



METALS FOR GENERATIONS TO COME

Sustainability Index 2020

Sustainability Index 2020

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ABOUT THIS INDEX

Boliden has published information on its sustainability approach and performance since 2005. This index is prepared in accordance with the Global Reporting Initiatives (GRI) Standards: Core Option. This index also constitutes Boliden's Communication on Progress (COP) and therfeore contains references to Boliden's performance in relation to the UN Global Compact's ten principles. Since 2019, Boliden has supported the Task Force on Climate-related Financial Disclosures (TCFD) and discloses its performance in this index. The 2020 Sustainability Index comprises references to the Boliden

2020 Annual and Sustainability Report that discloses the Group's value creation, operations, and risk assessment, including the sustainability perspective.

The Sustainability Index and the Annual and Sustainability Report have been reviewed by means of an external limited assurance engagement 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. Organizational profile and key performance data are presented in Boliden's Annual and Sustainability Report 2020.

CATEGORIES

Governance

Learn more about how Boliden identifies and manages sustainability topics in the Governance section.

6

Economic

Learn more about job creation, economic impact and ethical behavior in the Economic Performance section

12

Environment

Learn more about energy, climate, material efficiency and other environmental topics in the Environmental Performance section

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Social

Learn more about working conditions, human rights, and community relations in the Social Performance section

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Defining report content and topic boundaries

The information contained in this report, with the exception of environmental performance data, covers facts and figures from Boliden's eleven Business Units, from the Group's head office and various staff functions, and from its sales offices. Environmental performance data is limited to Boliden's eleven operational Business Units as they represent Boliden's significant environmental impacts. During the reporting period, there have been no significant changes in the smelting operations, the supply chain, or in the capital structure and capital formation. In mining operations, the Kylylahtis mine was closed in November and reclamation work is ongoing.

Report Content

Boliden's Sustainability Index has the ambition to provide Boliden's stakeholders with relevant information about Boliden's economic, environmental and social impact. Boliden's Sustainability topics are presented in this report. There are topics directly connected to how Boliden conducts its operations and topics that impact stakeholders and determine Boliden's license to operate and ability to develop its business. This report has been reviewed and approved by Boliden's Group management and Board of Directors.

Reporting Principles

The financial data is drawn from Boliden's audited annual accounts. The Boliden Group reports in Swedish kronor (SEK). Occupational health and safety and Environmental data, including energy-related data, is collected on a monthly basis from the units and consolidated at Group level. Social data has been collected on a quarterly or annual basis from the operations and consolidated at Group level. Metal emissions to air and discharges to water are measured in metal equivalents in allignment with the Natural Capital Protocol (NCP) framework.

More detailed measurement techniques, calculation methods, and assumptions are reported in connection with relevant indicators.

External Assurance

Boliden's policy is to use external assurance to ensure the high quality and credibility of the information published in the Boliden Sustainability Index. The Sustainability Report has therefore been subject to external limited assurance by the Auditor.



About Boliden

Boliden is a metal producer with a focus on sustainable development. The company's core competence is within the fields of exploration, mining, smelting, and metals recycling. Boliden operates six mining units and five smelters in Sweden, Finland, Norway, and Ireland. Its shares are listed on NASDAQ Stockholm, segment Large Cap.

Boliden and sustainability

Boliden produces metals that make modern society work. The company's operations are characterized by concern for people, the environment and society. Boliden's sustainability work is based on its own norms and values, as well as on international guidelines and targets, such as the UN Global Compact and the UN Sustainable Development Goals. Dialogues with internal and external stakeholders are used to ensure that different perspectives are taken into account.

Sustainability reporting

Boliden uses a risk-based sustainability approach to disclose environmental, social and governance information to its stakeholders. Boliden is assessed periodically by a number of sharing information that is relevant to the business.



Introduction

This Index is designed to facilitate the navigation of Boliden's disclosure of governance, strategies, report parameters, sustainability topics, performance indicators. It includes references to Boliden's environmental, social, and economic goals and results*.

The Content Index at the end of this document includes references to Boliden's disclosures to the following initiatives:

1. GLOBAL REPORTING INITIATIVE (GRI) CONTENT INDEX

The GRI Standards include an internationally recognized set of standards for economic, environmental and social aspects of business performance that enables stakeholders to compare the performance of different companies. Boliden's Sustainability Index 2020 is prepared in accordance with the GRI Standards: Core Option. Given Boliden's business, the company has also included relevant disclosures from the previous GRI G4 Mining and Minerals sector supplement, which no longer form part of the applicable GRI standards.

2. THE TEN PRINCIPLES OF THE UN GLOBAL COMPACT INDEX

Boliden has been a signatory to the UN Global Compact since 2012. The UN Global Compact is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labor rights, environment and anticorruption. Boliden's Sustainability Index 2020 includes the Communication on Progress (COP) with references to Boliden's performance in relation to the UN Global Compact's ten principles.

3. TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)

Boliden supports the recommendations from the TCFD, and discloses its performance to date in this Sustainability Index.

*In cases where Boliden reports partially (with omissions) on a sustainability topic, the reasons for the omissions are provided either directly in the index or in connection with the disclosure of the topic.



Governance

The Board of Directors is responsible for the stewardship of the company and for ensuring that appropriate corporate governance structures and systems are in place. Sustainability is addressed at each Board and Group Management meeting, and in local management meetings. However, day-to-day responsibility is decentralized to each Business Unit.

Sustainability topics and their boundaries

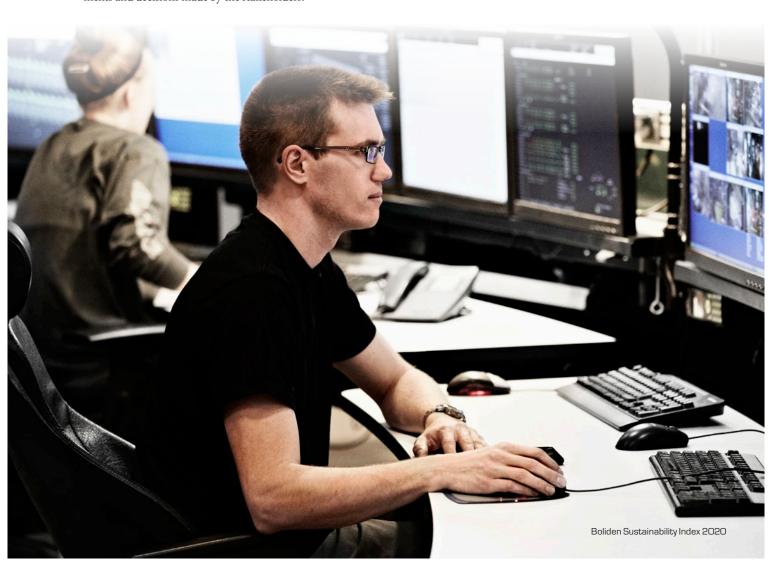
Boliden has identified sustainability topics that can affect its business model – both positively and negatively – by studying the business environment, stakeholder engagement and sustainability trends. A direction is set for each of the defined topics. The topics are managed and controlled in Boliden's operations. The sustainability topics are embedded throughout the organization and approved by Group management. At Boliden, a 'sustainability topic' is an issue that reflects Boliden's economic, social and environmental impact, as well as issues that can affect assessments and decisions made by the stakeholders.

Identifying sustainability topics

Sustainability topics for Boliden are based on Boliden's business model, taking into consideration risk and opportunities such as business intelligence and risk mapping, as well as applicable requirements and expectations such as:

- Stakeholder expectations
- Current and potential legislative trends
- ISO 9001, 45001, 14001 and 50001 standards
- Gold Supply for the LBMA Good Delivery list
- GRI Standards (Global Reporting Initiative)
- UN Sustainable Development Goals (SDGs)
- UN Global Compact

Boliden regularly consults selected stakeholder groups on its sustainability performance from a broader perspective. These stakeholders are asked to comment on Boliden's performance in order to drive further improvement.



Environment

Content Indexes

Boliden's stakeholders

Stakeholder dialogue is an important part of living up to Boliden's values as a responsible and sustainable company. Stakeholders are defined as groups of people that can be significantly affected by Boliden's operations. Each group is consulted in order to identify significant sustainability topics for Boliden.

Stakeholders have different views and expectations of Boliden. The way in which Boliden's activities relate to the SDGs, to other societal trends and expectations, and to the views expressed internally within the company and in contact with representatives of other stakeholders have all provided important input for the process of defining sustainability topics.

Boliden's Stakeholder groups	Sustainability topics	Dialogue and activities
Employees	Health and safetyDevelopment plansCompensation and benefitsClimate	Employee surveyWorkers councilsYearly AppraisalClimate program and internal dialogue
Society	 Local communities Land use Resettlement and closure planning Rights of indigenous people Climate Biodiversity 	 Public meetings Dialogue in application processes for permits Citizens dialogue rehabilitation planning Dialogue as part of project development Dialogue during operation Engaging with local communities and indigenous peoples
Market	– Financials – Health and safety – Climate	– Customer visits – Dialogues with banks – Low-carbon metals
Capital markets	Financial performanceRisksClimateBusiness ethics	Investor meetingsInvestor Relations daysTCFD reportingESG rating
Suppliers	– Business ethics – Human rights – Compliance	– ESG Supplier assessments – Site visits – Audits
Environment	– Emissions to air – Discharge to water – Land use	- Measurements and follow up - Studies with universities - Preventive actions to avoid impacts on air, land and water

Boliden and the Sustainable **Development Goals**

Many of Boliden's sustainability topics are related to specific SDGs. Boliden supports all the SDGs, but has identified the most important goals to its business to show how it contributes to cross-sector international efforts to solve global development issues. Boliden's work toward these goals has a positive impact on its ability to become a world-class metals company and a sustainable first link in metal value chains.

Boliden's most relevant and prioritized SDGs are:



SDG8-Decent work and economic growth

- Boliden promotes sustained.

inclusive and sustainable economic growth, productive employment and decent work for all, including in rural communities where most of its mines are located.



SDG 12-Responsible consumption and production

ations produce metals efficiently and with comparatively low-carbon footprint. Some processes create value from societal waste and secondary materials to contribute toward the circular economy.



SDG 13-Climate action

– Boliden is working to reduce its climate impact

and to constantly maintain and improve low-carbon footprint on its metals.



Boliden also considers SDG 5 (Gender equality), SDG 14 (Life Below Water) and SDG 15 (Life on land) to be relevant to its business.

102–47 List of sustainability topics that are manage in order to create trust, enables strategy or to create value.



IMPACT	TOPIC	DIRECTIONS	UN SDG
	Financial performance	Contribute to long-term economic growth by providing metals that are essential for creating a sustainable society.	8.3
	Market presence	Contribute to local employment levels, trade and industry by generating purchasing power and providing a critical base for social services.	8.3
	Indirect economic impacts	Contribute to job creation indirectly or induced through subcontractors, suppliers or the effect of employees' expenditures.	8.3
ECONOMIC	Anti-corruption	Promote and monitor compliance throughout the company by following the Code of Conduct, and Boliden's anti-bribery and corruption program.	16.5
20014014110	Anti-competitive behavior	Promote and monitor compliance throughout the company and contribute to free and fair competition.	16.5
	Business partner Environmental, Social and Governance (ESG) assessment	Boliden's business relations create a positive environ- mental and social impact through business relations as well as they promote a transparent business partner governance. Expect Business Partners to follow the Business Partner Code of Conduct.	12.2, 12.4, 12.5, 16.2, 16.5
	Circular economy	Contribute to the circular economy through recycling and by maximizing metal recovery from the available raw materials.	8.4, 12.2, 12.5
	Waste & resource usage	Dam facilities to comply with the Global Industry standard on Tailings Management. Invest in R&D to develop new products that eliminate waste.	12.2, 12.5
	Energy	Implement and maintain energy management systems to achieve energy efficiency and conserve energy.	7.3
23	Water	Reduce the consumption of fresh water and the discharge of used water. Maintain water management plans. Reduce the discharges of metals to water.	12.2
ENVIRONMENTAL	Biodiversity	Contribute to increased biodiversity by 2030 in all regions where we operate.	15.5
	Air pollution emissions	Reduce emissions to air through improved process efficiency.	14.3
	Climate	Provide society with low-carbon metals. Reduce carbon dioxide intensity through improved process efficiency and increased electrification with the aspiration to create a fossil free mine.	13.2, 13.3
	Environmental compliance	Comply with permit values and legal requirements. No serious environmental incidents.	16.3
	Employment	Provide an attractive workplace.	8.8, 8.5
	Occupational health and safety	Provide a safe and healthy workplace.	8.8
	Training and education	Facilitate career and skill development.	4.7
202	Diversity and Equal Opportunity	Foster workforce diversity that reflects the local community.	5.1, 8.5
8	Non-discrimination	Discourage all forms of harassment and discrimination on the basis of gender, ethnicity, age, disability, religion, sexual orientation or any other factor.	5.1, 8.5, 8.8
SOCIAL	Local Communities	Maintain good community relations and effective operations management.	11.3, 11.a
	Socioeconomic Compliance	Ensure legal requirements are always met.	16b
	Resettlement and Closure planning	Plan for the conservation and reclamation of mining areas during their operation and end of production lifespan.	11.3, 11.4, 14.2, 15.5
	Rights of Indigenous People	Promote open dialogue and long-term cooperation with Sami communities in order to mitigate the negative impacts of Boliden's mining activities on local people and the environment.	10.2

BOLIDEN'S SUSTAINABILITY TOPICS AND DIRECTIONS

103-1 Identifying significant sustainability topics

Boliden's process for integrating and implementing significant sustainability topics into its business strategy is described in four steps:

- 1. Identify Sustainability topics
- 2. Prioritize significant topics to be part of the strategy input
- 3. Implement systematic sustainability work
- 4. Report, follow up and improve.

Boliden has an internal process designed to annually review its sustainability topics in response to its overall results, changing

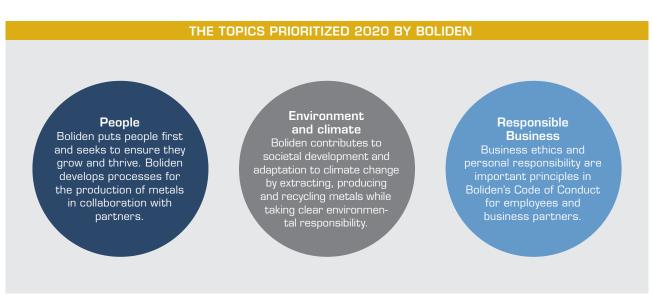
business requirements, changing stakeholder expectations, implementation of the SDGs, technological and scientific progress, etc. The process includes cross-disciplinary discussions and impact analysis where multiple internal experts participate. During the materiality assessment, significant sustainability topics are defined and given as an input to the Group strategy process. The significant topics are validated by Group management and the Board of Directors through the Strategy Plan and then integrated into the strategy work. The Business Areas develop activities and plans to achieve the Group's goals.

MATERIALITY ASSESSMENT PROCESS Step 1 - Identify sustainability topics Identify Stakeholder Research, SWOT, senario analysis and impact mapping engagement results fed Step 2 - Prioritize sustainability topics into the **Prioritize** Significance to business and importance to shareholders materiality assessment process. Step 3 - Validate relevance of prioritized topics Validate At senior management level

Sustainability component of the business strategy

The identification and prioritization of the Group's sustainability topics are based on the overall vision of being one of the leading

companies in the industry in terms of development, productivity, responsibility and value creation. The topics prioritized in 2020 are grouped into three areas.



The significant sustainability areas identified in the materiality analysis

Economic

Content Indexes

103-2&3 Management approach, its components and evaluation thereof

The general aspects of the management approach are covered in this part of the report, whereas the more topic-specific management aspects are covered in association with the disclosure of 200 Economic/300 Environment/400 Social topics. Identifying and prioritizing the most important and relevant issues within the context of Boliden's sustainability work is an ongoing process. Sustainability comes with a long-term perspective and is a long-term commitment, which means it is an integral part of Boliden's strategy and operations. The basis for the sustainability work is that all operations are conducted in accordance with legislative provisions and permits in the countries in which the Group operates. Boliden's ambitions are, however, significantly higher than this and the Group works proactively by setting goals and guidelines that are fundamental to its operations from a sustainability perspective. In order to systematically control and develop Boliden's operations, management systems have been implemented to ensure that significant sustainability topics of the operations are covered, making it possible to minimize the risks associated with mining and metals production. Boliden's way of working also facilitates adaptation to market conditions and preferences, while ensuring compliance with future legislation. Boliden became a signatory to the UN Global Compact in 2012, and continually enhances the efforts to protect and respect its principles and promote its spirit.

The significant sustainability topics enable Boliden to set relevant goals, and to track and improve performance.

Policies and Management Systems

Boliden has a governance model comprising Group-wide policies, with local instructions, guidelines and tools in a global management system that corresponds to the challenges the company faces. The overall policy documents and local documents are available in the Boliden Management System (BMS), which is accessible to all employees via Boliden's intranet.

Boliden's operations have adopted quality, environmental, occupational health and safety and energy management systems. The ambition is to have all sites certified in accordance with the environmental management standard ISO 14001, standard for energy management ISO 50001 and the occupational health and safety management standard ISO 45001. In 2020, all sites except Kevitsa and Kylylahti achieved these certifications. The Group's smelters are also certified in accordance with the ISO 9001 standard for quality management. By working with certified management systems, Boliden ensures that its operations review significant issues, set targets, measure performance, follow up on progress, and continuously work to improve their performance. The certification schemes also demand documented delegation of responsibilities on each site and that relevant competences are upheld.

Ethics and compliance

The Ethics and Compliance function is strategically developing and leading Boliden's ethics and compliance work regarding human rights, anti-bribery and corruption, competition law and anti-trust legislation, trade sanctions, whistleblowing and Boliden's Codes of Conduct for employees and business partners.

The function is placed within Boliden's Corporate Responsibility department and is responsible for the overall management and co-ordination of compliance and adherence to regulatory frameworks, industry standards as well as internal policies and procedures related to the defined scope. It regularly reports to the Audit Committee and the Group Management Team.

Code of Conduct

Boliden's Code of Conduct provides a non-exhaustive framework for what it considers responsible conduct. The foundation of the Code is Boliden's values – care, courage and responsibility – which should guide the employees in daily decisions. It sets out the required behavior and desired direction on how we should act towards each other, the society, the environment, our business partners, and the capital market. It specifically sets out expected behavior in regard to business integrity. The Code of Conduct has been approved by Boliden's Board of Directors and applies to all Boliden employees, including temporary personnel, worldwide, as well as to members of the Boards of Directors of Boliden AB and its subsidiaries.

Line managers are responsible for making the guidelines known and for promoting and monitoring compliance. Violation of the Code of Conduct is not tolerated and may lead to internal disciplinary action, dismissal, or even criminal prosecution. Should an improper practice or incident occur within Boliden, the company is committed to make the necessary corrections and will take remedial action to prevent recurrence.

The Code is publicly available on Boliden's corporate website.

Business Partner Code of Conduct

Boliden sources raw materials, energy, services and equipment from various external suppliers around the world. Boliden also sells its products to an international market. Operating in a global market with varied legislation, labor and environmental standards, and business ethics requires a comprehensive approach to risk management throughout the value chain. Boliden is aware of the importance of its suppliers and customers working as responsibly as its own organization. Therefore, Boliden's Business Partner Code of Conduct reflects the same high standards that are required by its own organization.

The Business Partner Code of Conduct applies to all business partners and reflects the requirements that Boliden sets on its own organization and operation. The Business Partner Code of Conduct specifically addresses human rights, labor rights, environment, anti-corruption and conflict minerals.

The Code has been developed from the principles laid out in the UN Global Compact, the ILO fundamental conventions, applicable ISO standards, the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, as well as other international industry standards and best practices. The Code sets the minimum level of behavior required by all parties in the value chain – whether Boliden is a buyer or a seller – regarding human rights, labor rights, environment, anti-corruption, conflict minerals and governance.

Boliden's business partners are evaluated before entering an agreement as well as regularly throughout the business relationship. The evaluation process is based on the Business Partner Code of Conduct.

Business partner risk management program

Boliden conducts systematic compliance controls and evaluations of third parties including customers, suppliers and other business partners. The purpose is to identify and manage compliance and sustainability risks in regard to sanctions, money-laundering, bribery and corruption as well as human rights, labor rights, occupational health and safety, and environment. More information regarding each of these areas are addressed in the upcoming chapters (Economic-, Environmental- and Social performance).

The compliance controls mainly involve conducting a background and database screening on relevant counterparties and individuals. Evaluations are risk-based and can include self-assessments, in-depth due diligence and audits. New business partners must approve Boliden's Business Partner Code of Conduct or other relevant and generally accepted business standards before entering into an agreement. If necessary, regular audits are performed at business partners to monitor compliance with the Code. Because Boliden believes in supporting its business partners to improve its corporate responsibility efforts, deviations from the Business Partner Code of Conduct are primarily handled by agreeing on a corrective action plan together with the business partner.

