NEW BOLIDEN

Sustainability Index 2021

GUIDED BY CARE, COURAGE AND RESPONSIBILITY

SUSTAINABILITY INDEX 2021

CONTENT

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ABOUT THIS SUSTAINABILITY INDEX

Boliden has published information on its sustainability approach and performance since 2005. This Sustainability Index is prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core Option. It also constitutes Boliden's Communication on Progress (COP) and therefore contains references to Boliden's performance in relation to the UN Global Compact's ten principles; the Task Force on Climate-related Financial Disclosures (TCFD, supported by Boliden since 2019); the Sustainability Accounting Standards Board (SASB, supported by Boliden since 2021) and the International Council on Mining and Metals (ICMM, where Boliden has been a member since 2021) principles.

The 2021 Sustainability Index contains references to the Boliden 2021 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 2021.

CATEGORIES

Governance

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

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Economic

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

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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, except for environmental performance data, covers data from Boliden's ten 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 ten 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 Kylylahti mine was closed in November 2020 and reclamation work is ongoing. Boliden is expanding the zinc smelter in Odda, southern Norway. The expansion will enable Odda to almost double its zinc production and at the same time reduce carbon dioxide intensity.

Report content

Boliden's Sustainability Index has the ambition to provide Boliden's stakeholders with relevant information about the company's economic, environmental and social impacts. Boliden's sustainability topics are presented in this report. These include topics directly connected to how Boliden conducts its operations, as well as topics that impact stakeholders and thereby Boliden's social 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 alignment 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 Index 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 five mining units and five smelter units 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 ensure that different perspectives are considered.

Sustainability reporting

Boliden uses a risk-based sustainability approach to disclose environmental, social and governance information to its stakeholders. Boliden is assessed periodically on environmental, social, and governance criteria by several responsible investment organizations and analysts. Boliden strives to be as transparent as possible, partaking in ranking and ratings, and sharing information that is relevant to the business. Boliden also conducts an independent assurance of its sustainability performance each year, following the ICMM guidance on assuring and verifying the ICMM membership requirements.

INTRODUCTION

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

The Content Indexes 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 the economic, environmental and social aspects of business performance that enables stakeholders to compare the performance of different companies. Boliden's Sustainability Index 2021 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 anti-corruption. Boliden's Sustainability Index 2021 includes its Communication on Progress (COP) with references to the company'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.

4. THE INTERNATIONAL COUNCIL ON MINING AND METALS' (ICMM) MINING PRINCIPLES

In 2021, Boliden became a member of the ICMM. The company's performance related to ICMM requirements is disclosed in this Sustainability Index.

5. THE SUSTAINABILITY ACCOUNTING STANDARDS BOARD (SASB)

From 2021, Boliden has reported according to the SASB, specifically their Metals & Mining standard.

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

Sustainability Content Indexes
References to each reporting initiative can be found in the Content Indexes.
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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

At Boliden, "sustainability topics" are issues that reflect Boliden's economic, social and environmental impact, as well as issues that can affect assessments and decisions made by its stakeholders.

Boliden has identified sustainability topics that can affect its business model – both positively and negatively – by monitoring and assessing 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 are approved by Group Management.

Identifying sustainability topics

Sustainability topics for Boliden are based on Boliden's business model, taking into consideration risks and opportunities identified by 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 and Forest Stewardship Council (FSC® COC-000122)
- OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-affected and High-risk Areas
- GRI Standards (Global Reporting Initiative)
- UN Sustainable Development Goals (SDGs)
- UN Global Compact
- ICMM Mining principles

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.

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 stakeholder group is consulted in order to identify significant sustainability topics for Boliden.

Different stakeholders have different views and expectations of Boliden. The ways 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 Boliden's sustainability topics.

