprisonment. For the individual employee who is in violation or breach of the law or our Code of Conduct it can lead to labor law consequences, such as a written warning or termination.

IDENTIFICATION OF IMPACTS, RISKS AND OPPORTUNITIES
How we work
The Group Ethics and Compliance (E&C) function supports the company to operate in accordance with the relevant regulatory frameworks, international law and regulations, the EU's legal regulations and national law. Furthermore, the function makes sure Boliden's operations are conducted in accordance with Boliden's internal policies and instructions. The department is responsible for the strategic development and coordination of the Group's work in the areas of anti-bribery and corruption, sanctions, human rights, anti-money laundering and terrorist financing. Additional responsibilities include compliance with Boliden's Code of Conduct and Business Partner Code of Conduct, as well as handling and investigating matters reported through Boliden's whistleblower channel. The function also supports the commercial departments, including procurement and sales, in the evaluation of business partners from an ethical and compliance perspective.

The E&C function consists of the Chief Ethics and Compliance Officer and one Ethics and Compliance Officer, both of whom possess either legal and human rights training or have extensive experience from relevant positions. The expertise in the E&C function is enhanced through active participation and knowledge sharing within professional networks such as The International Council of Swedish Industry. The Board of Directors and Group management team's role and knowledge in business conduct are described on pages 49–57.

The governance of Boliden's E&C function is described in the chart on the next page. The business organization, via business units' general managers and heads of Group functions, form the first line of defense. Group E&C, its networks and groups and the Subject Matter Advisors form the second line of defense. The Board of Directors, E&C Board and E&C Council are the governing bodies for E&C-related matters.

The E&C Board consists of the Group management team. It is chaired by the President and CEO and meets at least two times a year. The responsibilities of the E&C Board include allocating resources for Boliden's E&C work, setting strategic directions for the function, and making business decisions on matters involving material and/or strategic business conduct risks.

The E&C Council is a cross-functional forum responsible for ensuring an appropriate approach for managing risks connected to the E&C focus areas and coordinating and deciding about operational business conduct matters. The Council escalates and prepares decisions for the E&C Board and decides how the decisions should be implemented.

Identified impacts, risks and opportunities for Business conduct

Impact materiality on environment and people		Financial materiality for Boliden	
Negative impact	**Positive impact**	**Risk**	**Opportunity**
Failing whistleblower mechanism can lead to: • Reduced ability to raise concerns and undetected cases of Code of Conduct breaches Violation or down-prioritization of Boliden's Code of Conduct can lead to: • Insecurity among employees, mental illness, reduced enjoyment at work, sick leave, reduced well-being, increased stress or unemployment among our own workforces • Human rights violations in the value chain Increased corruption from Boliden, because of business in countries with increased risk of corruption, can lead to: • Unfair business conditions for competitors or companies in the value chain and increased corruption in the value chain	Strengthening whistleblower mechanism, and thus increasing the willingness to inform about actual misconduct, can lead to: • Improving trust in process from employees • Capturing violations and mistreatment • Inspiring the industry to increase standards Evaluating suppliers based on Business Partner Code of Conduct and making reasonable demands for lead times and cost can lead to: • Improving the ESG performance of the suppliers in areas such as working conditions and GHG emissions • Prevention of negative impacts on the human rights of the workforce in the value chain Advocating, preventing and combatting corruption, bribery and money laundering can lead to: • Fair competition, not only for Boliden but also for suppliers in the value chain, thus positive impact on the economy, the environment, people and society • Awareness and zero tolerance of corruption and bribery across value chain	Failure, by management, employees or business partners, to live up to the Code of Conduct and sustainability requirements or to not comply with new and existing regulation or the anti-corruption & bribery policy can lead to: • Legal or regulatory sanctions • Human rights violations • Serious incidents • Material financial losses • Damaged Boliden brand/negatively affected reputation • Loss of business contracts and partnerships • Negative effect on valued relationships with company stakeholders • Exclusion from market/permit to conduct business lost Failure of whistleblower mechanism, such as not providing the possibility to remain anonymous, can lead to: • Legal or regulatory sanctions • Damaged culture • Harmed brand • Reduced ability to retain and attract talent • Reduced trust from investors leading to increased cost of capital	Compliance with Code of Conduct and corporate values can lead to • Credibility in Boliden as a company • Reduced cost of capital • Access to funding through green bonds, • Attracting and retaining talent • Increased market growth • Increased access to land for new operating areas Trustworthy suppliers with high integrity improving their ESG performance can lead to: • Boliden being a preferred business partner • Willingness to pay a premium • Increased possibility to attract investors • Access to funding on better terms Strengthening whistleblower mechanism and a strong and healthy corporate culture, can lead to: • Attracting and retaining talent • Increased trust in Boliden brand • Increased pride in working for Boliden • Increased satisfaction/well-being at work • Increased productivity and performance

↓ PDF print version

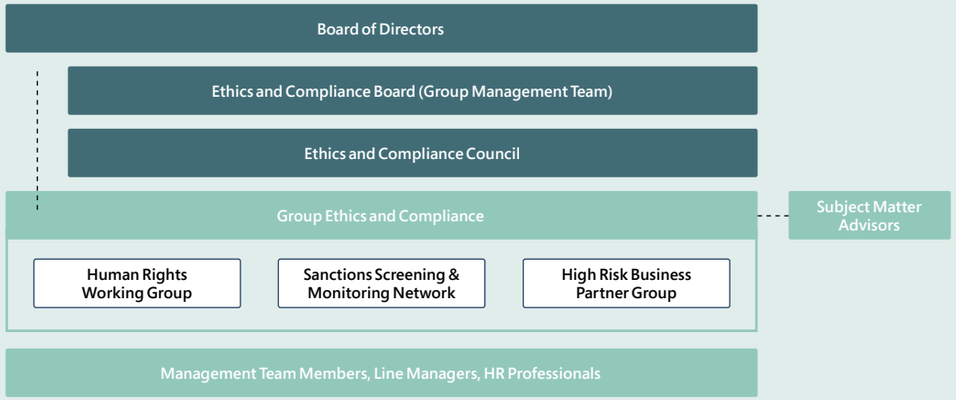
TARGETED FUNCTIONS
Although Group E&C targets the whole company, due to their involvement in critical financial transactions and decisions regarding purchasing, sales, mergers and acquisitions, and/or political discussions, certain functions and individuals pose elevated risk for ethical breaches, such as corruption and bribery. These functions include purchasers, sales managers, sales and purchase agents, certain project managers, treasury, legal, and people involved in public affairs or permit processes. Senior management is also included, covering Group management, business area management and all people reporting to them.

ETHICS AND COMPLIANCE RISK IDENTIFICATION
Boliden conducts a yearly E&C risk assessment related to anti-corruption, sanctions, anti-money laundering, human rights risks and third-party risks, as well as risks related to internal business conduct which we define as the topics covered in our Code of Conduct. Key personnel from across the Group are invited to a workshop to ensure that risks from all parts of the business are captured. Functions invited include, for example, sourcing and sales, legal, sustainability, HR, public affairs, finance, and strategy. We always aim to have each country in which Boliden operates represented in the workshop to ensure that we capture geographically specific and local risks.

Throughout the year up until the workshop, relevant parts of the business conduct local risk assessments focusing on limited parts of the business or specific risk areas, for which the outcome can be used as input to the Group risk workshop. When the risks have been identified, subsequent work includes assessment and prioritization of the risks and developing an action plan. The risk assessment forms the basis of the upcoming activities and strategic work for the E&C function.

BUSINESS PARTNER RISK IDENTIFICATION
Boliden's business partner evaluation program is based on a systematic and risk-based due diligence process used to assess partners' risk to Boliden and their adherence to Boliden's Business Partner Code of Conduct. The code applies to all business partners, including customers and suppliers, and reflects the minimum requirements. It specifically addresses requirements within human rights, trafficking, labor rights, forced or compulsory labor, child labor, health and safety, environment, responsible value chain, business ethics and anti-corruption, and it prohibits the use of conflict minerals. It requires that the same principles be applied throughout the business partner's own supply chain. Boliden also includes the option of terminating the agreement in the event of a material breach of its Business Partner Code of Conduct.

THE GOVERNANCE OF GROUP ETHICS AND COMPLIANCE



POLICIES AND COMMITMENTS
Corporate culture and business conduct policies
Code of Conduct
The Code of Conduct states the expectations on us to prevent, mitigate, and remediate impacts and risks connected to business integrity. Every co-worker is responsible for preventing or interrupting ongoing unethical behavior and reporting suspected violations. All managers are also responsible for ensuring awareness, training, and promoting compliance with Boliden's Code of Conduct and related policies within their area of responsibility. The managers are also responsible for following up on the yearly employee satisfaction survey, where the corporate culture is evaluated. Boliden is subject to and complies with the Swedish Act on the Protection of Persons Reporting Irregularities (2021:890).

Boliden encourages all stakeholders to report suspected violations of the law or breaches of Boliden's Code of Conduct and other internal policies. Boliden's own workforce may file a report to their direct manager, manager's manager, their local HR function or Group E&C as early on as possible. A report may also be filed via the whistleblower channel either online, by phone or in a meeting. External stakeholders are encouraged to file a report via Group E&C, Business Area Mines' feedback portal or Boliden's whistleblower channel. The feedback portal and the whistleblower channel allow the reporting party to report completely anonymously, and the latter also enables anonymity throughout continued communication with Boliden. Information about these channels and our investigation routines are described in Boliden's Code of Conduct handbook, Complaints and Grievance Mechanism, and Whistleblower Policy which can be found on Boliden's external web or on the intranet.

Certain incidents are investigated according to topic-specific or local internal routines. Our procedures ensure that incoming reports are rigorously and objectively investigated. Suspected violations of the law will be reported to the relevant authority.

Business Partner Code of Conduct
The Business Partner Code of Conduct defines the principles for and our expectations on our business partners regarding responsible business conduct. It covers human rights, labor rights, health and safety, environment, responsible value chain, and business ethics. The Business Partner Code of Conduct also addresses the consequences of non-compliance and that when doing business with Boliden it is up to the business partner to ensure that there is awareness of the Business Partner Code of Conduct throughout the supply chain.

The Business Partner Code of Conduct applies to everyone with whom Boliden does business, including suppliers, subcontractors, joint venture partners, agents, distributors and representatives as well as customers.

Whistleblower policy
Boliden has in place a third-party provider for the whistleblower channel that allows internal and external stakeholders to safely and anonymously report suspected or actual serious irregularities and wrongdoings. Reports can be filed online, via phone or in a meeting. If a whistleblower chooses to be anonymous, neither Boliden nor our whistleblower service provider can track or identify the reporting individual. Only two people, at Group-level, can access the reports and they are regularly updated on legislative and policy changes. One of the two people joins the full investigation of the whistleblower report to ensure it is being handled objectively, independently and according to legal requirements. If any irregularities are discovered from investigations, disciplinary actions must be taken. Our promise to protect whistleblowers against retaliation is outlined in our Whistleblower Policy and Code of Conduct handbook. We maintain secure and confidential records of reports and outcomes and provide regular reports to Group management and the Board of Directors.

Human Rights Commitment
Our commitment to human rights is outlined in Boliden's Human Rights Commitment, which is based upon international frameworks such as the UN Guiding Principle of Business and Human Rights. The Human Rights Commitment stipulates Boliden's commitment to enable the remediation of any negative human rights we have caused or contributed to. It includes all parts of Boliden's business from its own workforce to workers in the value chain and affected communities. During 2024 the Human Rights Commitment was updated with additional clarification regarding how we remediate adverse impact.

Prevention and detection of corruption and bribery
Compliance with anti-corruption and anti-bribery regulations is one of the key focus areas within Boliden's E&C function. The Anti-Corruption Policy, Code of Conduct and Business Partner Code of Conduct set out measures to prevent corrupt behavior and improper influence. Boliden applies zero-tolerance for bribery and corruption, including the facilitation of payments. Conflicts of interest should be reported and addressed. In a conflict of interest, the person is removed from the decision and approval process. Detailed guidance on prohibited behavior, gifts, hospitality, benefits and conflicts of interest are addressed in Boliden's Anti-Corruption Guidelines. The Anti-Corruption Guidelines are based on the Anti-Corruption Policy.

Anti-Corruption Policy
Boliden's Anti-Corruption Policy has been approved by the Board of Directors and applies to all individuals acting in Boliden's name or on Boliden's behalf including employees, management, members of the Board, consultants and agents of Boliden Group. The Anti-Corruption Policy also applies to companies and joint ventures in which Boliden has an interest, and to third parties that act for or on behalf of Boliden. It is based on Group-wide risk assessments and compliance controls to ensure its relevance and mitigate any risk factors.

To detect potential cases of corruption, Boliden applies the four-eye principle and has a built-in authorization in the enterprise resource planning systems. Any suspected cases of bribery or corruption are investigated, initially at the relevant site by management and HR. Boliden's E&C function provides support in the cases and is always involved in serious matters and whistleblower cases. Confirmed cases of corruption and bribery are reported on a regular basis to the Board of Directors via E&C and the Group management team.

To continuously improve the prevention of corruption, Boliden's Anti-Corruption Policy was updated in 2024 with clarifications and it is now approved by the Board of Directors

ACTIONS AND RESOURCES (G1-2)
Evaluating compliance with Boliden's Business Partner Code of Conduct
Boliden evaluates potential business partners before entering agreements. After onboarding, business partners are monitored throughout the business relationship and due diligence is performed regularly. This approach is used for all business partners to ensure fairness and for external sourcing of raw materials in the mineral value chain. Further evaluation of the ESG performance of the business partner is performed before signing a contract. This is to secure the best commercial terms from raw material business partners with high ESG performance.

Risk screening
Based on sanctions screening results, country risk, type of business partner, industry risk, and purchasing or sales volume, the required level of due diligence is set.

Commitment
Upon signing a contract, business partners must commit to our Business Partner Code of Conduct and sanctions clause. Any deviations must be approved by Boliden's Chief E&C Officer and/or Group Legal Affairs.

Assessment
Boliden uses self-assessment questionnaires to further evaluate business partners and their adherence to the Business Partner Code of Conduct. Where needed, interviews and on-site assessments are conducted. For the mineral value chain, this always occurs before contract signing.

Improvement
In cases where gaps are identified, Boliden collaborates with the business partner to agree on an improvement plan followed by regular touch points to ensure the effective implementation of the plan.

Compliance with the Business Partner Code of Conduct is monitored by conducting, for example, regular risk assessments, interviews, on-site assessments, and follow-up meetings. For the mineral value chain, Boliden has a dedicated team responsible for overseeing the evaluation work of the business partner, escalating high-risk cases to relevant levels of the company and following the implementation of business partner improvement plans. Boliden believes in supporting the business partners to improve their ESG performance. Identified risks, impacts and deviations from the Business Partner Code of Conduct are therefore primarily handled by mutually agreeing on corrective actions together with the business partner. If it is deemed too difficult or not possible for the business partner to sufficiently improve within a reasonable time frame, the business agreement will not be entered into, can be paused or terminated.

Responsible supply chain of minerals
The Boliden Business Partner Code of Conduct prohibits Boliden's business partners from using conflict minerals.

Boliden adheres to the London Bullion Market Association's (LBMA) Responsible Silver and Gold Standards. The LBMA evaluation processes are in line with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Area. Boliden promotes transparency and ensures no material originates from restricted or conflict regions throughout the supply chain by always asking for country-of-origin documentation and the LBMA processes aim to ensure that secondary and primary raw material suppliers do not source conflict minerals.

Boliden is also included on the LBMA list of recommended gold and silver producers – the Good Delivery List – which requires companies to comply with a set of standards and to have their compliance certified by the LBMA. These standards aim "to help companies respect human rights and the environment and avoid contributing to conflict through their mineral sourcing practices". Companies included on the list have implemented routines to ensure that the raw material supply chain complies with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

Relationship with business partners
Boliden has developed a strong and stable supply chain network over decades, with a significant focus on fostering fair relationships with local, regional, and international business partners. This collaboration has enabled local business partners to become experts in their fields, contributing expertise and technology essential to Boliden's operations. Regular communication and following up on safety, productivity, and quality are integral to these relationships, with the procurement department actively involved in supporting and enhancing business partner performance. Boliden places a high priority on sustainability and ethical practices, continuously engaging suppliers to improve their performance in these areas. By working closely with local industries, unions, and authorities, Boliden ensures a well-informed and reliable supply base, characterized by a history of few incidents and a strong commitment to operational excellence.

Boliden supports vulnerable prospective raw material business partners by providing training and capacity building on responsible sourcing matters, as appropriate, both by site visits and online meetings by Boliden employees with relevant competence and third-party consultants. Boliden then continues to work collaboratively with its raw material business partners to strengthen their due diligence efforts within their supply chain. All employees involved with risk assessment or ESG matters related to our raw material business partners and their value chain will undergo yearly training in the ESG evaluation and screening process.

Specific figures regarding business partners can be found in the other disclosures on page 124.

METRICS AND TARGETS
Incidents of corruption
During 2024, Boliden was not involved in or convicted of violating any anti-corruption or anti-bribery laws, nor involved in any such public legal cases.

In terms of incidents of corruption or bribery, 1 case involving Boliden employees was identified. This case related to non-compliance with Boliden's policy on acceptable gifts and the employee was disciplined according to internal routines. Boliden terminated 1 contract with a business partner due to confirmed incidents of corruption or bribery.

Training on business conduct and anti-corruption
Boliden provides different types of training related to business conduct, depending on the employee's line of work.

In October 2023, Boliden launched a Code of Conduct handbook, which led to mandatory training (e-learning and/or classroom) for all employees. This training is mandatory for all new employees to take within their first 30 days of employment and thereafter every second year. The training covers information and dilemma exercises on how to behave when working for Boliden, and how to act if suspecting or noting any breaches which includes the possibility to file a report via the whistleblower channel. The training also includes anti-bribery and corruption and anti-money laundering, based on the Anti-Corruption Policy. Boliden is currently redeveloping dedicated training within anti-bribery and corruption, anti-money laundering and trade sanctions for functions at risk.

Sanctions training is mandatory for relevant groups who are involved in the applicable compliance screenings, such as sanctions screening. The training covers information or dilemma exercises in accordance with relevant policies. During 2024, 21 workers received training within sanctions, according to the set-out bi-annual plan.

The table gives an overview of the training provided.

	Code of Conduct including anti-bribery, anti-corruption and anti-money laundering	Sanctions
Figures related to functions at risk of bribery and corruption		
Number of own workers at risk of corruption and bribery	265	
Number of own workers at risk of corruption and bribery who completed training	233	
Share of workers at risk of corruption and bribery who completed training	92%	
Other training figures and information		
Total number of own workers in scope for training	6007[1)]	105
Number of own workers who completed training	5150[1)]	21
Share of own workers who completed training	86%[1)]	20%
Delivery method	Online/classroom (30 min)	Online/classroom (30-60 min)
Frequency	Biennially + new employees within 30 days of employment	Biennially + new employees involved in the process
Topics covered		
Definitions	Several[2)]	Sanctions
Policy	Code of Conduct and Code of Conduct handbook	Sanctions policy
Procedures on suspicion/detection	Yes	Yes
Dilemmas	Yes	No

1) Tara and Kylylahti excluded
2) Health safety and well-being, fair working conditions, diversity and inclusion, personal development, personal information and privacy, quality, documentation and financial reporting, company assets, confidentiality, fair competition, relationships with suppliers, customers and business partners, combating bribery and corruption, conflicts of interest, contact with public officials, gifts and entertainment, fraud, money laundering, sanctions, insider information and market abuse, external communication, human rights, climate and environment, political activity, sponsorships, community investments and donations.

↓ PDF print version

OTHER DISCLOSURES

New suppliers screened using ESG criteria

Some of Boliden's significant ESG risks in the supply chain are identified in its raw material sourcing. There were no significant changes to our organization or supply chain in 2024. In total, 50% of all new raw material suppliers, with no previous transaction with Boliden, were fully evaluated during 2024. Out of the 50% not fully evaluated, only test lots were received, which is according to our normal process. In 2024, 11 test lots were received. In the fields of logistics, products and services, 100% of new contracted suppliers, with no previous contract with Boliden, and a spend over SEK 1 million were evaluated during 2024.

Whistleblower reports

During 2024, there were 49 reports filed, including 12 related to health and safety, 2 to environment, 10 to HR, 5 to discrimination or harassment, 11 to fraud, 1 to conflicts of interest and 7 related to other. During the reporting year, 8 number of grievances were lodged within the whistleblowing channel by workers in the value chain, all of whom concerns workers at our own sites.

Whistleblower reports	2024	2023
Health and Safety	12	9
Environment	2	0
HR	10	4
Discrimination or Harassment	5	2
Conflict of interest	1	1
Fraud	11	5
Corruption	1	0
Other	7	1
Total	**49**	**22**

Incidents of Corruption

During 2024, there was 1 (0) ongoing legal action with respect to anti-competitive behavior.

↓ PDF print version

GRI index

GRI CONTENT INDEX

Statement of use	**Boliden AB has reported in accordance with the GRI Standards for the period Jan 1st 2024 to Dec 31st 2024. The report was published 20 March 2025.**
GRI 1 used	GRI 1: Foundation 2021

* Incomplete information. No standardized collection of data is available yet. Collection of this data is under investigation.