Boliden works actively to promote good practice among its supplier and customer base in order to work beyond compliance and further improve its value chain. For example, Boliden encourages its business partners to push for the same high level of standards as those set out in the Code in their own supply chain. In the event of serious violations, the business relation can be terminated.

Boliden continuously develops and improves its corporate responsibility work related to business partners by adopting new knowledge and adjusting to new conditions. Boliden's Business Partner Code of Conduct is available on the Boliden website.

Management of Hazardous waste and Conflict Minerals

Boliden complies with all national legislation and international guidelines such as the OECD guidelines for the trade in material and waste. When dealing with hazardous waste, Boliden applies a policy that involves making no payments until the material has been properly handled by the business partner. Visits and audits are carried out to ensure that the waste is handled correctly and that all legislation is complied. The process also ensures that secondary and primary raw material suppliers do not come from conflict areas by, among other things, requiring origin documentation for all raw materials purchased.

Responsibility and Monitoring of Progress

Boliden's Group management has ultimate responsibility for the Group's sustainability work. Prioritizing sustainability issues, as well as identifying and selecting the most relevant sustainability issues, is an ongoing process involving all units within the Boliden Group. The Group management includes the Senior Vice President -Corporate Responsibility, who ensures that sustainability issues are continuously addressed.

The work is largely carried out through Group-wide networks in order to facilitate the dissemination of Boliden's goals and strategies, as well as to exchange expertise and experience between the Business Areas and between production units. There are Group councils for occupational health and safety, environment, quality, and human resources as well as networks in the area of ethics and compliance, and public affairs. The chairs of the respective councils and networks report to the Group management.

Environmental performance, sick leave and accident rates are reported on a monthly basis. They are also presented at every Group management meeting and at every Board meeting. Supplier assessments of environmental and labor practices are reported on a quarterly basis. Boliden also presents sustainability performance in its quarterly interim reports. Boliden's Board of Directors reviews the Group's sustainability performance data annually.

The Boliden whistleblower function

Boliden's whistleblower reporting system enables employees and business partners to anonymously raise concerns regarding actual or suspected serious wrongdoings within the Boliden Group.

The system is hosted by an external and independent third party, and gives the whistleblower the possibility to follow the status of the case. The whistleblower function is managed by Group Ethics and Compliance with support from a cross-functional team of senior staff. Boliden applies zero tolerance for retaliation against anyone who reports wrongdoings in good faith.

Economic

Boliden contributes to long-term economic growth by providing metals that are important for society's industrialization and development.

At a minimum, the return on invest-

ECONOMIC PERFORMANCE 2020

The performance is presented in the Annual and Sustainability Report.

ECONOMIC TARGETS 2020 AND BEYOND

Return on investments
At a minimum, the return on investment shall be 10% (NPV)

Net debt/equity ratio
The net debt/equity ratio in an economic upturn shall not exceed 20%

Dividend
The dividend shall correspond to one third of the net profit



Introduction

Content Indexes

201-103 MANAGEMENT APPROACH - ECONOMIC

For more than 90 years, Boliden has been exploring, extracting and processing base metals and precious metals. Production is based on experience, innovation and modern technology, developed in collaboration with Nordic technology and engineering companies. Today, Boliden is an industry leader in terms of sustainable metal production, from deposits to the recycling of used metals. The locations of Boliden's operations are determined by the localization of mineral resources and the ability to explore and expand operations in connection therewith. Good community relations and mutual understanding are a prerequisite for Boliden's success and for enabling the business to grow.

The economic topics identified as important to Boliden are economic performance, market presence, indirect economic impact, anti-corruption, and anti-competitive behavior. All of these topics are closely linked to Boliden's overall performance. They are both the result, and a precondition, of trust from the local communities in which Boliden operates. By considering these topics and performing well in respect to them, Boliden maintains its license to operate and the ability to develop its business.

Economic performance

Economic performance is important, because Boliden contributes to welfare in society through the generation and distribution of economic value, e.g. by paying wages, taxes, interest, and dividends. These impacts occur throughout Boliden's value chain and affect several stakeholder groups and all Boliden sites.

Boliden's contribution to the community is multifaceted and includes investing in education and engaging with students, nurturing competence, and enabling conversion from one occupation to another to make people employable, sponsoring local organizations, making investments that benefit the company and the community, etc. These matters support job creation and strengthen rural communities' contribution to national economic stability. Several of Boliden's most important locations, and locations where major investments have been made, are in regions where economic stimulus is needed. Boliden is aware of its role and significance as it is often the biggest employer in the community and a generator of positive trickle-down effects, such as tax income to finance public services, and as a foundation for a private service sector. This status brings both privileges and responsibilities.

Salaries are an important part of the economic compensation to the community. In general, the entry-level wages for employees are set higher than the minimum wage, and average salaries and wages are often higher than the national industrial average. For blue-collar employees, there is an entry-level wage stated within the local salary agreements used for new employees. For white-collar employees hired directly out of university, Boliden applies entry-level wages, depending on the level of education needed for different jobs.

Social impact assessments are conducted in order to assess the consequences for the local community in connection with both expansions of and other significant changes to operations, and in conjunction with the closure of operations.

Due to the spread of Covid-19 and various national restrictions linked to it, Boliden experienced some logistics disruptions with effects on mining production and concentrate deliveries. Despite this, production was stable throughout the year, both in Mines and Smelters.

The Annual and Sustainability Report contains further details of the ways in which Boliden manages, follows up on, and monitors its performance in relation to these aspects.

Market presence

Protecting local communities' interests and maintaining good relationships with employees, neighbors, authorities and business partners is an important part of being a responsible company. It also strengthens the ability to attract skilled labor and contributes to the development of the business.

Boliden has a considerable impact on local employment levels, trade, and industry by generating purchasing power and providing a critical base for social services. At the year-end, Boliden had 6,071 (5,997) full-time employees, in eight countries. Although the industry is cyclically sensitive, Boliden has had stable employment over several business cycles, and the workforce has increased by about 1,500 (1,700) people in the past 10 years, mainly due to the acquisitions of the Kylylahti and Kevitsa mines.

Boliden currently operates in countries where the infrastructure is well developed and the need for Boliden to contribute to society by directly investing in and developing infrastructure and social services is limited.

Just as Boliden's companies are important to the development of society, society is important to Boliden. Maintaining an ongoing open dialogue with local inhabitants and other parties with interests in Boliden's operations is a given, as is collaborating with local operators and sponsoring various associations and events. Boliden encourages visits to its mines and smelting plants.

When expanding Boliden's operations or setting up in a new location, it is also important that it maintains a dialogue with all concerned stakeholders, in order to ensure that the company's negative social and environmental impacts are minimized.

Contribution to tax revenue

Boliden values the importance of a good tax reputation in each of the countries where it operates by reporting and paying taxes on time and in compliance with applicable tax legislation. The Group has a commercial, not a tax driven, approach to its business and this is also reflected in Boliden's Group Tax Policy

SEK m	Sweden	Finland	Norway	Ireland	Other	TOTAL
Corporate income tax	1,326	203	97	-18	1.1	1,608
Other taxes	1,037	307	35	63	0.0	1,442
Other payments to authorities ¹⁾	10	0.2	0.0	60	0.0	70
Total	2,373	510	131,862	104,741	1.1	3,121

¹⁾ Boliden's Payments to authorities report

and in the UK Tax Strategy that are published on its website. Boliden's contribution to tax revenues in the areas where the Group operates includes for example corporate income tax, social security contributions as well as energy and environmental taxes.

Indirect economic impact

A large proportion of Boliden's staff live close to their workplace, and the company has a major impact on local employment and local business through increased purchasing power and as the basis for important social services. Boliden's operations affect and touch the lives of many people – sometimes entire communities. Value creation depends on the ability to show consideration for people, society, and the environment throughout the value chain. Boliden aims to make a positive contribution to the development of communities, regions, and countries.

Bcause - Boliden's Charitable Foundation

Metals contribute to the development and modernization of societies around the world. Boliden and its business operations have been part of this process for over 90 years and have for many years had a local level commitment to associations and non-profit organizations. The Bcause charity fund has been running since 2014 as part of Boliden's global-level contribution. Bcause is based on voluntary monthly contributions from Boliden's employees whereby Boliden doubles the donated amount.

Anti-Money Laundering

Anti-Money Laundering was a prioritized area for Boliden during 2020. A new policy was published and a training program was developed. Online awareness training was given to the 170 employees, including senior management, persons within the purchasing, sales and economy functions and other key persons in the organization. An advanced training was developed during 2020, which will be held by both internal and external specialists and provided to senior management and risk groups during 2021.

Trade sanctions

Sanction controls are performed on a regular basis for potential and existing business partners. Boliden's sanctions compliance program was reviewed and improved in 2019. Policies, procedures and contract terms were updated and an extensive training program was carried out. During 2020, an assessment of the implementation of the sanctions compliance program was conducted, supported by an external legal advisor. The result of the

assessment will form the basis of Boliden's continuous improvements of the sanctions compliance program during 2021.

Anti-corruption

Compliance with anti-bribery and corruption is one of the focus areas within Boliden's newly established a function for ethics and compliance. Boliden's Code of Conduct and Business Partner Code of Conduct set out measures to prevent corrupt behavior and improper influence. Boliden applies zero-tolerance to bribery and corruption, and conflicts of interest shall be reported and addressed. Detailed guidance on prohibited behavior as well as gifts, hospitality, benefits and conflicts of interest are addressed in Boliden's anti-corruption policy and guidelines. 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 the Boliden Group. The anti-corruption policy also applies to companies and joint ventures in which Boliden has an interest, and to third parties who act for or on behalf of Boliden.

The anti-corruption documents are based on Group-wide risk assessments in order to ensure their appropriateness for the business operations in question and to address and mitigate any risk factors. During 2020, Boliden updated this Group-wide risk assessment with support from an external law firm. More information about this can be found in 205-1.

Anti-corruption compliance requirements are also incorporated into contractual agreements with business partners.

Anti-competitive behavior

Boliden's employees and Members of the Board shall comply with applicable anti-trust and competition laws, Boliden's Code of Conduct, and Boliden's competition law policy. Sharing, discussing or disclosing information that may be sensitive from a competition viewpoint is prohibited.

Compliance with competition and anti-trust laws is one of the focus areas within Boliden's newly established ethics and compliance function. Compliance is vital for Boliden and therefore specific requirements are included in Boliden's Code of Conduct as well as its competition law policy. During 2020, Boliden engaged an external law firm to support with a group-wide risk assessment specifically targeting anti-trust risks. The work with completing the risk assessment will continue during 2021.

SUSTAINABILITY TOPIC: ECONOMIC PERFORMANCE

201–1 Direct economic value generated and distributed Net sales in 2020 totaled SEK 56,321 (49,936) million. All of the indicators are reported with two comparative years. Boliden also reports revenues and operating profit per Business Unit, and tax payments per country in its Annual and Sustainability Report.

201–2 Financial implications and other risks and opportunities in the organization's activities due to climate change Boliden's goal is to be a sustainable first link in the metal value chain – and to achieve this by investing in modern technology and developing safe and energy efficient low-carbon processes.

Climate change risks and opportunities are both physical and financial. Assessments performed 2020 on physical climate risks show that Boliden's sites do not face severe physical risks due to climate change. Metals production is a energy-intensive process

that generates both direct and indirect carbon dioxide emissions. Boliden's direct carbon dioxide emissions primarily arise from metallurgical processes, transportation, and heating requirements. Indirect carbon dioxide emissions derive from purchased electricity. To address the climate change issue, Boliden has several development projects ongoing. For more information see the Climate chapter in this Sustainability index.

All of Boliden's smelter operations (Odda, Bergsöe, Rönnskär, Kokkola and Harjavalta) have been fully exposed to the European Emission Trading Scheme (ETS) since 2013. The ETS is a strategic challenge for Boliden, not only in calculating the costs that

may be entailed in future purchases of emission allowances, but also working on opportunities to reduce emissions, given the production levels and available technology. The Boliden Group has a comprehensive governance structure to manage climate-related risks and opportunities, and in 2019, set the Group-wide target to reduce its CO₂ intensity by 40% by 2030. An opportunity going forward is Boliden's production of low-carbon copper, which provides the customer with a carbon footprint that includes GHG emissions from Scope 1, Scope 2 and Scope 3 from upstream activities – from cradle-to-Boliden gate. This is presented in case 1.

Social

CASE STORY:

Low-carbon Copper

LOW-CARBON COPPER will play an important role in the sustainable transition to achieve the goal of the net zero CO₂ emissions by 2050 set by the EU. The greater use of renewable energy and the electrification of society needed to combat climate change both require more copper. Copper mining and smelting activities are known to generate significant amounts of greenhouse gas emissions. As a leading sustainability metals and mining company, Boliden is well positioned to supply a copper with a low-carbon footprint. Boliden's favorable integration of own mines and smelters, and being one of the world's largest recyclers of metal from electronic material, enables the company to produce a low-carbon copper cathode and a copper cathode originating from 100% recycled material.

Boliden's low-carbon Copper offering

Boliden's copper has less than half of the global average presented by the International Copper Association (ICA)1).

1) ICA Copper Environmental Profile, 2018



Boliden Low-carbon Copper <1.5 kg CO₂eq/kg Cu: Boliden's low carbon copper is produced from copper mined in our own mines in the north of Sweden and Finland, with a low-carbon electricity grid mix.

Boliden Recycled Copper <1.5 kg CO₂eq/kg Cu: The primary raw material for Boliden's recycled copper is used electronics. By efficiently recove-

ring all the metals that have been circulating in society, the need for new mines can be minimized.

All materials and emissions included

Boliden's carbon footprint has been assured by Intertek, in accordance to the Greenhouse Gas Protocol - Product Life Cycle Accounting and Reporting Standard and reviewed in accordance with the principles in ISO 14064-3. Boliden's carbon footprint has a comprehensive scope and uses a conservative approach when calculating the footprint. This includes the full supply chain of raw materials, transportation and auxiliary bulk goods and chemicals, such as explosives, from cradle-to-Boliden gate, and excludes credits from energy and by-products.

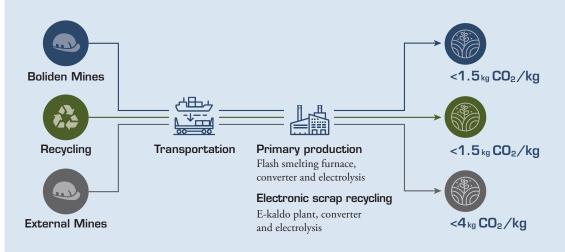


Figure 9. Example of Copper Carbon footprint from Mining to Refining

Introduction Content Indexes Governance

SUSTAINABILITY TOPIC: MARKET PRESENCE

202-2 Proportion of senior management hired from the local community

Boliden reports this indicator for each Business Unit, which corresponds to significant locations of operation. Senior managers are defined as managers that are members of the local management teams at our Business Units. Managers are considered to be hired from the local community if they are permanently resident in the geographical vicinity of their place of work (i.e. not commuting from other regions).

	20′	18	2019		202	20
Business Unit	Number of Senior Managers on site	Senior Managers Hired from local community %	Number of Senior Managers on site	Senior Managers Hired from local community %	Number of Senior Managers on site	Senior Managers Hired from local community %
Aitik	9	100	9	100	9	89
Boliden Area	9	100	10	100	12	100
Garpenberg	6	83	6	100	6	100
Tara	7	100	6	100	6	100
Kylylahti	7	100	7	100	6	100
Kevitsa	7	86	9	78	8	88
Rönnskär	6	100	6	86	7	100
Bergsöe	6	100	8	100	7	86
Odda	5	100	5	100	5	100
Kokkola	7	100	7	100	7	100
Harjavalta	8	100	9	100	8	100
Total	77	97.4	83	96.4	81	96.3

Information from 2018 have been corrected.

SUSTAINABILITY TOPIC: INDIRECT ECONOMIC IMPACTS

203-2 Significant indirect economic impact, including the extent of impacts

Boliden's mining and smelting operations are often of considerable importance in terms of employment in the local community, making Boliden an important local stakeholder. Not only do the Group's operations have a substantial impact on job opportunities, they also affect suppliers' purchasing power elsewhere in the local business sector, which affects the development of the communities' service sectors in the long term.

Boliden contributes to public finances, both through direct taxes and through the taxes paid by suppliers and customers. Boliden's total contribution to public finances through taxes and other payment to authorities in Sweden, Finland, Norway, and Ireland was SEK 3,121 m in 2020. Please see page 13 for more detailed information. The Group's operations not only impact the local communities at large. Employees, shareholders, customers and suppliers all depend on Boliden's profitability, and by improving this aspect of its operations even further, Boliden will be able to continue to make a positive economic and social contribution to the development of these communities.

A typical identified indirect negative economic impact could be a mine closure. Social impact assessments are made in conjunction with the closure of an operation, in order to assess any consequences to the community and in an effort to mitigate, as far as possible, any negative effects.

The Kylylahti mine ran out of ore in November and was therefore closed, which was in line with the Life-of-mine-plan. Over the last couple years personnel, as well as municipality leaders and other authorities, have been informed about the mine's diminishing reserves.

Closing down a mine can lead to several negative economic impacts. The main negative impact of closing down the Kylylahti mine is the loss of about 100 Boliden's jobs and 100 contractor jobs. In order to improve this negative impact, training and similar support was provided to the employees for them to find new job opportunities. All of Boliden's employees received the offer to move to and work at another Boliden operation. Boliden also organized 'match-making fairs' together with other potential employers in the area. Moreover, an indirect negative economic impact is that the taxes from the Kylylahti mine will no longer be contributed to society.

Even if Boliden Kylylahti has played a very important role in Polvijärvi (location of the mine) and Kaavi (location of the mill), the closing mine is not fatal for neither of them as there are many other available employers in the area as well. Boliden's heritage is strong and the Social License to Operate will remain positive after the mine is closed.

Boliden's exploration teams will continue their work aiming to create more well-being to the area.

SUSTAINABILITY TOPIC: ANTI-CORRUPTION

205-1 Operations assessed for risks related to corruption

During 2020, Boliden conducted a group-wide risk assessment specifically targeting anti-bribery and corruption, supported by an external law firm. The assessment addressed Boliden's entire operations and followed a structured approach including employee interviews, a document review and a desktop review of static risks. The report will lay the foundation for Boliden's future work with anti-bribery and corruption throughout the whole company. Certain high risk areas such as agents, distributors and logistics providers will be addressed more carefully in the compliance work going forward.

205–2 Communication and training in anti-corruption policies and procedures

Boliden's line managers are responsible for making the Code of Conduct and the anti-corruption policy and guidelines known to all employees, and for promoting and monitoring compliance. All employees whose work involves more regular contact with external business partners, in particular with competitors, suppliers, customers, or agents, are subject to anti-bribery and anti-corruption training appropriate for their area of responsibility.

The anti-bribery and anti-corruption training program has been reccurring every three years. The courses target a selected group of employees, normally those dealing with or having contact with potential competitors. The last e-learning was given to 2063 white collar workers. In 2020, Boliden engaged in a number of additional steps to communicate and train employees in its existing anti-bribery and corruption compliance program. For example, in-depth interviews with personnel throughout the risk assessment work, presentations of Boliden's ethics and compliance function for senior management, external legal advice on risks presented by specific raw material suppliers, and a roll-out of updated resources in relation to Boliden's due diligence process of business partners. Further, 159 persons initiated an anti-money laundering training which will be completed in early 2021.

205–3 Confirmed incidents of corruption and actions taken Boliden is committed to the highest standards of ethical business conduct. Actual or suspected incidents of bribery or corruption can be reported anonymously or openly via Boliden's whistle-blower reporting system. There were no confirmed cases of corruption during 2020.

ANTI-CORRUPTION - PART OF THE UN GLOBAL COMPACT

Principle 10: Boliden should work against corruption in all its forms, including extortion and bribery.

Efforts to combat bribery and corruption are an important part of Boliden's sustainability work and Boliden applies a

zero-tolerance policy in this respect. Boliden has zero tolerance for corruption and unfair competition, see 103-1, 201-103, 205-1, 205-2, 205-3 and 206-1.

SUSTAINABILITY TOPIC: ANTI-COMPETITIVE BEHAVIOR

206–1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices.

There were no initiated or ongoing legal actions with respect to anti-competitive behavior or compliance during 2020. There were no fines or non-monetary actions related to anti-competitive behavior, initiated or pending against Boliden.

Environment

Boliden's vision is to become the most climate friendly and respected metal provider in the world. Boliden invests considerable resources in efficient systems, advanced technology and stable processes throughout its operations. All sites work preventively with meticulous risk assessments and clear action plans.