Boliden's stakeholder groups	Sustainability topics	Dialogue and activities
Employees	– Health and safety – Development plans – Compensation and benefits – Climate	– Employee survey – Worker councils – Yearly appraisals – Climate 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 – Citizen dialogue and 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 – Dialogue with banks – Low-carbon metals ESG business partner assessment
Capital markets	– Financial performance – Risks – Climate – Business ethics	– Investor meetings – Investor Relations days – TCFD reporting – ESG rating
Suppliers	– Business ethics – Human rights – Compliance	– ESG business partner assessments – Site visits – Audits
Environment	– Emissions to air – Discharges 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 (SDGs)

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:

SDG 8 – 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 – Boliden's operations produce metals efficiently and with a 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 the low-carbon footprint of 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 managed in order to create trust, enable strategy or to create value.**

IMPACT	TOPIC	DIRECTIONS	UN SDG
ECONOMIC	**Financial performance**	Contribute to long-term economic growth by providing metals that are important for society's sustainable development. Pay the right amount of tax at the right time.	**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**
	Capital market	Boliden ensures its access to financing and sustainable loans. Be the preferred metal and mining investment.	**8.4**
	Indirect economic impacts	Contribute to job creation indirectly or induced through subcontractors, suppliers or the effect of employee expenditure.	**8.3**
	Anti-corruption & anti-competitive behavior	Promote and monitor compliance throughout the company by following the Code of Conduct, and Boliden's Anti-Bribery and Corruption Program. Contribute to free and fair competition.	**16.5**
	Strategic partnerships	Create a positive financial, environmental and social impact through Boliden's business relations.	**17.16, 17.17**
	Business partner Environmental, Social and Governance (ESG) assessment	Promote transparent business partner governance. Expect business partners to follow Boliden's Business Partner Code of Conduct.	**12.2, 12.4, 12.5, 16.2, 16.5**
	Legal framework & compliance	Always meet permit values and legal requirements. No serious environmental incidents.	**16.2, 16.4, 17.17**
ENVIRONMENTAL	**Circular economy & resource usage**	Contribute to the circular economy through recycling and by maximizing metal recovery from the available raw materials. Invest in and promote the development of new products and eliminate waste.	**8.2, 8.4, 9.4, 12.1, 12.2, 12.5-12.8**
	Extractive waste & slag	Minimize waste. Tailing facilities to comply with the global industry standard on tailings management.	**12.5**
	Energy & Climate	Implement and maintain energy management systems to achieve energy efficiency and conserve energy. 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.	**7.3, 13.2, 13.3**
	Water	Reduce the consumption of fresh water and the discharge of used water. Maintain water management plans. Reduce discharges of metals to water.	**12.2**
	Biodiversity	Contribute to increased biodiversity by 2030 in all regions where Boliden operates.	**15.5**
	Air pollution emissions	Reduce emissions to air through improved process efficiency.	**14.3**
SOCIAL	**Talent attraction & retention**	Provide an attractive workplace. Facilitate career and skill development. Foster workforce diversity that reflects the local community.	**5.1, 8.5, 8.8**
	Occupational health & safety	Provide a safe and healthy workplace.	**8.8**
	Non-discrimination	Zero tolerance for 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**
	Sustainable business growth & stakeholder relations	Maintain good community relations and the effective management of Boliden's operations. Ensure social license to operate.	**11.3, 11.a**
	Resettlement & 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 indigenous people in order to mitigate the impacts of Boliden's mining activities on local people and the environment.	**10.2**

BOLIDEN'S SUSTAINABILITY TOPICS AND DIRECTIONS

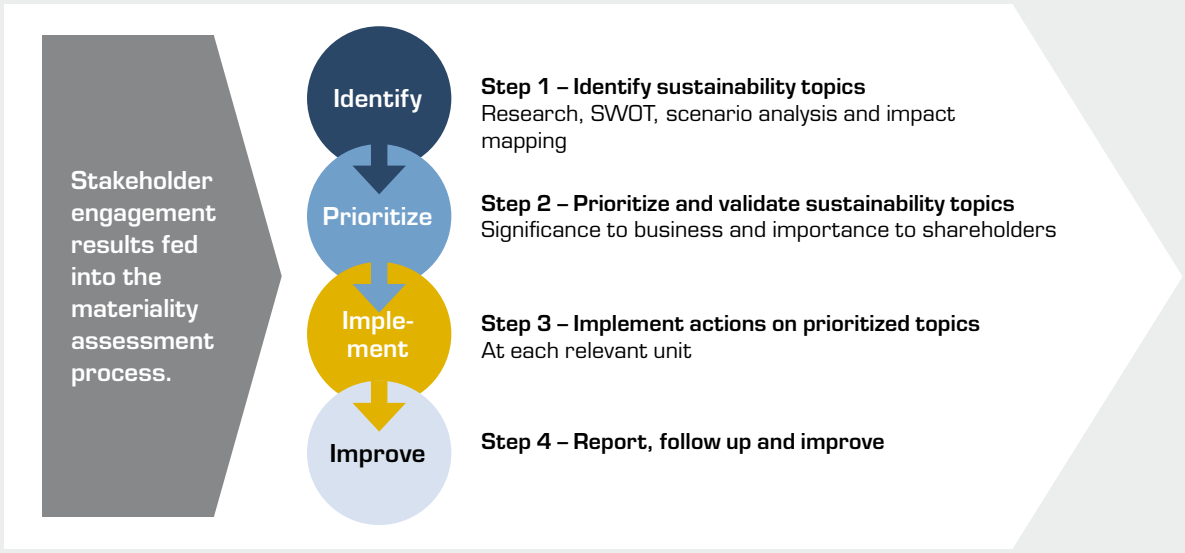
103–1 Identifying significant sustainability topics