				Omission		
GRI Standard		**Disclosure**	**Reference page**	**Requirement(s) Omitted**	**Reason**	**Explanation**
GENERAL DISCLOSURES						
GRI 2: General Disclosures 2021	2-1	Organizational details	22, 137, 189–190, 192			
	2-2	Entities included in the organization's sustainability reporting	60, 137			
	2-3	Reporting period, frequency and contact point	60, 125, 191, 192			
	2-4	Restatements of information	84			
	2-5	External assurance	63, 129			
	2-6	Activities, value chain and other business relationships	15–17, 63–64			
	2-7	Employees	102–110			
	2-8	Workers who are not employees	111–114	a–c	*	*
	2-9	Governance, structure, and composition	49–57, 120			
	2-10	Nomination and selection of the highest governance body	49–50			
	2-11	Chair of the highest governance body	48, 55			
	2-12	Role of the highest governance body in overseeing the management of impacts	50–52, 56, 61–62, 64–65			
	2-13	Delegation of responsibility for managing impacts	51–52			
	2-14	Role of the highest governance body in sustainability reporting	52, 61–62			
	2-15	Conflicts of interest	50, 55–57, 120–124			
	2-16	Communication on critical concerns	50–51, 122, 124			
	2-17	Collective knowledge of the highest governance body	50–52, 55–57			
	2-18	Evaluation of the performance of the highest governance body	49–53	c	*	*
	2-19	Remuneration policies	Boliden remuneration report on www.boliden.com, 51, 55–57, 63, 79, 142–143			
	2-20	Process to determine remuneration	Boliden remuneration report on www.boliden.com, 51–52, 63, 79, 142–143			
	2-21	Annual total compensation ratio			*	*
	2-22	Statement on sustainable development strategy	8–9, 63–64			
	2-23	Policy commitments	62, 102, 112, 115–117, 119–124			
	2-24	Embedding policy commitments	62, 115–117, 120–124			
	2-25	Processes to remediate negative impacts	103–104, 112, 114–117, 120–124			
	2-26	Mechanisms for seeking advice and raising concerns	62, 115–117, 120–124			
	2-27	Compliance with laws and regulations	109, 120–124	b.ii, d	*	*
	2-28	Membership associations	63			
	2-29	Approach to stakeholder engagement	64–65			
	2-30	Collective bargaining agreements	107			

↓ PDF print version

GRI Standard		Disclosure	Reference page	Omission: Requirement(s) Omitted	Omission: Reason	Omission: Explanation
MATERIAL TOPICS						
GRI 3: Material Topics 2021	3-1	Process to determine material topics	69			
	3-2	List of material topics	66–68			
SPECIFIC DISCLOSURE GRI 200: ECONOMIC TOPICS						
Economic performance						
GRI 3: Material Topics 2021	3-3	Management of material topics	15–17, 64–65			
GRI 201: Economic performance 2016	201-1	Direct economic value generated and distributed	15–17, 116, 131, 153–154			
	201-2	Financial implications and other risks and opportunities for the organization's activities due to climate change	43, 76–78, 138	a.v.	*	*
	201-3	Defined benefit plan obligations and other retirement plans	142–143, 157–159			
Market presence						
GRI 3: Material Topics 2021	3-3	Management of material topics	63–65, 102–110, 118–119			
GRI 202: Market presence 2016	202-2	Proportion of senior management hired from the local community	110			
Indirect economic impacts						
GRI 3: Material Topics 2021	3-3	Management of material topics	63–65, 118–119			
GRI 203: Indirect economic impacts 2016	203-2	Significant indirect economic impacts, including the extent of impacts	63–64			
Anti-corruption						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 120–124			
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	120–121			
	205-2	Communication and training on anti-corruption policies and procedures			*	*
	205-3	Confirmed incidents of corruption and actions taken	123			
Anti-competitive behavior						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 120–124			
GRI 206: Anti-competitive behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	124			
SPECIFIC DISCLOSURE GRI 300: ENVIRONMENTAL TOPICS						
Materials						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 97–101			
GRI 301: Materials 2016	301-1	Materials used by weight or volume	Renewable materials used 658 ktonnes. 99			
	301-2	Recycled input materials used	99			
Energy						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 76–85			

↓ PDF print version

GRI Standard		Disclosure	Reference page	Omission: Requirement(s) Omitted	Omission: Reason	Omission: Explanation
GRI 302: Energy 2016	302-1	Energy consumption within the organization	83, 85	g	*	*
	302-3	Energy intensity	83			
	302-4	Reduction of energy consumption	83			
Water and Effluents						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 86–92			
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	90–91			
	303-2	Management of water discharge-related impacts	86–89			
	303-3	Water withdrawal	Reported in m^3. 91–92	c	*	*
	303-4	Water discharge	Reported in m^3. 92	b	*	*
	303-5	Water consumption	91–92			
Biodiversity						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 93–96			
GRI 304: Biodiversity 2016	304-1	Operational sites owned, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas	95–96	a.vi–vii	*	*
	304-2	Significant impact of activities on biodiversity	93	b.iii–iv	*	*
	304-3	Habitats protected or restored	95	a–c	*	*
	304-4	IUCN Red list species and national conservation list species with habitats in the area affected by operation	www.boliden.com/sustainability/our-approach-to-sustainability/biodiversity-and-reclamation. 94			
Emissions						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 76–89			
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	84–85			
	305-2	Energy indirect (Scope 2) GHG emissions	84–85			
	305-3	Other indirect (Scope 3) GHG emissions	81, 84–85			
	305-4	GHG emissions intensity	84–85			
	305-5	Reduction of GHG emissions	81, 84–85			
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	88–89			
Waste						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 97–101			
GRI 306: Waste 2020	306-3	Waste generated	100			
	306-4	Waste diverted from disposal	100			
	306-5	Waste directed to disposal	100			
Supplier Environmental Assessment						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 111–117			
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	117, 124			
SPECIFIC DISCLOSURE GRI 400: SOCIAL TOPICS						
Employment						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 102–110			

↓ PDF print version

GRI Standard		Disclosure	Reference page	Omission: Requirement(s) Omitted	Omission: Reason	Omission: Explanation
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	106	b	*	*
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	104, 108–109, 157–159	a.i, a.iii	*	*
Occupational Health and Safety						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 102–110			
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	103–104, 108			
	403-2	Hazard identification, risk assessment, and incident investigation	104, 108	c–d	*	*
	403-3	Occupational health services	104			
	403-4	Worker participation, consultation, and communication on occupational health and safety	103–104			
	403-5	Worker training on occupational health and safety	104, 108			
	403-6	Promotion of worker health	104, 108			
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	104, 108, 111–114			
	403-9	Work-related injuries	20, 104, 108–109	b.v, c.ii–iii	*	*
	403-10	Work-related ill health	104, 108–109	a.ii–iii, b.ii–iii, c–e	*	*
Training and Education						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 102–110			
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	108			
	404-2	Programs for upgrading employee skills and transition	108			
	404-3	Percentage of employees receiving regular performance and career development reviews	108			
Diversity and Equal opportunity						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 102–110			
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	107	a.ii.	Incomplete information	Adjustment to prepare for future reporting requirements.
Non-discrimination						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 102–110			
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	109, 124	b	*	*
Rights of Indigenous Peoples						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 118–119			
GRI 411: Rights of Indigenous Peoples 2016	411-1	Incidents of violations involving rights of indigenous people	119	b	*	*
Local Communities						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 118–119			
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	64, 65, 78, 86, 90, 93, 97, 103–104, 111–112, 118–119, 121			
	413-2	Operations with significant actual and potential negative impact on local communities	118			
Supplier Social Assessment						
GRI 3: Material Topics 2021	3-3	Management of material topics	64–65, 111–117			
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	117, 124			

↓ PDF print version

Auditor's Limited Assurance Report on Boliden AB's Sustainability Report

To Boliden AB, corporate identity number 556051-4142

Introduction
We have been engaged by the Board of Directors and the President of Boliden AB to undertake a limited assurance engagement of the Boliden AB Sustainability Report for the year 2024. The Company has defined the scope of the Sustainability Report from page 59.

Responsibilities of the Board of Directors and the Executive Management for the Sustainability Report
The Board of Directors and the Executive Management are responsible for the preparation of the Sustainability Report in accordance with the applicable criteria, as explained on page 61 in this document, and are the parts of the Sustainability Reporting Guidelines published by GRI (Global Reporting Initiative) which are applicable to the Sustainability Report, as well as the accounting and calculation principles that the Company has developed. This responsibility also includes the internal control relevant to the preparation of a Sustainability Report that is free from material misstatements, whether due to fraud or error.

Responsibilities of the auditor
Our responsibility is to express a conclusion on the Sustainability Report based on the limited assurance procedures we have performed. Our engagement is limited to historical information presented and does therefore not cover future-oriented information.

We conducted our limited assurance engagement in accordance with ISAE 3000 (revised) Assurance Engagements Other than Audits or Reviews of Historical Financial Information. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the Sustainability Report, and applying analytical and other limited assurance procedures. The procedures performed in a limited assurance engagement vary in nature from, and are less in extent than for, a reasonable assurance engagement conducted in accordance with International Standards on Auditing and other generally accepted auditing standards in Sweden.

The firm applies International Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We are independent of Boliden AB in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

The procedures performed consequently do not enable us to obtain assurance that we would become aware of all significant matters that might be identified in a reasonable assurance engagement.

Accordingly, the conclusion of the procedures performed do not express a reasonable assurance conclusion.

Our procedures are based on the criteria defined by the Board of Directors and the Executive Management as described above. We consider these criteria suitable for the preparation of the Sustainability Report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion below.

Conclusion
Based on the limited assurance procedures we have performed, nothing has come to our attention that causes us to believe that the Sustainability Report, is not prepared, in all material respects, in accordance with the criteria defined by the Board of Directors and Executive Management.

Stockholm March 17, 2025

Deloitte AB

Thomas Strömberg
Authorized Public Accountant

Lennart Nordqvist
Expert Member of FAR

↓ PDF print version

Financial statement

↓ PDF print version

Consolidated Income Statement

SEK m	Note	2024	2023
Revenues	3, 4	89,207	78,554
Cost of goods sold	7	-76,305	-67,817
Gross profit		**12,903**	**10,737**
Selling expenses	7	-756	-733
Administrative expenses	6, 7	-1,256	-1,079
Research and development costs	7, 13	-1,136	-1,151
Other operating income	8	4,444	911
Other operating expenses		-507	-396
Results from participations in associated companies	17	0	-1
Operating profit	3–8, 11, 13–15	**13,692**	**8,287**
Financial income	9	220	207
Financial expenses	10	-1,357	-894
Profit after financial items		**12,555**	**7,600**
Tax	18	-2,529	-1,526
Net profit for the year		**10,026**	**6,074**
Net profit for the year attributable to:			
Owners of the Parent Company		10,022	6,073
Non-controlling interests		4	1
Earnings per share, SEK	23	36.65	22.21
There are no potential shares, hence no dilution effect			
Average number of shares, before and after dilution		273,471,169	273,503,169

Consolidated Statement of Comprehensive Income

SEK m	Note	2024	2023
Net profit for the year		**10,026**	**6,074**
Other comprehensive income			
Items to be reclassified to the Income Statement			
Cash flow hedging			
Change in market value of derivative in-struments		-16	-105
Fiscal effect on derivative instruments		3	19
Transfers to the Income Statement		95	142
Tax on transfers to the Income Statement		-20	-29
		62	**27**
Year's translation difference on overseas operations		649	-664
Result of hedging of net investments in overseas operations		-64	58
Tax on the net profit for the year from hedging instruments		13	-12
		598	**-618**
Total items to be reclassified to the Income Statement		**660**	**-591**
Items that will not be reclassified to the Income Statement			
Revaluation of defined benefit pension plans	24	-58	-166
Tax attributable to items not reclassified to the Income Statement		12	35
Total items that will not be reclassified to the Income Statement		**-46**	**-131**
Total Other comprehensive income		**614**	**-722**
Comprehensive income for the year		**10,640**	**5,352**
Comprehensive income for the year attributable to:			
Owners of the Parent Company		10,636	5,351
Non-controlling interests		4	1

↓ PDF print version

Consolidated Balance Sheet

SEK m	Note	31.12.2024	31.12.2023
ASSETS			
Non-current assets			
Intangible assets	13, 14	3,465	3,537
Property, plant and equipment	14, 15		
Buildings and land		9,214	7,733
Deferred mining costs		12,096	11,099
Machinery and other technical facilities		30,887	28,074
Equipment, tools, fixtures and fittings		2,116	1,324
Work in progress		19,504	16,390
		73,817	**64,620**
Other non-current assets			
Participations in associated companies	17	9	9
Other shares and participations	26	6	4
Deferred tax assets	18	234	136
Derivative instruments	26, 27	66	48
Non-current receivables		141	512
		457	**709**
Total non-current assets		**77,738**	**68,866**
Current assets			
Inventories	19	22,000	21,987
Trade receivables	20, 26	5,563	3,964
Tax receivables		2	38
Derivative instruments	26, 27	476	318
Other current receivables	21	3,361	1,806
Cash and cash equivalents	12, 26	7,052	4,978
Total current assets		**38,453**	**33,091**
TOTAL ASSETS		**116,192**	**101,957**

SEK m	Note	31.12.2024	31.12.2023
EQUITY AND LIABILITIES			
Equity	23		
Share capital		579	579
Other capital provided		5,940	5,940
Translation reserve		2,728	2,130
Hedge reserve		351	290
Defined benefit pension plans		-976	-930
Retained earnings		56,371	48,395
Equity attributable to the owners of the Parent Company		**64,992**	**56,404**
Non-controlling interests		**19**	**15**
Total equity		**65,012**	**56,420**
Non-current liabilities			
Provisions for pensions	24	1,208	1,128
Other provisions	25	11,070	10,986
Deferred tax liabilities	18	4,329	3,454
Liabilities to credit institutions	26, 29	11,201	11,462
Other interest-bearing liabilities	15, 29	299	108
Derivative instruments	26, 27, 29	0	4
Total non-current liabilities		**28,106**	**27,142**
Current liabilities			
Liabilities to credit institutions	26, 29	4,856	2,962
Other interest-bearing liabilities	15, 29	151	50
Trade and other payables	26, 29	13,626	10,915
Other provisions	25	164	250
Current tax liabilities		291	410
Derivative instruments	26, 27, 29	120	544
Other current liabilities	30	3,866	3,264
Total current liabilities		**23,074**	**18,396**
TOTAL EQUITY AND LIABILITIES		**116,192**	**101,957**

Consolidated Statement of Changes in Equity

		Equity attributable to the owners of the Parent Company								
SEK m	**Note**	**Share capital**	**Other capital provided**	**Translation reserve**	**Hedge reserve**	**Defined benefit pension plans**	**Retained earnings**	**Total Boliden's shareholders**	**Non-controlling interests**	**Total equity**
Opening equity, 01.01.2023		**579**	**5,940**	**2,748**	**262**	**-799**	**49,581**	**58,311**	**14**	**58,325**
Net profit for the year							6,073	6,073	1	6,074
Other comprehensive income				-618	27	-131		-722	0	-722
Comprehensive income for the year				**-618**	**27**	**-131**	**6,073**	**5,351**	**1**	**5,352**
Dividend to Boliden AB's shareholders							-4,103	-4,103		-4,103
Share-based payment settled by equity-instruments	5						1	1		1
Dividend to non-controlling interests	5						-11	-11		-11
Redemption		-289					-2,856	-3,145		-3,145
Bonus issue		289					-289	–		–
Closing equity, 31.12.2023	23	**579**	**5,940**	**2,130**	**290**	**-930**	**48,395**	**56,404**	**15**	**56,420**
Opening equity, 01.01.2024		**579**	**5,940**	**2,130**	**290**	**-930**	**48,395**	**56,404**	**15**	**56,420**
Net profit for the year							10,022	10,022	4	10,026
Other compre-hensive income				598	62	-46		614	0	614
Comprehensive income for the year				**598**	**62**	**-46**	**10,022**	**10,636**	**4**	**10,640**
Dividend to Boliden AB's shareholders							-2,051	-2,051		-2,051
Share-based payment settled by equity-instruments	5						3	3		3
Closing equity, 31.12.2024	23	**579**	**5,940**	**2,728**	**351**	**-976**	**56,371**	**64,992**	**19**	**65,012**

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.

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.

↓ PDF print version

Consolidated Statement of Cash Flow

SEK m	Note	2024	2023
Operating activities			
Profit after financial items		12,555	7,600
Adjustment for items not included in the cash flow:			
Depreciation, amortization and impairment of assets	7, 13, 14	6,783	6,246
Provisions		21	11
Revaluation of process inventory		-1,667	-477
Translation differences and other		216	-156
Tax paid	18	-2,171	-1,763
Cash flow from operating activities before changes in working capital	12	**15,737**	**11,461**
Cash flow from changes in working capital			
Increase (–)/Decrease (+) in inventories		1,722	738
Increase (–)/Decrease (+) in operating receivables		-2,893	-706
Increase (+)/Decrease (–) in operating liabilities		3,001	386
Other		92	304
Cash flow from changes in working capital		**1,922**	**722**
Cash flow from operating activities		**17,659**	**12,183**
Investment activities			
Acquisition of intangible assets	13	-22	-111
Acquisition of property, plant and equipment	14	-14,966	-15,420
Sale of property, plant and equipment		0	0
Disposal/acquisition of financial assets		-8	-5
Cash flow from investing activities		**-14,996**	**-15,537**
Free cash flow		**2,663**	**-3,354**
Financing activities			
Dividends and redemption		-2,051	-7,248
Loans raised		14,946	9,227
Amortization of loans		-13,485	-5,806
Cash flow from financing activities	12	**-590**	**-3,827**
Cash flow for the year		2,072	-7,180
Opening cash and cash equivalents		**4,978**	**12,159**
Exchange rate difference on cash and cash equivalents		**1**	**-1**
Closing cash and cash equivalents	12	**7,052**	**4,978**

Income Statement, Parent Company

SEK m	Note	2024	2023
Revenues		40	41
Administrative expenses		-65	-56
Operating profit		**-25**	**-14**
Dividends from subsidiaries	16	6,089	8,000
Profit after financial items		**6,065**	**7,985**
Tax		1	2
Net profit for the year		**6,066**	**7,987**

Boliden AB conducts limited operations, and is in a tax agreement with Boliden Mineral AB.

Boliden AB has no amounts to report under other comprehensive income.

Balance Sheet, Parent Company

SEK m	Note	31.12.2024	31.12.2023
ASSETS			
Non-current assets			
Financial assets			
Participations in subsidiaries	16	3,911	3,911
Other shares and participations		2	–
Deferred tax assets		3	2
Non-current receivables from subsidiaries		26,098	20,930
Total non-current assets		**30,014**	**24,841**
Current receivables			
Current receivables from subsidiaries		121	8
Total current assets		**121**	**8**
TOTAL ASSETS		**30,135**	**24,850**
EQUITY AND LIABILITIES			
Equity	23		
Restricted equity			
Share capital		579	579
Statutory reserve		5,252	5,252
		5,831	**5,831**
Non-restricted equity			
Retained earnings		8,707	2,771
Net profit for the year		6,066	7,987
		14,773	**10,758**
Total equity		**20,603**	**16,588**
Liabilities			
Non-current liabilities to credit institutions	26, 29	5,362	5,882
Current liabilities to credit institutions		4,127	2,367
Current liabilities to subsidiaries		22	0
Other current liabilities		22	13
Total liabilities		**9,533**	**8,262**
TOTAL EQUITY AND LIABILITIES		**30,135**	**24,850**

↓ PDF print version

Statement of Changes in Equity, Parent Company

SEK m	Share capital	Statutory reserve	Non-restricted equity	Total equity
Opening equity, 01.01.2023	**579**	**5,252**	**10,030**	**15,860**
Dividend			-4,103	-4,103
Redemption	-289		-2,856	-3,145
Bonus issue	289		-289	–
Buy back own shares			-11	-11
Net profit for the year			7,987	7,987
Closing equity, 31.12.2023	**579**	**5,252**	**10,758**	**16,588**
Opening equity, 01.01.2024	**579**	**5,252**	**10,758**	**16,588**
Dividend			-2,051	-2,051
Net profit for the year			6,066	6,066
Closing equity, 31.12.2024	**579**	**5,252**	**14,773**	**20,603**

The statutory reserve includes amounts transferred to the share premium reserve before January 1, 2006. Accumulated profit together with profit for the year constitute 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	2024	2023
Operating activities			
Profit after financial items		6,065	7,985
Adjustment for items not included in the cash flow:		1	-11
Cash flow from operating activities before changes in working capital		**6,066**	**7,975**
Cash flow from changes in working capital			
Increase (-)/Decrease (+) in operating receivables		0	0
Increase (+)/Decrease (-) in operating liabilities		10	4
Cash flow from changes in working capital		**10**	**4**
Cash flow from operating activities		**6,076**	**7,979**
Financing activities			
Loans raised		1,240	3,799
Dividends and redemption		-2,051	-7,248
Amortization, loans from subsidiaries		-5,265	-4,530
Cash flow from financing activities	12	**-6,076**	**-7,979**
Cash flow for the year		–	–
Opening cash and cash equivalents		–	–
Closing cash and cash equivalents		–	–

↓ PDF print version

Notes

All amounts in SEK m 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 and Sustainability Report was approved for publication by the Board on March 17, 2025. The Balance Sheets and Income Statements are subject to approval by the Annual General Meeting on April 23, 2025.

New or amended standards from International Accounting Standards Board (IASB), as well as interpretations and agenda decisions from IFRS IC that came into force in the 2024 calendar year
During the year, a review was conducted of the material information on accounting principles disclosed in the Annual and Sustainability Report.

New and amended standards, interpretations and agenda decision that have come into force during the financial year 2024, have not had any material effect on the Group's financial statements.

New standards from IASB, as well as interpretations and agenda decisions from IFRS IC that come into force in the 2025 calendar year or thereafter
New and amended standards, interpretations and agenda decisions that come into force for the financial year beginning on January 1, 2025 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, meaning 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 non-controlling interest 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 conditions 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 SEK 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.

Climate-related disclosures
The approved business plan, which is the base for the impairement test, also includes an evaluation of environmental issues as this is an integrated part of the strategic work. This also includes the need for future investments. See note 14, Property, plant and equipment for more information.
Boliden has issued green bonds within the framework for green financing, see note 29, Financial liabilities and maturity structure.

One of the performance conditions in Boliden´s long-term share savings program is sustainability-based, see note 5, Employees and personnel costs.

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.

Reclamation costs
Provisions for reclamations are made on the basis of an assessment of future expenses based on current conditions. Provisions are reviewed regularly by internal and external specialists and updates are made when necessary when the estimated useful lives, costs, technical preconditions, regulations or other conditions of mine and smelter assets change. Provisions for reclamation work totaled SEK 11,218 m (10,890), also see note 25, Other provisions. Capitalized reclamation costs totaled SEK 7,379 m (7,695), also see note 14, Property, plant and equipment. Net reclamation liability totaled SEK 3,839 m (3,195).

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 interest rate of 2.5% (2.5) has been used.
A change in the discount rate of 0.5 percentage points would result in an adjustment to the reclamation liability of approximately SEK 1,000 m and a corresponding change in capitalized reclamation costs. The depreciations in the years ahead should be adjusted by around +/- SEK 40 m with the net financial items affected by the equivalent amount but in the opposite direction

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 estimation of the proportion of process inventory and finished metal inventory derives from internal mining operations, based on the quantities of mined concentrate produced internally and purchased externally.

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 choosen to present sensitivity analysis 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.

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 for instance 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 based on current consensus prices in the market at the time of the impairment test. 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 develops annual life of mine production plans for the mines.

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 175–178. 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 operating units via two Business Area Boards, one for each Business Area, through which the financial results are evaluated in relation to financial targets, 3) financial targets 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 targets and resource allocation for units within the respective Business Areas are made within the respective Business Areas' management groups, and 5) General Managers of operating units report not to the CEO but to the Business Area Presidents.

Business Area Mines comprises the operations of the Swedish mines Aitik, the Boliden Area and Garpenberg, the Tara mine in Ireland, and the Kevitsa mine 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

31.12.2024	Mines	Smelters	Other[2]	Eliminations	The Group
External revenues	3,547	85,660	0		89,207
Internal revenues	17,656	-31	254	-17,878	0
Revenues	**21,202**	**85,629**	**254**	**-17,878**	**89,207**
Insurance income	0	3,339			3,339
Results from participations in associated companies		0			0
Operating profit	**5,241**	**8,814**	**-363**		**13,692**
Net financial items					-1,137
Profit after financial items					**12,555**
Tax					-2,529
Net profit for the year					**10,026**
Intangible assets	147	3,307	9		3,465
Property, plant and equipment	47,597	26,074	145		73,817
Equity shares and other financial assets	-20	10	25		15
Inventories	2,571	20,157	-728		22,000
Other receivables	3,605	8,084	164	-2,246	9,606
Assets in capital employed	**53,902**	**57,632**	**-385**	**-2,246**	**108,903**
Provisions, other than for pensions and tax	10,235	998	0		11,234
Other non interest-bearing liabilities	3,356	15,305	1,197	-2,246	17,612
Liabilities in capital employed	**13,591**	**16,303**	**1,197**	**-2,246**	**28,845**
Total capital employed	**40,310**	**41,329**	**-1,581**	**0**	**80,058**
Depreciation	5,075	1,690	17		6,783
Investments[1]	8,270	7,091	14		15,376

31.12.2023	Mines	Smelters	Other[2]	Eliminations	The Group
External revenues	1,331	77,222	0		78,554
Internal revenues	17,351	-25	258	-17,585	0
Revenues	**18,683**	**77,197**	**259**	**-17,585**	**78,554**
Results from participations in associated companies	0	-1	0		-1
Operating profit	**3,111**	**4,962**	**214**		**8,287**
Net financial items					-687
Profit after financial items					**7,600**
Tax					-1,526
Net profit for the year					**6,074**
Intangible assets	207	3,306	24		3,537
Property, plant and equipment	43,893	20,589	139		64,620
Equity shares and other financial assets	-20	10	23		13
Inventories	2,067	20,575	-656		21,987
Other receivables	2,212	4,795	1,296	-1,659	6,644
Assets in capital employed	**48,358**	**49,275**	**827**	**-1,659**	**96,801**
Provisions, other than for pensions and tax	9,916	1,002	319		11,237
Other non interest-bearing liabilities	3,691	12,118	576	-1,659	14,727
Liabilities in capital employed	**13,608**	**13,120**	**895**	**-1,659**	**25,964**
Total capital employed	**34,751**	**36,155**	**-68**	**0**	**70,837**
Depreciation	4,511	1,725	10		6,246
Investments[1]	8,744	6,799			15,543

1) Excluding capitalized reclamation costs but including right-of-use assets.
2) 'Other' includes Group staff functions and Group-wide functions not allocated to Mines or Smelters. This item also includes elimination of internal profit.