Boliden's target is to have zero serious environmental incidents each month

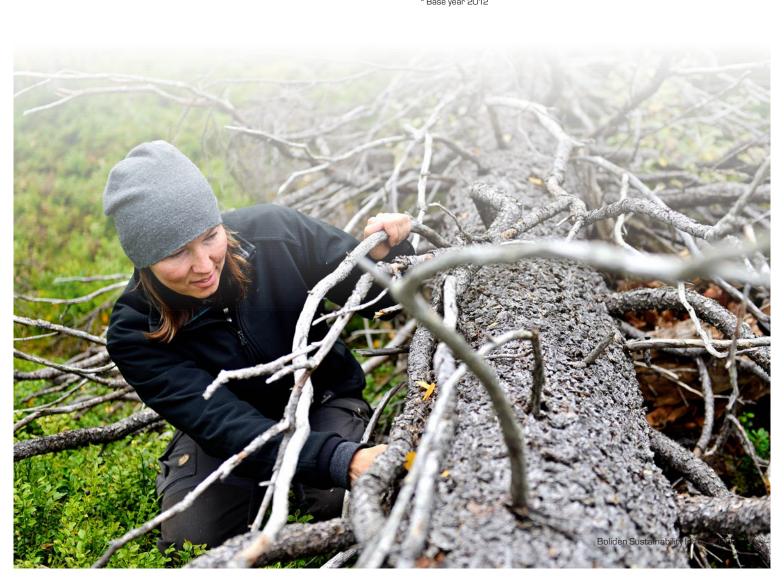
ENVIRONMENTAL PERFORMANCE 2020

The performance is presented in the Annual and Sustainability Report.

ENVIRONMENTAL TARGETS 2020 AND BEYOND

Climate	Decrease carbon dioxide intensity by 40%* by 2030 Reduce CO ₂ total emissions
Air pollution emissions	Reduce amount of metals to air Reduce sulfur dioxide to air
Water	Reduce amount of metals to water Reduce N-tot to water
Biodiversity	Contribute to increased biodiversity by 2030 in all regions where we operate
Environmental compliance	No serious environmental incidents should occur No permit value deviations should occur

The table shows some of Boliden's environmental performance indicators that are followed up on a monthly, quarterly or annual basis. * Base year 2012



301-103 MANAGEMENT APPROACH ENVIRONMENT

Environmental topics

Environmental topics, such as energy use, water, emissions, effluents & waste, compliance and transport are directly connected to how Boliden conducts its operations and whether it maintains stable processes that comply with permit requirements. Several topics are linked and impact Boliden's overall performance and compliance. Other environmental topics, such as climate, materials, biodiversity, closure planning, grievance mechanisms and supplier assessments constitute environmental topics as they impact external stakeholders, and determine Boliden's license to operate and ability to develop its business.

Materials and circular economy

Materials is a fundamental topic since Boliden's core business is mining (production of concentrates) and smelting (transformation of concentrates to base metals). Boliden produces high-quality metals, which are mainly sold to industrial customers in Europe. Material stewardship is important to us. Care and consideration for people, society and the environment are constant themes for Boliden's entire value chain – from exploration to customer deliveries. Boliden's recycling of materials, e-scrap and batteries are also an important contribution to the circular economy.

Energy

Metal production is energy intensive, both in the mining phase and in refining processes. All Boliden's Business Units have implemented a energy management system in accordance with ISO 50001. All units are obliged to work continuously on making improvements in energy efficiency. Boliden shall reduce its dependence on fossil fuels by using renewable and/or recycled energy wherever possible. Boliden's energy consumption is a major cost item, accounting for approximately 14% (14%) in the breakdown of the Group's total operating costs.

Climate

Boliden's target is to reduce greenhouse gas emissions by 40% measured in CO_2 intensity to 2030. Boliden's Board and Group Management evaluate the company's CO_2 emission trends every quarter. Boliden's units evaluate their climate impact every month to identify possible improvements and efficiency measures. Using the best available technical solutions and resources efficiently, and replacing fossil fuels with renewables, are important components of Boliden's efforts to reduce CO_2 emissions.

Boliden's position regarding implementation of the Global Industry Standard on Tailings Management is that all Boliden's facilities with 'Extreme' or 'Very high' potential consequences will be in conformance with The Global Industry standard on Tailings Management within three years of today, and all other facilities within five years. Boliden's overall goal is to contribute to increased biodiversity by 2030 in all regions where we operate.

Social

Waste

Apart from normal industrial waste, Boliden's operations produce large quantities of extractive waste (such as tailings and waste rock) and smelter waste (such as slag and sludge), which is managed in a controlled way. Boliden's operations also generate waste in water and gas purification processes that are managed in line with local requirements.

Boliden's position regarding the implementation of the Global Industry Standard on Tailings Management is that all Boliden's facilities with 'Extreme' or 'Very high' potential consequences will be in conformance with The Global Industry standard on Tailings Management within three years, and all other facilities within five years.

Biodiversity

Boliden's overall goal is to contribute to increased biodiversity by 2030 in all regions where we operate. Boliden has developed a biodiversity approach to long-term land management – from exploration to rehabilitation. Boliden has decided that all rehabilitation plans shall have a specific chapter on ecological rehabilitation. Compensation plans are made to enable compensation for possible losses.

Water

All Boliden's units shall have a Water Management Plan. Water conservation is an important part of Boliden's policy. Water management plans consider many critical operational aspects such as water scarcity, pollution and flooding. Water risk assessments shall be undertaken regularly to evaluate potential impact on the business, operations, revenue or expenditures.

Air

Boliden aims to continue to reduce its emissions to air, focusing on metals and sulfur dioxide as well as reducing diffuse emissions (dust). Local action plans are being developed both at mines and smelters.

Compliance

Environmental compliance is a prerequisite for successful mining and smelting operations. Legal requirements shall always be met.

Business Partner assessments

Environmental criteria are a vital part of Boliden's Business Partner Code of Conduct, and accordingly also a crucial part of the evaluation of business partner and supplier assessments. Boliden requires all business partners to identify and document their environmental aspects and to be aware of and comply with environmental legislation and common practices. All business partners must agree to comply with Boliden's Business Partner Code of Conduct, which requires them to conduct their business

in a responsible way with as little impact on the environment as possible, by preventing, mitigating and controlling environmental damage from their operations. They shall also constantly strive to minimize their environmental impact, greenhouse gas emissions and the amount of waste. Within the area of environment, the Business Partner Code of Conduct addresses: a precautionary approach to environmental challenges, implementing environmental management systems, and minimizing the operational impact related to energy, greenhouse gas emissions, waste and water consumption.

Governance

Grievances about environmental impacts

The subjects of reports received by Boliden included noise, vibrations, dust, and other types of environmental disturbances to Boliden's site. Complaints are handled in accordance with local

procedures. Neighbors and other stakeholders are welcome to contact either the Business Unit or any of the company functions through a variety of channels, e.g. phone, e-mail, written correspondence. It is the responsibility of every employee to ensure that operations are conducted properly and in compliance with given instructions. Employees must promptly report any suspected environmental violation.

SUSTAINABILITY TOPIC: MATERIALS

301-1 Materials used by weight or volume

Levels of mined rock and milled ore have increased in 2020 as well as smelting materials and concentrates produced compared to last year. Boliden has included tonnage of rock, ore and concentrates in the material used in its reporting. Other materials specified in the table include e.g. fuels, explosives and chemicals used in production processes.

Some of the concentrate produced in the mines is sold to external parties. The total smelting material feed comprises concentrates both from Boliden's own mines and from external mines, purchased secondary materials, and secondary materials sent from one smelter to another.

Materials are mostly weighed in connection with loading and/ or charging (ore, concentrates, and most smelting materials). The mined rock figure is based on calculations (waste rock and ore). A minor part of input materials is calculated from input and stock.

Materials used by weight, (k metric tons)	2018	2019	2020
Mined rock	112,392	116,207	117,880
Whereof milled ore	54,000	56,000	59,000
Whereof concentrate produced	1,361	1,252	1,282
Smelting materials	2,742	2,628	2,777
Other materials	1,077	1,2571)	795
Whereof non-renewables ²⁾	162	153 ¹⁾	153

¹⁾ Corrected calculations. 2) Such as oil, gas and coal

301-2 Recycled input materials used

Boliden uses its own and other companies' by-products and residues for the extraction and recycling of metals. The Boliden Rönnskär smelter began recycling electronic scrap since 2012, and ensures Boliden is one of the world leaders in e-scrap recycling. Boliden Bergsöe, which recycles about 70,000 metric tons of lead acid batteries and about 5,000 metric tons of other lead scrap per year is the only secondary lead smelter in the Nordic region.

Metals can be recycled endlessly without any deterioration in their quality and it is important that electronic materials and scrap, such as telephone cables, copper roofs and copper pipes, from the demolition or construction of buildings and infrastructure are re-utilized to as high a degree as possible.

The recycling input rate (RIR) shows the fraction 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.

Percentage of recycled materials (metric tons)	2018	2019	2020
Total secondary feed Total feed (primary and	348,500	347,100	313,600
secondary)	2,742,000	2,628,000	2,777,000
Recycling rate	13%	13%	11%

SUSTAINABILITY TOPIC: CIRCULAR ECONOMY

Boliden contributes toward a more circular economy

As one of the sustainability leaders in the metals and mining sector, Boliden clearly has a role to play in meeting the societal need for metals as sustainably as possible.

Boliden has created value from waste for many years. For example, being one of Europe's largest recyclers of used lead-acid batteries, benefiting from decades-long resource-effective industrial synergies, and continuously finding new methods of creating value from the company's own waste materials.

How Boliden contributes to the circular economy for metals

Boliden plays a crucial role in enabling the recycling and reuse of society's waste metals. Several of Boliden's smelters are specially equipped to process complex waste metals into 'new metals' that can then be used to create new components and products.

The circular approach to resource management is particularly well suited to the mining and metals industry as many metals can be recycled repeatedly without losing their properties.

Recovering valuable metals from electronics and industrial waste

Boliden's Rönnskär smelter in northern Sweden is one of the largest recyclers of scrapped electronic equipment in the world. The smelter annually recycles around 120,000 metric tons of waste material from electrical equipment, including circuit boards from computers and mobile phones. The waste material is sourced primarily from within Europe.

Rönnskär has also processed waste steel mill dust since the 1980s to annually produce around 33,000 metric tons of zinc clinker, which accounts for 10–15% of Rönnskär's total production. In total, the smelter produces some 225,000 metric tons of copper, 500 metric tons of silver and 14 metric tons of gold every year.

Recycling car batteries at Bergsöe

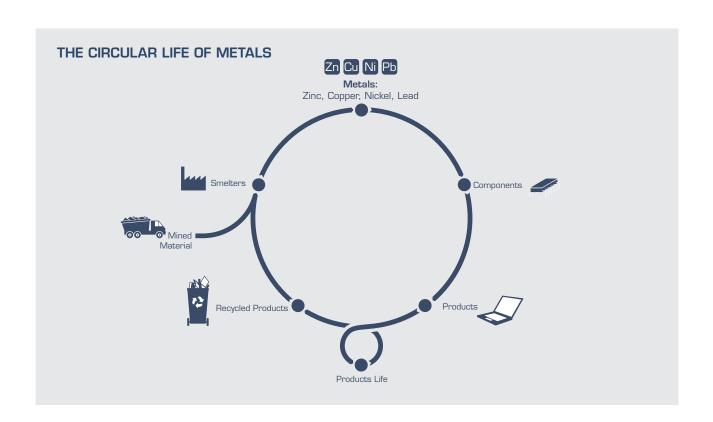
Boliden's Bergsöe smelter in southern Sweden has been recycling used lead-acid car batteries since 1942, and currently recovers lead from 4 million batteries each year. The recycled lead is mainly sold to European battery manufacturers where it is used to produce both industrial and automotive batteries.

2020 was the first full year of operation for Boliden's separation plant at Bergsöe to recycle plastic battery casing that is sold to industrial customers. The investment avoids annual emissions of around 10,000 metric tons CO_2 and has improved both safety and quality at Bergsöe.

Secondary feed material recycling at Odda

Around 20–25% of the Boliden's Odda smelter's total zinc production is produced from secondary sources.

Boliden Odda also recycles Waelz Oxide filter powder, which is a residual material from the scrap steel recycling industry, to produce 15,000 to 20,000 metric tons of zinc each year. Waelz Oxide can have serious negative impacts on the environment if not properly processed.



SUSTAINABILITY TOPIC: ENERGY

302-1 Energy consumption within the organization

Energy consumption in 2020 totaled 20.3 (18.9) million gigajoules (GJ). Electricity accounts for 16.7 (16.1) million GJ of this consumption, which equates to 4.6 (4.5) TWh.

The reported energy usage is based on invoiced incoming and outgoing deliveries, supplemented by internal measurements and stock inventories at the end of the year. Conversions between weight and energy have been performed using energy values specified by the supplier or by using tabled values provided by national bodies.

Coke, coal, oil, and fuel gases are used for the reduction and smelting of copper, lead and zinc concentrates. Diesel is used for transportation purposes, in mining operations, and for internal transportation. Limited amounts of heating oil and gas are used for heating purposes during the cold season. The use of biofuels in metallurgical processes has been tested and evaluated. Bio-based fuels have also, to a limited extent, been used in road transport. Electricity is the dominant source of indirect energy in the Group.

Energy consumption within the organization (GJ)	2018	2019	2020
Direct energy			
Coal & coke	2,053,000	1,814,000	1,788,000
Gas	306,000	306,000	315,000
Oil	2,285,000	2,000,000	1,720,000
Diesel & petrol	1,666,000	1,568,000	1,528,000
Wood chips	49,000	67,000	118,000
Total direct energy	6,359,000	5,754,000	5,468,000
Whereof renewables ^{1]}	69,000	89,000	365,000
Indirect energy			
Electricity, purchased	16,156,000	16,055,000	16,727,000
Heat&steam, purchased	1,100,000	128,000	1,170,00
Total indirect energy	17,256,000	16,183,000	17,897,000
Total energy input	23,614,000	21,937,000	23,365,000
Produced energy, for internal use	2,380,0002)	4,700,000	2,703,000
Produced energy, sold	3,964,000	3,054,000	3,062,000
Total energy consumption	19,650,000	18,884,000	20,304,000

¹⁾ Wood chips and biodiesel.

302-3 Energy intensity

Boliden's energy intensity was 13.74 (13.21) GJ/metric ton metal, showing an increase in energy usage from the previous year, mainly from indirect energy. The energy intensity ratio is reported as the product intensity (energy consumed per unit produced). It is calculated as Boliden's net total energy consumption (the same as in GRI 302-1) for all Boliden sites, divided by the production output in metal metric tons from Boliden's production sites. This indicator is affected both by process efficiency and by the product mix and raw material properties.

302-4 Reduction of energy consumption

Due to the different character of mining and smelting operations, Boliden has chosen to to work with local energy targets, rather than Group targets.

Boliden's smelting operations strive to take advantage of excess heat from the processes, either transforming it to electric power or supplying it for use in external district heating. In 2020, 2,703,000 (4,700,000) GJ of heat was used internally, and 3,062,000 (3,054,000) GJ was delivered externally for use in district heating systems.

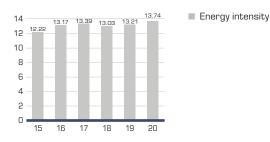
To drive improvements, an energy network was established in 2019 in order to exchange experience on energy efficiency projects between the units.

At Boliden Rönnskär, heat recovery has been used and further developed to increase energy efficiency for several decades:

Year	Improvement
1980s	Boliden Rönnskär started to focus more on heat recovery when the price of oil soared due to the oil crisis, by building the district heating network.
2005	The project ECOEL delivered an expansion of the district heating network to increase the recovery of steam.
2010s	To recover more heat from e-material a steam accumulator was added when building the E-Kaldo plant.
2019/2020	The heat recovery from sulfuric acid plant was increased via air batteries.
2019	The steam and district heating network was reducing the need for energy for the Rönnskär Smelter significantly, corresponding to a yearly reduction of 170,000 ton of $\rm CO_2$ emission (assumption: replacing oil as energy source).

ENERGY INTENSITY

GJ/t metal



²⁾ Corrected calculations.

Economic

Introduction

Boliden's vision is to be the most climate friendly and respected metal provider in the world

Boliden is working to reduce its climate impact and to constantly maintain and improve low-carbon metal production. There is a growing global demand for metals to meet societal challenges, such as climate change, as the greater use of renewable energy and the electrification of society both require more metals. Several of Boliden's metals are identified as being of special strategic interest for the development of the fossil free society.

Hence, Boliden is well positioned to help limit Europe's heavy dependence on metal imports, and to enhance sustainability throughout the metal value chain. Naturally, Boliden's operations also face challenges. Mining and smelting activities can generate significant amounts of greenhouse gas emissions. However, as a sustainability leader in the metals and mining sector, Boliden clearly has a role to play in significantly reducing its climate impact – and in driving positive change throughout the industry.

The Climate Program presents how Boliden manages and measures Climate-related risks and opportunities with three chapters covering the perspectives of the Boliden Group, Business Area Mines and Business Area Smelters.

Boliden's Climate Program includes disclosure sections on:

- Governance how climate-related risks and opportunities are governed.
- Strategy the actual and potential impacts of climate-related risks and opportunities on Boliden's business, strategy and financial planning.
- Risk management how climate-related risks are identified, assessed and managed.
- Metrics and targets the metrics and targets used to assess and manage relevant climate-related risks and opportunities.
- Performance the current performance and progress made by Boliden toward its climate targets.

Governance

Proactive climate governance

The Boliden Environmental Board, which consists of the Boliden Group Management team, has the overall responsibility for the company's climate strategy and long-term targets. The CEO reports progress to the Boliden Board, which monitors and oversees progress against goals and targets for addressing climate-related issues.

Group Management is supported by an Environmental Council. The Boliden Climate Committee – an expert group that updates the Boliden's Climate Program consists of Business Area representatives and experts from the organization. The committee's assignment is to follow up, suggest improvements and coordinate the climate work within Boliden. The committee reports quarterly to the Environmental Council. Each Business Area is responsible for implementing Boliden's climate strategy and long-term targets.

BOLIDEN'S CLIMATE PROGRAM

To provide the metals essential to improve society for generations to come

Vision
To become the
most climate friendly
and respected metal
provider in the
world

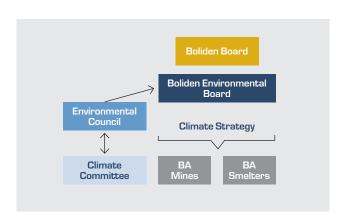
Goal Reducing carbon dioxide intensity by 40% by 2030¹⁾

Activities defined in Boliden's strategy plans:

- Investigate fossil-free reducing agents
- Reduce carbon footprint in transportation
- Increased metal recovery
- Improved energy efficiency

1) Base year 2012

- Increased use of fossil-free energy and optimized power generation technologies
- Investigate the possibility of carbon capture



Strategy: Boliden's climate-related risks and opportunities

Decarbonization presents opportunities and will enhance competitiveness and drive long-term profitability. A scenario analysis of Boliden's portfolio showed that there will be an increased need for our metals to make the transition to a low carbon society.

The decarbonization of Boliden's business will help it to mitigate the risks associated with fossil fuel and process reduction agents dependency, such as those related to rising fuel costs and more stringent future regulations connected to CO_2 -emissons.

Social

Dieke

Introduction

- Perception of mining & the issue of carbon leakage
- Balancing circular economy & climate obligations
- Regulation risks
- Extreme weather

Opportunities

- Climate resilience metals for a sustainable society
- Increased market demand for sustainable metals that command higher premiums
- Financial planning

Risks

The need for mines & the issue of carbon leakage

Boliden's greatest risk is the perception in society that mines are not needed – particularly in Europe. Authorities make permits difficult to obtain, using increasingly stringent environmental criteria. However, such policies have significant negative global climate implications as the metals produced in China, for example, can have a much larger carbon footprint compared with metals produced in Europe. Moving mining and metal production activities out of Europe might reduce Europe's emissions, but can at the same time significantly increase global emissions. This is known as carbon leakage and must be avoided.

Balancing circular economy & climate obligations

The creation of circular systems that gain maximum value from resources by recovering and reusing materials is an essential part of Boliden's sustainability agenda. However, recovering valuable metals from societal waste can sometimes cause more carbon emissions than sourcing new metal ore. It is essential to find a balance between promoting a circular resource use and climate emissions.

Boliden is a member of several organizations aiming to make the European non-ferrous industry more sustainable, for example Eurometaux. Such cooperation promotes the circular economy and helps avoid carbon leakage while keeping industry and jobs within the EU. It also helps Boliden reduce risk by engaging with, and influencing, the EU agenda to support economically sustainable development.