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 goals.

Materiality assessment process



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 2021 are grouped into three areas.

The topics prioritized 2021 by Boliden

The significant sustainability areas identified in Boliden's materiality analysis

EVALUATION OF BOLIDEN'S SUSTAINABILITY TOPICS IN 2021

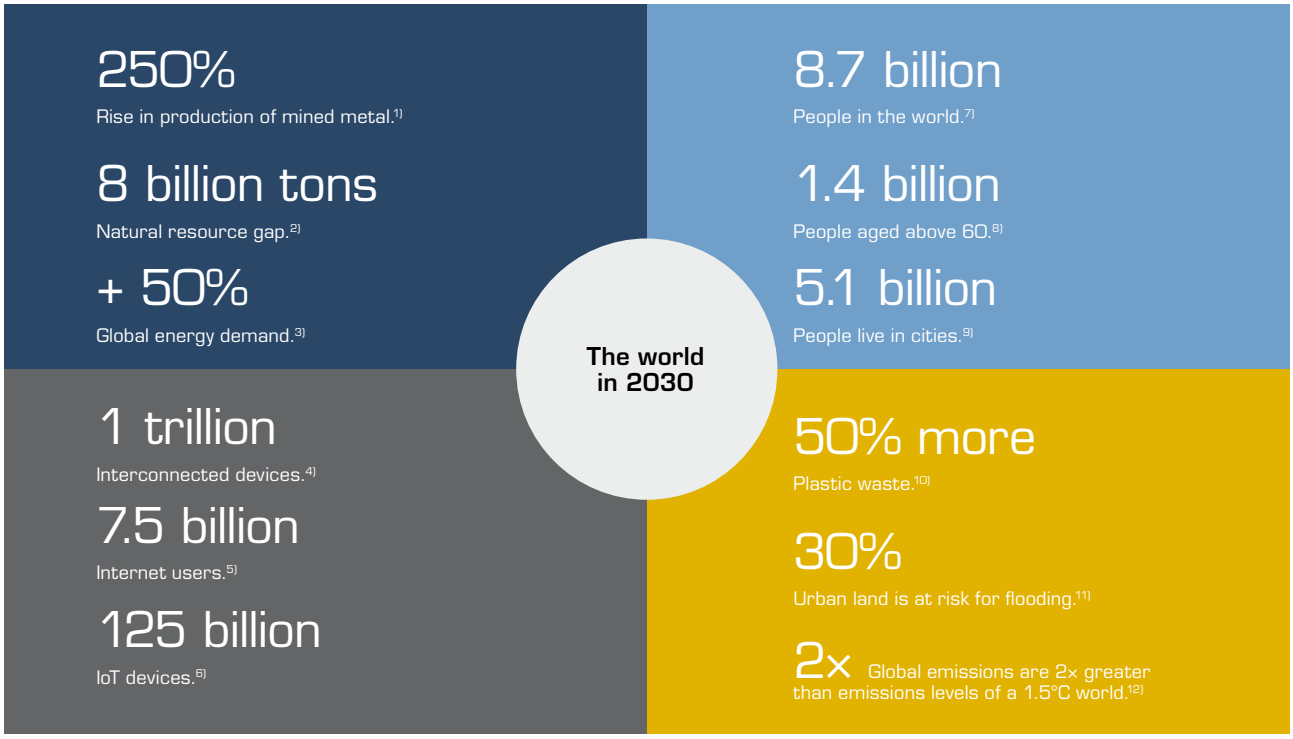
Boliden took its stakeholder and materiality assessments to the next level in 2021 to further validate its sustainability topics. The assessment was done with a future focus.