Boliden's three major customers in the Smelters segment account for 16% (17), 14% (14) and 7% (7) respectively of Boliden's external revenue. Other customers each represent less than 6 percent (6) of Boliden's total external revenue. Boliden's metals are sold primarily to industrial customers, but are also sold to base metal traders and international metal warehouses, 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	2024	2023
Sweden	3,594	6,912
Finland	9,088	8,040
Nordic region, other	496	530
Germany	16,954	15,256
UK	14,670	14,619
Europe, other	39,913	31,005
North America	127	78
Other markets	4,365	2,116
	89,207	**78,554**

Assets in capital employed	31.12.2024	31.12.2023
Sweden	72,151	66,054
Finland	19,586	18,629
Norway	14,032	9,045
Ireland	3,101	3,045
Other countries	33	28
	108,903	**96,801**

Investments in non-current assets[1]	31.12.2024	31.12.2023
Sweden	8,387	7,904
Finland	1,720	2,461
Norway	5,226	4,938
Ireland	43	240
Other countries	0	0
	15,376	**15,543**

1) Excluding capitalized reclamation costs but including right-of-use assets.

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. Definitive 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 definitive 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.

Boliden's revenues derive primarily from the sale of metals. The following table shows external revenues broken down by product category. The increase in sales of intermediate products is due to Rönnskär´s modified business model after the fire with sales of anodes instead of cathodes. 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.

2024	Mines	Smelters	Other	The Group
Finished metals	–	47,261	–	47,261
Metal concentrate	3,546	–	–	3,546
Intermediate products	–	36,441	–	36,441
By-products	–	1,875	–	1,875
Other sales	0	84	0	84
Total external sales revenues	**3,547**	**85,660**	**0**	**89,207**

2023	Mines	Smelters	Other	The Group
Finished metals	–	56,590	–	56,590
Metal concentrate	1,331	–	–	1,331
Intermediate products	–	18,927	–	18,927
By-products	–	1,631	–	1,631
Other sales	0	75	0	75
Total external sales revenues	**1,331**	**77,222**	**0**	**78,554**

Note 05 Employees and personnel costs

Average number of employees[1]	2024	of whom women	of whom men	2023	of whom women	of whom men
The Parent Company	3	1	2	3	1	2
Subsidiaries						
Sweden	3,380	851	2,529	3,512	881	2,631
Finland	1,629	283	1,346	1,673	290	1,383
Norway	428	97	330	377	76	301
Ireland	351	28	323	82	22	60
Others	18	7	11	17	7	10
Total in subsidiaries/The Group	**5,808**	**1,267**	**4,541**	**5,664**	**1,277**	**4,387**

1) Refers to full-time equivalents.

Percentage of women at Board and Group management level	2024	2023
The Board of Directors	27%	30%
Group management	20%	20%

	2024		2023	
Salaries, other remuneration and social security expenses	**Salaries and remuneration**	**Social security expenses**	**Salaries and remuneration**	**Social security expenses**
The Parent Company	32	16	27	16
of which pension expenses		(6)		(6)
Subsidiaries	4,671	1,588	4,271	1,501
of which pension expenses		(407)		(410)
The Group, total	**4,702**	**1,604**	**4,298**	**1,517**

	2024		2023	
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**
The Parent Company	32	–	27	–
Subsidiaries in Sweden	37	2,415	34	2,196
Subsidiaries abroad				
Finland	9	1,291	10	1,202
Norway	2	332	2	298
Ireland	6	561	6	506
Others	2	17	2	15
The Group, total	**87**	**4,615**	**81**	**4,217**

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 40,000/full-time employee) is payable when the return on capital employed reaches 18%. The funds may be disbursed to the employees after three years at the earliest unless otherwise regulated by the relevant national profit-sharing scheme. An allocation of SEK 38,400 (16,280) per full-time employee is proposed for 2024 as the return on capital employed was 17.6% (12.1).

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 director fees.

Remuneration paid to the President and other senior executives comprises basic salary, variable remuneration, other benefits and pension. 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 members, 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.

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

Variable remuneration

The variable remuneration paid to the President in 2024 was based on the Group's return on equity, sustainability targets and the accident trend within the Group.

For other members of Group management, the variable remuneration for 2024 was based on the Group's targets and on their personal areas of responsibility, including financial and individual targets as well as sustainability targets and the accident rate trend. Other benefits refer primarily to car benefits.

Pensions

The President has a defined contribution pension plan to which the company allocates 35% of the fixed monthly salary including vacation pay. The President himself decides the level of survivor annuity, indemnity for medical treatment or disability, etc., in his insurance plan. The retirement age of the President is 65.

All other members of Group management have defined contribution pension plans to which the company sets aside 30% of the fixed monthly salary. The premium does not include costs for ITP basic level, ITPK, part-time retirement pension and supplementary health insurance. The retirement age is 65.

Remunerations and other benefits paid during the year
Specification of remuneration paid to the Board Members and senior executives.

	Directors' fee/ Basic salary		Variable remuneration		Other benefits		Pension cost	
SEK k	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**
The Board of Directors								
Karl-Henrik Sundström, Chairman	2,265	2,190						
Helene Biström	675	655						
Tomas Eliasson	835	805						
Per Lindberg	755	730						
Perttu Louhiluoto	675	655						
Elisabeth Nilsson	675	655						
Pia Rudengren		930						
Group management								
Mikael Staffas, President	10,374[1)]	9,928[1)]	4,751[3)]	1,946[3)]	176	174	3,634	3,475
Other members of Group management[2)]	13,380	12,600	5,298[3)]	2,112[3)]	499	480	4,839	4,405

1) Refers to basic salary including vacation pay.
2) A total of 4 people in 2024 and 2023.
3) The amounts are attributable to 2024 but will be disbursed in 2025. The cost for the long-term share savings programs will be additional in the amount of SEK 783 thousands for the President and SEK 1,013 thousands for Group Management.
4) The amounts are attributable to 2023 but were disbursed in 2024. The cost for the long-term share savings program will be additional in the amount of SEK 318 thousands for the President and SEK 411 thousands for Group Management.

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

Severance pay
The President and the company shall give six and twelve months' notice of termination respectively. If notice is given by the company, severance pay corresponding to six 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 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 2024 Corporate Governance Statement for information.

SHARE-BASED PAYMENT SETTLED BY EQUITY INSTRUMENTS
Accounting principles
Boliden has a share-based incentive program in the form of a long-term share savings program. The cost of the program is recognized based on the fair value per share right at the time of grant, calculated by an independent third party, and the number of shares expected to be earned. This remuneration is recognized as personnel costs during the vesting period, with an equivalent increase in equity. To the extent the vesting terms in the program are connected to market-related performance conditions (total shareholder return, TSR), these are taken into consideration when calculating the fair value of the share rights. Performance conditions as well as employment conditions (continued employment) impact personnel costs during the vesting period through changes in the number of shares expected at the end of the program. At the end of each reporting period, the Group reviews its assessment of the number of shares that are expected to be earned based on the performance conditions and employment conditions. When shares are allocated, social security contributions are to be recognized in certain countries for the value of the employee benefit. The Group continuously recognizes a liability for social security contributions for these remunerations. The liability is revalued continuously based on the fair value of the share-based remuneration on the Balance Sheet date.

Long-term share savings program
On April 23, 2024, the Annual General Meeting passed a resolution to implement a long-term share savings program, LTIP 2024/2027 aimed at the CEO, members of the Group Management, general managers and certain other key employees in the Boliden Group. The overall purpose of the share savings program is to maintain a close community of interest between employees and shareholders by incentivizing employees to increase the value of the company. The program is intended to attract and retain key employees. Previously, the long-term share savings program LTIP 2023/2026 is also ongoing. The information below provides details about the share savings program LTIP 2023/2026 in parentheses.

Both LTIP 2024/2027 and LTIP 2023/2026 are share-based programs that require participants to purchase shares, investment shares, on the market. Subject to certain conditions, the participants are allotted up to three performance shares free of charge for each investment share purchased. The number of eligible investment shares allocated is linked to a certain percentage of the participant's annual fixed base salary. Performance shares are awarded after a period of three years. The total number of performance shares comprises a maximum of 100,000 (40,000). The program encompasses a maximum of 10 (17) participants. The allotment of performance shares is conditional to continued employment and an uninterrupted holding of allocated investment shares. In addition, two performance conditions are set, one financial and one sustainability condition.

The financial condition is linked to the total return for Boliden's share (TSR). The TSR development in 2024 (2023) compared with 2027 (2026) should exceed that of a peer group of other companies. The measurement period is 20 trading days after Boliden's publication of the year-end report each year. For maximum allotment of performance shares, Boliden's TSR must exceed that of the peer group by at least 12.5 percentage points.
The sustainability condition relates to the reduction of Boliden's carbon dioxide emissions in absolute terms. A condition for allotment of performance shares is that Boliden's carbon dioxide emissions in absolute terms during the financial year 2026 (2025) have been reduced by at least 15% (12) compared to Boliden's carbon dioxide emissions in absolute terms in the financial year 2021.

The financial condition is weighted with 80% and the sustainability condition with 20% when determining the allotment of performance shares.

The grant date for the long-term share savings program was July 1, 2024 (July 1, 2023).

In accordance with the terms and conditions, Boliden's Group Management and certain other key employees in the Group, a total of 35 (15) people, have acquired or already hold 27,115 (11,672) shares. LTIP 2024/2027 may comprise a maximum of 81,345 (35,016) performance shares in Boliden. To ensure delivery of shares under LTIP 2024/2027, there is an authorization from the Annual General Meeting to repurchase 100,000 shares. The authorization is valid until the Annual General Meeting 2025 and had not been utilized as of the balance sheet date. Regarding LTIP 2023/2026, 40,000 shares were repurchased in 2023. The cost for the program, excluding social security contributions, is reported based on the fair value per share right at the time of allotment, amounting to SEK 181.0 (180.4), and the estimated number of shares that will be vested. Total cost for the year amountsto SEK 3.4 m (1.4) , of which social security contributions amounted to SEK 1.0 m (0.3).

Note 06 Auditors' fees and reimbursement of expenses

	2024	2023
Deloitte AB		
Audit engagements	11	11
Auditing assignments in addition to the audit engagement	0	0
Tax consultancy	-	0
Other services	0	0
	11	**11**

Note 07 Key expense items

	2024	2023
Raw material costs, incl. inventory changes	50,615	42,985
Personnel costs	6,517	6,002
Energy costs	3,654	4,256
Other external costs	11,884	11,292
Depreciation and amortization	6,783	6,246
	79,453	**70,781**

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:	2024	2023
Cost of goods sold	6,696	6,176
Selling expenses	0	0
Administrative expenses	73	61
Research and development costs	14	9
	6,783	**6,246**

Note 08 Other operating income

	2024	2023
Realized exchange rate gains	257	209
Sale of electricity	352	162
Scrap sales	67	52
Profit, sale of non-current assets	0	25
Insurance payments[1)]	3,339	180
Sales of district heating	110	97
Rental income, industrial properties	25	25
Other	294	160
	4,444	**911**

1) Refers to insurance compensation related to the fire in Rönnskär 2023.

Note 09 Financial income

	2024	2023
Interest income on cash and cash equivalents[1)]	218	204
Other	2	3
	220	**207**

1) Included in the category Financial assets at amortized cost.

Note 10 Financial expenses

	2024	2023
Interest on loans at amortized cost	809	531
Interest on currency futures[1)]	139	159
Interest on pension provisions	29	29
Interest on reclamation reserve	260	112
Interest on leases	6	3
Other financial items	113	60
	1,357	**894**

1) Included in the category Financial assets at fair value through profit or loss.

Boliden's average interest rate on liabilities to credit institutions totaled 4.6% (3.9), 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 in exchange for the latter's meeting or agreeing to meet certain future conditions. 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 as a reduction in costs during the same reporting period the contributions are intended to cover. The costs involved are personnel costs and energy costs.

Government subsidies totaling SEK 367 m (530) were received in 2024, SEK 170 m (226) was reported in the Income Statement, and the asset's value was reduced by SEK 23 m (252). The majority of the subsidies were received in Norway under a carbon dioxide compensation scheme and for energy efficiency improvement measures, and in Finland in respect of electrification support, and are reported under cost of goods sold in the Income Statement.

Note 12 Supplementary information to the Statement of Cash Flow

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

	2024	2023
Interest received		
Bank interest	218	204
	218	**204**
Interest paid		
Interest on currency futures	-105	-150
Interest on external loans	-795	-521
Interest on leases	-6	-3
	-906	**-674**
Cash and cash equivalents, December 31		
The following items are in-cluded in cash and cash equivalents:		
Cash and bank balances	7,052	4,978
Short-term investments	0	0
	7,052	**4,978**

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.

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

		Items not affecting cash flow			
The Group 2024	**At the beginning of the year**	**Cash flow**	**Currency**	**Other[1)]**	**Amount at year-end**
Non-current liabilities to credit institutions	11,462		-261		11,201
Current liabilities to credit institutions	2,962	1,573	321		4,856
Other interest-bearing liabilities, non-current	108			191	299
Other interest-bearing liabilities, current	50	-112		213	151
Total liabilities from financing activities	**14,582**	**1,421**	**60**	**404**	**16,507**

1) The effect of changes in leases during the year.

		Items not affecting cash flow			
Koncernen 2023	**At the beginning of the year**	**Cash flow**	**Currency**	**Other[1)]**	**Amount at year-end**
Non-current liabilities to credit institutions	10,639	882	-59		11,462
Current liabilities to credit institutions	350	2,612			2,962
Other interest-bearing liabilities, non-current	139			-31	108
Other interest-bearing liabilities, current	64	-73		59	50
Total liabilities from financing activities	**11,192**	**3,421**	**-59**	**28**	**14,582**

1) The effect of changes in leases 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 business 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 estimated 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 tonne 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 adjusted. 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 and amortization 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.

	Capitalized development expenses	Patents, licenses and similar rights	Exploration rights	Goodwill	Total intangible assets
Historical costs					
Opening balance, 01.01.2023	421	318	271	3,295	4,305
Investments	107	4	–	–	111
Sales and retirements	-24	-6	–	–	-30
Reclassifications	0	2	–	–	2
Translation differences for the year	0	-1	-1	-55	-57
Closing balance, 31.12.2023	**504**	**317**	**270**	**3,240**	**4,331**
Opening balance, 01.01.2024	504	317	270	3,240	4,331
Investments	20	2	–	–	22
Sales and retirements	-4	-3	–	–	-7
Reclassifications	-67	5	–	–	-62
Translation differences for the year	3	10	9	37	59
Closing balance, 31.12.2024	**456**	**332**	**279**	**3,277**	**4,343**
Amortization					
Opening balance, 01.01.2023	-243	-258	-271		-772
Amortization for the year	-37	-17	–		-54
Sales and retirements	24	5	–		30
Translation differences for the year	0	1	1		2
Closing balance, 31.12.2023	**-256**	**-268**	**-270**		**-794**
Opening balance, 01.01.2024	-256	-268	-270		-794
Amortization for the year	-53	-17	–		-70
Sales and retirements	4	3	–		7
Translation differences for the year	-4	-9	-9		-22
Closing balance, 31.12.2024	**-308**	**-291**	**-279**		**-878**
Reported value in the Balance Sheet 31.12.2023	**248**	**49**	**–**	**3,240**	**3,537**
Reported value in the Balance Sheet 31.12.2024	**148**	**41**	**–**	**3,277**	**3,465**
Amortization according to plan, included in operating profit					
2023	**-37**	**-17**			**-54**
2024	**-53**	**-17**			**-70**

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

The Boliden Group did not sell any emission rights in 2024.

Note 14 Property, plant and equipment

ACCOUNTING PRINCIPLES
Land, plants and equipment and associated capitalized costs for development and preproduction measures, 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 future expenses, calculated at current value, which are simultaneously reported as provisions. Effects of subsequent 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 is ready to become operational.

Plants and capitalized values attributable to waste rock are depreciated by pushback and in conjunction with metal extraction in relation to the anticipated metal extraction for the entire pushback. Plants 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 years
Deferred mining costs and waste rock capitalization	Concurrently with metal extraction
Capitalized reclamation costs	Linearly over the anticipated lifetime
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 technical facilities	Equipment, tools, fixtures and fittings	Work in progress	Total Property, plant and equipment
Historical costs						
Opening balance, 01.01.2023	15,937	28,397	61,130	2,607	8,054	116,125
Investments	321	2,690	1,402	239	10,752	15,404
Capitalized reclamation costs	0	–	3,815	–	–	3,815
Sales and retirements	-174	-2,513	-1,839	-19	-12	-4,557
Reclassifications	399	27	1,106	566	-2,143	-45
Translation differences for the year	-111	-75	-453	-126	-260	-1,027
Closing balance, 31.12.2023	**16,371**	**28,525**	**65,162**	**3,267**	**16,390**	**129,715**
Opening balance, 01.01.2024	16,371	28,525	65,162	3,267	16,390	129,715
Investments	617	2,764	2,736	517	8,315	14,951
Capitalized reclamation costs	–	–	88	–	–	88
Sales and retirements	-45	-29	-799	-17	-8	-897
Reclassifications	1,573	0	2,841	680	-5,052	42
Translation differences for the year	222	438	673	-29	-140	1,164
Closing balance, 31.12.2024	**18,739**	**31,699**	**70,703**	**4,419**	**19,504**	**145,064**
Depreciation						
Opening balance, 01.01.2023	-8,252	-18,287	-35,946	-1,812		-64,297
Depreciation for the year	-724	-1,702	-3,452	-239		-6,118
Sales and retirements	150	2,513	1,886	9		4,559
Reclassifications	–	–	1	-1		0
Translation differences for the year	73	50	377	101		600
Closing balance, 31.12.2023	**-8,753**	**-17,427**	**-37,134**	**-1,944**		**-65,256**
Opening balance, 01.01.2024	-8,753	-17,427	-37,134	-1,944		-65,256
Depreciation for the year	-784	-1,916	-3,493	-393		-6,586
Sales and retirements	27	16	843	12		898
Reclassifications	–	–	–	–		–
Translation differences for the year	-119	-277	-368	23		-740
Closing balance, 31.12.2024	**-9,629**	**-19,603**	**-40,152**	**-2,302**		**-71,686**
Reported value in the Balance Sheet 31.12.2023	**7,733**	**11,099**	**28,074**	**1,324**	**16,390**	**64,620**
Closing balance as above, 31.12.2024	9,110	12,096	30,551	2,116	19,504	73,378
Reported rights-of-use assets	104		336			440
Reported value in the Balance Sheet 31.12.2024	**9,214**	**12,096**	**30,887**	**2,116**	**19,504**	**73,818**
Depreciation according to plan, included in operating profit						
2023	**-724**	**-1,702**	**-3,452**	**-239**		**-6,118**
2024	**-784**	**-1,916**	**-3,493**	**-393**		**-6,586**

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 9,203 m (9,114). Accumulated depreciation totals SEK -1,824 m (-1,419). The change in capitalized reclamation costs for the year total SEK 88 m (3,815). 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 403 m (28), also see 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.

Capitalized interest expenses included in planned residual value	31.12.2024 Reported value, SEK m	31.12.2024 Interest rate, %	31.12.2023 Reported value, SEK m	31.12.2023 Interest rate, %
Rönnskär expansion, completed in 2000	6	6.8	9	6.8
Odda expansion, completed in 2004	–	–	1	4.0
Aitik expansion, completed in 2011	62	2.5	75	2.5
Rönnskär, electronic scrap recycling, completed in 2012	3	3.2	5	3.2
Garpenberg expansion, completed in 2014	45	1.7	51	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, based on the existing mineral reserve, usually between 5 to 30 years. Smelters establishes plans for 10 years. 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 also include assessments of environmental issues based on external analyses, risks and opportunities. The most important environmental issues are included in the strategic work, where targets, metrics and activity plans are clarified. Investments shall be assessed on the basis of environmental impact and be in support of Boliden's business strategy of being a prioritized metal supplier for a sustainable society. Production plans are based on the assumption that the permits needed to conduct the operations can be obtained and, where necessary, renewed. This long-term production planning also allows the use of long-term and established 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 current consensus prices, i.e. a joint market assessment. Current consensus prices are available through compilations from a number of analysis firms.

The current consensus prices used in the impairment test are shown in the table below.

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 relevant 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 8% (9), which corresponds to the weighted average 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 estimated to exceed the carrying amount of all cash-generating units. The Tara zinc mine book value, EUR 210 m, is marginally at the level of the estimated value in use. The value of Tara is continuously monitored in terms of metal prices, exchange rates and treatment charges for zinc. In the case of the completed sensitivity analysis presented below, Tara demonstrates sensitivity to changed assumptions.

An increase in the discount rate by one percentage point would have led to a minor need for impairment of one cash-generating unit in the Mines segment, the Tara mine. A 10% reduction of all current consensus 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 respect of the Tara mine. If current consensus prices for metals were to remain unchanged, a 10% weakening of the US dollar against all other currencies would not require 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 reduction would have a positive effect.

		2024				
Metal prices	**Unit**	**2025**	**2026**	**2027**	**2028**	**2029[1)]**
Copper	USD/tonne	9,413	10,050	10,057	10,224	9,143
Zinc	USD/tonne	2,928	2,702	2,696	2,720	2,626
Lead	USD/tonne	2,120	2,118	2,125	2,157	2,085
Nickel	USD/tonne	17,273	18,023	18,098	18,386	18,514
Gold	USD/oz	2,624	2,262	2,181	2,122	1,967
Silver	USD/oz	30.68	29.27	28.48	27.51	25.37
Treatment/refining charges						
Copper	USD	30	80	80	80	80
Zinc	USD	165	230	230	230	230
Lead	USD	85	190	190	190	190
Exchange rates						
USD/SEK		10.07	9.00	9.00	9.00	9.00
USD/NOK		10.49	8.45	8.45	8.45	8.45
EUR/USD		1.12	1.10	1.10	1.10	1.10

1) From 2030 onwards, Boliden's long-term prices are used.

		2023				
Metal prices	**Unit**	**2024**	**2025**	**2026**	**2027**	**2028[1)]**
Copper	USD/tonne	8,478	9,030	9,399	8,911	8,486
Zinc	USD/tonne	2,451	2,612	2,684	2,752	2,639
Lead	USD/tonne	2,226	2,030	2,069	2,136	2,082
Nickel	USD/tonne	20,926	19,651	20,089	19,964	19,254
Gold	USD/oz	2,033	1,875	1,792	1,764	1,710
Silver	USD/oz	25.6	23.7	23.2	23.1	22.8
Treatment/refining charges						
Copper	USD	88	80	80	80	80
Zinc	USD	160	230	230	230	230
Lead	USD	130	190	190	190	190
Exchange rates						
USD/SEK		10.84	9.00	9.00	9.00	9.00
USD/NOK		10.59	8.45	8.45	8.45	8.45
EUR/USD		1.10	1.10	1.10	1.10	1.10

1) Real 2028 prices are used for 2029 and beyond.