Regulation change risks

Changes to regulations and taxes, such as the EU Emission Trading Scheme (ETS), may result in cost increases that jeopardize Boliden's competitiveness in the international market. Decarbonizing more quickly than competitors is Boliden's strategy to mitigate the company's exposure to such future risks. An efficient and reliable permitting process from the authorities is crucial to ensure that new, necessary and climate-smart investments are made possible.

Extreme weather-related risks

There are a wide range of natural weather events that have the potential to impact a target asset and climate change can increase the risk of more extreme weather events in the future. For example, changes in precipitation might lead to heavier snowfall or flooding that can affect open pit mining operations, or localized flooding and changes in groundwater levels could impact on Boliden's operations. Higher temperatures and storms in the future might also have negative implications on Boliden's business in general.

Various weather related risk assessments and scenario analysis have since long been carried out on different occasions, development projects and permit application processes within Boliden operations.

Opportunities

Resilience - metals for a sustainable society

As one of the leading sustainability metals and mining company, Boliden is well positioned to supply the metals needed for a sustainable society. Copper and zinc, for example, are essential for society's transition from fossil fuels to electrification by enabling solar panels, wind turbines and electric vehicles. Boliden's proactive stance on climate-related issues can differentiate it from its competitors as there will be strong demand for low-carbon metals in a fossil-free society. Boliden is also one of the leaders in recovering valuable metals from societal waste, such as e-scrap, lead car batteries and existing process waste.

Boliden is actively working to reduce the climate footprint of its own operations. This includes working toward the electrification of its mines and the development of low-carbon production processes for its smelters. These areas both require significant R&D innovation and investment, and working proactively with them is essential to enable the supply of low-carbon metals to the market. Establishing itself as a low-carbon metals producer is a major opportunity for Boliden to enhance its reputation and brand.

Potential for more sustainable metals to command a higher premium

Boliden has identified potential customers that will be interested in paying a premium for low-carbon metals. Boliden has opportunities to tap into this market – to enhance profitability while also contributing toward a more sustainable society.

Governance

Financial planning

Boliden has a strategic investment program, including investments to mitigate climate-related risks and capitalize on opportunities. The program involves evaluating different actions based on their long-term environmental impact, ${\rm CO_2}$ emissions and financial cost.

Risk Management

Risk and opportunities

Boliden pursues a business that is exposed to fluctuations in metal prices and foreign exchange rates as well as social and environmental demands and expectations. Operations affect the surrounding environment and many processes are associated with occupational health and safety risks. Boliden seeks to mitigate these risks, through scenario analysis and risk management. Operational risks are managed by the operating units in compliance with the guidelines and instructions established for each Business Area and unit.

Roles and responsibility

The CEO has ultimate responsibility for Boliden's strategic orientation and for ensuring compliance with and implementation of the Board's decisions, and for ensuring that risk management, control, systems, organization and processes are all of a satisfactory standard. The CEO is supported in his work by the Group's management team which also includes the presidents of Boliden's two Business Areas Mines and Smelters, the CFO, and the Director, Corporate Responsibility.

Risk and opportunities analysis

Boliden's two Business Areas conduct opportunity and risk analyses as an integrated part of their management systems. This includes for example various climate-related risk and opportunities assessments, as part of site permits and ISO 14001 certified environmental management systems. Opportunities and risks are compiled per Business Area. The most significant opportunities and risks are presented to Group management and are compiled annually for the Board.

Boliden is working with risk assessments based on the TCFD framework, the EU Green deal and stakeholder input – at all levels of the business.

Control activities

Various types of control activities are carried out in the Group. The control activities are carried out in order to manage known risks and to detect new risks For every risk identified, the controls used to manage the risk are documented.

Information and communication

Information on policies, guidelines and manuals is available in Boliden's Management System BMS. External communication is conducted in accordance with the Group communications policy. All information must be communicated openly, judiciously and clearly.

More systematic approach to risk

Boliden is gradually improving its systematic approach to Risk Management. One on-going project is to identify various risk assessments, including climate-related risks, that are being carried out around the business. To investigate how the process to consolidate the results of the various risk, assessments can be clarified at different organizational levels.

Annual Sustainability workshop

An annual sustainability workshop is held, with the participation of all levels of the business, to identify the most important topics to address on a Group level. This workshop involves key people throughout the business and provides an outside-in perspective by gathering input from important external stakeholders, such as investors and the media.

Climate-related risk management in 2021 and beyond

Boliden will continue to improve its systematic approach to risk management. This work will ultimately enable Boliden to better identify and capture risks, and further develop its risk management processes.

The next step of Boliden's work will involve assessing scope 3 CO_2 emissions and the company's supply chain from a physical climate risk perspective to identify potential hazards.

Assessing opportunities

In 2020, a third party conducted a climate risk competitive analysis for Boliden that looked at carbon pricing, water stress and future commodity alignment. All Boliden's metals are aligned with future need as demand for metals for solar panels, wind generation and batteries for example will remain high when building a more sustainable society.

Boliden ranked favorably compared with competitors in the climate competitiveness score.



Carbon Pricing Risk

• R



- Future Commodity Alignment
- Projected carbon price based on 2°C scenario
- Regulatory risks from carbon price
- Projected basin-level water stress levels
- Physical risk from changes in water availability
- Projected demand of metal based on the 2°C scenario
- Metal's contribution to low-carbon technologies such as solar PV, battery storage, LED etc.

CASE STORY:

Physical risk workshop and scenario analysis at Bergsöe

In 2020, based on Boliden overall physical risk screening, IPCC scenario analyses, current processes and site specific information, the Bergsöe Business Unit Management Team conducted a climate change risk workshop with the theme 'Climate scenarios and physical risks affecting our business strategy' led by a third-party consultant with expertise on climate science and risk management specific to climate change.

Key climate hazards assessed

- Extreme heat
- Extreme cold, including snow, ice
- Storms
- Flooding pluvial, fluvial, coastal, groundwater
- Drought and water stress
- Wildfires
- Landslides

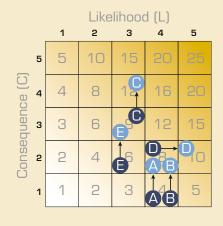
The objectives of the workshop were:

- 1. To provide an overview of identified climaterelated risks and their importance for Boliden Bergsöe.
- 2. To jointly discuss existing and emerging risks at the site and to identify the specific site operations and/or resources that are most exposed to climate hazards.
- 3. To prepare a route to assess the potential materiality of risks to align with Boliden's internal risk thresholds.

The output of the workshop was an assessment and dashboard with identified risk items per selected climate hazard evaluated and presented in Boliden Risk Matrix for further handling in existing risk register and risk management processes.

Boliden's model for assessing physical climate risks

Relevant risks have been plotted onto Boliden's risk matrix for present day (Dark blue) and 2030 (light blue)



Present day risk class

2030 risk class¹⁾

1) 2030 risk level is only shown for risks where there is a change in the risk level.

Risk	Relevant Hazard	Risk Item
Α	Sustained high temperatures	Unsafe working conditions for personnel working in close proximity to the furnace area in high temperature conditions as a result of extreme temperatures.
В	Intense rainfall events	Severe rainfall events can lead to the water treatment plant storage capacity being reached, resulting in outflow of untreated water into water supplies.
С	Intense rainfall events	Flooding events have the potential to physical damage operational site infrastructure, as well as damaging transport infrastructure.
D	Coastal flooding and storm surges	Coastal flooding and storm surges have the potential to physically damage asset infrastructure – the site is located on filled land and is located only 2 m above sea level. The water treatment plant is particularly exposed to this risk.
E	Storms	Severe high-wind events have the potential to damage vital operating equipment, including electrical infrastructure, and create dangerous working conditions for personnel working outside.

Assessing physical climate risks

Introduction

The conclusions of the assessment of physical climate risks show that Boliden sites do not face severe physical risks due to climate change compared with other parts of the world. This is due to the reduced risk for locations in northern Europe to be severely affected by climate change.

During 2020, a collective grip was taken on the exposure of physical climate hazards for all Boliden assets projected in different climate-change scenarios and time frames. Two of the Intergovernmental Panel on Climate Change (IPCC)'s Representative Concentration Pathways (RCPs) were used as scenarios to assess projections of likely global changes in key Climate-related parameters for 2030 and 2050.

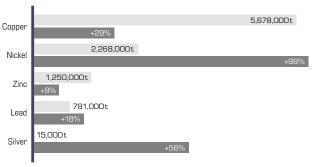
This overall physical risk screening provides an initial understanding of the potential exposures to Boliden physical climate hazards in general and is a hotspot analysis that identifies climate hazards that could be of material significance for each site and Business Unit to integrate into further risk management practices and decision-making.

The risk screening indicates that Boliden overall has few potential high-risk climate hazard exposures to mitigate thanks to its location of current assets.

Targets and plans

Boliden's objective is to provide metals with a low-carbon footprint, by decarbonizing its operations and supplying low-carbon metals. Boliden has set the objective to reduce its CO_2 intensity by 40% by 2030. This will enable Boliden to contribute toward the EU aspirations to achieve net zero CO_2 emissions by 2050 and the Paris Agreement objective to limit the global temperature increase to below 2°C. Boliden's roadmap for competitive low-carbon metal production is relevant to the entire Group. The Business Areas decide on what actions to take to support the roadmap, and which of their units and projects to improve. Improvements typically involve increasing energy efficiency and decreasing the use of fossil fuels.

INCREASE METALS AND MINERALS REQUIRED GLOBALLY IN CLIMATE TECHNOLOGIES BY 2050



- tonnage of increased metals demanded by 2050 global climate technologies
- Percentage increase in 2050 global metal demand versus today's global production 2020

Data based on The World Bank "Minerals for Climate Action: The mineral intensity of the clean energy transition" (2020), UBS electric vehicle projections (2017).

Boliden aims to:

• have low CO2 emissions per metric ton of metal

Social

- ensure an efficient production process and use renewable energy sources
- have efficient and safe waste management
- recover valuable metals from societal waste
- promote the circular use of newly produced metals

Decarbonization presents opportunities to establish cleaner operations in Boliden's mines and smelters that enhance competitiveness and drive long-term profitability.

By increasing production at its mines and smelters, Boliden helps Europe to meet existing challenges in relation to raw materials supply in a world that is demanding more and more metals. Several of Boliden's metals have, furthermore, been identified as being of special strategic interest for the continent as a whole. However, increasing production and boosting efficiency will require time and capital. In addition, political decisions that promote the industry's global competitiveness will be central to achieving success, as will an effective and reliable approval processes for new investments. Politicians have a clear responsibility to maintain a long-term and holistic perspective. Areas where politics can make a difference include promoting:

- permitting processes that promotes climate-smart investments.
- a holistic view in political decisions that avoids (for example) policies that sub-optimize and harm the industry's competitiveness and ability to invest in fossil-free production.
- investment in research and development within fossil-free production processes.
- access to fossil-free electricity with a low total system cost and high reliability.
- the strategic allocation of biomass and access to biofuels at competitive prices.

Industry, the public sector and other actors need to work together to bear the cost of the transition, drive technological development and support the achievement of global and national climate goals.

Boliden has a comprehensive system to collect and report climate-related data. Key metrics are the aggregated scope 1 and 2 emissions per source and greenhouse gas emissions intensity.

305-1 Direct (Scope 1) GHG emissions

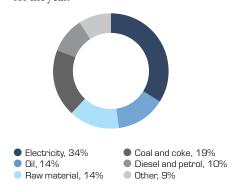
Boliden reports this indicator for the units over which it has operational control. The direct carbon dioxide emissions arise from GHG emissions from carbonaceous raw materials, from fuels in metal extraction processes and fuels for heating, and from the use of fuels for mining operations and road transportation within the company.

The direct emissions are calculated in accordance with the procedures laid down in the $WBCSD^{1)}\,GHG^{2)}$ Protocol, together with additional guidelines from the EU and/or national authorities.

The CO_2 reporting within the framework of ETS is carried out in accordance with separately audited procedures in each country, and although Boliden seeks to report the same data, it cannot guarantee that the Group's GRI disclosure will correlate exactly with the CO_2 data reported within ETS.

CARBON DIOXIDE EMISSIONS (SCOPE 1 + SCOPE 2), 2020 PER SOURCE

The total reported $\rm CO_2$ emissions are 897 (917) k metric tons for the year.



305-2 Indirect (Scope 2) GHG emissions

Boliden reports this indicator for the units over which it has operational control and includes only production-related indirect emissions. Boliden uses location-based emission factors. This was an adaptation to the updated GHG Protocol Guidelines for Scope 2 reporting. The calculation is made by multiplying the energy used with the production mix for the specific region. The production mix should be as current as possible, and Boliden uses emission factors published by the International Energy Agency.

CARBON DIOXIDE EMISSIONS (SCOPE 1 + SCOPE 2), 2020 PER SOURCE

Boliden Group

Carbon dioxide emissions, Scope 1+2, metric tons	2018	2019	2020
Direct emissions, (305-1)	644,000	598,000	544,000
Indirect emissions, (305-2)	327,000	319,000	353,000
Total (305-1 + 305-2)	971,000	917,000	897,000

1) World Business Council for Sustainable Development.

Mines

Carbon dioxide emissions, Scope 1+2, metric tons	2018	2019	2020
Direct emissions, (305-1)	207,000	173,000	145,000
Indirect emissions, (305-2)	134,000	139,000	137,000
Total (305-1 + 305-2)	341,000	312,000	282,000

Smelters

Carbon dioxide emissions, Scope 1+2, metric tons	2018	2019	2020
Direct emissions, (305-1)	436,000	425,000	398,000
Indirect emissions, (305-2)	194,000	179,000	217,000
Total (305-1 + 305-2)	630,000	605,000	615,000

305-4 GHG emission intensity

Boliden's GHG intensity was 0.61~(0.64) t/t metal. The GHG intensity is reported as the ratio of the total carbon dioxide emissions (Scope 1 and Scope 2) and the sum of production of metal in concentrate at Mines and metal production at Smelters.

GREENHOUSE GAS EMISSION INTENSITY t CO₂/t metal

Boliden group

Carbon dioxide emissions, Scope 1+2, metric tons/	,		
production volume	2018	2019	2020
Direct intensity	0.43	0.42	0,37
Indirect intensity	0.221	0.22	0,24
Total intensity	0.64	0.64	0,61

¹⁾ Corrected calculations.

Mines

Carbon dioxide emissions, Scope 1+2, metric tons/			
production volume	2018	2019	2020
Direct intensity	0.40	0.361)	0,30
Indirect intensity	0.26	0.29	0,28
Total intensity	0.66	0.66	0,58

¹⁾ Corrected calculations.

Smelters

Carbon dioxide emissions, Scope 1+2, metric tons/			
production volume	2018	2019	2020
Direct intensity	0.441)	0.46	0,40
Indirect intensity	$0.19^{1)}$	0.20	0,22
Total intensity	0.631)	0.66	0,62

¹⁾ Corrected calculations.

305-5 Reduction of GHG emissions

Boliden strives to deliver the excess heat from its processes for use in district heating, wherever possible. Boliden also proactively identifies potential reductions in fossil-fuel emissions by means of fuel substitution tests, participation in demonstrations of electrified road transport, and improved heat recovery/exchange with the aim of phasing out the use of fossil fuels for heating purposes.

²⁾ Greenhouse Gas

Recent initiatives have focused on reducing diesel use, which typically has a significant impact on reducing both financial costs and emissions. The majority of projects have involved the promotion of electrification, which helps to mitigate Boliden's exposure to fluctuating oil prices but risks greater dependency on electricity prices and fees.

Heat recovery to reduce fossil fuel use

All mines in Sweden have to preheat incoming ventilation air in winter when outdoor air temperatures are below zero degrees Celsius, which is typically done with propane gas heaters.

In the summer 2020, the Boliden Board approved a SEK 39.5 million implementation project to install heat recovery units at Boliden's Garpenberg mine. The units will use outgoing mine air to warm up incoming cold air to reduce the use of propane gas by between 80 and 90%, and realize annual savings of around 2,000 metric tons CO_2 . A feasibility study is also being done at Boliden's Kankberg mine that has the potential to save approximately 1,000 metric tons CO_2 .

Fossil free heating

In the Harjavalta smelter the nickel concentrate is dried in an oil fired drum. Besides being one of the identified bottlenecks limiting the total capacity, it also contributes to the direct CO_2 emissions. During 2021, the oil fired nickel concentrate dryer will be replaced with a modern dryer utilizing waste heat/recovered steam. This will enable fossil free heating and reduce the direct CO_2 emissions by 5,800 tons annually.

Underground mine electrification - a great opportunity

Underground mines are more difficult to electrify than open pit mines due to the need to combine trolley and battery solutions. However, the potential for electrification is huge since avoiding underground diesel use will not only reduce vehicle emissions, but will also significantly decrease the need to ventilate diesel fumes from mines. Boliden expects to trial its first trolley and battery hybrid solution in 2022, which will draw experience from the lessons and failures from previous projects by other mining companies. Potentially, profitability will also be boosted by higher diesel prices. A fully battery driven loader has been tested at Boliden's Kristineberg mine since September 2020 and a battery swapping station has been constructed.

Innovation

Boliden aims to identify multiple pathways toward low carbon smelting and refining. Different technology options for decarbonization have been identified in close cooperation with production experts at the smelters. Specific innovation support is managed in partnership with research institutes to support the scaling up of R&D to pilot and demonstration plants.

The Business Area Smelters R&D department has several ongoing projects to evaluate various innovative technologies that have the potential to decrease CO_2 emissions and reduce financial costs. Examples include:

- The evaluation of hydrogen and bio-based alternatives as reduction agents
- Switching to fossil free fuels for process heating
- Installing heat recovery where not yet installed
- The investigation of carbon capture solutions
- Fossil free transport solutions
- Energy efficiency program

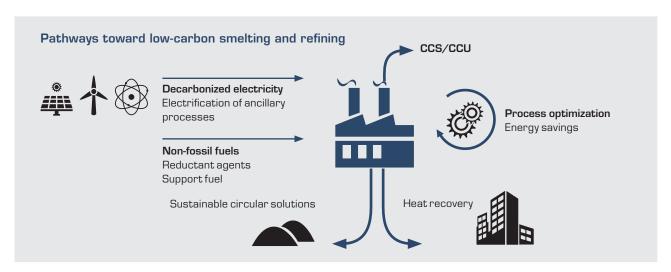
Overcoming major challenges

Major challenges include decarbonizing Boliden's smelter processes by finding alternatives to the fossil fuel reducing agents currently used by smelters throughout the Smelter Business Area. To meet Boliden's climate objectives, alternative low-carbon processes are required, which would require significant innovation and investment. Boliden has both the R&D capacity to develop the innovative solutions required, and the willingness of the company's management to invest in low-carbon solutions that make long-term financial sense.

This approach to difficult challenges ensures that Boliden is well-positioned to achieve its objective of becoming the preferred supplier of metals for a sustainable society – with all the business and societal benefits this entails.

Supply agreement for fossil-free energy

Boliden has a long-term electricity supply agreement for fossil-free energy from two wind power developers. The agreements involves annual electricity deliveries totaling 900 GWh in Sweden and 500 GWh in Finland. The wind farms will be developed close to Boliden's operations in Sweden and in Finland.



SUSTAINABILITY TOPIC: WATER

303-1 Interaction with water as a shared resource

Governance

Boliden's operations are located in areas where there is no scarcity of water, and no water sources are significantly affected by the water withdrawal by Boliden's operations. Boliden aims, nonetheless, to reduce both its consumption of freshwater and the discharge of used water. It is important to have a good understanding of current and future water use. Water risk assessments are undertaken regularly to evaluate potential impact on the business, operations, revenue or expenditure.

303-2 Management of water discharge-related impacts

In mining, water is typically used in mineral processing and slurry transport, while in smelting, it is used for cooling and gas cleaning purposes. Boliden's operations do not re-use water from other organizations, but in Harjavalta and Kokkola, wastewater from adjacent operations is ducted into Boliden's wastewater treatment plants for treatment before being discharged to recipients. These volumes are included in the reported data from the units. All water volumes are based on data from flow meters.

Water recycled and reused			
(million m³)	2018	2019	2020
Recycled volume	891)	114	206
Percentage of water recycled	38%1)	46%1)	58%

¹⁾ Adjusted calculations.

303-3 Water withdrawal

The water volumes are measured and/or calculated for each site by the use of flow meters and/or the monitoring of pump operating

Total water withdrawal by source (million m³)	2018	2019	2020
Surface water (sea)	80	74	80
Surface water (inland)	46	391)	44
Groundwater	16	15	19
Collected rainwater	1	1	1
Municipal water	2	2	2
Total water withdrawal	145	132	147

¹⁾ Adjusted calculations.