Future Focus 2030

In 2021, Boliden assessed its sustainability topics with input from a Future Focus report. The report projected how the world might look in the year 2030 and what this will mean for Boliden's business. It predicted various indicators based around four drivers that are expected to shape the world in 2030:

- (B)reaching limits to growth
- Increasingly inter-connected world
- Shifting demographics
- Changing natural environments

How the world might be in 2030



[1] Accenture, 2020
[2] World Economic Forum & Accenture, 2018
[3] Accenture, 2020
[4] WEF & Accenture, 2018
[5] Statista, 2020
[6] IHS Markit, 2017 & 2020
[7] Yale University, 2020
[8] World Health Organization, 2019
[9] WEF & Statista, 2020
[10] Alliance to End Plastic Waste, 2020
[11] United Nations Development Programme, 2018
[12] NGC, 2019

Based on how these drivers are expected to impact the landscape for the metals and mining industry toward 2030, three critical themes were chosen:

- Low-carbon and circular society
- Workforce transition
- Economy and finance

IDENTIFIED RISKS AND OPPORTUNITIES

For each of these critical themes, key drivers were identified as well as how they will shape the metals and mining landscape toward 2030. This involved identifying both opportunities and risks to Boliden's business.

Low-carbon & circular society

Drivers	Opportunities	Risks
• Population dynamics • Urbanization • Biodiversity loss • Food, water and energy • Access to natural resources • Infrastructure development • Climate change mitigation and adaptation • Global tech revolution • Economic growth	• Incorporate long-term climate impacts into mining plans • Help achieve SveMin's 2030 biodiversity roadmap • Provide traceable low-carbon metals • Build partnerships to innovate low-carbon metal recovery • Help achieve Sweden's goal of fossil-free extraction	• Access to fossil free energy • Low-carbon metals face tough competition • Barriers toward a low-carbon future by failing to decarbonize • Climate impacts on dam safety and smelters • Increased conflicts with neighbors due to climate impacts • Metal recovery pathways from society are not established

Workforce transition

Drivers	Opportunities	Risks
• Population dynamics • Access to natural resources • Infrastructure development • Global tech revolution • Economic growth • Macroeconomic trends and geopolitical shifts	• Strengthen relationships by upskilling transitioning workers • Improve health and safety by adopting technology	• Inability to attract top IT talent • Failure to mitigate transition impacts for communities • Issue related to job losses due to automation

Economy & finance

Drivers	Opportunities	Risks
• Biodiversity loss • Access to natural resources • Infrastructure development • Climate change mitigation and adaptation • Macroeconomic trends and geopolitical shifts	• Help other countries achieve low-carbon mining • Access to green finance (bonds, loans, etc.)	• Failure to receive license to operate for new mines • EU Taxonomy raises compliance criteria • TCFD disclosures by finance sector increases cost of capital

VALIDATION OF BOLIDEN'S SUSTAINABILITY TOPICS IN 2021

Each year, Boliden conducts interviews with its managers working with key external stakeholders to identify which topics are important to them. These topics are then rated according to the stakeholder insights and their influence on Boliden's business.