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. The right-of-use assets 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. 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. Similarly, the value of the liability and the asset are adjusted when the lease term i reassessed. The option of extending an agreement is included in a few of the Group's leases but 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 for example 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 the lease of a low-value asset, is exempt and is not included when determining liability and right-of-use assets, rather these are booked linearly in the item Cost of goods sold in the Income Statement. This also applies to agreements with variable lease payments. See note 29, Maturity structure.

THE GROUP

Amounts reported in the Balance Sheet

The Balance Sheet presents the following amounts related to leases:

	2024	2023
Right-of-use assets		
Buildings and land	104	115
Machinery and other technical facilities	336	46
	440	**162**
Lease liabilities		
Current	151	50
Non-current	299	108
	450	**158**

Additional right-of-use assets totaled SEK 403 m (28).

Amounts reported in the Income Statement

The Income Statement presents the following amounts related to leases:

	2024	2023
Depreciation of right-of-use assets		
Buildings and land	-29	-23
Machinery and other technical facilities	-97	-51
	-126	**-74**
Interest expenses	-6	-3
Expenditure attributable to short-term leases	-56	-62
Expenditure attributable to leases for which the underlying asset is of low value, which are not short-term leases	-87	-71
Expenditure attributable to variable lease payments not included in the lease liability	-1,007	-1,000

The total cash flow relating to leases was SEK 1,279 m (1,221).

Note 16 Participations in subsidiaries

Specification of the Parent Company's and the Group's holdings of participations in sub-sidiaries.

	31.12.2024			
Subsidiary/Co. reg. no./Registered office	**Shares/ participations**	**Percentage share**	**Book value**	**Book value 2023**
Boliden Mineral 3974677 Limited, Vancouver, Canada	85,811,638	100	–	–
Boliden Mineral 1393512 Limited, Vancouver, 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 Kevitsa Mining Oy, 2345699-1, Sodankylä, Finland				
Other subsidiaries, dormant or of minor importance				
			3,911	**3,911**

During the year, the Parent Company, Boliden AB, received dividend of SEK 6,000 m (8,000) from Boliden Mineral AB and SEK 89 m (0) from Boliden Mineral Limited.

Note 17 Participations in associated companies

	31.12.2024	**31.12.2023**
Book value at the beginning of the year	9	10
Exchange rate differences	0	0
Participation in associated companies' profits for the year	0	-1
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 tax rates applicable 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 tax losses carried forward 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 tax 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.

The Group is subject to OECD's model rules for Pillar 2. Legislation on Pillar 2 is in effect as of January 1, 2024 in Sweden. In accordance with 4a of IAS 12, the Group applies the exception for reporting and disclosure of deferred tax assets and liabilities for Pillar 2 income taxes.

The Group has assessed its potential exposure to Pillar 2 income taxes. Applying the temporary relief rules, the so-called "Transitional CbCR Safe Harbour", the Group has performed calculations based on its Country-by-Country reporting for 2024. According to the calculations, all companies within the Group qualify for the Transitional CbCR Safe Harbour in 2024, and there are no circumstances that indicate that this will change in the coming year. The Group therefore does not report any Pillar 2 income taxes in 2024.

Current tax expense	**2024**	**2023**
Tax expense for the period	-1,767	-1,580
Adjustment of tax attributable to previous years	-4	105
	-1,771	**-1,475**
Deferred tax expense (–) / tax income (+)		
Deferred tax expense/tax income in respect of temporary differences	-995	-216
Deferred tax expense/tax income for capitalized tax losses carried forward	236	166
	-758	**-51**
Total reported tax expense (–) / tax income (+)	**-2,529**	**-1,526**
Reconciliation of effective tax		
Reported profit before tax	12,555	7,600
Tax according to anticipated tax rate	-2,517	-1,519
Non-deductible expenses	-20	-87
Non-taxable income	2	63
Deductible costs not reported in the Income Statement	5	0
Taxable revenues not reported in the Income Statement	0	2
Market valuation of deferred tax assets	2	3
Non-capitalized tax losses carried forward	-22	-16
Utilization of previously unrecognized tax losses	24	–
Other adjustments	0	-77
Adjustment of tax attributable to previous years	-4	105
Total reported tax expense	**-2,529**	**-1,526**

Tax expense comprises 20.1% (20.1) of the Group's profit before tax. The anticipated tax expense for 2024 of 20.0% (20.0) has been calculated based on the current Group structure and applicable tax rates in the respective countries.

Deferred tax asset/tax liability

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

	31.12.2024			31.12.2023		
The Group	**Deferred tax asset**	**Deferred tax liability**	**Net**	**Deferred tax asset**	**Deferred tax liability**	**Net**
Intangible assets	–	-1	-1	1	-3	-1
Buildings and land	–	-462	-462	–	-161	-161
Machinery and equipment	–	-3,157	-3,157	5	-2,721	-2,716
Deferred mining costs	–	-176	-176	–	-171	-171
Other property, plant and equipment	1	–	1	–	0	0
Inventories	–	-1,080	-1,080	2	-768	-767
Equity	–	-33	-33	–	-29	-29
Non-current liabilities	384	–	384	344	–	344
Current liabilities	–	-62	-62	–	-49	-49
Interest deduction	14	–	14	–	–	–
Tax losses carried forward	476	–	476	232	–	232
Total	**875**	**-4,970**	**-4,095**	**584**	**-3,901**	**-3,318**
Offset within companies	-641	641	–	-448	448	–
Total deferred tax asset/ tax liability	**234**	**-4,329**	**-4,095**	**136**	**-3,454**	**-3,318**

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

The Group 2024	**Amount at the beginning of the year**	**Reported in the Income Statement**	**Reported in Other comprehensive income**	**Translation difference**	**Amount at year-end**
Intangible assets	-1	1	–	0	-1
Buildings and land	-161	-299	–	-1	-462
Machinery and equipment	-2,716	-407	0	-34	-3,157
Deferred mining costs	-171	0	–	-5	-176
Other property, plant and equipment	0	1	–	0	1
Inventories	-767	-313	–	0	-1,080
Equity	-29	-13	8	–	-33
Non-current liabilities	344	22	12	6	384
Current liabilities	-49	0	-14	1	-61
Interest deduction	–	14	–	0	14
Tax losses carried forward	232	236	–	8	476
Total	**-3,318**	**-758**	**7**	**-26**	**-4,095**

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

Koncernen 2023	**Amount at the beginning of the year**	**Reported in the Income Statement**	**Reported in Other comprehensive income**	**Translation difference**	**Amount at year-end**
Intangible assets	-2	1	–	0	-1
Buildings and land	546	-673	–	-33	-161
Machinery and equipment	-3,326	569	–	41	-2,716
Deferred mining costs	-168	-3	–	0	-171
Other property, plant and equipment	-1	1	–	0	0
Inventories	-616	-150	–	0	-767
Equity	–	37	-65	0	-29
Non-current liabilities	286	40	23	-5	344
Current liabilities	-14	-37	–	2	-49
Interest deduction	–	–	–	–	–
Tax losses carried forward	72	166	–	-6	232
Total	**-3,224**	**-51**	**-43**	**-1**	**-3,318**

Tax losses carried forward

Deferred tax asset of SEK 476 m (232) regarding tax losses carried forward relates in its entirety to Tara as a result of the business being placed under care and maintenance in 2023. Considering that operations have resumed in late 2024, it is expected that all of Tara's tax losses carried forward can be utilized against future taxable profits.

Unutilized tax losses carried forward for which deferred tax assets have not been reported totaled SEK 169 m (195) on December 31, 2024. All tax losses relate to Canada and mature between 2037 and 2044. It is deemed unlikely that the losses can be offset against future profits.

Tax paid by country

	2024	**2023**
Sweden	1,486	721
Finland	535	917
Ireland	1	0
Norway	146	123
Others	3	3
	2,171	**1,763**

Note 19 Inventories

ACCOUNTING PRINCIPLES
The Group's inventories primarily comprise mine 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 realizable 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 manufacturing costs. Supplies inventories are valued at whichever is the lower of the average historical cost and the replacement value. When mine 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.

	31.12.2024	31.12.2023
Raw materials and consumables	12,633	11,013
Goods under manufacture	5,902	7,761
Finished goods and tradable goods	3,465	3,213
	22,000	**21,987**

Note 20 Trade receivables

ACCOUNTING PRINCIPLES
Receivables are reported at the anticipated recoverable amount, i.e after deductions for expected credit losses. The anticipated term of trade receivables is short, the value is therefore reported at the nominal amount without any discounting, in accordance with the amortized cost method. See note 26 for further information on accounting principles for financial instruments.

Boliden applies the simplified method for reporting expected credit losses through trade receivables. Based on assessments that reflect an objective and probability-weighted outcome, a general provision is reported based on reasonable and verifiable data derived from historical, current and forward-looking conditions. For information on the management of credit risks, see Credit risks in trade receivables on page 44 in the Risk management section of the Directors' Report.

On December 31, 2024, trade receivables falling due for payment in more than 30 days totaled SEK 31 m (47), corresponding to 0.6% (1.2) of total trade receivables. Provisions for expected credit losses are not material.

	31.12.2024	31.12.2023
Trade receivables not due	4,755	3,498
Overdue 0-30 days	776	420
Overdue 31-60 days	9	34
Overdue 61-90 days	5	5
Overdue more than 90 days	17	8
	5,563	**3,964**

The majority of the Group's trade receivables relate to European customers. Trade 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

	31.12.2024	31.12.2023
Energy tax	138	103
Royalties	28	23
Other prepaid expenses and accrued income	357	293
VAT recoverable	451	633
Other current receivables[1)]	2,386	754
	3,361	**1,806**

1) Of which SEK 2,335 m is related to unsettled insurance compensation.

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 them, is presented in note 5, Employees and personnel costs and in the Corporate Governance Report on pages 55–57.

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 guarantees to any Board member or senior executives of the Company. During the year, the Parent Company, Boliden AB, received dividend of SEK 6,000 m (8,000) from Boliden Mineral AB and SEK 89 m (0) from Boliden Mineral 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.

Buy-back of own shares
Boliden's holdings of its treasury 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.

Number of shares	31.12.2024	31.12.2023
Opening number of shares	273,471,169	273,511,169
Stock split 2:1	–	273,511,169
Redemption	–	-273,511,169
Buy-back own shares	–	-40,000
Closing number of shares	**273,471,169**	**273,471,169**
Share capital, SEK	578,914,338	578,914,338
Nominal value per share, SEK	2,12	2.12

Equity, SEK m	31.12.2024	31.12.2023
Share capital	579	579
Total equity	65,012	56,420
Equity attributable to the owners of the Parent Company	64,992	56,404
Equity per share, SEK	237.66	206.25

Earnings per share	31.12.2024	31.12.2023
Net profit for the year attributable to the owners of the Parent Company, SEK m	10,022	6,073
Average number of shares, before and after dilution	273,471,169	273,503,169
Number of own shares held	40,000	40,000
Earnings per share, SEK	**36.65**	**22.21**

Equity
The Articles of Association for Boliden AB state that the share capital shall 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 23, 2024 resolved to pay a dividend of SEK 7.50 per share, in all SEK 2,051 m.

Boliden's Board of Directors will propose to the Annual General Meeting that a dividend of SEK 0 (7.50) per share be paid.

Buy-back of own shares
To ensure delivery of shares under the long-term share savings program, LTIP 2023/2026, Boliden AB has on October 20, 2023 repurchased 40,000 shares, for a total amount of SEK 11 m. As the total number of shares in Boliden amounts to 273,511,169, this corresponds to 0.002% of the total number of shares in Boliden.

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 weighted average number of shares.

Asset management
Boliden's managed assets comprise equity. Consolidated equity is presented on page 81. 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 18 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 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 life-long 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 2024 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 162% (158). 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 nonvesting 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 benefit plans.

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. A significant proportion 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, largely due to the effect of amended assumptions.

The Group's reported pension liability was SEK 1,208 m (1,128). The amount includes endowment insurance and similar commitments totaling SEK 139 m (132) in respect of defined contribution pension plans in Sweden.

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 obligations.

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

	Sweden		Ireland		Other	
Actuarial assumptions (weighted average)	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**
Discount rate, %	3.05	3.25	3.4	3.5	3.4–3.6	3.4–3.6
Future pay increases, %	2.5	2.5	1.9	2.1	3.4–3.5	3.4–3.5
Future pension increases, %	2.0	2.0	0	–	1.9–2.7	1.9–2.7
Lifespan						
Women	89	89	89	89	90	90
Men	87	87	88	88	86	86

	Sweden		Ireland		Other		Total	
Specification of provisions for pensions	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**
Pension obligation at the beginning of the year	**981**	**823**	**-6**	**-16**	**21**	**20**	**996**	**826**
Cost of defined benefit plans	56	45	1	0	0	9	57	53
Revaluations recognized in other comprehensive income	54	154	4	11	0	1	58	166
Payments and disbursements	-40	-41	0	0	-1	-12	-41	-53
Reclassification from other provision	–	–	–	–	–	4	0	4
Translation differences	–	–	-1	–	0	-1	-1	-2
Pension obligation at year-end[1]	**1,051**	**981**	**-2**	**-6**	**20**	**21**	**1,069**	**996**
Endowment insurance and similar commitments	139	132	–	–	–	–	139	132
Net debt, as per Balance Sheet[2]	**1,190**	**1,113**	**-2**	**-6**	**20**	**21**	**1,208**	**1,128**

	Sweden		Ireland		Other		Total	
Specification of provisions for pensions, as per December 31	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**
Pension obligations, funded	–	–	62	68	17	18	78	85
Pension obligations, unfunded	1,051	981	–	–	14	14	1,065	995
Fair value of plan assets	–	–	-64	-74	-10	-10	-72	-84
Pension obligations	**1,051**	**981**	**-2**	**-6**	**20**	**21**	**1,069**	**996**
Endowment insurance and similar commitments	139	132	–	–	–	–	–	132
Net debt, as per Balance Sheet	**1,190**	**1,113**	**-2**	**-6**	**20**	**21**	**1,208**	**1,128**

	Sweden		Ireland		Other		Total	
Specification of costs	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**
Cost of defined benefit plans								
Current service cost	33	28	0	0	0	9	33	37
Interest expense on obligations	30	29	2	2	0	0	33	32
Interest income from plan assets	–	–	-3	-3	0	0	-3	-3
Special payroll tax and other tax	-7	-13	–	–	–	–	-7	-13
Administrative costs and premiums paid	–	–	1	1	0	0	1	1
Total cost of defined benefit plans	**56**	**45**	**1**	**0**	**0**	**9**	**57**	**53**
Cost of defined contribution plans	124	115	19	35	243	241	386	392
Total pension costs	**180**	**160**	**20**	**35**	**243**	**250**	**443**	**445**

1) Obligations in Sweden include obligations in accordance with PRI/FGI totaling SEK 896 m (816), obligations for underground workers totaling SEK 92 m (105).
2) 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.

	Sweden		Ireland		Other		Total	
Reconciliation of pension obligations	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**
Present value of obligations at the beginning of the year	981	823	68	59	29	31	1,079	913
Current service cost	33	28	0	0	0	9	33	37
Interest expense on obligations	30	29	2	2	0	0	33	32
Special payroll tax	-7	-13	–	–	–	–	-7	-13
Revaluation of defined benefit pension liability recognized in other comprehensive income	54	154	-3	12	0	1	51	168
of which gain/loss as a result of financial assumptions	*37*	*99*	*0*	*3*	*0*	*0*	*36*	*102*
of which gain/loss as a result of experience-based assumptions	*17*	*56*	*-3*	*9*	*0*	*0*	*15*	*65*
Disbursements made	-40	-41	0	-5	-1	-12	-41	-58
Translation differences	–	–	-5	0	0	0	-5	0
Present value of obligations at year-end	**1,051**	**981**	**62**	**68**	**28**	**29**	**1,142**	**1,079**
Endowment insurance and similar commitments	**139**	**132**	–	**–**	–	**–**	**139**	**132**
of which amounts attributable to active employees	*431*	*416*	–	–	*16*	*17*	*447*	*433*
of which amounts attributable to holders of paid up policies	*370*	*354*	–	–	–	–	*370*	*354*
of which amounts attributable to retired employees	*389*	*344*	62	*68*	*12*	*12*	*463*	*424*

	Sweden		Ireland		Other		Total	
Reconciliation of plan assets	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**
Fair value of plan assets at the beginning of the year	–	–	74	75	10	11	84	87
Interest income from plan assets	–	–	3	3	0	0	3	3
Return on plan assets excluding amounts included in net interest items, recognized in Other comprehensive income	–	–	-6	1	0	0	-5	2
Disbursements made	–	–	-8	-5	-2	-2	-9	-7
Administrative costs, tax and premiums paid	–	–	-2	-1	-1	-1	-2	-2
Translation differences	–	–	2	0	1	1	3	1
Fair value of plan assets at year-end	**–**	**–**	**64**	**74**	**10**	**10**	**73**	**84**
Net debt, as per Balance Sheet[1)]							**1,208**	**1,128**

1) Including endowment insurance and similar obligations totaling SEK 139 m (132).

	Sweden		Ireland		Other		Total	
Specification of plan assets	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**
Interest-bearing securities	–	–	63	74	–	–	63	74
Cash and cash equivalents	–	–	1	0	–	–	1	0
Other	–	–	–	–	10	10	10	10
	–	**–**	**64**	**74**	**10**	**10**	**74**	**84**

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	-1	-77
	-0.5	+86	+1	+87
Pay increases, %	+0.5	+48	0	+48
	-0.5	-40	0	-40
Changed lifespan, years	-1	-31	-1	-32
	+1	+31	+1	+32

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	50	6	5	61
Benefits scheduled for disbursement within 1–5 years	198	22	8	228
Benefits scheduled for disbursement after 5 years or more	942	33	16	991

The weighted average duration of the defined benefit pension liability is 17 years for Sweden and 10 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. Here, 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.

	31.12.2024	31.12.2023
Reclamation costs	11,218	10,890
Other	16	347
	11,234	**11,237**
Of which:		
Non-current	11,070	10,986
Current	164	250
	11,234	**11,237**

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 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, but at the same time, the requirements for reclamation work have increased over time. Provisions for reclamation are reviewed on an ongoing basis.

Last years additions to existing provisions relate mainly to Aitik and Garpenberg. Aitik's reclamation reserve was expanded to be based on the entire life of the mine, 2047. This will be included in the the new operating permit application. Garpenberg made certain technical adjustments to the reclamation plan for the tailings facility, which affected the size of the reclamation reserve.

To determine the size of the reclamation liability, a discount interest rate of 2.5% (2.5) was used. A sensitivity analysis in respect of the discount rate is presented in note 2, Estimates and assessments.

	2024			2023		
The Group	**Reclamation costs**	**Other**	**Total**	**Reclamation costs**	**Other**	**Total**
Book value at the beginning of the year	10,890	347	11,237	7,040	327	7,367
Additions to existing provisions	88	–	88	3,815	–	3,816
Provision during the year	78	10	88	74	25	99
Reversal of existing provisions	-21	-353	-378	-26	–	-26
Payments	-154	0	-154	-105	–	-105
Reclassification to pension provision	–	–	–	–	-4	-4
Discount effect for the period	260	0	260	112	0	112
Translation difference	76	11	87	-21	-1	-22
Book value at year-end	**11,218**	**16**	**11,234**	**10,890**	**347**	**11,237**
Anticipated time of out-flow of resources:						
Within one year	163	1	164	249	1	250
Between one and two years	170	11	181	256	343	599
Between three and five years	494	1	494	552	0	552
More than five years	10,391	2	10,393	9,833	2	9,835
	11,218	**16**	**11,234**	**10,890**	**347**	**11,237**

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, matured 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.

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 Bloomberg.

When presenting the fair value of liabilities to credit institutions, the fair value is calculated as discounted agreed amortizations and interest payments at estimated market interest margins. The fair value of trade 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 expected credit losses, 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 expected 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 the 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 1 comprises instruments that are listed and traded on an active market where identical instruments are traded. Level 2 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 3 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 2, in that the discounted prices are based on listed daily prices from the stock exchanges. Currency futures and interest rate swaps have also been classified as level 2, 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 2, as these are calculated as discounted agreed amortizations and interest payments at estimated market interest rate levels. The fair value therefore essentially corresponds to the reported value. Shares and participations that are not listed have been classified as level 3. Exceptions to classification on the basis of the fair value hierarchy are made for trade 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 using calculated effective interest rate. The effective interest rate 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.

↓ PDF print version

Financial assets and liabilities by valuation category

31.12.2024	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*			66	66	66
Current receivables						
Trade receivables		5,563			5,563	5,563
Derivative instruments	*2*		16	459	476	476
Cash and cash equivalents		7,052			7,052	7,052
Total financial assets		**12,615**	**23**	**525**	**13,163**	**13,163**
LIABILITIES						
Non-current liabilities						
Liabilities to credit institutions	*2*	11,201			11,201	11,226
Derivative instruments	*2*			0	0	0
Current liabilities						
Liabilities to credit institutions	*2*	4,856			4,856	4,856
Trade and other payables		13,626			13,626	13,626
Derivative instruments	*2*		65	55	120	120
Total financial liabilities		**29,683**	**65**	**55**	**29,803**	**29,827**

31.12.2023	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*		4		4	4
Derivative instruments	*2*			48	48	48
Current receivables						
Trade receivables		3,964			3,964	3,964
Derivative instruments	*2*		167	151	318	318
Cash and cash equivalents		4,978			4,978	4,978
Total financial assets		**8,942**	**171**	**199**	**9,313**	**9,313**
LIABILITIES						
Non-current liabilities						
Liabilities to credit institutions	*2*	11,462			11,462	11,478
Derivative instruments	*2*			4	4	4
Current liabilities						
Liabilities to credit institutions	*2*	2,962			2,962	2,962
Trade and other payables		10,915			10,915	10,915
Derivative instruments	*2*		128	416	544	544
Total financial liabilities		**25,339**	**128**	**420**	**25,887**	**25,903**

Boliden's financial instrument holdings, which are reported at fair value in the Balance Sheet are all classified as level 2 items in the fair value hierarchy, with the exception of a minor amount of level 3 holdings in other shares and participations.

Note 27 Financial derivative instruments and hedge accounting

Derivatives
Derivatives valued at fair value, and for which changes in 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 metal 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 42–46. An assessment of hedge efficency 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 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 undertakings)
Changes in value of financial derivatives used to hedge a binding undertaking are reported under the operating profit together with changes in 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 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 part of the unrealized market values is reported as 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 gains/losses attributable to metal and currency derivatives are reported in net sales, while the gains/losses on interest rate derivatives are reported in net financial items. If the hedge refers to a non-financial item such as major investments concluded in foreign currency, the capitalized earnings from equity is transferred to the asset's historical cost and then booked in the Income Statement in line with depreciations. Any ineffective part of cash flow hedging is reported as operating profit or net financial items.

Hedging of net investments
Hedge accounting in respect of net investments in overseas operations is reported as 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 42–46.

	31.12.2024				31.12.2023			
Outstanding derivative instruments, SEK m	**Nominal amount**	**Assets**	**Liabilities**	**Fair value**	**Nominal amount**	**Assets**	**Liabilities**	**Fair value**
Transaction exposure (binding undertakings)[1)]								
Currency futures	-1,270	24	-31	-7	-1,946	74	-23	52
Raw material derivatives	-2,907	345	-5	339	-5,171	31	-317	-286
Transaction exposure (forecasted cash flow)[1)]								
Currency futures	1,903	97	-21	76	1,956	2	-85	-83
Interest rate derivatives	-3,246	63	0	63	-4,360	97	0	97
Derivatives, non hedge accounting								
Currency derivatives	-4,768	15	-64	-48	-2,919	162	-123	39
Total		**543**	**-120**	**422**		**366**	**-548**	**-182**

1) Find out more about the Group's transaction exposure in Risk management on page 45.