303-4 Water discharge

Discharges to water derive from dams and tailings ponds at the mines, and from water treatment plants and the collection of surface water at smelters and mines. Boliden's smelters account for approximately 80% of metal discharges to water. Boliden's mines account for approximately 70% of the Group's nitrogen discharges with the nitrogen generated mainly from the use of explosives and their handling.

Ensuring efficient and stable operations at water treatment plants and recirculating the process water as much as possible are important parts of reducing discharges to water. Boliden's operations include purifying process water as well as a significant amount of the rainwater that falls within the industrial areas.

Once the water-treatment processes are completed, the smelters discharge their water into the sea while the mines discharge the water into rivers and lakes. The water discharged to recipients is monitored to ensure that levels of pollutants are within the quality standards stipulated in the environmental permit. Accredited laboratories, both internal and external, are used to analyze samples taken on site.

Water discharge	20181)	2019	2020
Metal discharges to water, metric tons (me-eq)	61	51	37
Metal discharges to water, metric tons (mass)	14	15	12
Nitrogen /N-tot/ to water metric tons (mass)	240	228	201

1) Updated model for calculation of metal equivalents, based on the framework for Natural Capital Protocol

Discharged water volume (million m³)	2018	2019	2020
To wetland	0	0	0
To inland surface water	55	43	47
To sea surface water	78	66	85
To municipal treatment plants	0.03	0.03	0.03
Total	133	109	132

303-5 Water consumption

The water consumption of Boliden is calculated from the difference between the total water withdrawal and the discharged water volume of Boliden's sites.

Water consumption (million m³)	2018	2019	2020
Total water withdrawal	145	132	147
Discharged water volume	133	109	132
Water consumption	12	23	15

Economic

Content Indexes

SUSTAINABILITY TOPIC: BIODIVERSITY

Biodiversity is a basic precondition for life on Earth – including for humans. Studies show that over half of the world's BNP, is wholly or partly dependent on nature and ecosystem services. At the same time, biodiversity is declining at a dramatic pace as a consequence of human activities. However, there are great opportunities to reverse the downward trend in biodiversity. Boliden's overall goal is to contribute to increased biodiversity by 2030 in all regions where we operate.

The following measures to work proactively for biodiversity net gain have been identified:

- 1. Create social benefits by supporting the Sustainable Develop-
- 2. Gain access to land through environmental permits
- 3. Meet owners' demands
- 4. Meet clients' demands
- 5. Meet stakeholders' expectations
- 6. Attract and retain competent staff
- 7. Gain society's acceptance
- 8. Minimize risks
- 9. Facilitate business planning and increase the rate of innovate

Boliden's operations shall be sustainable through the entire value chain from prospecting, during production, through to posttreatment, and in a long-term perspective after completion of post-treatment. Boliden takes responsibility for the impact of our operations and works pro-actively to minimize losses of biodiversity and ecosystem services, and to enhance ecosystems.

Working according to the mitigation hierarchy involves systematically working with biodiversity based on the following steps:

- Firstly, avoid impact if possible
- · Secondly, minimize impact that cannot be avoided with mitigation measures
- Thirdly, restore impacts by, for example, environmental remediation.
- As a fourth measure, offset the impacts caused and strive toward creating a net gain for biodiversity

More information available in the Annual and Sustainability Report on page 19.

Collaboration with stakeholders

Boliden's work builds on an understanding of and collaboration with other industries and stakeholders. This means that we initiate respectful cooperation and relations with local society. Through close dialogue and the exchange of knowledge, we strive towards creating a net gain for biodiversity and ecosystem services.

304–1 Operational sites in, or adjacent to, protected areas and areas of high biodiversity values

Sites located in or adjacent to protected areas can be found in the table below. Boliden has collected data regarding to the operation areas that are located in the vicinity of conservation areas and their possible impacts. Based on data, four of Boliden's five smelters are located in the vicinity of conservation area:

- 1. Boliden Bergsöe is located close to two different conservation areas (Gråen 25 ha, Saxåns mynning-Järavallen 1 956 ha). The distance from closest border to smelter area is about 2 km.
- 2. Closest conservation area of the Harjavalta smelter is the Natura 2000 – Pirilänkoski. The total protected area of Pirilänkoski is 146 ha and the distance from closest border of smelter area is about 2 km.
- 3. Boliden Kokkola is located in the vicinity of a Natura-2000 area. The conversation area covers 236 ha.
- 4. Boliden Rönnskär is located close to a Nature reserve (birds). The total area of conservation area is 1530 ha.

At Odda, the closest conservation area is the Folgefonna National Park (glacier), which is located at such a distance that it is considered to be insignificant.

Sites	Operation	Country	Size, ha	Protected areas
Aitik	Mine	Sweden	8,332	Yes1)2)
Bergsöe	Smelter	Sweden	13	Yes ²⁾
Boliden Area	Mine	Sweden	5,447	Yes ²⁾
Garpenberg	Mine	Sweden	1,447	No
Harjavalta	Smelter	Finland	534	Yes ²⁾
Kevitsa	Mine	Finland	1,420	Yes1)2)
Kokkola	Smelter	Finland	340	Yes ²⁾
Kylylahti	Mine	Finland	653	Yes1)2)
Odda	Smelter	Norway	40	No
Rönnskär	Smelter	Sweden	153	Yes ²⁾
Tara	Mine	Ireland	885	Yes ²⁾
Old mining areas and forests	_	Sweden	5,551	Yes ^{1) 2) 3)}

- 1) Protected area within the Boliden operation area
- 2) Protected area adjacent to Bolidens operation (closer than 5 km)
 3) Protected area partly within the Boliden operation area

304–2 Significant impacts of activities, products, and services on biodiversity

Governance

Boliden's impacts on biodiversity are above all related to land use in current or abandoned operations. As of December 31, 2020, Boliden owned or controlled 24,800 (23,600) ha of land in connection with existing operations, in areas adjacent to existing or former operations, or in other areas of interest for exploration.

Most of Boliden's operations are located in areas where mining or smelting activities have been carried out for anything between several decades and several hundred years. Some of the older mining and industrial areas are from a time when environmental legislation did not exist and knowledge levels were much less developed. This makes it difficult to determine an original baseline, and to quantify the long-term impact of the activities.

For every operation there is a permit process. During the environmental permitting process, it is important to evaluate the best possible location in relation to natural value and to assess the possible impacts on biodiversity.

When an operation is closed, the area is rehabilitated with objective to reestablish biodiversity and ecosystem services. Boliden always ensures that the areas occupied by smelters and mines can be reclaimed after the operation's closure. Closure and remediation plans, including biodiversity aspects, are according to Boliden standards developed for every operational site that is going to close.

Compensation measures are developed during the permitting process of new operations that risk causing a loss of biodiversity

304-3 Habitats protected and restored

All land and forests owned or leased are managed in forest management plans. Protected areas and discoveries of protected and listed species are registered and described as well as areas with high value forest for future development to raise the ecological value of the site. None of the operational sites, are considered to be in high biodiversity areas.

For new mining projects a specific inventory of natural value is always carried out early on in the project to enable development of the project according to the mitigation hierarchy.

All inventories and how the project development has proceeded according to the mitigation hierarchy are described in the application for an environmental permit.

Examples of Boliden's habitat restoration projects

Boliden is working together with different partners to restore a number of habitats. This includes a collaboration with the Swedish University of Agricultural Sciences (SLU) to monitor and assess projects for ecological compensation and reestablishment of habitats for reindeer winter grazing

Boliden has initiated one of Sweden's most comprehensive research projects investigating ecological compensation in collaboration with the SLU. Two areas totaling 837 hectares around Boliden's Aitik mine are part of the compensation work. This has involved financing a PhD student in 2020 to analyze the results of Boliden's ecological compensation work around Aitik. A variety of wood fungi and insects including some rare species have been transferred by relocating their dead wood habitats and then continuing to monitor them. The study is also looking if the transfer of these species has led to increased bird populations in the new habitats. Hiking trails have also been created.

Another project is the abandoned mining site of Näsliden, which has created ecological and social added value together with local residents. As part of its remediation work, Boliden not only improved the site's biodiversity, but also created a meadow that can be used for recreational activities by the local community.

304–4 IUCN Red List species and national conservation list species with habitats in areas affected by operations

Boliden continues to monitor and manage the areas that have been reclaimed for an indeterminate period of time, and this may, if necessary, entail implementing additional measures in already reclaimed areas. Where appropriate, reclamation is done in partnership with affected landowners.

There are various types of protected areas in the vicinity of the majority of Boliden's mining operations, such as wildlife and plant sanctuaries, key biotopes, protected waterbodies, nature reserves, and Natura 2000 areas.

A list of prioritized reclamation objects has been prepared, which is updated on the basis of the results of studies showing changes in the status of the respective objects. Additional measures may include anything from measures designed to improve dam safety, environmental performance, water treatment, improved biodiversity planting or the installation of bird nests, water treatment, planting, or the installation of nesting boxes for birds. Boliden's interventions in older abandoned mining areas are often aimed at complementing the old techniques with new and improved methods.

Habitats restored	Type of activity	Size, ha	Start	End
Långsele	Reclamation work	5.5	2018	2022
Gillervattnet	Reclamation work	300	2014	2023
Näsliden	Reclamation work	7	2015	2020
Stekenjokk	Reclamation work	5	2019	2020
Old Forests	Ecological			
Aitik	compensation	837	2017	2022

MM1 Amount of land disturbed or rehabilitated

Boliden owns and holds licenses over large areas of land. Reclamation of mining areas that have reached the end of their productive lifespans are part of Boliden's operations and responsibility. The reclamation programs are designed to minimize impacts on the surrounding environment and to add value for biodiversity and ecosystem services. Boliden has made ongoing provisions of funds for the future rehabilitation. At the end of 2020, a total of SEK 5,134 (5,086) million had been allocated for future reclamation of mining areas and smelters. Rehabilitation efforts currently focus on old mine sites.

Land management (ha)	2018	2019	2020
Total land holding	23,100	23,600	24,800
Disturbed and not yet rehabilitated (opening balance)	6,881	7,050	7,217
Disturbed in the reporting period	217	168	61
Rehabilitated in the reporting period	48	1	39
Disturbed and not yet rehabilitated (closing balance)	7,050	7,217	7,229

New mines and the expansion of existing businesses

The establishment of new mines and the expansion of existing businesses require access to land. The aim is to have the minimum possible impact on biodiversity. Boliden's operations shall be sustainable throughout its operations – from prospecting and production to post-processing, and in the long-term. Most of the company's mines are located in rural areas. The exception is Tara Mines, which is located near the community of Navan in Ireland. Boliden's smelters are all located in industrial areas adjacent to a community and close to the coast. Boliden takes responsibility for the impact of its business operations and works proactively on the loss of biodiversity and ecosystem services. In practice, this means that Boliden not only avoids or minimizes the negative impact, but also adds or creates new ecological value. The work is based on the four steps of the so-called harmless hierarchy: avoidance, minimization, restoration and offsetting.

Natural and cultural values are inventoried in an Environmental Impact Assessment (EIA) early on in the permitting processes for new projects or changes in existing operations.

During operations, different types of monitoring programs are set up, both according to permits and voluntarily. For example, the programs involve the evaluation of fish, algae in water and mosses, berries, fungi, reindeer grazing species, moor frogs, smews and tufted ducks. Ecological rehabilitation and compensation are ongoing in several operations.

The majority of Boliden's acreage in northern Scandinavia is adjacent to reindeer grazing land and Boliden prioritizes indepth dialogues with representatives of the reindeer industry to ensure their interests are taken into consideration. This may, for example, entail ensuring that the reindeer herds can roam freely between grazing areas, or that grazing land is, as far as possible, maintained in an undisturbed condition and that the lichen and plants on which the reindeer feed are included in the flora planted when areas are reclaimed.

Boliden owns land and forests and practices responsible forestry, as defined by the Forest Stewardship Council (FSC® COC-000122). This includes promoting and protecting biodiversity and creating environmental and social values.

Boliden has assigned approximately 10% of its productive forested land for nature conservation. This area is partly protected through the establishment of nature conservation area, key habitats and habitat-protected areas, and partly managed to promote nature-conservation interests. The areas protected by Boliden mainly comprise older forests, wetland, and areas dominated by deciduous forest. Over time, some of the older forests are becoming more and more primeval. In areas dominated by deciduous forest, forestry is conducted in a way that prioritizes deciduous tree species. On the productive forested land, Boliden manages the forestry from a landscape ecology perspective.

In previous years, the Group's forestry management in these areas has included prescribed felling, which is intended to benefit deciduous wooded pastures, and controlled burning in order to promote certain species and biological diversity. By adapting forest management in areas used for outdoor recreation, social value is created and maintained. Boliden's ambition is for the wildlife on its land to be in harmony with forestry, hunting, and other public interests. Current long-term plans extend for at least ten years and include remediation, planned measures, and allocated funding for a number of abandoned mines. Boliden is constantly working to develop new options for restoring impacted ecosystems and to identify opportunities to compensate for impact through offseting.

Boliden's operations take advantage of exploration, mining, enrichment and transport. Boliden consequently conducts ongoing work designed to minimize the social and environmental impact.



SUSTAINABILITY TOPIC: AIR POLLUTION EMISSIONS

305-7 Significant air emissions

Other significant air emissions deriving from Boliden's operations are nitrogen oxides (NOx), sulfur oxides (SOx), metals, and dust. The most common of the sulfur oxides (SOx/SO $_2$) is sulfur dioxide, and Boliden generally uses the expression 'sulfur dioxide' to describe this emission. The figures for sulfur dioxide and NOx disclosed in the table are the direct measured emissions from sources at Boliden's smelters. The figures for metals and dust include direct-measured emissions from smelter stacks, but exclude diffuse emissions.

Deposits and runoff of, among other things, sulfur, nitrogen and metals are measured and followed up on from our sites. The sulfur deposition and the total deposition of acidifying substances have counted as hydrogen ions, as well as the deposition of inorganic nitrogen have been reduced over the years.

Diffuse emissions are generated at both mines and smelters and the environmental impact is due to dust particles containing metals being dispersed by the wind. All operations are working systematically to reduce particle emissions to air, e.g. by enclosure of dust-generating equipment and by salting and watering roads. The diffuse emissions are monitored, but are difficult to quantify in an aggregated manner.

Emission Reduction Efforts

Boliden's efforts to reduce emissions are based on an overall analysis of the environmental impact. The impact and risk assessments are revised on a regular basis, as are the measures to be taken. The work is controlled and conducted by each individual Business Unit, as local circumstances may differ. Follow-up at Group level is conducted on a monthly basis.

Sulfur dioxide emissions to air are mainly attributable to gases generated during the smelting processes at the Harjavalta and Rönnskär copper smelters. The amount of sulfur dioxide emitted during the process depends on factors such as process stability, the efficiency of gas cleaning systems, and the amount of sulfur in

raw materials. Thus, one way of reducing emissions is to maintain a stable smelting process and to conduct ongoing, effective maintenance work and process control. The monitoring and control of abatement systems for effective gas cleaning is important work and is carried out continuously.

The SO_2 emissions to air increased slightly during 2020 at Boliden Smelters since more materials with sulfur content was used in the smelting processes. This is a result of Covid-19 where access of electronic scrap has been lower during the year. The metal emissions to air have decreased due to improved filtration techniques at the Smelters. For example, Rönnskär started up a new air filtration facility during the spring, for example filtrating more lead emissions from the copper anode casting.

Emissions to air are mainly based on the periodic monitoring in accordance with applicable national standards. Emissions from

fuel are calculated using the fuel properties data provided by the supplier. Accredited laboratories, both internal and external, are used for the analyses of samples taken on site.

Emissions to air (metric tons)	20181)	2019	2020
NO _X	450	450	530
SO ₂	7,720	6,240	6,310
Particulate matter	181	164	158
Metal emissions to air (me-eq)	74	69	60
Metal emissions ¹⁾ to air (mass)	19	26	19

Updated model for calculation of metal equivalents, based on the framework for Natural Capital Protocol

SUSTAINABILITY TOPIC: WASTE AND RESOURCE USAGE

306–2 Waste by type and disposal method

Boliden has developed processes to extract as much value as possible from the material streams at mines and smelters. Some hazardous waste is sent for disposal or stabilization, in some cases to landfill and deep repository.

Correctly processed waste can be turned into valuable products. Some of the process residues generated are sent to another Boliden site for metals recovery or final deposition. What is considered waste for one operation can often constitute a raw material for another. Appropriately handled, the trade in waste and by-products can be of benefit to society by increasing overall resource efficiency. Boliden works continuously to identify internal and external recycling or landfill solutions for any process wastes generated. Boliden receives significant amounts of waste from external parties for recycling, construction purposes or safe deposition in landfills.

The export of waste to landfill or for recycling is extensively regulated. Boliden has 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.

The secondary raw materials for Boliden smelters, such as electronic scrap and waste batteries, contain plastics that are incinerated in the process. The incineration of the plastics serves as a reducing agent in the metal production. The excess heat from the process is used for district heating.

During 2020, an additional amount of 624,000 metric tons of non-hazardous process waste was treated externally due to the closing of the Kylylahti mine. This involved old machines being recycled.

Waste by type and disposal method (metric tons)	2018	2019	2020
Hazardous waste, total	869,000	886,000	961,000
Landfill (storage)			
Internal	843,000	861,000	930,000
External	1,800	2,600	1,500
Recycling	24,000	22,000	30,000
Non-hazardous waste, total	279,000	249,000	207,000
Landfill (storage)			
Internal	222,000	175,000	117,000
External	2,200	2,200	2,300
Recycling	55,000	72,000	87,000

MM3 Waste types and disposal methods including overburden, rock, tailings and sludge, and their associated risks Boliden processes a number of different metals and substances that are both toxic and environmentally harmful. Mining and smelting operations generate residual waste consisting of waste rock, tailings, slag, sludge, and dust. There is considerable awareness of the importance of waste issues within the Boliden Group, e.g. waste sorting, significant recycling of process residues and scrap, good reporting procedures and ongoing waste projects. Boliden's wastes are managed in accordance with the EU Directive on the Landfill of Waste and the Mining Waste Directive. Waste rock dumps are covered continuously, in order to prevent weathering and leaching. Boliden's mine waste is handled in accordance with applicable environmental permits that specify how and where it may be stored and how it shall be covered and reclaimed.

Extensive monitoring programs are in place to ensure a high level of dam safety and several measures to increase dam safety have been finalized or are in progress. Boliden is responsible for around 40 dam facilities in Sweden, Norway, Finland and Ireland. They are used or have been used to deposit tailings or for other water management. This figure includes both operational and decommissioned facilities. Dam facilities are managed according to mining industry guidelines for dam safety.

Waste rock tonnage is based on calculations of volume and density. Tailings are based on calculations of tonnage of ore minus tonnage of concentrate output.

Governance

Tailings result from underground mining operations, such as from the concentrator, and are to a certain extent used as backfill – both as reinforcement and to reduce the amount of tailings above ground. Some waste is sent for final storage in underground facilities.

Waste from extractive industries (metric tons)	2018	2019	2020
Reuse (backfilling)			
Waste rock	8,892,000	8,887,000	9,183,000
Tailings	3,182,000	3,174,000	2,870,000
Waste rock (dumps)	49,619,000	50,180,000	48,215,000
Sold waste rock	5,400	5,900	14,000
Tailings management facility	48,844,000	51,677,000	52,843,000

Waste rock from underground mines that is directly used for backfilling is not considered to be waste and should not be reported as waste.

There are no statistics available for overburden as it is seldom that any overburden exists. Sludge that is not reused in the process accounts for an insignificant percentage of either hazardous waste or non-hazardous waste, depending on its properties. In the beginning of 2021, the construction of the 750 m SEK investment in a new leaching plant at the Rönnskär site will be completed. The plant will enable waste material that has been stored at the site since 1975 to be reprocessed. The 460,000 metric tons of waste material currently held will decrease to 220,000 metric tons. The remaining 220,000 metric tons will be stored in a deep underground repository, located under the Rönnskär smelter plant. The deposition of waste material in the repository commenced in 2021. This is a globally unique solution. It is the only place in the world where a deep underground repository shares a site with a smelter. Boliden has no organic waste material other than small amounts from canteens, which are sent for municipal treatment.

Boliden does not practice deep well injection or waste incineration.

Safe and responsible Tailings management

The International Council on Mining and Metals (ICMM), the United Nations Environment Programme (UNEP) and the Principles for Responsible Investment (PRI) conducted a review and launched a global industry standard on tailings management in August 2020.

Social

Boliden's position regarding the implementation of the Global Industry Standard on Tailings Management is that all Boliden's facilities with 'Extreme' or 'Very high' potential consequences will be in conformance with The Global Industry standard on Tailings Management within three years of today, and all other facilities within five years. A Gap analysis has been caried out during 2020 to define where Boliden needs to improve and to define action to reach its commitment. During 2020, large investment projects related to tailings management commenced and continued – both to enhance our operations and minimize risk. For example, our mine sites have increased their tailings storage capacity with planned dam uplifts and liquefaction assessments have been performed in accordance with current standards to minimize risks.