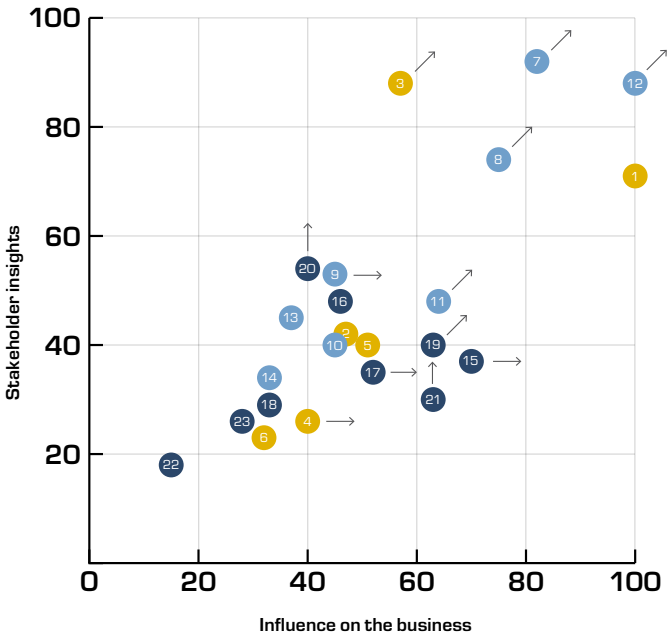
Every one of Boliden's sustainability topics is important, but they are important in different ways and require different approaches to how Boliden deals with them. For example, some are "hygiene factors" that Boliden must work with every day, whereas others are of critical strategic importance to get the company where it wants to be in 2030. The major difference how Boliden assessed these topics in 2021 was that stakeholder insights were combined with the "future focus 2030" lens to refine and rate them. This resulted in the redefining of some topics and changes in how they were rated.

Matrix to rate and group Boliden's sustainability topics

Financial
1. Financial performance
2. Market presence
3. Business partner Environmental, Social and Governance (ESG) assessment
4. Indirect economic impacts
5. Anti-corruption
6. Anti-competitive behavior

Environmental
7. Circular economy
8. Waste & resource usage
9. Energy
10. Water
11. Biodiversity
12. Climate
13. Environmental compliance
14. Air pollution emissions

Social
15. Employment
16. Occupational health and safety
17. Training and education
18. Diversity and equal opportunity
19. Local communities
20. Resettlement and closure planning
21. Rights of indigenous people
22. Socioeconomic compliance
23. Non-discrimination



BOLIDEN'S SUSTAINABILITY TOPICS BY GROUP

Another important difference was that the topics were then grouped together for the first time to better understand their influence on the business toward 2030.

The topic financial performance is fundamental to Boliden's very existence. Climate, Waste & resource usage, and Circular economy all have the potential to provide the greatest value going forward until 2030 if Boliden works with them in the correct manner.

The other topics rated enable Boliden's strategy and build stakeholder trust.

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 Economic (200), Environment (300) and Social (400) topics.

Identifying and prioritizing the most important and relevant issues within the context of Boliden's sustainability work is an ongoing process. Sustainability brings 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 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 related to its 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 has been a signatory to the UN Global Compact since 2012, and continually enhances its efforts to protect and respect the principles. In 2021, Boliden became a member of the International Council on Mining and Metals (ICMM), committing to its ten Mining Principles that define good practice environmental, social and governance requirements for the mining and metals industry specifically.

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

Policies and management system

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, governing documents for the Group and local steering documents are all available in the Boliden Management System (BMS), which is accessible to all employees via Boliden's intranet.

The Boliden Management System is integrated and includes the quality, environmental, occupational health and safety, and energy management systems that Boliden's operations have adopted. The ambition is to have all ten operational sites certified in accordance with the environmental management standard ISO 14001, the occupational health and safety management standard ISO 45001 and the energy management standard ISO 50001. In 2021, all sites achieved these certifications. In addition, all sites shall have management systems in place that are aligned with the ISO 9001 standard for quality management, and the Group's five smelters are certified in accordance with this standard. Boliden's owned forests are managed and certified in line with the Forest Stewardship Council (FSC® COC-000122).

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 the documented delegation of responsibilities on each site and that relevant competencies are maintained.

In addition to the certification standards, Boliden is also subject to various ratings from stakeholders such as rating institutes, as well as verification activities related to for example the membership requirements of the International Council of Mining and Metals (ICMM).

Ethics and compliance

The Ethics and Compliance function strategically develops and leads 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 Boliden employees in their daily decisions. It sets out the required behavior and desired direction on how Boliden's employees should act toward each other, society, the environment, Boliden business partners, and the capital market. It specifically sets out expected behavior regarding 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 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.

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 as well as business ethics, requires a comprehensive approach to risk management, throughout Boliden's entire value chain.

Boliden is aware of the importance of its suppliers and customers, which are known as "Boliden's business partners", working as responsibly as Boliden's own organization. Therefore, Boliden's Business Partner Code of Conduct reflects the same high standards that are required by Boliden's own organization.