Hedge accounting, SEK m	**2024**	**2023**
Fair value hedging		
– Changes in value of hedging instruments in respect of binding undertakings	-308	-400
– Change in value of hedged item	308	400
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 2024 from effective cash flow hedges in respect of transaction exposure totaled SEK -95 m (-142), relating to interest rate swaps.

Offsetting of financial assets and liabilities

	31.12.2024	**31.12.2023**
Gross amount for financial assets	621	461
Amount offset in Balance Sheet	-79	-95
Net asset reported in Balance Sheet	543	366
Amount comprised by offsetting in conjunction with insolvency, etc.	-91	-226
Net asset	**452**	**139**

	31.12.2024	**31.12.2023**
Gross amount for financial liabilities	199	643
Amount offset in Balance Sheet	-79	-95
Net liability reported in Balance Sheet	120	548
Amount comprised by offsetting in conjunction with insolvency, etc.	-91	-226
Net debt	**30**	**321**

Note 28 Risk information

See section "Risk management" in the Directors' Report on pages 42–46 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, 2024 and on Boliden's planned production volumes. Sensitivity is based on 2024 benchmark Treatment Charges. 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.

	2024				2023			
Change in metal prices, +10%, SEK m	**Operating profit**	**Net financial items**	**Tax**	**Equity**	**Operating profit**	**Net financial items**	**Tax**	**Equity**
Copper	875	38	-183	730	850	36	-177	709
Zinc	950	41	-198	793	575	25	-120	480
Gold	550	24	-115	459	400	17	-83	334
Silver	375	16	-78	313	300	13	-63	250
Nickel	200	9	-42	167	225	10	-47	188
Lead	150	6	-31	125	150	6	-31	125
Change in exchange rates +10%								
USD/SEK	2,200	95	-459	1,836	1,850	79	-386	1,543
EUR/USD	1,350	58	-282	1,127	1,150	49	-240	959
USD/NOK	300	13	-63	250	170	7	-35	142
Change in treatment charges +10%								
TC zinc	120	4	-21	83	200	9	-42	167
TC/RC copper	100	5	-25	100	100	4	-21	83
TC lead	-10	0	2	-8	-10	0	2	-8
Change in market interest rates by +1%[1]		165	-33	132		146	-29	117

1) Based on closing loan portfolio excluding interest rate swaps on December 31.

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, 2024. Changes in 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	**2024**	**2023**
Translation exposure in net investments in foreign operations, exchange rate +10%[1]		
EUR/SEK	2,065	2,313
NOK/SEK	935	942
Effect of interest rate +1%, exchange rate +10%[2]		
Interest rate derivatives, interest rate swaps	113	28
Currency derivatives	1,030	195

1) Based on closing balances on December 31.
2) Based on outstanding derivatives as of December 31.

↓ PDF print version

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 considered to correspond to the value. Liabilities to credit institutions are initially valued at amounts received, less any arrangement fees, and are then valued at amortized cost. Interest expenses are reported on an ongoing basis in the Income Statement with the exception of the part included in the historical cost for property, plant and equipment. Capitalized arrangement 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 as 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 arrangement 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[2]					
31.12.2024 SEK m	Currency	Interest[1], %	Reported amount	2025	2026	2027	2028	2029	2030+
Bilateral loans	EUR	2.31	2,577	702	753	553	409	269	130
Bilateral loans	NOK	6.29	915	171	164	156	149	142	382
Bilateral loans	SEK	4.48	3,076	157	153	153	1,117	685	1,598
Bonds[3]	NOK	6.73	1,362	93	423	71	71	71	1,066
Bonds[3]	SEK	4.92	5,000	1,236	202	2,135	1,614	24	573
Commercial papers	SEK	3.30	3,127	3,172					
Leases			450	152	141	98	39	7	30
Trade and other payables			13,626	13,626					
Derivative instruments			120	120					
Total			**30,253**	**19,429**	**1,836**	**3,166**	**3,399**	**1,198**	**3,779**

	Financial liabilities			Maturity structure[2]					
31.12.2023 SEK m	Currency	Interest[1], %	Reported amount	2024	2025	2026	2027	2028	2029+
Bilateral loans	EUR	2.64	3,091	710	688	735	540	399	389
Bilateral loans	SEK	2.15	3,084	773	165	165	166	1,117	1,726
Bonds[3]	NOK	6.81	1,382	95	95	430	73	73	1,155
Bonds[3]	SEK	5.81	5,250	1,038	1,251	205	2,133	1,599	
Commercial papers	SEK	4.67	1,617	1,640					
Leases			158	50	37	26	11	8	37
Trade and other payables			10,915	10,915					
Derivative instruments			548	544	4				
Total			**26,045**	**15,765**	**2,240**	**1,561**	**2,923**	**3,196**	**3,307**

1) Weighted interest including interest rate swaps.
2) The duration analysis includes gross flows of loans and interest, including flows from interest rate swaps.
3) Outstanding commercial papers and bonds are officially reported under the Group's Parent Company, Boliden AB.

Loan portfolio 31.12.2024
Boliden has a number of utilized non-current loans from Swedish and Nordic institutions totaling SEK 6,650 m (6,191) and maturing between 2025 and 2032. On closing day, Boliden's MTN program with a framework of SEK 12,000 m, had SEK 6,362 m (6,632) outstanding, of which SEK 5,062 m (5,082) green bonds falling due in 2025-2030. Boliden also has syndicated credit facilities totaling EUR 400 m and EUR 450 m respectively, maturing in 2027 and 2029, and bilateral revolving credit facilities of EUR 130 m, SEK 1,000 m and SEK 2,000 m respectively, maturing in 2026, 2027 and 2027, where the utilized component of the 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 3,127 m (1,617) outstanding. The average term of the loan facilities was 3 years (3.4) and the average interest rate in the debt portfolio total 4.3% (4.3). The fixed interest term on outstanding loans including interest rate swap agreements, totaled 1.6 years (1.1). The above maturity analysis includes interest flows from interest rate swaps. Boliden's net payment capacity, in the form of cash and cash equivalents and unutilized credit facilities with terms exceeding one year, totaled SEK 16,446 m (14,843). At the end of 2024, Boliden also entered into a bridge loan facility. The facility amounts to USD 1,400 million, aimed at securing the initial financing for the acquisition of Neves-Corvo and the Zinkgruvan mines. The facility is not included in reported payment capacity and can only be utilized to complete the aquisition.

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.

Note 30 Other current liabilities

	31.12.2024	31.12.2023
Accrued salaries and social security expenses	1,226	1,000
Accrued interest expenses	159	125
Other accrued costs and prepaid income	2,114	1,764
Other operating liabilities	366	375
	3,866	**3,264**

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 Group		The Parent Company	
	2024	2023	2024	2023
Pledged assets				
For own liabilities and provisions	None	None	None	None
Contingent liabilities				
Parent Company sureties	–	–	16,138	14,822
Other sureties and guarantees	8,724	8,373	1	1
Pension liabilities	14	12	–	–
Agreed residual values according to lease contracts	18	16	–	–
	8,756	**8,401**	**16,139**	**14,823**

The Parent Company sureties refer to guarantees issued for subsidiaries. SEK 16,138 m (14,822) 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 29,726 m (12,874).

Other sureties 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"). Investigations concluded that the accident had been caused by design and construction errors in the dam, rather than by Apirsa's operations.

Nevertheless, the Spanish Ministry of the Environment issued a fine of approximately EUR 45 m towards Apirsa. In addition, the local government (Junta de Andalucia) directed a claim against Apirsa, Boliden BV and Boliden AB for alleged clean-up costs in connection with the accident. This claim, amounting to close to EUR 90 m, was tried by the First Instance Court no. 11 of Seville. In its judgement issued in July 2023, the Court fully dismissed the Junta's claim and imposed the legal costs for the proceedings on the Junta. The decision has been appealed by the Junta to the next instance.

Apirsa initiated insolvency proceedings in January 2005, for an orderly coordinated closure of the company. In the context of the insolvency procedures, the receivers had requested that Apirsa's parent company, Boliden BV, Boliden Mineral AB and Boliden AB be held liable for the deficit in Apirsa's estate, in total allegedly just over EUR 147 m, including the above-mentioned fine of EUR 45 m and the Junta's disputed claim of close to EUR 90 m. The insolvency proceedings have been on hold for several years pending the determination of the Junta'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, are entitled to reimbursement for their legal costs. It is currently not possible to assess whether the claims for these legal costs can be brought against any Boliden company other than Apirsa.

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 final rulings.

Note 32 Events after December 31, 2024

EXTRAORDINARY GENERAL MEETING
An Extraordinary General Meeting was held on January 23, 2025, in Stockholm and by advance voting (postal voting). The Meeting resolved, in accordance with the Board's proposal, to authorize the Board to, on one or more occasions during the period up to the 2025 Annual General Meeting, resolve on a new issue of shares with or without preferential rights for the company's shareholders. The purpose of a new issue is to raise proceeds to achieve an efficient capital structure and to refinance part of the bridge loan secured to finance the acquisition of Neves-Corvo and Zinkgruvan.

BUY-BACK OF OWN SHARES
Boliden AB has during February 7 and 10, 2025, repurchased a total of 100,000 treasury shares as part of the repurchases resolved by the Board of Directors in order to ensure future delivery of shares to the participants in Boliden's long-term share savings program, LTIP 2024/2027. The cost of the repurchase amounts to SEK 38 m and corresponds to 0.0003% of the total number of shares.

Proposed allocation of profits

The Board's proposed allocation of profits for 2024 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 to the Annual General Meeting to cancel the ordinary dividend. The reason is that the suspended dividend contributes approximately half of the equity needed to finance the transaction with Lundin Mining, announced on December 9, 2024. The Board has taken the cyclical nature of the industry and the risks associated with the operations into account in its dividend proposal.

The Parent Company's non-restricted equity totals SEK 14,773 m, will be carried forward. The Group's total equity amounts to SEK 64,992 m.

The Annual and Sustainability Report has 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 and Sustainability Report and the Consolidated Accounts provide 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 March 17, 2025

Karl-Henrik Sundström
Chairman of the Board

Helene Biström
Board member

Tomas Eliasson
Board member

Per Lindberg
Board member

Perttu Louhiluoto
Board member

Elisabeth Nilsson
Board member

Pia Rudengren
Board member

Derek White
Board member

Ronnie Allzén
Employee representative

Jonny Johansson
Employee representative

Andreas Mårtensson
Employee representative

Mikael Staffas
President and CEO

Our Auditor's Report was submitted on March 17, 2025
Deloitte AB

Thomas Strömberg
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 2024-01-01 – 2024-12-31, except for the corporate governance statement on pages 47–58 and the statutory sustainability report on pages 60-129. The annual accounts and consolidated accounts of the company are included on pages 33-58 and 130–167 in this document.

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the parent company as of 31 December 2024 and its financial performance and cash flow for the year then ended in accordance with the Annual Accounts Act. The consolidated accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the group as of 31 December 2024 and their 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. 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) 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) 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.

Estimates of 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, and discount rates. Any changes in these estimates and assumptions may have a significant impact on the group's earnings and financial position.

The group's accounting principles for reclamation provisions, this year's change in capitalized reclamation costs, and the group's reclamation provisions are described in 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 discount rates.

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 procedures to ensure that revenues are recognized at agreed terms and that revenues are recognized in the correct period.

The group's accounting principles for revenue recognition and the group's revenues by geographical area and product category are described in 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 are recognized at appropriate

Valuation of inventory
The group's inventory consists primarily of metal concentrate, materials tied up in the smelter's production process 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.

The group's accounting principles for valuation of inventory and a breakdown of the group's inventory, are described in 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 at current metal prices and exchange rates,
- review of the process inventory revaluation and eliminations of 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 42-46 and 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.

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 these assumptions have a significant impact on the group's future cash flows and thus the estimated recoverable amount of intangible and tangible assets and any potential impairment needs.

The group's principles to prepare impairment tests for intangible and tangible assets and significant assumptions applied in the impairment tests are described in 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
This document also contains other information than the annual report and the consolidated accounts and can be found on the pages 1-32, 60-129, 172 and 174-193. The Board of Directors and the Managing Director are responsible for this other information. The other information also consists of the remuneration report. 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 Accounting Standards 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.

- Plan and perform the group audit to obtain sufficient and appropriate audit evidence regarding the financial information of the entities or business units within the group as a basis for forming an opinion on the consolidated accounts. We are responsible for the direction, supervision and review of the audit work performed for purposes 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, actions taken to eliminate threats or safeguards applied.

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 2024-01-01 – 2024-12-31 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.

THE AUDITORS'S EXAMINATION OF THE ESEF REPORT
Opinion
In addition to our audit of the annual accounts included on pages 33-58 and 130–167 we have also examined that the Board of Directors and the Managing Director have prepared the annual accounts and consolidated accounts in a format that enables uniform electronic reporting (the Esef report) pursuant to Chapter 16, Section 4 a of the Swedish Securities Market Act (2007:528) for Boliden AB (publ) for the financial year 2024-01-01– 2024-12-31.

Our examination and our opinion relate only to the statutory requirements.

In our opinion, the Esef report has been prepared in a format that, in all material respects, enables uniform electronic reporting.

Basis for opinion
We have performed the examination in accordance with FAR's recommendation RevR 18 Examination of the Esef report. Our responsibility under this recommendation is described in more detail in the Auditors' responsibility section. We are independent of Boliden AB (Publ) 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 evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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 Esef report in accordance with the Chapter 16, Section 4 a of the Swedish Securities Market Act (2007:528), and for such internal control that the Board of Directors and the Managing Director determine is necessary to prepare the Esef report without material misstatements, whether due to fraud or error.

Auditor's responsibility
Our responsibility is to obtain reasonable assurance whether the Esef report is in all material respects prepared in a format that meets the requirements of Chapter 16, Section 4(a) of the Swedish Securities Market Act (2007:528), based on the procedures performed.

RevR 18 requires us to plan and execute procedures to achieve reasonable assurance that the Esef report is prepared in a format that meets these requirements.

Reasonable assurance is a high level of assurance, but it is not a guarantee that an engagement carried out according to RevR 18 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 aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the Esef report.

The firm applies International Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The examination involves obtaining evidence, through various procedures, that the Esef report has been prepared in a format that enables uniform electronic reporting of the annual accounts and consolidated accounts. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement in the report, whether due to fraud or error. In carrying out this risk assessment, and in order to design audit procedures that are appropriate in the circumstances, the auditor considers those elements of internal control that are relevant to the preparation of the Esef report by the Board of Directors and the Managing Director, but not for the purpose of expressing an opinion on the effectiveness of those internal controls. The examination also includes an evaluation of the appropriateness and reasonableness of assumptions made by the Board of Directors and the Managing Director.

The procedures mainly include a validation that the Esef report has been prepared in a valid XHMTL format and a reconciliation of the Esef report with the audited annual accounts included on pages 33-58 and 130–167.

Furthermore, the procedures also include an assessment of whether the consolidated statement of financial performance, financial position, changes in equity, cash flow and disclosures in the Esef report have been marked with iXBRL in accordance with what follows from the Esef regulation.

THE AUDITOR'S EXAMINATION OF THE CORPORATE GOVERNANCE STATEMENT
The Board of Directors is responsible for that the corporate governance statement on pages 47-58 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/ the Annual Accounts Act for Credit Institutions and Securities Companies/ the Annual Accounts Act for Insurance Companies.

THE AUDITOR'S OPINION REGARDING THE STATUTORY SUSTAINABILITY REPORT
The Board of Directors is responsible for the statutory sustainability report on pages 60-129, and that it is prepared in accordance with the Annual Accounts Act.

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 different and substantially less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinion.

A statutory sustainability report has been prepared.

Deloitte AB was appointed auditor of Boliden AB by the general meeting of the shareholders on April 23, 2024 and has been the company's auditor since May 5, 2015.

Stockholm March 17, 2025
Deloitte AB

Thomas Strömberg
Authorized Public Accountant

↓ PDF print version

Report on sustainable financing

Green Finance Framework
As part of Boliden's strategy, and to further integrate our sustainability commitments with Boliden's financing activities, a Green Finance Framework was established in May 2022 which will enable Boliden to issue Green Bonds and Green Loans. The Green Finance Framework provides investors transparency on how they are contributing to Boliden's vision to be the most climate friendly and respected metal provider in the world.

Financing under the framework is earmarked for projects and investments within energy efficiency, pollution prevention and control, research and development, and clean transportation. Examples of important projects that could be financed under the framework include energy and heat recovery, process and mine electrification, water purification, waste reduction and extraction of metal from residual and recycled materials.

The framework has undergone an independent external review by CICERO Shades of Green, now part of S&P, who have classified the framework as "CICERO Medium green" with an "Excellent" governance score and assessed it to be in alignment with the International Capital Market Association Green Bond Principles and the Loan Market Association Green Loan Principles.

Governance and selection process
To ensure transparency and accountability around the selection of investments to be financed under the framework, Boliden has established a cross-departmental Sustainable Finance Committee (SFC), being responsible for the evaluation and selection process. The SFC ensures that only such assets and projects that comply with the Green Project categories defined in the Framework are eligible to be financed. Examples of other eligibility criteria are satisfactory outcome of ESG risk evaluation and CO_2 lock-in effect assessment.

Green Bond issue
Boliden issued Green bonds in 2022 and 2023, totaling SEK 3,700 m and NOK 1,400 m. The financing supports the expansion investments in Boliden Odda with the aim of increasing zinc production with a low climate footprint. The bonds were issued under Boliden's MTN program and are listed on Nasdaq's Sustainable Bonds list (SEK) and Oslo Børs (NOK).

Examples of Green Projects financed under the framework
The expansion of Boliden Odda
Proceeds from the Green bonds issued in 2022 and 2023 are allocated to Boliden's expansion of the world's most climate effective zinc smelter in Odda, Norway. The expansion means that the production of zinc with world-leading climate performance will almost double. The increased production capacity, together with improved energy efficiency and a new long-term contract for the supply of fossil-free electricity, means a further reduction in the already low carbon dioxide intensity. The investment includes several new facilities at Boliden Odda, including a new roaster, a new sulphuric acid plant, expansion and modernization of the leaching and the purification plant, a new cellhouse and expansion of the foundry and quay infrastructure. The investment is planned for a total of EUR 1,050 million and scheduled for completion during 2025.

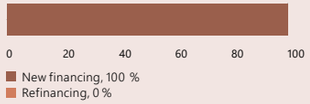
Impact report
Investments funded under Boliden's Green Finance Framework intend to bring energy efficiency improvements with the aim of reducing energy consumption (in absolute or relative terms) by using best available technology and beyond in the targeted area, and/or significantly reduce pollution to water and air, as well as the reduction, recycling, recovery and reuse of waste. An important selection criterion is also that investments be in line with Boliden's roadmap to achieve the target of 42% reduction in CO_2 emissions by 2030 and the long term goal of net zero carbon emissions in Scopes 1 and 2 by 2050.

In relation to the issued Green Bonds allocated for the expansion of Boliden Odda, the investments are in line with Boliden's CO_2 roadmap and are intended to increase production capacity of low carbon zinc while reducing the electrical energy intensity by 5% and waste intensity by 30%. The outcome of the targets will be reported once the expansion is completed and the new facilities are up and running.

Terms

	Amount	Year of issue	Maturity	Margin	Interest rate
MTN 3	SEK 1,000 m	2022	2025	2.00 %	Floating, 3M Stibor
MTN 4	SEK 1,000 m	2022	2027	2.50 %	Fixed, 5.53% incl. margin
MTN 5	SEK 500 m	2022	2027	2.20 %	Fixed, 5.136% incl. margin
MTN 6	SEK 450 m	2022	2027	2.20 %	Floating, 3M Stibor
MTN 7	SEK 750 m	2022	2028	2.45 %	Floating, 3M Stibor
MTN 8	NOK 350 m	2023	2026	1.55 %	Floating, 3M Ni-bor
MTN 9	NOK 750 m	2023	2030	2.50 %	Floating, 3M Ni-bor
MTN 10	NOK 300 m	2023	2030	2.50 %	Fixed, 6.2% incl. margin

Allocation of new financing and refinancing, %

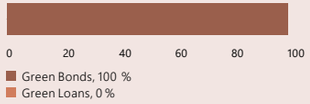


Allocation report

Green Project category	Investments in Boliden Odda
ICMA GBPs	Energy Efficiency, Pollution Prevention and Control
Project	Expansion of Boliden Odda
Country	Norway
Years of issue	2022 and 2023
Total Green Bond issue	SEK 3,700 m and NOK 1,400 m
Total allocated proceeds[1)]	SEK 11,839 m
Project Status	Ongoing

1) Any proceeds awaiting allocation to Green Projects will be managed according to Boliden's Group Financial policy and held as cash.

Split amount outstanding, %



Auditor's Limited Assurance Report on Boliden AB's Sustainable Finance Report

To Boliden AB (publ), corporate identity number 556051-4142

Introduction
We have been engaged by Boliden AB (publ) ("Boliden") to undertake a limited assurance engagement of Boliden's Sustainable Finance Report ("Reporting") for the year 2024 set out in this document on pages 172-173.

Responsibilities of Management
Boliden Management is responsible for the preparation of the Reporting in accordance with the applicable criteria, as explained in Boliden's Green Finance Framework May 2022 (available at https://www.boliden.com/investor-relations/financials/debt-structure) as well as the accounting and calculation principles that the Company has developed. This responsibility also includes the internal control relevant to the preparation of the Reporting that is free from material misstatements, whether due to fraud or error.

Responsibilities of the auditor
Our responsibility is to express a conclusion on the Reporting based on the limited assurance procedures we have performed. Our engagement is limited to historical information presented and does therefore not cover future-oriented information.

We conducted our limited assurance engagement in accordance with ISAE 3000 Assurance Engagements Other than Audits or Reviews of Historical Financial Information. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the Reporting and applying analytical and other limited assurance procedures. The procedures performed in a limited assurance engagement vary in nature from, and are less in extent than for, a reasonable assurance engagement conducted in accordance with International Standards on Auditing and other generally accepted auditing standards in Sweden.

The firm applies International Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We are independent of Boliden in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

The procedures performed consequently do not enable us to obtain assurance that we would become aware of all significant matters that might be identified in a reasonable assurance engagement.

Accordingly, the conclusion of the procedures performed do not express a reasonable assurance conclusion.

Our procedures are based on the criteria defined by Boliden Management as described above. We consider these criteria suitable for the preparation of the Reporting. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion below.

Conclusion
Based on the limited assurance procedures we have performed, nothing has come to our attention that causes us to believe that the Reporting for the year 2024, is not prepared, in all material respects, in accordance with the applicable criteria, as explained in Boliden's Green Finance Framework May 2022.

Stockholm March 17, 2025

Deloitte AB

Thomas Strömberg
Authorized Public Accountant

Lennart Nordqvist
Expert Member of FAR

Other

↓ PDF print version

Mineral Resources and Mineral Reserves

Mineral Resources and Mineral Reserves are the foundation for the future viability of a mining company's operations. As Mineral Reserves are reduced every year through mining activities, new additions through exploration and technical studies are vital to the viability of the operations.

Highlights
In 2024 production started at Rävliden (Kristineberg) as well as in Liikavaara (Aitik). Tara restarted production in October 2024. At Kevitsa there is an increase in both Mineral Resources and Mineral Reserves due to a new Mineral Resource Estimation and other technical improvements. Additionally, successful exploration drilling in Garpenberg and Renström led to an increase in Mineral Resources.