More information available in the Annual and Sustainability Report on page 23.

306-3 Significant spills

A total of 33 (37) moderate (more than 150 liters) oil and/or diesel spills, were reported from Aitik, Boliden Area, Kevitsa and Tara. All spills occurred within the site area, were immediately sanitized and any contaminated soil was excavated. These events have not entailed any significant environmental impact or caused lasting harm to the surroundings. Investigations have been conducted in conjunction with all of the incidents in order to ascertain the causes of the spills and, wherever possible, to implement measures that avoid similar instances from happening in the future.

306-4 Transport of hazardous waste

Processing of intermediate and waste products is a natural part of Boliden's value chain in order to maximize metal recovery levels. In some cases, however, hazardous waste is sent for disposal or stabilization, and/or to external landfill and deep repository. During 2020, 9,200 (9,200) metric tons were sent for external use, treatment, recovery or disposal.

SUSTAINABILITY TOPIC: ENVIRONMENTAL COMPLIANCE

307–1 Non-compliance with environmental laws and regulations

Boliden was not subject of any significant corporate environmental fine during 2020. One minor corporate environmental fines

was charged at 50 000 SEK due to a discharge of metals to water in the Rönnskär smelter during Q3 in 2019.

SUSTAINABILITY TOPIC: BUSINESS PARTNER ENVIRONMENTAL ASSESSMENT

308–1 Percentage of new suppliers that were screened using environmental criteria

Boliden has identified both environmental and social topics as material sustainability topics. The integrated handling of these in Boliden's Evaluation of Business Partners processes is further explained in the GRI 414 section of this report.

ENVIRONMENT - PART OF UN GLOBAL COMPACT

Principle 7: Boliden should support a precautionary approach to environmental challenges.

Boliden's environmental commitments are based on the company's values and driven by the need to reduce environmental impact. Boliden strives to maximize the environmental benefit in relation to the resources invested. Legal requirements and Boliden's commitments shall always be met.

Principle 8: Boliden should undertake initiatives to promote greater environmental responsibility.

Boliden provides metals and related products to achieve the environmental goals of modern society, including climate action and efficient energy use. Boliden strives to minimize the use of resources such as land, water and energy. Boliden operates in a

manner that reduces the impact on the surrounding communities from active and closed operations. Performance and examples are presented in the Annual and Sustainability Report as well as in this Sustainability Index.

Principle 9: Boliden should encourage the development and diffusion of environmentally friendly technologies.

Boliden systematically works with continuous improvements and innovations and its operations shall implement and maintain environmental management systems according to ISO 14001.

Boliden strives to effectively reuse and recycle Materials and develop solutions for valuable Materials to find their way back into the economy.

CASE STORY:

Nature cleans wastewater

Economic

The Boliden Tara mine in Ireland was one of the first in the world to successfully demonstrate the potential to remove heavy metals while simultaneously reducing sulfate and nitrogen concentrations through an Integrated Constructed Wetland (or ICW).

"ICW's mimic natural wetlands but in a confined, monitored and controlled setting," says Ailish McCabe, Environmental Engineer at Boliden Tara. The processes require little or no chemicals and very little maintenance. The pilot scale project has been running for two and a half years.

Constructed wetlands can do more than provide effective water treatment. Over time the ICW develops and the environment provides the ideal conditions, attracting a variety of new species and the area becomes a self-sustaining, biodiverse habitat. Another area attracting a lot of interest is the ability of wetland to potentially sequester carbon and become a carbon sink.



Economic

Social

In order for Boliden to have top-quality operations, processes and products, it is crucial to have employees that are skilled, committed and take personal responsibility. In return, Boliden offers its employees a safe and inspiring work environment. Boliden follows up on its social performance through a range of performance indicators on a regular basis.



Boliden's target is to have O serious accidents

SOCIAL PERFORMANCE 2020

The performance is presented in the Annual and Sustainability Report.

SOCIAL TARGETS 2020 AND BEYOND

Occupational health and safety	Zero accidents resulting in absence from work
Proactive approach to safety	Proactivity Index higher than 5.0 Employee engagement in safety to be at 100% Continuously improvement on Risk Class 3 Ratio (RC3F)
Sick leave	Sick leave rate not exceeding 4.0%
Diversity	Boliden strives for a diversity among our employees, which reflects the local communities in which we operate. An important part of Boliden's diversity work is to increase the proportion of women. At least 20% female employees in 2020.
People management	Staff turnover not to exceed 6.0%

The table shows part of Boliden's environmental performance indicators



Content Indexes

102–16 Values, principles, standards and norms of behavior

Guided by its values Care, Courage and Responsibility, Boliden aims for its vision. The values describe how employees shall work together in daily operations. They bring many different competences and skills together and form Boliden's corporate culture towards a common purpose. Boliden strives to be a company governed by these values in that they form the basis for how it develops its business. Boliden expects its employees to promote its values by acting responsibly towards colleagues, business associates, and society at large, and to keep in mind that they may be regarded as Boliden representatives even during their leisure time. Boliden's Code of Conduct provides a non-exhaustive framework for what Boliden considers to be responsible conduct. Boliden's employees should always strive to exercise good judgement, care, and consideration in their work for the company.

Boliden, and its employees, shall base their behavior on mutual respect. Boliden does not accept any form of harassment, discrimination, or other behavior that colleagues or business associates may regard as threatening or humanly degrading. Boliden shall ensure that none of the operations controlled by the company lead to the exploitation of children. The company

never, either directly or indirectly, collaborates with suppliers or customers where it has reason to believe that child labor is used. Employees and Board Members shall not seek to obtain advantages for themselves (or any related persons) that are improper or may harm Boliden's interests in any other way. Information beyond general business knowledge acquired in their work for Boliden should be regarded confidential and treated as such.

The company shall communicate its financial results and other information affecting the share price in an appropriate and timely manner and shall, when doing so, comply with relevant legislation, stock market contracts, and other regulations.

The Code of Conduct has been approved by Boliden's Board of Directors and applies to all Boliden employees, including temporary personnel, worldwide, as well as to members of the Board of Directors of Boliden AB and its subsidiaries. Line managers are responsible for making the policy known and for promoting and monitoring compliance. Violation of the Code of Conduct is not tolerated and may lead to internal disciplinary action, dismissal, or even criminal prosecution. Should an improper practice or incident occur within Boliden, the company is committed to make the necessary corrections and will take remedial action to prevent recurrence.



Content Indexes

401–103 MANAGEMENT APPROACH SOCIAL

Employment and labor principles

Boliden considers the ability to attract, recruit, develop, and retain competent employees as a prerequisite for its success. It is important to achieve a balance between the company's capabilities and commitments. This means having the right skills in the right place, at the right time. Employees are Boliden's best ambassadors when it comes to attracting new employees to join the company. Another prerequisite for successfully attracting and retaining good employees is that Boliden offers a work environment that balances work and leisure time. Good health is not only positive for the individual but also for Boliden's success.

Boliden's talent pool, and the skills and knowledge possessed by its employees are vital if it is to achieve its strategic and operational objectives. By identifying important future competence challenges as new technologies and tools are implemented, employees and managers are afforded the opportunity to develop skills in line with Boliden's strategic goals.

Work with competence development and recruitment is also based on the Group's strategic goals of contributing to diversity and increased equality. Challenges include operating in a male-dominated industry, in regions with limited recruitment bases and tough competition for engineers with specialist training.

Health and Safety

Occupational health & safety is Boliden's most important issue as it involves the well-being and, ultimately, the lives of Boliden's employees and contractors. A strong safety culture is characterized by a value-driven leadership that trusts employees' ability to act in relation to risk, health and safety.

As Boliden faces a number of retirements, competes for a limited supply of competent employees, and is located in rural areas – the ability to offer a work environment dominated by foresight, development, and employee care is crucial for the business. Supplier assessments of sound and safe labor practices is vital for Boliden's ambition to be the sustainable first link in metal value chains.

Responding to Covid-19

Environment

In 2020, Boliden has worked proactively to prevent the spread of Covid-19 in its workplaces. As of November 2020, all production units have managed to maintain good production levels despite some disruptions and slightly higher sick leave.

Boliden's response has been built on its already established systematic approach to continuously improve health and safety. Delegated local people with a clear mandate to act have been selected at site level and the overall work is coordinated at Group level through a continuous and regular exchange of good practice. Special guidelines have been developed for Boliden's workplaces, business trips and for major maintenance stoppages – as well as on how to avoid contributing to spreading Covid-19 in society in general. Boliden took an extraordinary step by allowing employees with professional health/medical training are allowed to contribute directly by temporarily working in hospitals and medical clinics while retaining their salaries.

Training and education

Keeping all employees updated with regard to technological, functional, and leadership skills is essential to Boliden's 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 assignments safely and efficiently at all times. Boliden has a number of internal programs for career and skill development.

Governance

Diversity and equal opportunity

Boliden believes that diversity leads to dynamism, creativity, and ultimately greater profitability and that it is a resource for achieving its company goals. Boliden's commitment to diversity is clearly stated in its Code of Conduct and in the Diversity Policy, which have been approved by the CEO.

Boliden and its employees shall:

- Refrain from all forms of discrimination and harassment on the basis of gender, ethnicity, age, disability, religion, sexual orientation, or any other factor.
- Always focus on the person's competence, and disregard gender, ethnicity, age, disability, religion, sexual orientation, or other circumstances.
- · 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 worklife balance.
- · Forcefully act against and counter any incidences of discrimination or harassment.

Non-discrimination

Boliden does not accept any form of harassment, discrimination or other behavior that may be regarded by colleagues or close relatives as abusive or degrading. It is the responsibility of all Boliden employees to comply with the guidelines set out in Boliden's anti-victimization policy.

Rights of indigenous peoples

Operations in northern Sweden and northern Finland are located in reindeer-herding areas. Boliden promotes open dialogues and long-term cooperation with Sami communities in order to mitigate the negative impacts of its mining activities on local people and the environment.

At the end of 2020, SVEMIN (the Swedish Association of Mines, Mineral and Metal Producers) published a Position Statement on how the entire mining industry should respect reindeer herding. Boliden was heavily involved in the development of the document. The hope is that the statement will influence the entire industry and is being shared among SVEMIN members as well as Sami organizations.

Resettlement and closure planning

Boliden's operations involve land use for mining, industrial areas, and ponds for use as tailings and clarification ponds. Thus conservation and reclamation of mining areas which reach the end of their production lifespans form part of Boliden's operations and responsibilities. The goal is to use the best available technology, complemented by the ongoing monitoring of work that has been carried out.

Society

Boliden's business is based on the strategy of responsible mining and minimizing impact on other interests, the environment, society, reindeer herding etc. The strategy for society is proactive and includes continuous dialogues, as well as voluntary commitments and business agreements with stakeholders. Boliden strives to reach agreements through good cooperation - based on the respect and understanding of other interests and stakeholders.

The topics focused on are local communities, anti-corruption, anti-competitive behavior, compliance, and resettlement.

Grievance Mechanisms

Effective grievance mechanisms play an important role in labor practices. All Boliden employees can file grievances via managers, HR functions or union representatives. Anonymous grievances can also be filed via Boliden's whistleblower function.

Boliden's business partner risk management program

Boliden's business Partner Code of Conduct addresses fundamental human rights, the effective abolition of child labor, upholding the elimination of all forms of forced or compulsory labor, non-discriminatory practices, protecting and respecting freedom of association and collective bargaining, working hours, living wages and health and safety. These are also the topics that Boliden looks at when evaluating a presumptive business partner from a social perspective and determining whether to accept a business partner or not. If the business partner does not meet the criteria that Boliden sets for its business partners, a development plan would primarily be considered. If the business partner has the potential to reach Boliden's standards within a reasonable timeframe, a business agreement may be entered with close follow-up on the development plan. However, if Boliden believes it to be very difficult or impossible for the business partner to improve sufficiently, a business agreement may not be entered into.

Boliden's policy states that no concentrates or secondary raw materials may be acquired from areas with armed conflict. Boliden's business partner management program promotes transparency throughout the supply chain, especially for raw materials where country-of-origin documentation shall be provided for all raw materials so that Boliden can verify that the material does not originate from conflict regions. Boliden's process for the Evaluation of Business Partners helps to verify that its secondary and primary raw materials suppliers do not source conflict minerals.

Boliden is a member of networks for sharing good practice experience, such as the Swedish Network for Business & Human Rights. Working together with business partners is a reciprocal process where all parties learn from each other and improve over

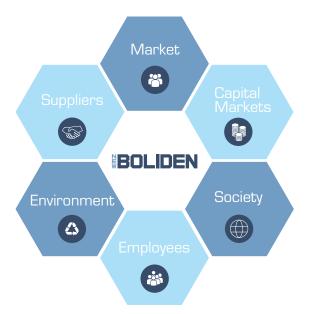
SUSTAINABILITY TOPIC: STAKEHOLDERS

102-40 List of stakeholder groups

A stakeholder process is in place with roles and responsibilities defined. The stakeholder process is applicable for Boliden Group, Business Areas Mines and Smelters as well as the Business Units. Each unit is responsible for identifying applicable stakeholders and the type of dialogue that should be carried out, and by whom.

Stakeholders are identified for example during initial exploration work and contacted through telephone calls, workplans for exploration or public meetings if the company enters an area of low experience of exploration and mining. Stakeholder management is also a central part of project development, application processes for permits as well as continuously during operation and long-term rehabilitation.

The stakeholder groups identified as priority groups for engagement on sustainability issues are:



102-42 Identifying and selecting stakeholders

Environment

Boliden's operations affect many people in a variety of ways, and similarly, its stakeholders have different views and expectations of Boliden. A stakeholder process is implemented to help Boliden's Business Units engage and strengthen dialogue with important stakeholders. By conducting stakeholder dialogues at different levels and operations, Boliden meets demands for increased transparency and learns about stakeholder demands and expectations in greater detail.

102-43 Approach to stakeholder engagement

Boliden has a wide-ranging framework of stakeholders who raise expectations, influence perceptions of the company, and are relevant with regard to sustainability performance. Dialogues are conducted in different ways with different groups, for example, bi-annual employee surveys, open-house meetings with employees and the neighboring community, formal and informal meetings with authorities, as well as capital market days and the Annual General Meeting.

Stakeholders are contacted and involved in different ways. Social impact assessments have been completed in several projects. Boliden has developed a toolbox for different types of stakeholder involvement. A typical example is citizen dialogue conducted in the Boliden area regarding the rehabilitation of industrial areas.

102-44 Key topics and concerns raised

Boliden's employees are naturally a key stakeholder. Employee dialogues aimed at understanding their desires and demands are essential for the overall success of Boliden's units. Responses from internal stakeholders (employees) confirms that health and safety is the most important issue, followed by the ability to create value by maximizing the metal yield and driving technological developments.

External stakeholders have high expectations when it comes to Boliden's focus on increased energy efficiency, its carbon footprint, responsible business and land use. The common denominator for all stakeholders is an expectation that Boliden's innovation and technological development capabilities will benefit both the company and society at large. Sustainability within Boliden means evaluating environmental impact, taking social considerations into account, and securing strong economic results.



SUSTAINABILITY TOPIC: EMPLOYMENT

102-8 Information on employees and other workers

Governance

All information in this Sustainability Index concerning the number of employees refers to data from the actual number of employees on December 31 for the years 2018-2020, while in the Annual and Sustainability Report, the corresponding figures are calculated and reported as Full Time Employees (FTEs).

There are no significant variations in the numbers reported due to seasonal variations in production in Boliden's operations. The data has been generated through the local HR IT systems at the company's operations.

The data has been quality assured by the Business Area Management teams each month, and annually by Group HR.

102-8a Total number of employees by employment contract (permanent and temporary), by gender

	2018			2019		2020			
	Number	%	Female, %	Number	%	Female, %	Number	%	Female, %
Permanent	5,727	95.0	18.3	5,912	95.2	18.7	6,067	95.0	19.3
Temporary	302	5.0	29.1	295	4.8	39.7	319	5.0	45.1
Total	6,029	100.0	18.9	6,207	100.0	19.7	6,386	100.0	20.6

102-8b Total number of employees by employment contract (permanent and temporary), by region

	2018	18 2019 203		2019		
Region	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
Sweden	3,224	155	3,326	147	3,426	181
Norway	298	25	302	34	320	46
Finland	1,616	82	1,625	90	1,703	78
Ireland	578	40	590	24	600	14
Other	11	0	19	0	18	0
Total	5,727	302	5,912	295	6,067	319

102-8c Total number of permanent employees by employment type (full-time and part-time), by gender

		2018			2019			2020	
Employment type	Number	%	Female, %	Number	%	Female, %	Number	%	Female, %
Full-time	5,616	98.1	18.0	5,809	98.3	18.5	5,963	98.3	19.0
Part-time	111	1.9	32.4	103	1.7	30.1	104	1.7	34.6
Total	5.727	100.0	18.3	5.912	100.0	18.7	6.067	100.0	19.3

401-1 New employee hires and employee turnover

Boliden aims to have a diverse workforce in all of its operations. Boliden has instituted a policy aimed at facilitating its goal of female employees constituting at least 20% of the total workforce by 2020.

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

	2018		2019		2020	
	Number	%	Number	%	Number	%
Group Total	483	8	537	9	474	8
<30 years	181	37	211	39	181	38
30-50 years	260	54	271	51	219	46
>50 years	42	9	55	10	74	16
Men	376	78	399	74	341	72
Women	107	22	138	26	133	28
Sweden	284	59	364	68	338	71
Norway	20	4	34	6	31	7
Finland	162	34	127	24	94	20
Ireland	16	3	12	2	11	2
Other countries	1	0.2	0	0	0	0

Total number and rate of employee turnover by age group, gender and region

_	2018		201	2019		! 0
	Number	%	Number	%	Number	%
Group Total	381	7	376	6	346	6
<30 years	45	12	53	14	29	8
30–50 years	171	45	144	38	154	45
>50 years	165	43	179	48	163	47
Men	307	81	296	79	272	79
Women	74	19	80	21	74	21
Sweden	245	8	215	6	210	6
Norway	14	5	24	8	18	6
Finland	97	6	104	6	93	5
Ireland	24	4	33	6	24	4
Other countries	1	9	0	0	1	6

401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees

Boliden offers a comprehensive and competitive package of market-rate salaries, benefits, and bonuses. Boliden's remuneration to senior executive, GM, Directors and other Managers consists of fixed salary, variable remuneration, pension benefits and other benefits. The variable remuneration 2020 was based on the Group's return on equity, accident trend within the Group and on the personal spheres of responsibility which could be strategical topics such as climate.

Profit-sharing program

The profit-sharing program for all employees: a profit share is payable when the return on capital employed reaches 8%. The maximum profit share of SEK 30,000/full-time employee is payable when the return on capital employed reaches 18%.

Significant locations of operations

While the benefits offered by Boliden are similar at all Boliden operations, they are not identical due to legislative differences between the different countries. Examples of these differences include parental leave, parental pay, and opportunities for working shorter for employees with young children. In Sweden, Ireland, and Norway, for example, Boliden provides compensation for employees on parental leave as a complement to the compensation from the social security systems in these countries. In Finland, all compensation for employees on parental leave is paid exclusively by the social security system.

Below is a description of the benefits offered to Boliden's employees by significant locations of operations, defined as the countries where its production facilities are located.

Finland

Boliden's employees in Finland have valid contracts of employment regulating their salaries and other general working conditions. Furthermore, all employees, including temporary workers and those working part time, receive benefits in addition to those included in the collective agreements and individual employment contracts. These benefits are health care, employers' liability insurance (statutory), travel insurance (only for business trips), leisure time accident insurance, sports insurance (in special cases), insurance against treatment injury (statutory), life

assurance (statutory), employment pension insurance (statutory), employee compensation insurance, and maternity/paternity leave. All employees benefit from the various leisure and healthcare activities provided by the company.

Ireland

Boliden's employees in Ireland are paid salaries and allowances as well as shift premiums as outlined in collective agreements and/or individual employment contracts. Employees are, furthermore, entitled to the following benefits: life assurance, health insurance (subsidized or fully paid), access to company healthcare, disability coverage (white-collar employees only), pension, bonuses, retirement provision, maternity/paternity leave, annual leave and public holidays, and the reimbursement of travel and other work-related expenses.

These benefits are provided to all full-time and part-time employees (sometimes proportionately) as well as to employees who are on a fixed-term contract. Summer students and temporary employees on very short-term contracts, however, are not entitled to all of the above benefits.