The Business Partner Code of Conduct applies to all business partners and reflects the requirements that Boliden places on its own organization and operations. The Business Partner Code of Conduct specifically addresses human rights, labor rights, the environment, anti-corruption, anti-bribery and it prohibits the use of 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, and the ICMM Mining Principles, as well as current and potential legislative trends and international industry standards and best practices, to meet Boliden's stakeholders' expectations.

Boliden adheres to the LBMA Responsible Gold & Silver Standard, and has a management system for its raw material sourcing in line with the OECD Due Diligence Guidance for responsible supply chains of minerals from conflict-affected and high-risk areas. The Business Partner Code of Conduct sets the minimum level of behavior required by all business partners that form part of Boliden's value chain – whether Boliden is a buyer or a seller – regarding human rights, labor rights, environment, anti-corruption, anti-bribery, preventing money laundering and preventing the financing of terrorism. The Business Partner Code of Conduct also prohibits the use of conflict minerals and ensures compliance with the abovementioned principles, laws and best practices in the mining and smelter businesses.

Boliden's business partners are evaluated before Boliden enters into any agreement with them as suppliers or clients. After onboarding, the business partners are monitored throughout the business relationship. Updated due diligence is performed regularly throughout the entire period of the business relationships. The evaluation process is based on the Business Partner Code of Conduct. For those business partners who have been identified as high risk or critical risk, due diligence is performed more frequently than for those business partners that have been deemed as low or medium risk.

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 regarding 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 may be found in the upcoming chapters (Economic-, Environmental- and Social performance).

The compliance controls mainly involve conducting background and database screening on relevant counterparties and individuals. Evaluations are risk-based and can include self-assessments, in-depth due diligence, and audits of the business partners, either through desk reviews or on-site audits. New business partners must approve Boliden's Business Partner Code of Conduct and other relevant and accepted business standards before Boliden enters into any agreement with them.

If necessary, regular audits are performed on site at business partner facilities to monitor compliance with the Business Partner Code of Conduct. Because Boliden believes in supporting its business partners to improve their corporate responsibility performance, deviations from the Business Partner Code of Conduct are primarily handled by agreeing on corrective action that is planned in cooperation with the business partner.

Boliden works actively to promote best practices among its business partners, in order to work beyond compliance and further improve the entire value chain. For example, Boliden encourages its business partners to strive for the same high level of standards as those set out in Boliden's Business Partner Code of Conduct throughout their supply chain. In the event of serious violations, the business relation can be terminated, unilaterally by Boliden.

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 Boliden's external website www.boliden.com.

Management of hazardous waste, hazardous products and conflict minerals

Boliden complies with all national legislation and international guidelines such as the OECD guidelines for the trade in materials and waste, and the UN Globally Harmonized System of Hazard Classification and Labelling. 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 to ensure compliance with all relevant laws, regulations and best practices. The process also ensures that secondary and primary raw materials do not come from conflict areas by, among other things, requiring origin documentation for all raw materials purchased by Boliden.

Responsibility and monitoring of progress

Boliden's Group Management has ultimate responsibility for the Group's sustainability work. Identifying, prioritizing 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 production units. There are Group councils for occupational health and safety, environment, quality/management system, human resources and compliance council, and a committee for climate and one for public affairs. The chairs of the respective councils and committees report to the Group Management.

Environmental performance, sick leave and accident rates are reported on a monthly basis. These statistics 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. The Boliden 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 and other stakeholders 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 anonymity and the possibility to follow the status of the case without disclosing their identity. The whistleblower function is managed by the Group Ethics and Compliance function, 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 PERFORMANCE

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

10%

As a minimum, the return on investment shall be 10% (NPV).

ECONOMIC PERFORMANCE 2021

The performance is presented in the Annual and Sustainability Report.

ECONOMIC TARGETS 2021 AND BEYOND

Return on investments	As 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.

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, due to low carbon dioxide intensity in the Nordic regions according to Wood McKenzie and CRU. The locations of Boliden's operations are determined by the localization of mineral resources and the ability to explore and expand operations in these areas. Good community relations and mutual understanding are prerequisites 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 of and a precondition for 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.