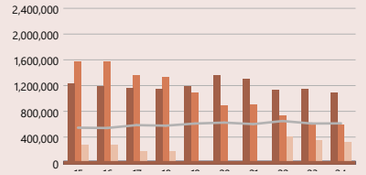
Mineral Resources and Mineral Reserves
Boliden follows SveMin's recommendations for reporting exploration results, Mineral Reserves and Mineral Resources and strives towards reporting according to the Pan-European Reserves and Resources Reporting Committee (PERC). The PERC standard is an international reporting standard that has been recognized by SveMin in Sweden, FinnMin in Finland and Norsk Bergindustri in Norway for exploration and mining companies in the Nordics.

Aitik
Liikavaara, processed in Aitik and included in Aitik's Mineral Reserves and Mineral Resources, began production in 2024. This year, there was a slight decrease in Aitik's Mineral Reserves of 52 Mtonnes (5%) due to mining activities and economic assumptions, and a minor reduction in Mineral Resources of 35 Mtonnes (4%) attributed to drilling and economic factors. In total, 41 Mtonnes were milled in 2024. Exploration and project development is also ongoing at the Nautanen deposit, approximately 15 km north of Aitik, which is reported separately.

Boliden Area
In the Boliden Area, the total Mineral Reserves increased by 1 Mtonnes (7%), mainly by converting Mineral Resources from Rävliden (Kristineberg). Production began in the Rävliden deposit in 2024 and will continue to ramp up during 2025. Kankberg also contributed to the increase in Mineral Reserves by technical changes regarding mining method. The Mineral Resources increased in Renström and Kankberg due to successful exploration drilling and the total increase of Mineral Resources in Boliden Area amounts to 2.5 Mtonnes (10%). 1.5 Mtonnes of ore were milled in the Boliden area in 2024.

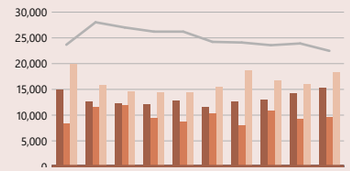
Garpenberg
In Garpenberg the Mineral Reserves increased by 5 Mtonnes (5%) due to conversion from Mineral Resources. Thanks to successful exploration drilling, the Mineral Resources increased by 34 Mtonnes (38%). 3.5 Mtonnes were milled 2024.

Aitik



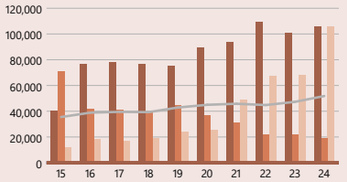
A minor decrease in Mineral Reserves as well as in Mineral Resources.

The Boliden Area



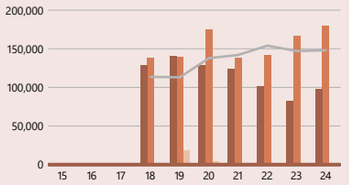
Increase in Mineral Reserves and in Mineral Resources.

Garpenberg



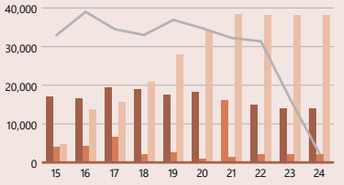
A minor increase in Mineral Reserves and a significant increase in Mineral Resources.

Kevitsa



An increase in Mineral Reserves and Mineral Resources.

Tara



Last year's figures subtracted by mining 2024.

Proved and Probable Mineral Reserves
Measured/Indicated Mineral Resources
Inferred Mineral Resources
Production ×15
All values in ktonnes.

Kevitsa
After geological and technical improvement measures in Kevitsa, an updated Mineral Resource Estimation was conducted in 2024 and the Kevitsa mine plan was recalculated. In 2023, 20 Mtonnes were downgraded from Mineral Reserves to Mineral Resources due to uncertainty in permitting regarding the tailings dam expansion. The tailings dam needs to be expanded, and a first permit application for a change of method together with a raise was submitted to the authorities in 2024. An additional application for further raising of the dam will be submitted to the authorities in 2025, providing the required capacity for the Life of Mine Plan. The work behind these permit applications enabled conversion back of the 20 Mtonnes of material, which had been downgraded to Mineral Resources in 2023.The net increase in Mineral Reserves is 15 Mtonnes (19%), due to the conversion and the new Mineral Resource Estimation. Additionally, the Mineral Resources have increased by 15 Mtonnes (9 %) despite the conversion back to Mineral Reserves. 9.85 Mtonnes were milled 2024.

Tara
Tara resumed production in October 2024. The existing Life of Mine Plan remains economically feasible however no new resource estimations have been made, and the Mineral Reserves and Mineral Resources are based on last year's figures, depleted by mining of 156 ktonnes in 2024. Work with a new production plan after the Care and Maintenance period is ongoing. Exploration drilling restarted in the end of 2024.

About the classification
Mineral Resources and Mineral Reserves are estimated separately and divided into different categories. Conditions in the form of costs and metal prices are established at the beginning of the year and used in all calculations made during the year. Boliden's Mineral Resources are exclusive of Mineral Reserves. When a Mineral Resource is converted to a Mineral Reserve, the quantity is removed from the Mineral Resource.

A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are subdivided in order of increasing geological confidence into Inferred, Indicated and Measured categories.

A Mineral Reserve is the economically mineable part of a Measured Mineral Resource and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at a Pre-Feasibility Study or Feasibility Study level, as appropriate, that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

Inferred Mineral Resource
An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Indicated Mineral Resource
An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the Mineral deposit. Geological evidence is derived from the adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

Measured Mineral Resource
A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the Mineral deposit.
Geological evidence is derived from the detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.
A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource.
A Measured Mineral Resource may be converted to a Proved Mineral Reserve or to a Probable Mineral Reserve.

Probable Mineral Reserve
A Probable Mineral Reserve is the economically mineable part of an Indicated Mineral Resource, and in some circum- stances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proved Mineral Reserve.

Proved Mineral Reserve
A Proved Mineral Reserve is the economically mineable part of a Measured Mineral Resource. A Proved Mineral Reserve implies a high degree of confidence in the Modifying Factors.

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 Resources and Mineral Reserves.

Regulations, codes and Competent Persons
Boliden follows the recommendations of the Swedish Mining Association (SveMin) for reporting exploration results, Mineral Resources and Mineral Reserves and strives towards reporting according to the Pan-European Reserves and Resources Reporting Committee (PERC). The PERC standard has clear requirements for documentation and the Competent Persons, who must evaluate the information that companies report. All summarizing reports for Mineral Resources and Mineral Reserves per project and mine available on the Boliden website, are reviewed and approved by the Competent Persons presented in the respective report. This summary of Mineral Resources and Mineral Reserves has been reviewed and approved by Sofia Höglund, Head of Mineral Resources and Project Evaluation, Boliden and Competent Person for reporting of Mineral Resources and Mineral Reserves and member of The Fennoscandian Association for Metals and Minerals Professionals (FAMMP), a Recognized Professional Organization according to PERC.

February 2025
Sofia Höglund

Mineral Resources as of December 31, 2024

		Quantity, ktonnes		2024										
		2024	2023	Au g/t	Ag g/t	Cu %	Zn %	Pb %	Ni[1] %	Co[1] %	Pt g/t	Pd g/t	Te[2] g/t	Mo g/t
Aitik area														
Aitik	**Measured**	**211,000**	**196,000**	**0.12**	**0.7**	**0.17**								
	Indicated	**379,000**	**393,000**	**0.12**	**0.8**	**0.17**								
	Inferred	**315,000**	**351,000**	**0.07**	**0.8**	**0.17**								
Nautanen	**Measured**													
	Indicated	**13,800**	**13,800**	**0.78**	**5.7**	**1.56**								**109**
	Inferred	**11,700**	**11,700**	**0.79**	**5.4**	**1.42**								**101**
Boliden area														
Sulfide mineralizations														
Kristineberg	Measured	440	370	0.48	33	0.60	3.0	0.2						
	Indicated	5,500	6,300	0.42	55	0.56	2.7	0.3						
	Inferred	6,800	6,100	0.38	44	0.66	2.4	0.3						
Petiknäs N	Measured													
	Indicated	360	360	8.10	72	1.60	2.8	0.3						
	Inferred	1,700	1,700	4.40	54	0.90	2.1	0.3						
Renström	Measured													
	Indicated	1,500	800	1.68	67	0.55	4.3	0.8						
	Inferred	2,800	1,200	1.15	57	0.68	2.2	0.5						
Strömfors	Measured													
	Indicated													
	Inferred	2,600	2,600	2.95	81	0.16	4.4	0.8						
Total[3] *Sulfide mineralizations*	**Measured**	**440**	**370**	**0.48**	**33**	**0.60**	**3.0**	**0.2**						
	Indicated	**7,300**	**7,500**	**1.05**	**58**	**0.61**	**3.0**	**0.4**						
	Inferred	**13,900**	**11,600**	**1.51**	**55**	**0.60**	**2.7**	**0.4**						
Gold mineralizations														
Kankberg	Measured	210	170	4.1	9								154	
	Indicated	460	190	4.1	6								192	
	Inferred	850	870	3.0	5								117	
Älgträsk	Measured													
	Indicated	1,100	1,100	2.8	5									
	Inferred	3,500	3,500	2.0	4									
Total[3] *Gold mineralizations*	**Measured**	**210**	**170**	**4.1**	**9**									
	Indicated	**1,500**	**1,300**	**3.2**	**5**									
	Inferred	**4,400**	**4,400**	**2.2**	**4**									
Garpenberg	**Measured**	**70**	**70**	**0.24**	**108**	**0.03**	**2.8**	**1.0**						
	Indicated	**18,500**	**21,600**	**0.42**	**63**	**0.05**	**2.8**	**1.3**						
	Inferred	**105,400**	**67,900**	**0.33**	**58**	**0.05**	**2.4**	**1.1**						

↓ PDF print version

Mineral Resources as of December 31, 2024 continued.

		Quantity, ktonnes		2024									
		2024	2023	Au g/t	Ag g/t	Cu %	Zn %	Pb%	Ni[1] %	Co[1] %	Pt g/t	Pd g/t	Te[2] g/t	Mo g/t
Kevitsa	**Measured**	69,100	60,700	0.08		0.29			0.20	0.010	0.15	0.10		
	Indicated	111,300	105,700	0.07		0.34			0.23	0.010	0.12	0.07		
	Inferred	1,300	290	0.05		0.24			0.14	0.010	0.08	0.05		
Tara	**Measured**	30	30				5.7	1.3						
	Indicated	2,100	2,100				4.9	1.8						
	Inferred	38,100	38,100				7.5	1.6						
Laver	**Measured**													
	Indicated	734,000	734,000	0.14	4	0.24								37
	Inferred	227,000	227,000	0.11	5	0.19								30
Rockliden	**Measured**													
	Indicated	800	800	0.08	102	2.1	4.4	0.9						
	Inferred	9,200	9,200	0.05	47	1.7	3.9	0.4						

1) Kevitsa reports Ni and Co in sulphide compounds.
2) Te only in Kankberg.
3) Totals are calculated on precise values and sometimes apparent differences may occur in the totals.

Boliden reports Mineral Resources excluding Mineral Reserves to avoid double counting the same tonnage.
This means quantities converted to Mineral Reserves are deducted from Mineral Resources.

Mineral Reserves as of December 31, 2024

		Quantity, ktonnes		2024									
		2024	2023	Au g/t	Ag g/t	Cu %	Zn %	Pb %	Ni[1] %	Co[1] %	Pt g/t	Pd g/t	Te g/t
Aitik	**Proved**	175,000	110,000	0.09	1.4	0.20							
	Probable	916,000	1,033,000	0.17	1.3	0.24							
Boliden Area													
Sulfide mineralizations													
Kristineberg	Proved	740	560	0.25	65	0.58	5.1	0.5					
	Probable	5,100	4,800	0.29	75	0.87	4.0	0.5					
Renström	Proved	410	260	1.73	101	0.42	5.4	0.9					
	Probable	4,500	4,800	1.73	106	0.27	5.7	1.1					
Total[2] *Sulfide mineralizations*	**Proved**	1,160	830	0.78	78	0.52	5.2	0.6					
	Probable	9,600	9,600	0.96	89	0.59	4.8	0.8					
Gold mineralizations													
Kankberg	**Proved**	1,900	1,900	3.6	11								200
	Probable	2,600	1,900	3.3	6								145
Garpenberg	**Proved**	16,900	17,200	0.26	99	0.04	2.9	1.3					
	Probable	88,800	83,700	0.31	86	0.05	2.5	1.1					
Kevitsa	**Proved**	37,400	47,900	0.10		0.30			0.20	0.009	0.22	0.14	
	Probable	60,100	34,200	0.09		0.32			0.23	0.010	0.17	0.11	
Tara	**Proved**	720	730				6.5	1.4					
	Probable	13,200	13,300				5.5	1.5					

1) Kevitsa reports Ni and Co in sulphide compounds.
2) Totals are calculated on precise values and sometimes apparent differences may occur in the totals.

Planning prices/long-term prices 2024[1]

Planning prices	Long-term prices 2024	Change compared to 2023
Metal prices		
Zinc, USD/tonne	2,800	–
Copper, USD/tonne	8,400	+600
Nickel, USD/tonne	20,000	–
Lead, USD/tonne	2,000	–
Gold, USD/oz	1,600	+200
Silver, USD/oz	23	+3
Palladium, USD/oz	1,000	-300
Platinum, USD/oz	1,000	+100
Cobalt, USD/lb	20	–
Tellurium, USD/kg	35	–
Molybdenum, USD/lb	8	–
Treatment Charges (TC) and Refining Charges (RC)		
Copper concentrate TC, USD/dmt	80	–
Copper concentrate RC, USc/lb	8.0	–
Zinc concentrate TC, flat, USD/dmt	230	–
Lead concentrate TC, flat, USD/dmt	190	–
Nickel concentrate TC, USD/dmt	190	–
Nickel concentrate RC, USD/lb	1.00	–
Exchange rates		
USD/SEK	9.00	–
EUR/SEK	9.90	–
EUR/USD	1.10	–

1) Boliden uses the planning prices as a basis for estimations of Mineral Resources and Mineral Reserves as well as, for example, for calculations on investments and operational development.

↓ PDF print version

Ten-year overviews

The Group

The Group	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Profit, SEK m										
Revenues	89,207	78,554	86,437	68,636	56,321	49,936	52,454	49,531	40,316	40,242
Operating profit before depreciations	20,475	14,532	22,057	16,703	14,628	12,688	13,933	13,617	9,881	7,112
Operating profit excl. revaluation of process inventory	12,025	7,810	15,672	10,318	8,438	7,035	9,074	8,913	5,094	4,010
Operating profit	13,692	8,287	15,895	11,082	8,935	7,597	9,004	9,015	5,682	3,590
Profit after financial items	12,555	7,600	15,601	10,839	8,668	7,337	8,763	8,737	5,375	3,356
Tax	-2,529	-1,526	-3,191	-2,135	-1,867	-1,548	-1,562	-1,881	-1,135	-715
Net profit for the year	10,026	6,074	12,410	8,704	6,801	5,788	7,201	6,856	4,239	2,641
Cash flow, SEK m										
Cash flow from operating activities	17,659	12,183	16,398	13,144	11,255	9,442	11,768	12,737	6,995	6,235
Cash flow from investing activities	-14,996	-15,537	-10,069	-5,996	-6,297	-8,807	-6,076	-5,428	-9,795	-3,670
Free cash-flow	2,663	-3,354	6,329	7,148	4,957	635	5,692	7,309	-2,801	2,565
Cash flow from financing activities	-590	-3,827	-2,423	-3,957	-1,271	-1,538	-5,931	-6,304	3,376	-2,503
Cash flow for the year	2,072	-7,180	3,907	3,191	3,686	-903	-239	1,005	575	63
Capital structure & return, SEK m										
Balance Sheet total	116,192	101,957	96,376	80,549	72,492	66,424	58,727	55,882	53,877	43,022
Capital employed	80,058	70,837	62,249	53,382	51,007	49,809	44,441	42,931	42,457	35,131
Return on capital employed, %	18	12	27	21	17	16	20	21	15	10
Equity	65,012	56,420	58,325	50,882	45,638	41,440	39,011	35,053	29,394	25,807
Return on equity, %	17	11	23	18	16	14	19	22	16	11
Equity/assets ratio, %	56	55	61	63	63	62	66	63	55	60
Net debt	10,662	10,728	-15	-918	2,236	5,493	2,034	3,752	9,339	5,827
Net reclamation liability	3,839	3,195	2,860	2,427	2,205	2,134	1,757	1,657	1,471	1,040
Net debt/equity ratio, %	16	19	0	-2	5	13	5	11	32	23
Data per share, SEK										
Earnings for the period										
Before dilution	36.65	22.21	45.37	31.81	24.86	21.15	26.32	25.06	15.49	9.65
After dilution	36.65	22.21	45.37	31.81	24.86	21.15	26.32	25.06	15.49	9.65
Cash flow from operating activities										
Before dilution	64.68	44.55	59.95	48.06	41.15	34.52	43.03	46.57	25.57	22.80
After dilution	64.68	44.55	59.95	48.06	41.15	34.52	43.03	46.57	25.57	22.80
Equity										
Before dilution	238.07	206.25	213.19	185.98	166.81	151.47	142.59	128.13	107.44	94.33
After dilution	238.07	206.25	213.19	185.98	166.81	151.47	142.59	128.13	107.44	94.33
Ordinary dividend[1]	–	7.50	15.00	10.50	8.25	7.00	8.75	8.25	5.25	3.25
Redemption per share	–	–	11.50	15.50	6.00	–	4.25	5.75	–	–

The Group	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Share price, 31/12	310.5	314.0	391.0	350.0	291.4	248.5	192.0	280.6	237.9	142.9
Highest price paid	386.5	479.0	515.0	362.0	302.2	291.7	328.4	307.9	258.2	201.1
Lowest price paid	257.1	266.0	299.0	269.0	137.2	181.5	187.8	222.7	100.0	112.1
P/E ratio	8.5	14.1	8.6	11.0	11.7	11.7	7.3	11.4	15.4	14.8
Change in share price during the year, %	-1	-20	12	20	17	29	-32	18	66	14
Dividend yield, %	–	2.4	3.8	3.0	2.8	2.8	4.6	2.9	2.2	2.3
Total yield, %	1	-16	19	25	21	35	-28	20	70	15
Number of shares, million										
Number of shares, 31/12	273	273	274	274	274	274	274	274	274	274
Average number of shares	273	273	274	274	274	274	274	274	274	274
Number of own shares held, 31/12	0	0	–	–	–	–	–	–	–	–
Employees										
Average number of Group employees, total	5,808	5,664	6,226	6,167	6,071	5,997	5,819	5,684	5,477	4,878
Average number of female employees	1,267	1,276	1,300	1,277	1,205	1,154	1,060	1,001	976	867
Percentage of women on the Board/ in Group management, %	27/20	30/20	30/20	36/20	50/20	50/20	50/20	36/20	36/20	36/20
Accidents per one million hours worked, own personnel, frequency	3.9	3.0	4.4	5.4	4.9	4.0	3.1	5.0	6.7	6.6
Accidents per one million hours worked, incl contractors, frequency	5.1	4.4	4.7	5.9	5.8	4.4	5.1	6.3	7.9	8.9
Fatalities, own staff	0	0	0	0	0	0	0	0	0	0
Fatalities, contractors	0	0	0	0	0	0	0	0	1	0
Sick leave, %	5.2	5.5	5.6	4.9	4.8	4.3	4.5	4.5	4.4	4.6
Energy and water consumption										
Energy consumption, total GWh	5,637	5,857	5,976	5,946	5,781	5,362	5,732	5,497	5,295	4,670
Water consumption, total km³	7	-5	1	8	15	22	12	17	14	25
Emissions										
GHG emissions Scope 1, ktonnes	658	628	629	625	544	598	644	605	594	559
GHG emissions Scope 2, ktonnes	207	215	286	375	353	319	327	418	459	330
GHG emissions Scope 1-2, ktonnes[2]	865	842	915	999	897	917	971	1,024	1,052	889
GHG emissions Scope 3, ktonnes	3,335	3,413	3,058	2,836	–	–	–	–	–	–
GHG intensity[3]	0.67	0.66	0.65	0.70	–	–	–	–	–	–
Metal emissions to air intensity[4]	33	29	23	26	41	48	49	71	64	56
Sulphur dioxide emissions to air, tonnes	5,938	5,749	6,100	6,429	6,310	6,240	7,720	7,360	7,060	7,210
Metal discharges to water intensity[4]	59	64	48	33	25	36	41	50	74	101
Nitrous compounds to water, tonnes	198	235	237	276	201	228	240	236	300	261

1) The figures for 2024 comprise proposed dividend.
2) Land use change (LUC) emissions included. GHG emissions Scope 1-2 excluding LUC (2024: 854, 2023: 825, 2022: 884, 2021: 990).
3) GHG intensity is the relationship between the greenhouse gas (GHG) emissions (Scope 1-2) and the total production of metal in concentrate from mines and metal production from smelters. Land use change (LUC) emissions included. GHG intensity excluding LUC (2024: 0.66, 2023: 0.64, 2022: 0.63, 2021: 0.69).
4) The intensity consists of tonnes emitted metals weighted in NCP metal equivalents, divided by Mtonnes metal produced.