Norway

Boliden's employees in Norway have valid contracts of employment regulating their salaries and other general working conditions. Employees are, furthermore, entitled to the following benefits: life assurance, travel insurance (official business trips), health insurance (fully paid), disability coverage, defined contribution of 5 or 8% from base salary, and a defined benefit of 70% (incl. state pension) of salary between 62 and 67 years of age, optional loans for consumer goods (max. NOK 30,000), maternity/ paternity leave (10% paid by company), annual leave and public holidays, and reimbursement of travel and other related expenses.

The benefits do not differ between full-time and part-time employees. Temporary workers, however, are not entitled to consumer-goods loans or to company pensions. Temporary workers on short-term contracts (e.g. summer students) are only entitled to life assurance, travel insurance (official company journeys), and disability coverage.

Boliden's employees in Sweden have contracts of employment regulating their salaries and other general working conditions.

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All employees, including temporary workers and part-time workers, also have benefits in addition to those included in the collective agreements and individual employment contracts. All permanent employees in Sweden (including part-time workers) are entitled to the following benefits: life assurance, health insurance and disability/invalidity coverage, healthcare fund, dental care, parental-leave agreements, retirement provision, company profit-sharing scheme, and company bonus schemes. All employees are, furthermore, included in the various leisure and healthcare activities arranged at the different units.

Temporary workers receive the following benefits: life insurance, health insurance, and disability/invalidity coverage. The level of all these benefits is higher than that stipulated in national legislation.

In addition, Boliden offers one free counselling session before retirement to all white-collar employees in Sweden.

MM4 Number of strikes and lockouts exceeding one week's duration, by country

During 2020, Boliden experienced the Electricity Union strike in Finland exceeding the duration of one week. It began on December 5, 2019, and continued until February 17, 2020. The strike covered 28 people in Boliden Kokkola. There were no restrictions in production during 2020 due to the strike.

Boliden enjoys good relations with the different unions and there is, from Boliden's perspective, mutual trust. Boliden supports active cooperation between employers and employees and their respective representatives in every area of shared interest. For a number of years, the Group has had an agreement with trade union organizations with regard to union-related cooperation at all levels within the Group.

The employees have three representatives on Boliden's Board of Directors. Boliden also has a Works Council comprising employee representatives from all of the countries in which Boliden operates. At a local level, employee representatives/union representatives sit on a number of different councils relating to employee management, production planning, and health and safety, etc.

The frequency of dialogue ensures a constant flow of relevant information, enabling the unions to understand how Boliden is performing and promoting a two-way dialogue on strategic matters.

102-41 Collective bargaining agreements

The total number of employees at Boliden covered by collective bargaining agreements on December 31, 2020 was 6,228 (6,073) representing 97% (98%) of the total workforce.

SUSTAINABILITY TOPIC: OCCUPATIONAL HEALTH AND SAFETY

403-1 Occupational health and safety management system

All Boliden units have occupational health & safety management systems in line with ISO 45001:2018. Present certificates are available on https://www.boliden.com/sustainability/our-responsibilities/current-certificates.

403-2 Hazard identification, risk assessment, and incident investigation

All units have procedures for risk assessments, hazard identification, incident reporting, and safety inspections. Boliden also promotes initiatives designed to involve employees on a more informal basis by encouraging them to submit suggestions for health and safety improvements. Risk assessment is a requirement of ISO 45001:2018 and the certified Boliden units are consequently audited internally and externally on their risk assessments processes and performance.

Some parts of Boliden's workplaces involve a risk of exposure to lead, which could result in lead poisoning. Illness is preventable by avoiding exposure to lead and Boliden constantly measures its employees' lead levels in order to safeguard their health. Internal exposure requirements are set higher than legislation.

403-3 Occupational health services

All Boliden employees have access to occupational health services in the form of internal and external facilities.

Workplaces are regularly checked with regard to exposure, ergonomics, air quality, noise, and vibrations as part of Boliden's occupational hygiene monitoring programs. The results are

analyzed, actions taken when called for, and reported to the authorities. Employees are screened regularly via the occupational health services provided at the workplace to ensure that each individual is fit to perform their assigned duties. Any sign of illness that could be associated with work is documented and reported.

403-4 Worker participation, consultation and communication on occupational health and safety

Boliden's Top Management meets with union representatives four times per year in line with the European Workers' Council Directive. Worker participation, consultation and communication on occupational health and safety is also a requirement of ISO 45001:2018, which Boliden follows.

Boliden has also developed additional Group Safety Standards, which emphasize daily H&S pulse meetings with worker participation. Boliden has health and safety committees at all workplaces where more than fifty employees work on a regular basis. More than 95% of the workforce is represented by health and safety committees. The health and safety committees identify potential hazards, evaluate these potential hazards, recommend corrective actions, and follow up on implemented recommendations. The health and safety committees hold regular meetings and carry out workplace inspections. The committee members are also available to receive worker concerns and recommendations, to discuss problems, and to provide input into existing and proposed health and safety programs. Workers, contractors and visitors not directly represented by a Health & Safety committee are encouraged to submit suggestions on improvements.

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Boliden conducts biannual safety culture surveys where all employees are provided with an opportunity to assess and further develop the safety priorities of both their leadership and colleagues. This is a key activity as part of the workers' participation program designed to improve H&S even further.

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403-5 Worker training on occupational health and safety

Worker training in occupational health and safety is a requirement of ISO 45001:2018. Boliden holds annual BeSafe days where all workers are given an opportunity to participate in various forms of health and safety training. There are also many formal health and safety training courses conducted each year on topics such as evacuation, fire prevention, first aid and working at height. All operations also regularly provide health and safety training for employees and contractors, to improve knowledge and create a personal commitment to working and acting safely at work. More than 200 of Boliden's leaders participated in a Masterclass Safety Leadership Training during the period 2018-2019. A program to train informal leaders to safety ambassadors (Safety Savvy) has also begun at a number of production units.

403-6 Promotion of worker health

Boliden has a zero-harm philosophy with regards to accidents at work. The goal for each unit is zero accidents every month. Low absentee rates and low injury rates also create positive results in productivity and profitability. Boliden has a responsibility to create structures, procedures, and other conditions for a safe working environment. Equipment, instructions, risk assessments, incident reporting, safety audits, and inspections all help safeguard the individual's safety. Boliden continuously invests in automation, new technology to improve safety and productivity. However, whatever efforts that are put into systems and techniques, they will not be sufficient without decisive action on the part of each individual in the form of their own behavior. Every individual shall be personally willing to act safely. The principle of 'production is important but your health and safety is more important' must be clearly established in every employee's mind. This message is communicated clearly during the 60 annual BeSafe Days that are held within the Group.

This has contributed to the number of accidents decreasing in recent years and the number of accidents with Absence (LTI) decreasing by 52% during the period 2012-2019.

In 2020, however, this positive trend has not continued at all units, but instead the number of accidents has started to increase again. The number of serious accidents continues to decrease, but there has been an increase in minor accidents such as trip, slip and fall accidents and hand/finger injuries in a number of units.

To reverse the trend and better identify where improvement measures should be implemented, a Group-wide safety culture survey was conducted in the autumn of 2020. The survey also included a psychosocial section to analyze the consequences of e.g. stress and the prioritization of safety work under pressing production conditions.

More than 4,900 employees participated in the survey which resulted in more than 700 improvement proposals. The results are discussed in local working groups and a joint action plan with local measures will be implemented during the first half of 2021.

It is expected that this should see the accident trend turning in the right direction again in all units.

The sick leave rate was stable in 2020. Despite some periodic increases in the short-term absence due to Covid-19. Boliden is actively working to minimize the risk of the virus spreading at its workplaces. This work has so far been successful despite minor Covid-19 outbreaks in some of our production units and offices. Boliden also took an extraordinary measure by offering employees an opportunity to assist in the overstretched healthcare sector while retaining their salary.

403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships

The prevention and mitigation of occupational health and safety impacts directly linked by business relationships is a requirement of ISO 45001:2018. Boliden has well-established routines to engage suppliers and contractors in the health and safety work, whereby contractors are encouraged to participate in daily pulse meetings covering health and safety.

403-8 Workers covered by an occupational health and safety management system

All employees and contractors working in Boliden's 11 units.

403-9 Work-related injuries

Boliden's operations contains large number of work activities with potential risks of personal injury and ill health. This applies to the entire production chain from the extraction of ore to the completion of products at the smelters and the transport to the customers. Focus is therefore to actively risk report on daily pulse meetings and regular safety inspections to detect and mitigate serious hazards and risks (considered as risk class 3, RC3) before they becomes incidents. RC3 cases are followed up with a Root Cause Analysis (RCA), which includes preventive and corrective actions. In 2020, the employees submitted 18,453 risk reports.

Despite efforts to decrease work-related injuries the number of accidents leading to absence from work (LTI) increased by 24 % during 2020 from 4.4 to 5.8 per one million hours worked. A possible explanation to this increase is that maintaining routines of daily pulse meetings and physical safety inspections have been a challenge during 2020 due to the Covid-19 pandemic. In 2020, 50 (40) accidents resulting in absence from work were reported at Boliden's units by Boliden employees. The most common form of accidents include slip, trip and falls and finger/hand injuries during work with hand tools. The number of accidents resulting in absence from work, including contractors, was 88 (69). The number of workdays of absence due to accidents among Boliden's employees was 530 (485).

LTI Frequency¹⁾ Boliden employees

	2018	2019	2020
Sweden	3.3	3.4	4.2
Norway	0.0	7.3	3.5
Finland	3.5	5.1	6.6
Ireland	2.8	2.7	4.5
Group	3.1	4.0	4.9

LTI Frequency¹⁾ Boliden contractors

	2018	2019	2020
Sweden	7.3	5.8	7.2
Norway	0.0	0.0	10.1
Finland	11.7	5.7	9.8
Ireland	8.3	2.0	2.1
Group	8.6	5.2	7.7

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LTI Frequency¹⁾ employees and contractors

	2018	2019	2020
Sweden	4.7	4.2	5.2
Norway	0.0	5.2	5.2
Finland	6.7	5.3	7.7
Ireland	4.5	2.5	3.8
Group	5.1	4.4	5.8

Lost day rate¹⁾ Boliden employees

Lost days due to injury per 1,000,000 working hours

Work days	2018	2019	2020
Sweden	28	31	62
Norway	0	213	3
Finland	53	63	110
Ireland	163	19	42
Group	49	49	70

Sick leave rate¹⁾ Boliden employees

Percentage	2018	2019	2020
Sweden	4.3	3.9	4.8
Norway	7.2	6.6	5.9
Finland	4.5	4.8	4.8
Ireland	4.2	4.1	4.9
Group	4.5	4.3	4.8

Work-related fatalities employees and contractors

Percentage	2018	2019	2020
Employees	0	0	0
Contractors	0	0	0
Total	0	0	0

Work-related fatalities are very rare within Boliden. No workrelated fatalities have occurred on Boliden sites during the last 10 years of operation.

403-10 Work-related ill health

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Work related injuries and ill health have the highest priority on the agenda on all management group meetings in Boliden. Every month, reports are compiled at Business Unit, Business Area and Group level, which contains information on the latest developments in Health & Safety. The report includes detailed information on proactive safety employee engagement indicators and the number of accidents and serious risk situations. Furthermore, the report contains information related to short-term and longterm sick leave as well as information on the Covid-19 situation and preventive measures to minimize the spread of infection at Boliden's workplaces. An analysis of the psychosocial work environment is also performed on a regular basis.

Work-related ill health can include acute, recurring, and chronic health problems caused or aggravated by work conditions or unhealthy practices. Detailed data is followed up on unit level with the local health service providers. The information is partly confidential and it is therefore not always possible to share or analyze on a higher level. The number of reported occupational diseases or data on absenteeism connected to occupational diseases is not included in Boliden's reporting since it can take several years before a reported occupational disease is finally accepted or not accepted as an occupational disease by the authorities.

SUSTAINABILITY TOPIC: TRAINING AND EDUCATION

404-1 Average hours of training per employee

Boliden's approach is to facilitate skill development during regular working hours. The responsibility for the organizing and following up of on-the-job training resides with the line management. Boliden has not set a target for the average number of training hours for different job categories - individual needs determine the methods and extent of training activities.

Average hours of training per employee by gender and by employer category

Category	2018	2019	2020
Men	19.6	21.1	11.0
Women	20.6	22.2	12.0
White-collar	21.5	23.9	11.6
Blue -collar	18.6	19.9	10.9
Total	19.6	21.3	11.2

404-2 Programs for upgrading employee skills and transition

In addition to several types of health and safety training programs, Boliden employees are offered a variety of skills upgrading opportunities. Development programs are run annually on local sites or coordinated by Business Area HR for both Mines and Smelters. A number of corporate training programs for participants from all Business Units and competencies are also coordinated annually by Boliden Group HR.

Transition assistance programs can in some cases be provided locally. There is no coordination on Group level regarding those programs.

¹⁾ The LTI frequency is calculated per one million working hours and includes all injuries that have caused one day's absence or more from work after the day of the injury. To calculate the injury rate (IR) and lost day rate according to GRI, divide the frequency/rate stated above by five. The number of days' absence for contretors is not reported as there are no reliable data available. The sick leave rate is the total number of hours' absence due to injury or disease divided by the total number of scheduled working hours. Boliden currently lacks the ability to monitor sick leave for contractors working for several clients (other than Boliden).

Examples on training provided by Boliden Group HR:

 Young Professionals Program: Onboarding and personal development program for all young academics in Boliden. 24 participants started the program in 2020 (356 participants since the program started in 2005). Due to Covid-19 the final parts of the program were postponed and will continue in $2021\,$ if the situation permits traveling and physical meetings.

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- High Potentials Program: Assessment program for future top leaders in Boliden. (73 participants since the program started in 2008).
- Senior Middle Management Program: Improve leadership skills among Boliden's senior middle management leaders. (112 participants since program start in 2016).
- Women at Work: Development program for all female employees in Boliden to improve their career opportunities. Due to the Covid-19 situation, the program planned for 2020 is postponed until 2021 (222 participants since the program started in 2010).

404-3 Percentage of employees receiving regular performance and career development reviews

Boliden's target is for 100% of its employees to receive an annual performance appraisal and career-development review.

During 2020, Boliden started to implement a new competence and personnel-planning system in order to develop and integrate new personnel, and to develop and retain existing employees. The tool is going to be used across the Group in 2021 to improve the development of performance management, competence planning, and succession planning. One of the purposes of the new system is to improve the quality of follow-up work on performance reviews and to expand the potential for such work, as the tool enables managers and employees to document development

reviews and to follow up on goals and development plans. It also highlights their competence and expresses their desire to advance.

Percentage of employees receiving regular performance and career development reviews by gender and employee category

	2018	2019	2020
	2010	2013	2020
Group Total	81	77	78
Men	80	74	77
Women	86	88	82
White-collar	83	85	80
Blue -collar	75	68	72

New HR masterdata system

At the end of 2019 a decision was taken by the Boliden Board of Directors to invest in a new common HR masterdata system for the whole Boliden Group. The purpose was to enable the secure, shared and efficient management of data regarding organization, processes, employees and their competences development. The system enables higher quality measuring, follow-up and analysis as well as increased predictability and strategic planning in compliance with GDPR. It is also a part of Boliden's general digitalization process

In February 2020, phase one of the implementation of the system started, with three focus areas: Data and Integration, Standardization of Processes and Change Management. In the beginning of 2021, the work within phase 1 will be launched and a governance organization will commence to support the local Business Units in the new way of working. In 2021, Phase 2 of the implementation will start with the focus areas Recruitment, Training and Job architecture.

SUSTAINABILITY TOPIC: DIVERSITY AND EQUAL OPPORTUNITY

405-1 Diversity of governance bodies and employees

Diversity contributes to sustainability, dynamics, creativity and better results. Boliden strives to attract employees with different backgrounds, age and experience. One challenge is to attract female employees into a traditionally male-dominated industry. Boliden's goal was for at least 20% of all employees to be women by the end of 2020, calculated as FTE. In 2020, the resulting portion was 19.8% (19.2). The proportion of women at management level, among Boliden's so-called top-100, was 26% (28). 3 (3) of Boliden's 11 mines and smelters are led by women.

Percentage of individuals within the organization's governance bodies in the diversity categories, gender and age group

		2018			2019			2020		
	Board of Directors	Group Manage- ment	Super- visors	Board of Directors	Group Manage- ment	Super- visors	Board of Directors	Group Manage- ment	Super- visors	
Total number	10	5	599	10	5	648	10	5	677	
Women, %	50	20	14	50	20	17	50	20	17	
Men, %	50	80	86	50	80	83	50	80	83	
<30 years, %	0	0	4	0	0	5	0	0	4	
30-50 years, %	20	0	59	20	20	61	20	20	59	
>50 years, %	80	100	37	80	80	34	80	80	37	

Percentage of total number of employees per employee category and diversity categories, gender and age

Employees	2018	2019	2020
Total number	6,029	6,207	6,386
Blue-collar, %	65	65	65
White-collar, %	35	35	35
Women, %	19	20	21
Men, %	81	80	79
<30 years, %	16	16	16
30–50 years, %	51	52	52
>50 years, %	33	32	32

Boliden does have employees who come from minority groups, but does not register this out of concern for individual privacy.

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SUSTAINABILITY TOPIC: NON-DISCRIMINATION

406-1 Incidents of discrimination and corrective actions taken

Boliden's Diversity Policy states that if an incident of discrimination should occur, the employee affected shall initially raise the matter with their manager and then with the company's HR function, or through the whistleblower reporting system (accessible via the intranet and Boliden's external website).

One incident of discrimination was reported through the whistleblower channel and three incidents were reported through other formal grievance mechanisms during 2020. All four incidents were resolved during the reporting period, and three of the incidents resulted in corrective actions during the reporting period.

SUSTAINABILITY TOPIC: RIGHTS OF INDIGENOUS PEOPLE

411–1 Incidents of violations involving rights of indigenous people

A successful business has to be based on local support and understanding. Boliden has a long history in the areas in which it operates. The strategy is to act responsibly and to build trust with local stakeholders to get the social license to continue operations. With an open dialogue and cooperation with local communities, the company is able to find solutions that are beneficial to all parties and mitigate negative consequences. Since different interests overlap, Boliden has to respect different opinions, while working to avoid and overcome significant disputes.

Operation in or adjacent to indigenous peoples' territories

In the northern parts of Norway, Sweden and Finland the Sami, as an indigenous people, have a traditional land use right over large areas – Sapmi. All types of operations that use land in these areas – from exploration to rehabilitation – are, accordingly, places where Boliden's interests overlap with those of the Sami. Boliden conducts exploration work in these areas.

Three of Boliden's mining areas, the Boliden Area, the Aitik mine, and the Kevitsa mine (27% of Boliden's Mines), are also located in Sapmi. Consultations are continuous and ongoing with the affected Sami villages regarding exploration, operations, project development and rehabilitation. Agreements on cooperation, development and compensation are generally in place between Boliden and the Sami villages.

Examples of development projects together with the Sami:

• Consequences for the Sami and reindeer from mining projects are difficult to evaluate since there is very limited research in

- this field. Boliden has therefore initiated a project MINEDEER to find better ways to evaluate reindeer disturbance zones. This project is financed by the Swedish Mining Innovation (SIP-SMI) and is conducted together with three different Sami villages at Boliden sites and also together with researchers from the Swedish University of Agricultural Sciences.
- Re-establishment of lichens Pilot tests have been set up in Boliden and Aitik in partnership with the Swedish University of Agricultural Sciences.

The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities, and indigenous peoples.

Different types of grievance mechanisms are used in different stages from exploration throughout project development, permitting processes and long-term operations. Before any exploration is conducted, a working plan is sent to all stakeholders with information about the date and type of work being planned, and a description of any consequences. Details of the contact at Boliden and at the supervising authority Bergsstaten are provided in the plan to facilitate contacts and changes to the planned work. During project development and permitting, hearings are held with stakeholders to enable feedback directly to Boliden or the authorities. Also, annual meetings are usually held with all stakeholders during operations, as well as during the long-term rehabilitation planning process. The extent of hearings and meetings is planned based on need, and may consist of anything from single meetings to extensive citizen dialogues.

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SUSTAINABILITY TOPIC: LOCAL COMMUNITIES

413–1 Operations with local community engagement, impact assessments, and development programs

Good social relations are important to Boliden, both for the current business operations and for its new projects - everything from prospecting to finishing. Boliden maintains continuous dialogue with stakeholders and conducts several consultation processes each year where the public and various business owners are invited to attend and submit their views. Ensuring that the consultation process works well is essential for designing activities and projects in the best possible way and giving everyone the opportunity to express their views. As part of this, Boliden is working on developing the process and introducing new ways of working such as a careful analysis of those involved, and the consultations are then adapted to best capture individual groups' views and ideas. Active and interactive ways of working also capture the attention of participants in a better way. The civil dialogue regarding Gillervattnet and the Boliden Area's original breakthrough is one example of a developed consultation process.