Boliden's mines conduct extractive industry operations. Consequently, Boliden AB reports payments to government agencies in accordance with Swedish law (2015:812) on the reporting of payments to government agencies.

Economic performance

Economic performance is important because Boliden contributes to welfare in society through the generation and distribution of economic value, for example 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 people to switch from one occupation to another to make them more employable, sponsoring local organizations, making investments that benefit the company and the community, etc. Through this contribution, Boliden supports job creation and strengthens rural communities' contribution to national economic prosperity. 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 important role and significance as it is often the largest 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. Boliden's philosophy is to offer an equal, market based but not market leading, competitive and differentiated wage in line with business and local needs. The Philosophy is based on "pay for performance" aligning compensation with company and individual performance and goals. For white-collar employees hired directly out of university, Boliden applies entry-level wages, depending on the level of education required for different jobs.

Social impact assessments are conducted in order to assess the consequences for local community in relation to expansions, closures and other significant changes to operations.

Due to the spread of Covid-19 and various related national restrictions, Boliden experienced some logistical disruptions during 2021, which effected mining production and concentrate deliveries. Despite this, production was stable throughout the year, both in Mines and Smelters.

The Annual and Sustainability Report includes further details of how 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 6,167 (6,071) 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 1,600 (1,500) people in the past 10 years, due to the acquisition of the Kevitsa mine.

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

Just as Boliden's operations are important to the development of society, society is also important to Boliden. Maintaining an ongoing open dialogue with local residents 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 operations or establishing operations in a new location, it is also important that Boliden maintains dialogue with all concerned stakeholders 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 the 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 and in the UK Tax Strategy, which are both published on the company 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.

SEK m	Sweden	Finland	Norway	Ireland	Other	TOTAL
Corporate income tax	1,300	562	120	–122	2.0	**1,863**
Other taxes	974	140	34	61	0.0	**1,209**
Other payments to authorities[1)]	7.0	0.0	0.0	53	0.0	**60**
Total	**2,281**	**702**	**154**	**-7**	**2.0**	**3,133**

1) Boliden's Payments to authorities report.

Indirect economic impact

A substantial proportion of Boliden's staff live close to their workplace, and the company has a major impact on local employment and local businesses 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 Group-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 and how to prevent the financing of terrorism was a prioritized area for Boliden during 2021. A new updated policy and guidelines were published, and online awareness training was given to Boliden's employees, including senior management, persons within the purchasing, sales and economy functions and other key personnel in Boliden's organization. Advanced training was developed in 2020, which was held by both internal and external specialists to senior management and risk groups during 2021. Additionally, an internal audit of Boliden's payment processes was performed during 2021, to ensure that Boliden understands the source of wealth and that Boliden does not, in any way, participate in money laundering schemes or the financing of terrorism.

Trade sanctions

Sanction controls are performed on a regular basis both on potential and existing business partners. Boliden's Sanctions Compliance Program was reviewed and improved in 2019. This involved updating policies, procedures and contract terms, and an extensive training program was carried out. During 2020, an assessment of the implementation of the sanction's compliance program was conducted, supported by an external legal advisor. Based on this review, the written policies and procedures have been updated and clarified, in particular with respect to the escalation and decision making process. New model clauses for ESG requirements (including sanctions compliance) have been drafted and are in the process of being implemented in coming concentrate and secondary raw material purchase agreements.

Anti-corruption

Compliance with anti-bribery and anti-corruption regulations is one of the focus areas within Boliden's 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 for bribery and corruption, including facilitation payments, 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 that act for or on behalf of Boliden.

The Anti-Corruption Policy is based on Group-wide risk assessments 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 and during 2021 new compliance controls were implemented, based on the findings in the risk assessment.

During 2021, Boliden developed and launched a mandatory nano-learning for all employees to ensure compliance and to prevent anti-corruption and anti-bribery. By year end, 41% of employees with access to the digital training had completed all 13 modules. The completion and follow-up will continue during 2022, and employees that currently have no access to nano-learnings (32% of total employees) will be given the trainings locally at all sites.