↓ PDF print version

Mines

Mines	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Production of metal in concentrate										
Zn, ktonnes	164	195	261	268	286	290	290	305	329	299
Cu, ktonnes	91	89	109	114	128	121	140	143	103	85
Ni, ktonnes	12	10	12	13	12	10	14	14	7	–
Pb, ktonnes	45	46	54	55	54	55	55	60	63	62
Au, kg	5,880	5,762	6,449	6,516	7,963	7,257	7,678	7,237	5,766	4,922
Au, oz	189,053	185,259	207,338	209,486	255,997	233,316	246,855	232,666	185,386	158,228
Ag, kg	348,098	321,924	376,772	370,981	353,973	372,199	402,349	413,238	446,826	418,489
Ag, '000 oz	11,191	10,350	12,113	11,927	11,380	11,966	12,936	13,286	14,365	13,454
Te, kg	45,759	35,507	32,708	41,367	41,742	40,953	44,641	34,979	38,680	33,000
Financial data, SEK m										
Revenues	21,202	18,683	24,755	22,045	18,126	17,060	18,404	18,195	12,659	9,808
Operating expenses	11,655	11,444	11,119	9,343	9,173	8,849	8,481	7,947	6,833	5,842
Depreciation	5,060	4,488	4,661	4,296	4,403	3,824	3,708	3,487	3,172	2,520
Operating profit	5,241	3,111	9,318	8,761	4,594	4,484	6,451	6,681	2,804	1,429
Investments	7,867	8,742	6,159	3,910	4,439	6,409	4,482	3,722	2,755	2,394
Business acquisitions[1]	–	–	–	–	–	–	–	–	5,961	–
Capital employed	40,310	34,751	31,470	29,023	29,009	28,719	26,328	25,502	24,972	19,275
Greenhouse gas emissions										
GHG emissions Scope 1, ktonnes[2]	273	216	239	198	145	173	207	192	168	131
GHG emissions Scope 2, ktonnes[2]	71	81	115	135	137	139	134	151	145	96
GHG intensity[2, 3]	1.10	0.87	0.81	0.74	0.58	0.66	0.66	0.66	0.62	0.51
AITIK										
Milled ore, ktonnes	40,840	40,689	43,297	40,100	41,661	40,661	38,472	39,045	36,051	36,361
Input grades										
Cu, %	0.17	0.18	0.20	0.22	0.24	0.25	0.29	0.28	0.22	0.21
Au, g/tonne	0.07	0.08	0.10	0.11	0.13	0.13	0.14	0.13	0.11	0.11
Ag, g/tonne	0.75	0.80	0.86	0.87	1.06	1.17	1.82	1.98	2.11	2.45
Concentrate production										
Cu, ktonnes	239	261	314	314	368	377	404	394	320	307
Concentrate grade										
Cu, %	24.99	24.63	25.20	25.49	24.78	24.21	24.58	24.76	22.12	21.93
Production of metal in concentrate										
Cu, ktonnes	60	64	79	80	91	91	99	98	71	67
Au, kg	1,379	1,724	2,431	2,611	3,128	3,063	3,150	2,899	2,119	2,042
Au, oz	44,322	55,412	78,143	83,947	100,563	98,470	101,285	93,197	68,127	65,666
Ag, kg	23,843	25,010	28,003	26,361	34,616	37,991	54,894	61,862	56,602	61,452
Ag, '000 oz	767	804	900	848	1,113	1,221	1,765	1,989	1,820	1,976
Financial data, SEK m										
Revenues	6,392	6,338	7,365	7,211	6,295	5,818	6,017	5,487	3,273	3,292
Operating profit before depreciations	2,803	3,028	4,565	4,754	3,888	3,646	3,974	3,513	1,548	1,413
Operating profit	754	1,419	3,076	3,281	2,296	2,149	2,494	2,073	222	183
Investments	4,469	5,403	3,131	1,653	1,823	1,985	1,576	1,534	1,174	1,207
Cash cost USc/lb Cu C1, Normal	246	191	128	108	65	76	77	82	102	105
Proven and probable mineral reserves[4]										
Mtonnes	1,091	1,143	1,131	1,307	1,353	1,187	1,148	1,161	1,194	1,227
Cu, %	0.23	0.23	0.23	0.22	0.22	0.23	0.22	0.23	0.23	0.23
Au, g/tonne	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.14	0.14	0.14
BOLIDEN AREA										
Milled ore, ktonnes	1,781	1,833	1,878	1,916	1,898	2,028	1,947	2,065	2,138	1,879
of which slag	282	238	257	280	283	272	199	264	300	301
Input grades										
Zn, %	3.57	3.16	3.83	3.19	3.54	3.57	3.54	3.99	4.16	3.82
Cu, %	0.29	0.32	0.35	0.33	0.39	0.34	0.36	0.38	0.40	0.41
Pb, %	0.48	0.39	0.47	0.39	0.41	0.39	0.36	0.42	0.44	0.44
Te, g/tonne	61.2	49.1	45.3	49.0	51.2	45.6	44.7	34.9	36.9	37.6
Au, g/tonne	2.5	2.1	2.1	1.9	2.2	2.0	1.9	1.9	1.7	1.7
Ag, g/tonne	55.0	49.8	54.7	53.6	59.0	54.1	52.1	57.7	59.2	59.6
Concentrate production										
Zn, ktonnes	88	84	105	85	96	107	103	123	129	103
Cu, ktonnes	15	18	19	17	19	18	20	20	23	20
Pb, ktonnes	10	8	10	8	7	11	9	13	12	9
Concentrate grade										
Zn, %	55.2	54.5	54.7	55.8	54.4	54.1	54.7	53.2	54.5	54.2
Cu, %	22.7	22.9	23.9	24.0	25.1	24.4	23.9	25.3	24.8	25.7
Pb, %	41.9	42.3	41.6	41.5	40.2	31.8	32.1	25.7	31.3	34.0
Production of metal in concentrate										
Zn, ktonnes	49	46	57	47	52	58	57	66	70	56
Cu, ktonnes	3	4	4	4	5	4	5	5	6	5
Pb, ktonnes	4	3	4	3	3	3	3	3	4	3
Te, kg	45,759	35,507	32,708	41,367	41,742	40,953	44,641	34,979	38,680	33,000
Au, kg	3,250	2,800	2,886	2,607	2,960	2,793	2,752	2,476	2,261	1,899
Au, oz	104,475	90,030	92,795	83,813	95,162	89,810	88,461	79,615	72,693	61,058
Ag, kg	68,230	64,963	72,644	68,391	73,173	75,123	72,154	80,781	84,911	64,846
Ag, '000 oz	2,194	2,089	2,335	2,199	2,353	2,415	2,320	2,597	2,730	2,085
Financial data, SEK m										
Revenues	4,483	3,245	3,644	2,896	2,671	2,594	2,361	2,612	2,025	1,602
Operating profit before depreciations	2,900	1,543	2,114	1,574	1,308	1,162	1,149	1,267	924	437
Operating profit	2,376	1,054	1,640	1,123	872	738	756	868	548	108
Investments	1,205	957	677	456	408	592	632	440	365	413
Cash cost USc/lb Zn C1, Pro rata	61	77	83	77	48	75	78	79	64	68
Cash cost USc/lb Cu C1, Pro rata	169	216	186	211	142	147	153	143	112	167
Cash cost USD/oz Au C1, Pro rata	981	1,081	809	892	977	715	692	686	710	818

Mines	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Proven and probable mineral reserves										
Sulphide ores, ktonnes	10,760	10,430	9,100	8,870	7,010	7,630	7,920	7,680	8,910	10,550
Zn, %	4.8	5.1	5.6	5.9	5.9	5.6	5.2	5.2	5.5	5.7
Cu, %	0.6	0.6	0.5	0.6	0.4	0.5	0.5	0.5	0.5	0.6
Gold ores, ktonnes	4,500	3,800	3,800	3,700	4,540	5,040	4,200	4,500	3,680	4,300
Au, g/tonne	3.4	3.8	3.4	3.8	3.3	3.4	3.7	3.7	3.6	3.3
Te, g/tonne	168.0	194.0	185.1	180.1	161.0	162.0	171.0	175.0	189.0	187.0
KYLYLAHTI[4]										
Milled ore, ktonnes	–	–	–	–	681	716	785	809	797	733
Input grades										
Cu, %	–	–	–	–	0.58	0.74	1.01	1.30	1.62	1.72
Zn, %	–	–	–	–	0.25	0.35	0.41	0.53	0.64	0.70
Ni, %	–	–	–	–	0.28	0.23	0.21	–	–	–
Co, %	–	–	–	–	0.16	0.18	0.20	–	–	–
Au, g/tonne	–	–	–	–	1.14	0.86	0.98	1.08	0.81	0.75
Concentrate production										
Cu, tonnes	–	–	–	–	25,408	29,258	42,107	51,440	61,155	62,144
Zn, tonnes	–	–	–	–	766	1,895	2,334	3,799	5,283	5,177
Concentrate grade										
Cu, %	–	–	–	–	14.2	16.5	17.5	18.8	19.8	19.0
Zn, %	–	–	–	–	42.6	44.9	43.3	44.3	46.9	42.3
Production of metal in concentrate										
Cu, tonnes	–	–	–	–	3,609	4,826	7,353	9,686	12,123	11,835
Zn, tonnes	–	–	–	–	326	851	1,011	1,682	2,477	2,189
Ni, tonnes	–	–	–	–	989	731	518	–	–	–
Co, tonnes	–	–	–	–	447	425	278	–	–	–
Au, kg	–	–	–	–	623	480	605	674	477	421
Au, oz	–	–	–	–	20,029	15,419	19,435	21,657	15,347	13,542
Financial data, SEK m										
Revenues	–	2	4	56	659	558	674	708	573	560
Operating profit before depreciations	-22	-9	-10	-3	216	108	241	267	164	192
Operating profit	-22	-9	-269	-3	151	39	-31	34	-28	74
Investments	–	–	-1	–	1	4	10	24	97	137
Cash cost USc/lb Cu C1, Normal	–	–	–	–	-100	145	198	153	143	150
Proven and probable mineral reserves										
Ktonnes	–	–	–	–	–	500	1,300	1,700	1,900	2,900
Cu, %	–	–	–	–	–	0.6	0.7	1.2	1.2	1.4
Zn, %	–	–	–	–	–	0.3	0.3	0.4	0.5	0.6
Au, g/tonne	–	–	–	–	–	1.2	1.0	0.9	1.1	1.0

Mines	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
GARPENBERG										
Milled ore, ktonnes	3,455	3,151	2,989	3,056	3,000	2,861	2,622	2,634	2,622	2,367
Input grades										
Zn, %	3.4	3.3	3.6	3.8	3.8	4.1	4.1	4.3	4.4	5.0
Cu, %	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pb, %	1.5	1.4	1.4	1.5	1.5	1.5	1.6	1.8	1.8	2.1
Au, g/tonne	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Ag, g/tonne	97	97	117	119	108	118	135	133[5]	150	156
Concentrate production										
Zn, ktonnes	202	176	185	204	201	205	191	201	200	196
Cu, ktonnes	9	7	5	6	6	5	5	5	5	5
Pb, ktonnes	55	49	50	53	52	51	50	55	54	60
Concentrate grade										
Zn, %	54.1	54.7	54.1	53.4	53.1	53.0	52.9	53.5	54.3	55.0
Cu, %	11.1	12.9	15.3	16.3	15.7	13.8	13.7	16.3	15.2	16.3
Pb, %	73.4	73.4	71.7	72.6	71.0	70.7	70.5	70.9	72.7	70.7
Production of metal in concentrate										
Zn, ktonnes	109	96	100	109	107	109	101	107	109	108
Cu, ktonnes	1.0	0.9	0.7	1.0	0.9	0.7	0.7	0.8	0.7	0.8
Pb, ktonnes	40	36	36	38	37	36	35	39	39	42
Au, kg	821	842	595	661	668	514	542	541	580	559
Au, oz	26,386	27,074	19,127	21,243	21,477	16,522	17,413	17,406	18,661	17,962
Ag, tonnes	256	231	273	275	245	257	273	268	302	288
Ag, '000 oz	8,229	7,425	8,789	8,838	7,862	8,249	8,769	8,602	9,705	9,270
Financial data, SEK m										
Revenues	6,038	4,653	5,340	4,930	3,669	3,712	3,700	4,019	3,491	2,862
Operating profit before depreciations	4,334	3,059	3,921	3,643	2,456	2,555	2,685	3,049	2,509	1,896
Operating profit	3,740	2,473	3,359	3,110	1,942	2,079	2,225	2,606	2,063	1,452
Investments	938	716	411	419	537	573	395	377	317	336
Cash cost USc/lb Zn C1, Pro rata	50	59	59	48	54	51	47	46	43	45
Proven and probable mineral reserves										
Ktonnes	105,700	100,900	109,300	93,700	89,500	74,800	76,200	77,700	76,400	39,800
Zn, %	2.5	2.6	2.6	2.8	2.8	3.1	3.1	3.1	3.2	3.9
Ag, g/tonne	88	90	87	93	94	96	96	100	97	113

↓ PDF print version

Mines	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
TARA										
Milled ore, ktonnes	156	1,093	2,090	2,149	2,316	2,461	2,200	2,311	2,603	2,197
Input grades										
Zn, %	4.3	5.2	5.2	5.5	5.8	5.2	6.3	5.9	6.0	6.4
Pb, %	0.9	1.0	1.0	1.0	1.0	1.0	1.2	1.1	1.2	1.3
Concentrate production										
Zn, ktonnes	12	102	189	206	230	223	242	239	268	243
Pb, ktonnes	2	13	27	24	27	29	29	31	37	34
Concentrate grade										
Zn, %	51.0	52.4	54.7	54.6	55.3	54.9	54.4	54.6	55.2	54.8
Pb, %	57.4	54.6	51.8	54.0	52.6	54.9	57.0	54.7	52.8	49.9
Production of metal in concentrate										
Zn, ktonnes	6	53	103	112	127	122	132	131	148	133
Pb, ktonnes	1	7	14	13	14	16	17	17	20	17
Ag, kg	60	998	2,750	1,342	918	1,578	1,160	1,344	1,076	1,273
Ag, '000 oz	2	32	88	43	30	51	37	43	35	41
Financial data, SEK m										
Revenues	118	1,150	2,734	2,423	1,832	2,143	2,727	2,691	2,085	1,492
Operating profit before depreciations	-794	-275	848	861	110	598	1,160	1,275	947	470
Operating profit	-968	-571	441	534	-252	283	798	942	476	95
Investments	43	240	607	466	383	508	592	379	299	274
Cash cost USc/lb Zn C1, Normal	–	143	106	87	93	86	78	70	69	76
Proven and probable Mineral Reserves										
Ktonnes	13,900	14,000	15,000	16,100	18,100	17,400	19,000	19,500	16,500	17,000
Zn, %	5.5	5.5	5.5	5.4	5.5	6.0	5.7	5.8	6.3	6.3
Pb, %	1.5	1.5	1.5	1.4	1.5	1.6	1.5	1.4	1.6	1.5
KEVITSA[6]										
Milled ore, ktonnes	9,849	9,829	10,287	9,469	9,186	7,536	7,582	7,911	4,518	–
Input grades										
Cu, %	0.30	0.24	0.27	0.33	0.33	0.29	0.39	0.42	0.35	–
Ni, %	0.19	0.16	0.18	0.21	0.18	0.19	0.26	0.25	0.24	–
Co, %	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	–
Au, g/tonne	0.09	0.08	0.10	0.12	0.13	0.11	0.15	0.16	0.14	–
Pd, g/tonne	0.11	0.13	0.15	0.17	0.13	0.13	0.22	0.20	0.19	–
Pt, g/tonne	0.17	0.19	0.23	0.27	0.25	0.24	0.36	0.32	0.29	–
Concentrate production										
Cu, ktonnes	104	83	100	118	110	80	110	112	55	–
Ni, ktonnes	135	121	133	145	129	105	145	139	80	–
Concentrate grade										
Cu, %	25.4	24.1	25.3	24.4	25.0	24.6	25.1	26.8	25.8	–
Ni, %	8.5	8.2	8.9	8.9	8.6	8.6	9.6	9.9	9.3	–

Mines	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Production of metal in concentrate										
Cu, ktonnes	26	20	25	29	27	20	27	30	14	–
Ni, ktonnes	12	10	12	13	11	9	14	14	7	–
Co, tonnes	583	513	624	592	495	445	591	587	322	–
Au, kg	431	396	537	637	584	407	630	647	328	–
Au, oz	13,870	12,742	17,273	20,483	18,767	13,095	20,261	20,790	10,558	–
Pd, kg	723	762	960	1,036	858	699	1,157	1,021	559	–
Pd, oz	23,249	24,496	30,875	33,310	27,572	22,470	37,209	32,838	17,965	–
Pt, kg	958	933	1,243	1,447	1,276	953	1,576	1,418	750	–
Pt, oz	30,802	30,005	39,974	46,511	41,039	30,651	50,683	45,573	24,118	–
Financial data, SEK m										
Revenues	4,169	3,300	5,398	4,525	2,999	2,231	2,922	2,680	1,210	–
Operating profit before depreciations	2,433	1,561	3,732	3,266	1,721	1,079	1,686	1,502	500	–
Operating profit	753	89	2,298	1,788	320	67	974	893	166	–
Investments	1,191	1,360	1,306	892	1,264	2,716	1,221	939	473	–
Cash cost USc/lb Ni C1, Normal	-226	70	-337	-186	-140	8	-73	-150	150	–
Cash cost USc/lb Ni C1, Pro rata	278	386	341	339	305	392	315	278	340	–
Cash cost USc/lb Cu C1, Pro rata	155	173	116	168	131	150	146	139	155	–
Proven and probable Mineral Reserves										
Ktonnes	97,500	82,100	101,200	123,600	128,200	140,300	128,600	133,800	146,800	–
Cu, %	0.31	0.31	0.34	0.32	0.32	0.32	0.34	0.34	0.34	–
Ni, %	0.22	0.20	0.23	0.22	0.21	0.24	0.22	0.22	0.22	–

1) Business acquisitions: Kevitsa 2016 (SEK 5,961 m).
2) The figures for 2021 and 2022 have been restated due to an update of the reporting calendar.
3) The GHG intensity in mines is the relationship between greenhouse gas (GHG) emissions (Scope 1-2) and the metal content of concentrate produced from mines.
4) The acquisition of Kylylahti was completed in October 2014. The mine was mined for the last time in November 2020.
5) Due to incorrect calculation data, Garpenberg's figure for Ag g/tonne in 2017 has been corrected from 113 to 133.
6) The acquisition of Kevitsa was completed in June 2016.

Smelters

Smelters	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Metal production										
Zinc, ktonnes	454	458	475	473	489	486	486	457	461	469
Copper, ktonnes	159	225	353	374	372	322	364	353	336	332
Lead, ktonnes	19	24	29	27	28	26	29	28	28	26
Lead alloys, ktonnes (Bergsöe)	47	53	42	46	46	49	47	50	46	45
Nickel in matte, ktonnes[1]	40	34	26	19	25	26	31	25	31	17
Gold, kg	15,047	20,129	21,173	18,412	18,537	14,976	16,653	17,776	17,638	17,608
Gold, oz	483,753	647,136	680,707	591,959	595,961	481,477	535,381	571,501	567,077	566,102
Silver, kg[2]	282,405	426,144	574,878	589,271	605,376	466,738	563,051	569,474	626,331	680,600
Silver, '000 oz[2]	9,079	13,701	18,482	18,945	19,463	15,006	18,102	18,309	20,137	21,881
Aluminum fluoride, ktonnes[3]	0	0	0	0	0	0	0	0	32	31
Sulphuric acid, ktonnes	1,775	1,644	1,715	1,685	1,730	1,534	1,630	1,613	1,642	1,665
Financial data, SEK m										
Revenues	85,629	77,197	84,787	67,292	55,283	48,556	50,634	47,691	38,516	38,948
Gross profit excl. revaluation of process inventory[4]	15,044	15,577	15,703	11,314	12,062	10,969	10,088	9,776	9,376	9,167
Operating expenses	9,906	9,635	8,652	7,245	6,922	7,070	6,490	6,004	5,696	5,536
Depreciation	1,685	1,729	1,472	1,302	1,273	1,253	1,220	1,114	1,026	1,002
Operating profit excl. revaluation of process inventory[4]	7,147	4,485	5,916	2,903	3,975	2,716	2,435	2,732	2,759	2,692
Operating profit	8,814	4,962	6,139	3,666	4,472	3,277	2,364	2,834	3,347	2,272
Investments	7,091	6,773	3,862	2,070	1,835	2,398	1,656	1,862	1,372	1,248
Capital employed	41,329	36,155	31,241	25,545	21,977	21,175	18,237	18,018	17,838	15,878
Greenhouse gas emissions										
GHG emissions Scope 1, ktonnes[5]	384	412	390	427	398	425	436	413	426	428
GHG emissions Scope 2, ktonnes[5]	136	134	171	240	217	179	194	267	313	234
GHG intensity[5, 6]	0.53	0.58	0.58	0.68	0.62	0.63	0.63	0.71	0.78	0.71
RÖNNSKÄR										
Smelting material										
Copper, ktonnes										
Copper concentrate	654	662	707	645	658	606	665	631	626	642
Secondary raw materials	137	140	160	169	161	169	171	180	171	172
Of which electronics	75	69	83	73	72	81	86	77	82	86
Copper, total	791	802	867	814	819	774	835	811	798	814
Lead, ktonnes										
Lead concentrate	25	38	40	42	43	41	43	39	41	38
Secondary raw materials	1	0	1	1	1	1	2	2	1	1
Lead, total	25	39	41	43	44	42	45	41	42	39
Production										
Cathode copper, ktonnes	–	96	218	223	226	201	224	219	207	206
Lead, ktonnes	19	24	29	27	28	26	29	28	28	26
Zinc clinker, ktonnes	31	29	33	34	33	33	31	34	33	36
Gold, tonnes	7	11	12	11	14	12	13	13	14	13

Smelters	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Gold, '000 oz	231	349	385	362	434	398	429	421	443	425
Silver, tonnes	239	382	467	483	524	384	472	485	508	539
Silver, '000 oz	7,682	12,278	15,029	15,524	16,837	12,346	15,165	15,590	16,337	17,322
Sulphuric acid, ktonnes	560	566	550	528	506	463	518	505	503	533
Liquid sulphur dioxide, ktonnes	33	27	44	56	49	54	61	50	45	37
Palladium concentrate, tonnes	1	1	2	2	2	2	2	2	3	2
Financial data, SEK m										
Revenues	3,341	3,768	4,231	3,450	3,631	3,153	3,045	2,883	2,759	2,678
Operating profit before depreciations	3,951	808	1,662	1,401	1,646	850	1,091	1,221	1,135	1,038
Operating profit	3,465	276	1,257	1,075	1,327	519	756	900	852	727
Investments	1,304	673	473	502	939	978	403	356	398	383
BERGSÖE										
Smelting material, ktonnes										
Battery raw material[7]	50	55	47	48	51	52	50	51	47	47
Production, ktonnes										
Lead alloys	47	53	42	46	46	49	47	50	46	45
Financial data, SEK m										
Revenues	1,370	1,567	1,276	1,147	981	1,154	1,172	1,221	882	817
Operating profit before depreciations	110	181	56	94	3	110	61	124	126	37
Operating profit	86	158	33	72	-21	97	8	110	109	18
Investments	27	57	46	33	11	64	49	66	26	11
HARJAVALTA										
Smelting material, ktonnes										
Copper concentrate	573	502	592	591	612	488	522	543	552	528
Secondary raw materials	30	25	30	31	26	24	27	24	27	23
Copper, total	603	528	622	622	638	512	549	566	579	551
Nickel concentrate	308	280	271	207	254	266	296	259	294	282
Production										
Cathode copper, ktonnes	159	129	135	151	146	120	139	133	129	126
Nickel in matte, ktonnes[1]	40	34	26	19	25	26	31	25	31	17
Gold, tonnes	8	9	9	7	5	3	3	5	4	4
Gold, '000 oz	253	298	295	230	162	83	106	150	124	141
Silver, tonnes	20	22	85	83	62	63	73	66	101	126
Silver, '000 oz	634	718	2,735	2,683	2,005	2,012	2,351	2,134	3,247	4,042
Sulphuric acid, ktonnes	755	646	721	715	769	620	671	677	703	667
Liquid sulphur dioxide, ktonnes	17	14	20	29	34	36	37	35	33	37
Palladium concentrate, tonnes	3	2	4	3	3	3	3	3	3	2
Financial data, SEK m										
Revenues	4,715	3,749	4,310	3,111	3,083	2,816	2,897	2,353	2,281	2,214
Operating profit before depreciations	2,324	1,503	2,299	1,364	1,427	1,067	1,315	953	935	943
Operating profit	1,874	1,093	1,926	1,037	1,095	746	1,043	707	704	736
Investments	267	710	663	767	385	813	680	808	432	396

Smelters	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
KOKKOLA										
Smelting material, ktonnes										
Zinc concentrate	564	551	558	566	574	560	566	560	547	584
Production										
Zinc, ktonnes	302	294	294	293	297	291	295	285	291	306
Silver in concentrates, kg	23,757	21,904	22,345	22,980	19,316	20,147	18,205	18,188	17,180	16,079
Silver in concentrate, '000 oz	764	704	718	739	621	648	585	585	552	517
Sulphuric acid, ktonnes	328	316	322	320	328	326	322	326	315	343
Financial data, SEK m										
Revenues	3,711	4,515	3,648	2,610	3,044	2,842	2,344	2,363	2,223	2,350
Operating profit before depreciations	1,574	2,276	1,616	861	1,315	1,180	711	921	789	943
Operating profit	1,230	1,927	1,307	565	1,031	912	461	688	572	739
Investments	262	365	242	351	289	296	343	322	297	166
ODDA										
Smelting material, ktonnes										
Zinc concentrate (incl. zinc clinker)	319	336	355	358	382	384	366	338	339	310
Production, ktonnes										
Zinc	151	164	181	180	192	195	191	172	171	163
Aluminum fluoride[3)]	–	–	–	–	–	–	–	–	32	31
Sulphuric acid	131	114	122	122	127	126	119	104	121	123
Financial data, SEK m										
Revenues	1,529	2,129	1,827	1,353	1,743	1,687	1,322	1,309	1,522	1,554
Operating profit before depreciations	179	900	820	317	729	647	338	383	461	522
Operating profit	-33	645	613	133	548	467	168	225	314	390
Investments[8)]	5,226	4,936	2,407	402	182	221	152	298	214	283

1) Nickel in matte Harjavalta included as of July 1, 2015.
2) Silver in concentrate at Kokkola is included in the production figure shown as of 2014.
3) The aluminum fluoride operations at Odda were divested in 2017.
4) Process Inventory Revaluation.
5) The figures for 2021 and 2022 have been restated due to an update of the reporting calendar.
6) The GHG intensity in smelters is the relationship between greenhouse gas (GHG) emissions (Scope 1-2) and metal production from smelters.
7) As of 2020, used battery raw material is reported excluding plastics, which were previously included. Adjustments to the background history have been made accordingly.
8) Green Zinc Odda included from year 2021.