All (100 percentage) of Boliden's operations have implemented local community engagement, impact assessments, and/or development programs. In addition to consultation processes, constant dialogue and interaction with stakeholders and the local community take place through different types of activities. These may involve event weeks, with visits from schools, business and municipalities, collaboration and sponsorship of local associations and sports teams, cultural activities and cooperation with hometown associations, etc. In 2020, Boliden's units sponsored 286 (413) local activities to the tune of approximately SEK 11.4 (10.5) m. Due to Covid-19 not as many activities compared to previous year was possible to carry out.

Keeping the interests of the local community high on the agenda when planning and executing mining and smelting operations is vital to maintaining good relations with the employees, their families, and their neighbors, and is an essential part of being a responsible corporate citizen. Failing to maintain these good relations would be a threat to Boliden's operations, as it would hamper the ability to attract a competent workforce and jeopardize any potential expansion.

Stakeholder analysis and social impact assessments

Stakeholder identification is also something that Boliden has identified as key to getting the Social License to Operate. Stakeholders are identified during initial exploration and contacted through telephone calls, working plans for exploration or public meetings if the company enters an area of low experience of exploration and mining. Stakeholder management is also a central part of project development, application processes for permits, as well as on an ongoing basis during operation and rehabilitation into the long-term phase. Stakeholders are contacted and involved in different ways. Social impact assessments have been completed in several projects. Boliden has developed a toolbox for different types of stakeholder involvement.

413–2 Operations with significant actual and potential negative impact on local communities

Boliden's operations with significant actual and potential negative impacts on local communities are located in Sweden, Finland, Norway and Ireland. Measurements are carried out continuously to monitor any impact on the local community's environment in the form of dust, noise, vibrations and shockwaves from blasting, for example. Methods have also been put in place for assessing impact, e.g. through changes in traffic, the landscape, water access and land access.

Social-impact assessments are made in conjunction with the closure of an operation, in order to assess any consequences to the community and in an effort to mitigate, as far as possible, any negative effects.

The Group's operations do not only have a substantial impact on job opportunities but also affect supplier purchasing power elsewhere in the local business sector, which, in the long term, impacts the development of community service sectors. Boliden estimates that for each Boliden employee, another three to five local job opportunities are, on average, created.

SUSTAINABILITY TOPIC: BUSINESS PARTNERS SOCIAL AND ENVIRONMENTAL ASSESSMENT

102-10 & 308-1 & 414-1 New suppliers screened using social criteria

Boliden's significant ESG risks in the supply chain are identified in its raw materials supply. There were no significant changes to the organization or its supply chain in 2020. In total, 88% of all new raw materials suppliers (new = no previous transaction

with Boliden) and customers managed by Boliden Smelters were evaluated during 2020.

In the fields of logistics, products and services 62% of new contracted suppliers (new = no previous contract with Boliden) with a spend over SEK 1 million were evaluated during December 2019 to November 2020.

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SUSTAINABILITY TOPIC: RESETTLEMENT AND CLOSURE PLANNING

MM9 Sites where resettlements took place

The closest settlements to the Aitik mine are the villages Sakajärvi and Liikavaara, located at 1.5 and 3km respectively to the north east of the Aitik pit. The Laurajärvi village is located about 5km east of the mining area.

The Liikavaara expansion project, which is currently undergoing a pre-feasibility study, is located close to the village of Liikavaara and about 1.5km from both Sakajärvi and Laurajärvi. The Liikavaara project forms part of Aitik's strategic plan.

Evaluations of safety zones and disturbance zones for vibrations, falling rocks, air impacts, dust and noise have been conducted. The studies concluded that the housing and living environments in Sakajärvi, Liikavaara and parts of Laurajärvi are unacceptable due to the operations in Aitik and the planned Liikavaara project. As a result, around 50 permanent residents of the villages will have to move.

Boliden has held dialogues with the people living in the villages and compensation has been offered with two options presented. The first option entails Boliden offering a replacement plot and a new house with similar functionality, while the second entails Boliden purchasing the property, valuing it as if the house was located near to Gällivare, with a 25% bonus. The target is to reach an agreement with all the affected residents in order for them to feel they have been compensated in full financially. During 2020, 85 % of the residents have reached an agreement. Negotiations are still ongoing with eight permanent residents and two owners of cottages.

MM10 Number and percentage of operations with closure

All of Boliden's present operations, both mines and smelters, have environmental closure plans, which have been approved by the authorities. In 2020, Boliden worked actively on the reclamation of former mine sites. At the end of 2020, a total of SEK 5,134 (5,086) m was set aside for the reclamation of mining areas and smelters. Additions to existing provisions during the reporting year are primarily attributable to the new environmental permit in Aitik, and the effects of the application of the EU Water Framework Directive on the Boliden units in Finland.

Emergency Preparedness - Sector-specific disclosure

Communities adjacent to mining operations may be concerned about the hazards and risks that the operations generate. For Boliden, effective emergency management is essential to protect people, the environment, and its operations. Every Business Unit has its own local emergency management plan, including routines for crisis management, which are reviewed and practiced regularly. Boliden's emergency preparedness procedures have worked satisfactorily and led to the minimization of damage to people, property, and the environment.

SUSTAINABILITY TOPIC: SOCIO-ECONOMIC COMPLIANCE

419-1 In the social and economic area

Socio-economic compliance is a precondition for successful mining and smelting operations. Legal requirements shall always

No significant fines or non-monetary sanctions regarding social performance have come to Boliden's attention during 2020. Legislative compliance is important to Boliden since it ensures its business legitimacy.

For the monetary value of significant fines for non-compliance with environmental laws and regulations, see 307-1.

SUSTAINABILITY TOPIC: PUBLIC POLICY

102-13 Membership of associations

Boliden participates in industry organizations that are able to play an important part in the sustainability dialogue. These organizations include: The International Zinc Association (IZA), The International Copper Association (ICA), The European Copper Institute (ECI), The Scandinavian Copper Development Association, The International Lead Association (ILA), The Nickel Institute, The European Precious Metals Federation (EPMF), The Selenium-Tellurium Association, The Galvanizers Associations of Germany/France and the UK, Zinc Info Norden, The International Wrought Copper Council, The European Chemical Industry Council (Cefic), The European Electronics Recyclers Association (EERA), The Bureau of International Recycling, Återvinningsindustrierna, Jernkontoret, The Association of Finnish Steel and Metal, SveMin, FinMin, Euromines and Eurometaux.

415-1 Political contributions

No form of bribery or corruption is acceptable, and conflicts of interest shall be reported and addressed. Boliden's anti-corruption program applies to individuals acting in Boliden's name or on Boliden's behalf including employees, management, Board Members, consultants and agents of the Boliden Group. The anti-corruption policy also applies to companies and joint ventures in which Boliden has an interest, and to third parties who act for or on behalf of Boliden. The program states that it is always forbidden to give or accept political contributions or charity donations.

Introduction

SOCIAL - PART OF UN GLOBAL COMPACT

Principle 1 (GRI 412): Boliden supports and respects the protection of internationally proclaimed human rights

Boliden's own operations are located in countries where the risks of human rights violations are generally low. There are, however, material topics to consider, such as non-discrimination, indigenous rights, and supply chain risks. Boliden has a business partner management program that focuses on human-rights risks in the supply chain. The ESG business partner evaluations specifically focuses on freedom of association & collective bargaining, child labor, forced and compulsory labor, among other topics.

There is a Human Rights Grievance Mechanism that covers Boliden's own operations, as well as those of its suppliers. Please see the General Disclosure and Management Approach part of this report to learn about how Boliden manages performance within these aspects.

Boliden Commercial is also included on The London Bullion Market Association's (LBMA) list of recommended gold producers, the Good Delivery List, which requires the company to comply with a set of standards and to have this compliance certified by the LBMA. This guidance aims "to help companies respect human rights 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 a set of ethical criteria.

More information can be found in GRI disclosure 308-1 and 414-1.

Principle 2 (GRI 412): Boliden's code of conduct is designed to support the UN Declaration on Human Rights and ILO fundamental conventions

Boliden adheres to the UN Declaration of Human Rights and the ILO's fundamental conventions. If human rights are violated in connection with Boliden's business, any stakeholder is welcome to contact either the local managers or any of the company functions by a variety of channels; e.g. phone, e-mail, and written correspondence. Anonymous reporting can be done through Boliden's whistleblower function.

LABOUR - PART OF THE TEN PRINCIPLES OF UN GLOBAL IMPACT

Principle 3 (GRI 407): Boliden should uphold the freedom of association and the effective recognition of the right to collective bargaining

All of Boliden's employees are covered by collective bargaining agreements.

More information can be found in GRI disclosure 103-2&3.

Principle 4 (GRI 409): Boliden should uphold the elimination of all forms of forced and compulsory labor

Under no circumstances may forced and compulsory labor be employed or used in Boliden's operations, directly or indirectly through business partners.

More information can be found in GRI disclosure 103-2&3.

Principle 5 (GRI 408): Boliden should uphold the effective abolition of child labor

Under no circumstances may child labor be employed or used in Boliden's operations, directly or indirectly through business partners. All business partners must comply with this by agreeing to Boliden's Business Partner Code of Conduct. Any business partner may be subject to visits or third-party audits at the business partner sites to ensure compliance.

More information can be found in GRI disclosure 103-2&3.

Principle 6: Boliden should uphold the elimination of discrimination in respect of employment and occupation

Boliden does not accept any form of harassment, discrimination or other behavior that may be regarded by colleagues or close relatives as abusive or degrading. Boliden and its employees shall refrain from all forms of discrimination and harassment on the basis of gender, ethnicity, age, disability, religion, sexual orientation, or any other factor.

More information can be found in GRI disclosure 103-2&3.

Content Indexes

CASE 3.

The Safety Savvy program - training of informal leaders

Economic

A strong safety culture is characterized by a value-driven leadership that trusts employees' ability to act in relation to risk, health and safety.

In late 2019, the Boliden Tara Mines sent 10 volunteers from the operation to train as Safety Savvy Ambassadors. The week long training was provided by RMS Switzerland and it prepared 10 participants, most of whom had no previous presenting experience, to deliver the prescribed Safety Savvy Training on-site at the Tara Mine, Ireland. Since then, the Safety Savvy Trainers have successfully delivered weekly group training to employees from all areas of Tara. 'Engaging' is the

term most used in the course evaluations being returned by the participants. Participants are also responding positively to the fact that training is being delivered by their peers, who are familiar with the operation on the ground. Safety Savvy training format is behavioral based and relates to people's home lives as much as their work life. It identifies some of the major risk factors that we all encounter in our daily lives and provides tools to protect ourselves. Similar training of informal leaders have also been held on Boliden units in Norway and Sweden.



Safety Savvy Ambassadors from Boliden the Tara mine

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GRI CONTENT INDEX

General Dis	closures	Omissions	Reference
GRI 100: (General Disclosures ASR Annual and Sustainability report (SI Sustainability Inde	ех
Organizatio	nal profile		
102-1	Name of the organization		Boliden AB (publ)
102-2	Activities, brands, products, and services		ASR 10-17
102-3	Location of headquarters		SI back cover
102-4	Location of operations		ASR 16-17
102-5	Ownership and legal form		ASR 58-64, 90
102-6	Markets served		ASR 10-13, 48-51
102-7	Scale of the organization		ASR 110-116, SI 41-42
102-8	Information on employees and other workers		ASR 78-79 Note 5, SI 43
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102-11	Precautionary Principle or approach		ASR 54-57, SI 11
102-12	External initiatives		ASR 5, 37, SI 6
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102-14-15	CEO statement (Statement from senior decision-maker)		ASR 2-3
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102-16-17	Values, principles, standards, and norms of behavior		ASR 2-3, 6-7, SI 39
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102-18-39	Governance structure		ASR 58-67, SI 6-11
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102-40	List of stakeholder groups		SI 42
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102-43	Approach to stakeholder engagement		SI 42
102-44	Key topics and concerns raised		SI 9
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102-45	Entities included in the consolidated financial statements		ASR 86 Note 16
102-46	Defining report content and topic boundaries		SI 6
102-47	List of sustainability topics		SI 8
102-48	Restatement of information		Presented in connection to the data
102-49	Changes in reporting		Kylylahtis mine closed in November
102-50	Reporting period		Calendar year
102-51	Date of most recent report		March 2020
102-52	Reporting cycle		Annually
102-53	Contact point for questions regarding the report		SI back cover
102-54	Claims of reporting in accordance with the GRI Standards		SI 2,4
102-55	GRI content index		SI 54-57
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	Vlanagement Approach		
			SI 6.9
GRI 103: I	Vianagement Approach Explanation of the Sustainability topic and its boundary The management approach and its components		SI 6,9 SI 10

Social

GBI 200-	ures	Omissions	Reference
01112001	Economic standard series		
Manageme	ent approach - Economic		
201-103	Management approach – Economic		SI 13-14
Economic p	performance		
201-1	Direct economic value generated and distributed		ASR 1, SI 14
201-2	Financial implications and other risks and opportunities for the organization's activities due to climate change		ASR 2-5, 35, 54, SI 14-15
201-3	Defined benefit plan obligations and other retirement plans		ASR 62, 78-79, 99 Note 5
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202-2	Proportion of senior management hired from the local community		SI 16
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203-2	Significant indirect economic impacts, including the extent of impacts		SI 16
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205-1	Operations assessed for risks related to corruption		ASR 36, SI 17
205-2	Communication and training on anti-corruption policies and procedures		ASR 36, SI 17
205-3	Confirmed incidents of corruption and actions taken		ASR 36, SI 17
	etitive behavior		
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices		ASR 34, SI 17
GRI 300:	Environmental standard series		
	ent approach – Environment		
301-103	Management approach – Environment		SI 19-20
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301-1	Materials used by weight or volume		SI 20
301-2	Recycled input Materials used		SI 20
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302-1	Energy consumption within the organization		
			ASR 34, 110, SI 22
302-3	Energy intensity		ASR 34, 110, SI 22 ASR 34, SI 22
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ESG Diclos	sures	Omissions	Reference
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306-2	Waste by type and disposal method		SI 34-35
306-3	Significant spills		SI 35
306-4	Transport of hazardous waste		SI 35
MM3	Total amount of overburden, rock, tailings, etc.		SI 34-35
Environme	ental Compliance		
307-1	Non-compliance with environmental laws and regulations		SI 36
Rusiness I	Partner Social and Environmental Assessment		
308-1	New suppliers screened using environmental criteria		ASR 36, SI 36, 50
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	ent approach - Social		
401-103	Management approach – Social		SI 40-41
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401-2	Benefits provided to full-time employees that are not provided to temporary		SI 44
	or part-time employees		
MM4	Strikes and lock-outs exceeding one week		SI 45
	nal Health and Safety (GRI indicators are from 2018)		
403-1	Occupational health and safety management system		SI 45
403-2	Hazard identification, risk assessment, and incident investigation		SI 45
403-3	Occupational health services		SI 45
403-4	Worker participation, consultation, and communication on occupational health and safety		SI 45
403-5	Worker training on occupational health and safety		SI 46
403-6	Promotion of worker health		SI 46
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships		SI 46
403-8	Workers covered by an occupational health and safety management system		SI 46
403-9	Work-related injuries		SI 46-47
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404-1	Average hours of training per year per employee		SI 47
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405-1	Diversity of governance bodies and employees		SI 48-49
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406-1	Incidents of discrimination and corrective actions taken		SI 49
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411-1	Incidents of violations involving rights of indigenous people		SI 49
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413-1	Operations with local community engagement, impact assessments, and development programs		SI 50
413-2	Operations with significant actual and potential negative impact on local communities		SI 50
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MM9	Sites where resettlements took place		SI 51
MM10	Number and percentage of operations with closure plans		SI 51
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415-1 Political contributions			ASR 63, SI 51	
Socioeconomic Compliance				
419-1 Non-compliance with laws and regulations in the social and economic area			ASR 58-64, 99, SI 51	

THE TEN PRINCIPLES OF UN GLOBAL COMPACT CONTENT INDEX

Principles	Reference
Human Rights	
Principle 1: Business should support and respect the protection of internationally proclaimed human rights; and	ASR 36, SI 52
Principle 2: make sure that they are not complicit in human rights abuses.	ASR 36, SI 52
Labour	
Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	ASR 36, SI 52
Principle 4: the elimination of all forms of forced and compulsory labour;	ASR 36, SI 52
Principle 5: the effective abolition of child labour, and	ASR 36, SI 52
Principle 6: the elimination of discrimination in respect of employment and occupation.	ASR 36, SI 52
Environment	
Principle 7: Business should support a precautionary approach to environmental challenges,	ASR 33, SI 36
Principle 8: undertake initiatives to promote greater environmental responsibility, and	ASR 7, 33, SI 36
Principle 9: encourage the development and diffusion of environmentally friendly technologies.	ASR 7, 33, SI 36
Anti-corruption	
Principle 10: Business should work against corruption in all its forms, including extortion and bribery.	ASR 36, 58-64, SI 17

Note: The assessment, policies and goals of the UN Global Compact principles are reflected under the GRI Standard disclosures for each Standard Performance and Management approach (103-2, 103-3, 201-103, 301-103, 401-103). Separate comments on the ten principles are provided after each GRI standard series.

Social

Environment

BOLIDEN'S CLIMATE DISCLOSURE USING TCFD STRUCTURE

Principles	Reference
Governance	
Frequency by which the board and/or board committees are informed about climate-related risks	ASR 61-63
Board and/or board committees consider climate-related issues when reviewing and guiding strategy	SI 23
Board monitors and oversees progress against goals and targets for addressing climate-related issues	ASR 63
Description provided of the processes by which the board is informed about climate-related issues disclosed	ASR 62
Organization has assigned climate-related responsibilities to management-level positions or committees	ASR 63, SI 23
Description provided of the associated organizational structure(s)	SI 23
Description provided of how management monitors climate-related issues	SI 23
Strategy	
Assessment of potential climate-related impacts on business conducted	ASR 4-7, SI 27
Description provided of what they consider to be the relevant short-, medium-, and long-term time horizons	ASR 4-7, SI 25-26
Description provided of the specific climate-related issues potentially arising in each time horizon	ASR 54, SI 24-25
Company discloses information on the potential impacts of climate-related risks and opportunities	ASR 4-7, 54, SI 24-27
Description provided of how the organization's strategies might be affected by climate-related risks and opportunities	ASR 4-7, 54,SI 23-24
Climate-related scenario analysis conducted by the company	SI 25-27
Company discloses how resilient the organization's strategies are to climate-related risks and opportunities	: ASR 4-7, 35. SI 24
Risk management	
Processes for identifying climate-related risks defined, covering potential size and scope of identified climate-related risks	ASR 35, 54, SI 7-9, 24-27
Description provided of processes used to manage climate-related transition risks (policy and legal, technology, market, reputation)	SI 24
Description provided of processes used to manage climate-related physical risks (acute and/or chronic)	SI 24-26
Description provided of processes used to manage climate-related opportunities (resource efficiency, energy source, products & services, markets, resilience)	SI 27
Processes for managing climate-related risks defined	SI 27-29
Processes for identifying, assessing, and managing climate-related risks are integrated into overall enterprise risk management framework	SI 7-9, 27-29
Climate-related risks and opportunities are integrated into current decision making and strategy formulation	ASR 1-6,SI 27-29
Metrics and targets	
Company discloses GHG emissions quantitative metrics used to measure & manage climate-related risks	ASR 9, 110-116, SI 27-29
& opportunities	
Company discloses quantitative metrics (other than GHG emissions) used to measure & manage climate-related risks & opportunities	SI 27-29
Company discloses quantitative information regarding the financial implications on its metrics used to measure & manage climate-related risks & opportunities	SI 27-29
Quantitative disclosures relate to climate-related opportunities, such as revenue from products and services designed for a lower-carbon economy	SI 27-29
Performance metrics are incorporated into remuneration policies	SI 44, ASR 71, note 5
Company defines an internal price of carbon, which is factored into business decision-making	ASR 81, Note 13, SI 14-15
Industry-specific GHG efficiency ratios disclosed	SI 27-29
GHG targets in place	ASR 9, SI 18
Climate change non-GHG targets in place, covering: water, energy, land use, and waste management where relevant and applicable	ASR 9, SI 18, 36

Auditor's Limited Assurance Report on Boliden AB's Sustainability Report

This is the translation of the auditor's report in Swedish.

To Boliden AB, corporate identity number 556051-4142

We have been engaged by the Board of Directors of Boliden AB to undertake a limited assurance engagement of the Boliden AB Sustainability Report for the year 2020. The Company has defined the scope of the Sustainability Report on page 54–58.

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 2 in the Sustainability Report, 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 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 ISQC 1 (International Standard on Quality Control) and accordingly maintains a comprehensive system of quality control including documented policies and 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 12 February 2021

Deloitte AB

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