↓ PDF print version

Alternative Performance Measures

The following Alternative Performance Measures are used by Boliden and are not defined in accordance with IFRS regulations.

Capital employed

Total assets less interest-bearing investments, tax receivable and non-interest-bearing provisions and liabilities.

The total amount of capital utilized to generate profits.

SEK m	2024	2023
Intangible assets	3,465	3,537
Property, plant and equipment	73,817	64,620
Participations in associated companies	9	9
Other shares and participations	6	4
Inventories	22,000	21,987
Trade receivables	5,563	3,964
Other receivables	4,043	2,680
Provisions, other than for pensions and tax	-11,233	-11,237
Trade and other payables	-13,626	-10,915
Other non-interest-bearing liabilities	-3,986	-3,812
	80,058	**70,837**

Equity/asset ratio

Equity as a percentage of the Total assets.

Measures the financial risk, which shows the company's equity in relation to total capital.

%	2024	2023
Equity	65,012	56,420
Assets	116,192	101,957
Equity divided by assets %	**56**	**55**

Free cash flow

Cash flow from operating activities including cash flow from investment activities.

Shows the company's cash generation capacity after operational investing activities.

See page 134 for calculation.

Net debt

Interest-bearing current and non-current liabilities (including pension liabilities) less financial assets (including cash and cash equivalents).

Measures the company's financial position.

SEK m	2024	2023
Liability to credit institutions	16,057	14,424
Other interest-bearing liabilities	449	158
Provisions for pensions	1,208	1,128
Other interest-bearing assets	-1	-4
Cash and cash equivalents	-7,052	-4,978
	10,662	**10,728**

Net debt/equity ratio

Net debts divided by equity. Also called net gearing.

Measures the financial risk, which shows to what degree the operations are financed with debt rather than shareholder capital.

%	2024	2023
Equity at the end of the period	65,012	56,420
Net debt	10,662	10,728
Net debt divided by equity %	**16**	**19**

Net reclamation liability

Reclamation liability less capitalized reclamation costs.

Measures the company's financial position, only considering the reclamation liability.

SEK m	2024	2023
Reclamation liability	11,218	10,890
Capitalized reclamation costs	-7,379	-7,695
	3,839	**3,195**

Operating profit (EBIT)

Revenues less all costs attributable to the operations but excluding net financial items and tax.

Measures the result.

See page 131 for calculation.

Operating profit (EBIT) excluding revaluation of process inventory

Revenues minus all costs attributable to the operations but excluding the effects of the revaluation of process inventory, net financial items and taxes.

Measures the result that gives a better picture of the underlying trend, as this is reported excluding revaluation of the smelter's process inventory.

SEK m	2024	2023
Operating profit	13,692	8,287
Revaluation of process inventory	-1,667	-477
	12,025	**7,810**

Net payment capacity

Cash and cash equivalents and unutilized binding credit facilities with a term of more than one year.

Shows the sources of cash available to the company.

SEK m	2024	2023
Not utilized credit facilities	14,286	12,877
Cash	7,052	4,978
Credits with maturity < 1 year	-4,892	-3,012
	16,446	**14,843**

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.

Measures the return on all the capital tied up in the operation.

%	2024	2023
Operating profit	13,692	8,287
Capital employed, average	77,934	68,655
Operating profit divided by average capital employed	**17.6**	**12.1**

Return on equity

Profit for the year as a percentage of average equity in the last 13 months. Measured after tax.

Shows the return that is generated on the shareholders' capital that is invested in the company.

%	2024	2023
Equity, average	60,018	57,566
Profit for the year	10,026	6,074
Profit for the year divided by average equity	**16.7**	**10.6**

↓ PDF print version

Definitions and terminology

Other financial definitions

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.

Cash flow per share
The cash flow for the period divided by the average number of outstanding shares.

Dividend yield
Dividend per share as a percentage of the share price.

Earnings per share
Net result for the period divided by the average number of outstanding shares.

Equity per share
Equity divided by the number of outstanding shares.

FTE – Full-time equivalent
A metric that corresponds to one employee working full time for one year.

P/E ratio
Share price divided by earnings per share.

Total assets
The sum of the assets side of the balance sheet.

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.

Definition cash cost

Boliden uses the Wood Mackenzie's cash cost metrics, C1 Normal costing and C1 Pro rata costing, to measure the cost position of our mines 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) to obtain the price in USD per tonne 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[1] of other metals, known as by-products.

+	Mining operations, concentration and administration costs[2]
+	Costs of freighting concentrate to smelters
+	Treatment and refining charges (TC/RC)
–	Deductions for net revenue of by-metals
=	**Cash cost C1 Normal costing**

1) The net revenue is the payable income from the metal, less freight costs and treatment and refining charges.
2) Administrative costs attributable to the mine.

Pro rata costing
In pro rata cash costing, the costs are divided 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. If not, 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 cash margin

Boliden uses Wood Mackenzie's cash margin metric to measure the cost position of our smelters in relation to other smelters globally. Cash margin is the difference between revenue and cash cost and is expressed in USc/lb metal. The income comprises treatment and refining charges, free metals and income from by-products.

For zinc smelters, the sales of sulphuric acid is included in the revenue, while it is a credit in the cash cost calculation for copper smelters. The revenue from sales of surplus energy is calculated as a credit against 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.

↓ PDF print version

Industry-specific terms and explanations

Alloy Substance with metallic properties which is composed of two or more chemical elements, at least one of which is a metal.

Base metals Some of the most common metals that are non-ferrous or non-precious. Examples are zinc, copper, lead, nickel and aluminum.

Cash cost Common measurement used to show the costs affecting a mine's cash flow. Used to compare the cost position between mines. See definition on previous page.

Complex ore Ore that contains several metals, for example zinc, copper, lead, gold and silver, and/or deleterious elements.

Concentrator A plant in which ore is processed mechanically and/or chemically to extract and produce a concentrate of the valuable minerals. Also called mill.

Copper anode An intermediate copper refinement product in the form of 99% pure copper plates that can be further refined into copper cathodes through electrolysis.

Copper cathode An end product from copper smelters in the form of 99.9975% pure copper plates.

Feed A smelter's raw material input, i.e., the amount of metal concentrate or secondary materials processed and refined.

Free metals The percentage of metal in concentrate purchased that an individual smelter can process, over and above the payable metal content. Free metals generate 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).

Gold doré A gold/silver alloy cast as bars in the smelter. Further processed to pure gold and silver at a precious metal refinery.

Greenhouse gas (GHG) emissions The release of the gases carbon dioxide, methane, nitrous oxide, and fluorinated gases into the atmosphere, contributing to global warming. Reported in the unit carbon dioxide equivalents, CO_2e.

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 as a fuel, thereby reducing the process energy requirement.

Metal equivalents In a sustainability context, a metric used to describe the environmental impact of emissions and discharges of metals to air and water, respectively. 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.

Metal concentrate Also known as dressed ore or mined concentrate. Metal concentrate is the result of the concentration processes that separate the financially valuable minerals present in ore from those with no financial value.

Metal content The quantities of for example 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 premium The price agreed in advance, over and above the LME price, and paid by customers for specifically customized metals delivered free of charge.

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: proven mineral reserves and probable mineral reserves.

Mineral resource A concentration of minerals in the bedrock that may become commercially extractable. Mineral resources are divided into three categories: measured mineral resources, indicated mineral resources and inferred mineral resources.

Mineralization A concentration of minerals in the bedrock.

Nickel matte An intermediate product made from smelting nickel concentrates. The nickel matte contains mainly nickel but also other metals such as copper, cobalt, and precious metals. The various metals present in the nickel matte are then separated into pure metals in a nickel refinery.

Open pit Method of mining mineral deposits located near the surface. The waste rock is stripped, and the ore mined directly at the surface.

Ore Economic term for minerals, rock types or other bedrock components that can be profitably mined to extract metals or other valuable substances.

Ore grade The average quantity of valuable metals in a tonne of ore, expressed as grams per tonne for precious metals and as a percentage for other metals.

Payable metal content The percentage of the metal content of the concentrate for which the smelters pay when purchasing concentrate.

PGMs Platinum-group metals are six noble, precious metallic elements clustered together in the periodic table. These include ruthenium, rhodium, palladium, osmium, iridium and platinum.

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.

Price escalators or de-escalators (PP) Also known as price-participation clauses. The clauses in the agreements for treatment charges that distribute changes in metal prices between mines and smelters. Most commonly for zinc treatmeant charges.

Recovery The percentage portion of the quantity of a given metal in an ore extracted during the concentration process.

Secondary material Recycling material from which metals can be recovered, for example electronic and metal scrap, metal ashes, slag, dust and scrap lead batteries.

Smelter A plant in which metal containing raw materials, metal concentrates or secondary materials are processed to separate metals from impurities.

Treatment and refining charges (TC/RC) The remuneration received by the smelter for smelting and refining 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.

Tailings Residue material from concentrate production in a mine's mill, which is dry-stacked or deposited in tailings storage facilities consisting of tailings ponds with surrounding dam structures.

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 stoping.

Waste rock Economic term for rock which, unlike ore, contains no valuable material.

Zinc ingot An end product from zinc smelters with detailed specifications with regard to degree of purity, weight and size.

Organizational acronyms

CSRD/ESRS The European Union's Corporate Sustainability Reporting Directive (CSRD) requires large companies to report according to the European Sustainability Reporting Standards (ESRS).

GRI Global Reporting Initiative standards is a reporting framework for the disclosure of ESG topics.

ICA International Copper Association is a not-for-profit trade association that bings together the global copper industry to develop and defend markets for copper and to make a positive contribution to the UN's Sustainable Development Goals.

IZA International Zinc Association is a trade association that provides global leadership, coordination and value on strategic issues for the zinc industry, including market development, license to operate, communications and sustainability.

ICMM International Council on Mining and Metals is a trade association promoting sustainable development, for example by devising guidelines such as the Global Industry Standards on Tailings Management.

LBMA London Bullion Market Association. International market responsible for the daily pricing of precious metals.

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.

SASB Sustainability Accounting Standards Board is an American NGO providing standards for the disclosure of ESG topics.

SBTi Science Based Targets initiative is a partnership between CDP, UN Global Compact, World Resources Institute and the World Wide Fund for Nature, validating climate targets of organizations to ensure alignment with the Paris Agreement target.

TCFD Task Force on Climate-Related Financial Disclosures was created by the Financial Stability Board and provides recommendations on the types of climate-related information companies should provide.

TNFD Taskforce on Nature-related Financial Disclosures is a global initiative aiming to create a framework for nature-related risk management and reporting.

Abbrevations

CO_2e = carbon dioxide equivalents
lb = pound = 0.4536 kg
Oz = Troy ounce = 31.1035 grams
USD = US dollars
USc = US cents
c/lb = cents per pound = 1/22.0462 USD/tonne
SEK = Swedish kronor
NOK = Norwegian kroner
EUR = euro
Ag = silver
Au = gold
Co = cobalt
Cu = copper
Ni = nickel
Pb = lead
Pd = palladium
Pt = platinum
Zn = zinc

The share

The Boliden share is listed on Nasdaq Stockholm and is part of the Large Cap segment. During the year, the share decreased 1% thus underperforming the Stockholm stock exchange, which gained 4%. However the share outperformed its key international peer index.

Trading in the Boliden share
In all, 0.9 billion (1.0) Boliden shares were traded in 2024 with a total value of SEK 283 billion (335). Nasdaq accounted for 33% (29) of trading in Boliden shares. During the year, 299 million (298) Boliden shares were traded on Nasdaq Stockholm, with a total value of SEK 94 billion (101). An average of 1.2 million (1.1) shares were traded per trading day, and the Boliden share accounted for 1.5% (1.9) of the total volume of shares traded on Nasdaq Stockholm. However, the largest exchange for the Boliden share was CBOE with 50% (55) of all trades in the share. The comparative figures for 2023 have been adjusted due to a new provider of trading data.

Price trend and dividend
The Boliden share fell by 1% compared to the OMX Stockholm 30 index, which rose by 4%, and the MSCI World Metals & Mining Index, which fell by 6%. The latter index is Boliden's key peer index. At year-end 2024, the Boliden share was quoted at SEK 310.5 (314.5) on NASDAQ Stockholm, corresponding to a market capitalization of SEK 85 billion (86). 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 1.02 (1.04).

As a consequence of the acquisition of Neves-Corvo and Zinkgruvan, the Board of Directors proposes to cancel the ordinary dividend for 2024, in order to reduce the proposed share issue with the corresponding amount.

Share capital
As per December 31, 2024, the total number of shares was 273,511,169. Each share had a quota value of SEK 2.12, and total share capital was SEK 578,914,338. Boliden's share capital derived from one type of share where each share has the same voting rights and the same right to dividends. There was no provision in Boliden's articles of association that limited the right to transfer shares or any voting right restrictions as to how many votes a shareholder may exercise at a shareholders' meeting. Boliden held 40,000 repurchased treasury shares and did not issued any shares in 2024. Boliden was unaware of any agreement between shareholders that may have entailed restrictions on the right to transfer shares in the company. Boliden was not party to any significant agreement affected by any public buyout offer. Boliden had no shareholders who had 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, 2024, Boliden had 121,813 shareholders (124,052). Approximately 56% (57) of the shares were registered to foreign accounts. The ten biggest individual shareholders represented 29% (29) 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 1,240,426 shares (1,191,186).

Shareholder information on the website

Continuously updated information about the Boliden share and the shareholder list is available on the Boliden website at www.boliden.com.

Boliden's financial reports, presentations and contact details to the equity research analysts in the 21 (21) banks and fund commissioners who monitor Boliden are also available on the website. For further information, please email us at: investorrelations@boliden.com.

Breakdown of Boliden's shares as of December 31, 2024

Shareholdings	Number of shareholders	Number of shares	Shareholding, %	Votes, %
1 – 100	75,316	2,513,549	0.9	0.9
101 – 500	30,960	8,275,884	3.0	3.0
501 – 1,000	8,088	6,483,956	2.4	2.4
1,001 – 10,000	6,771	17,676,101	6.5	6.5
10,001 – 50,000	439	8,974,497	3.3	3.3
50,001–	241	192,248,857	70.3	70.3
Anonymous ownership		37,338,325	13.6	13.6
Total		**273,511,169**	**100.0**	**100.0**

Source: Monitor, Modular Finance AB Holdings

Annual total return as of December 31, 2024	1 year	3 years	5 years	10 years
Boliden	1%	1%	10%	14%
OMX Stockholm 30	7%	4%	10%	9%
MSCI World Metals & Mining Index	-3%	9%	12%	11%

The average total shareholder return on the Boliden share over the past 10 years was 14% per year and 265% for the period as a whole.

Source: Bloomberg

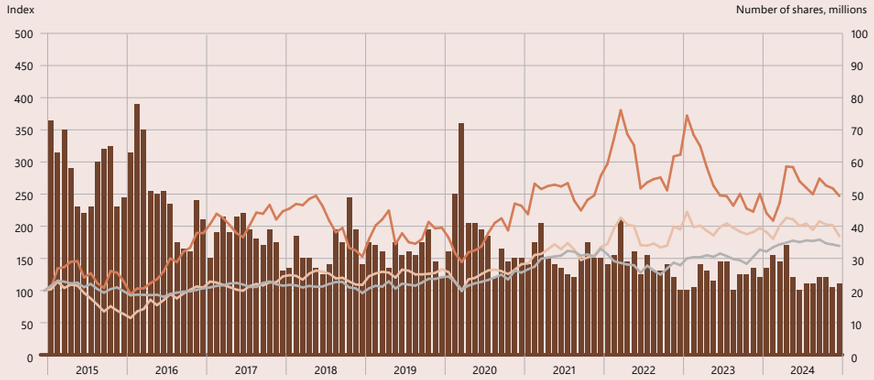
Boliden's 10 biggest shareholders As of December 31, 2024	
Percentage of capital and votes, %	
BlackRock	6.8
Vanguard	4.2
Swedbank Robur Fonder	3.6
Nordea fonder	2.5
Handelsbanken Fonder	2.4
Global X Management Company LLC	1.9
Söderbloms factoringtjänst AB	1.9
SEB fonder	1.8
Folksam	1.8
Länsförsäkringar	1.7
Total	**28.7**

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

The share in brief, 2024	
Exchange	Nasdaq Stockholm
Ticker	BOL
ISIN code	SE 0020050417
ICB code	5510
Highest price paid	386.5
Lowest price paid	257.1
Closing price	310.5
Market cap. 31 Dec	SEK 84.9 billion
Turnover rate	326%
Number of shares	273,511,169
Beta value (5 years)	1.02

Source: Nasdaq OMX, Modular Finance AB

Share price, sector index, and Nasdaq Stockholm

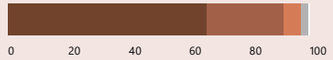


Share price, sector index, and Nasdaq Stockholm
During the year, the Boliden share fell by 1% compared to the OMX Stockholm 30 index which rose by 4%, and the MSCI World Metals & Mining Index, which fell by 6%.

Source: Bloomberg

- Boliden
- OMX Stockholm 30
- MSCI World Metals & Mining Index
- Number of shares traded per month

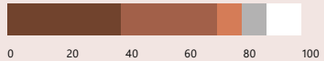
Trading on different exchanges



- CBOE, 50%
- Nasdaq, 33%
- LSE 14%
- Aquis, 2%
- Other, 1%

In 2024, 33% (29) of Boliden shares were traded on the Stockholm Exchange. Source: Modular Finance AB

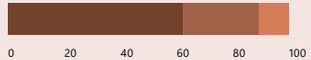
Ownership by country



- Sweden, 43.8%
- USA, 31.6%
- Luxembourg, 6.1%
- Great Britain, 5.7%
- Other, 12.8%

56% (57) of the shares were registered to foreign accounts.

Ownership by category



- Foreign accounts, 56%
- Swedish legal entity accounts, 29.5%
- Swedish natural person accounts,14.5%

↓ PDF print version

Annual General Meeting 2025

Boliden's Annual General Meeting (AGM) is scheduled for Wednesday, April 23, 2025 in Aitik. Participation may either take place in person at the meeting venue or by postal voting in accordance with the Articles of Association and Chapter 7 § 4a of the Swedish Companies Act.

Participation
Shareholders wishing to participate in the AGM shall be registered in the shares ledger kept by Euroclear Sweden AB on April 11, 2025 (see below for the re-registration process for nominee shareholders), and shall also notify the company, via Boliden's website, www.boliden.com, by telephone on +46 8 32 94 29, or by mail addressed to Boliden AB, c/o Euroclear Sweden AB, PO Box 191, SE-101 23 Stockholm, Sweden. When giving notice of participation, shareholders must state their name, identification or registration number, address and telephone number as well as the number of attending assistants (maximum of two). The information provided will be processed and used only for the purpose of the AGM. Notice of participation must be received by the company no later than April 15, 2025. April 15, 2025, is also the last day for submitting postal votes.

Nominee shares
In order to be entitled to participate in the AGM, nominee shareholders must, no later than April 11, 2025, 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. Voting rights registrations that have been completed by the nominee no later than April 15, 2025, will be taken into account in the preparation of the shares ledger.

Complete notice
The notice convening the AGM, as well as financial and other information, is published at www.boliden.com six to four weeks before the AGM. Printed financial information may also be ordered via the website or from Boliden AB, PO Box 44, SE-101 20 Stockholm, Sweden.

Investor information

Financial information

April 23, 2025	Interim Report for the first quarter 2025 and Annual General Meeting in Aitik
July 18, 2025	Interim Report for the second quarter 2025
October 22, 2025	Interim Report for the third quarter of 2025
February 3, 2026	Interim Report for the fourth quarter and year-end 2025

Capital Markets Update 2024
Once every 18 months, Boliden invites institutional investors, analysts and journalists to gain deeper understanding for its business during Capital Market Days events. Combining presentations by the Group management team sometimes with visits to business sites, these events often also include news that are communicated publicly. The virtual Capital Markets Update 2024 on March 18 saw the launch of decision to invest in a new tankhouse in Rönnskär, investments to extend the life span of the Boliden Area, Low-Carbon Nickel and news regarding a technical breakthrough for supplementary cementitious material. For all presentations, press releases and more information connected to our Capital Markets Days, please visit www.boliden.com.

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

Olof Grenmark, Director Investor Relations

The Group

Boliden Group
PO Box 44
101 20 Stockholm
Sweden
Visiting address:
Klarabergsviadukten 90
Phone +46 8 610 15 00

www.boliden.com

Boliden Mines

Finnforsvägen 4
936 32 Boliden
Sweden
Phone +46 910 77 40 00

Boliden Area
Finnforsvägen 4
936 32 Boliden
Sweden
Phone +46 910 77 40 00

Boliden Aitik
Sakajärvi 1
982 92 Gällivare
Sweden
Phone +46 970 72 90 00

Boliden Garpenberg
Kaspersbo 20
776 98 Garpenberg
Sweden
Phone +46 225 360 00

Boliden Kevitsa
Kevitsantie 730
99670 Petkula
Finland
Phone +358 16 451 100

Boliden Tara
Knockumber
Navan C15 NH63 Co Meath
Ireland
Phone +353 46 908 2000

Boliden Smelters

Boliden Commercial AB
PO Box 750
101 35 Stockholm
Sweden
Visiting address:
Klarabergsviadukten 90
Phone +46 8 610 15 00

Boliden Kokkola
Sinkkiaukio 1
67900 Kokkola
Finland
Phone +358 6 828 6111

Boliden Odda
Eitrheimsneset
5750 Odda
Norway
Phone +47 53 64 91 00

Boliden Harjavalta
Teollisuuskatu 1
29200 Harjavalta
Finland
Phone +358 2 535 8111

Boliden Rönnskär
932 81 Skelleftehamn
Sweden
Phone +46 910 77 30 00

Boliden Bergsöe
Gasverksgatan
261 22 Landskrona
Sweden
Phone +46 418 572 00

Boliden Marketing

Office England
No 7 Clarendon Place
Royal Leamington Spa
Warwickshire CV32 5QL
United Kingdom
Phone +44 1926 833 010

Office Germany
Stresemannallee 4c
41460 Neuss
Germany
Phone +49 2131 750 46 55

Office Denmark
Hvissingevej 116
2600 Glostrup
Denmark
Phone +45 4326 8300

Ecolabelled printed matter 3041 0196

FSC MIX Paper | Responsible sources | FSC® C150082

Boliden Annual and Sustainability Report 2024
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.

Production: Boliden in cooperation with Narva Communications.
Photo: Boliden, Daniel Holmgren, Esa Melametsä, Hanna Sjövall, Jeanette Hägglund, Jesper Persson, Johanna Sjövall, Jonas Westling, Jorma Simonen, Karina Abrahamsen, Mikael Florens, Oscar Byström, Oscar Karlin, Patrik Persson, Piero Facci/Shutterstock, Stefan Måns, Thorbjörn Ljungeld, Tomas Westermark, Tommi Hietaharju.
Illustrations: Narva Communications, Henson **Print:** Elanders, Sweden, 2025

NEW BOLIDEN