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

Anti-competitive behavior

Boliden's employees and Members of the Board must 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 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 2021, Boliden engaged an external law firm to support with a Group-wide risk assessment specifically targeting anti-trust risks. The risk assessment was finalized in 2021 and aims to minimize the risk that Boliden engages in any anti-competitive behavior. In 2022, Boliden will implement new enhanced controls, to ensure compliance with anti-trust laws and best practices within the mining and smelting businesses.

SUSTAINABILITY TOPIC: FINANCIAL PERFORMANCE

201-1 Direct economic value generated and distributed

Net sales in 2021 totaled SEK 68,636 (56,321) million SEK. All of the indicators are reported with two comparative years. Boliden also discloses 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 in 2020 on physical climate risks show that Boliden's sites do not face severe physical risks due to climate change. Metal production is an energy-intensive process that generates both direct and indirect carbon dioxide emissions.

Boliden's direct CO_2 emissions (scope 1) primarily arise from metallurgical processes, transportation, and heating requirements. Indirect CO_2 emissions derive from purchased electricity, heat and steam (scope 2). Other indirect emissisons (scope 3) defined as significant for Boliden primarily come from four categories of the GHG protocol: purchased concentrates, capital goods, fuel- and energy-related activities and upstream transportation and distribution. Emissions from transports of external suppliers are reported and followed up internally, while scope 3 emissions from the entire value chain is included in the footprint of Boliden's low-carbon metals.

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 in 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, the Group set a target to reduce its CO_2 intensity by 40% by 2030 compared with 2012.

Low-carbon copper and zinc will play a key role in the sustainable transition to achieve the goal of net zero CO_2 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 and zinc mining and smelting activities are known to generate significant amounts of greenhouse gas emissions. As a leading sustainable metals and mining company (according to Wood McKenzie and CRU), Boliden is well positioned to supply copper and zinc with low-carbon footprints. Boliden's favorable integration of its 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.

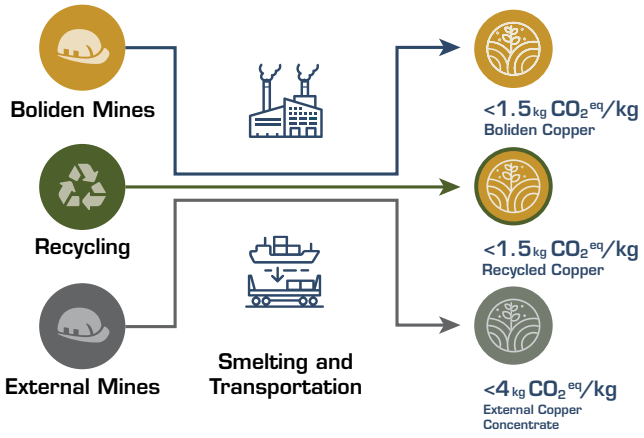
Boliden's low-carbon copper is produced from copper mined in its own mines in the north of Sweden, with a low-carbon electricity grid mix. Therefore, the Boliden Low-carbon Copper has a relatively low footprint of <1.5 kg CO_2eq/kg Cu.

Boliden's low-carbon copper includes scope 1-3 emissions.

The primary raw material for Boliden's recycled copper is electronics. By efficiently recovering all the metals that have been circulating in society, the need for new mines can be minimized.

Boliden's low-carbon special high grade (SPG) zinc is produced from zinc concentrates mined from Boliden's mines in Ireland and Sweden. The Boliden Low-carbon Zinc has a footprint of <1.0 kg CO_2eq/kg Zn.

In July 2021, Boliden announced a 700 million Euro investment in the Odda Smelter in Norway. This investment will mean an increase in the annual production capacity of zinc from 200 ktons to 350 ktons per year and substantially improve productivity while also avoiding a significant amount of future maintenance. In addition to zinc, it will also be possible to extract the bi-metals lead, gold and silver. The increased production capacity together with improved energy efficiency and a new, long-term contract for the supply of fossil-free electricity means a further reduction in the already low carbon dioxide intensity. In a sustainability context, the new facility will have long-term energy agreements that will supply the facility with fossil free energy.



Note: Boliden's carbon footprint has been assured by Intertek, in accordance with the Greenhouse Gas Protocol – the Product Life Cycle Accounting and Reporting Standard – and reviewed in accordance with the principles of 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, for example explosives, from cradle-to-Boliden gate, and excludes credits from energy and by-products.

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 Boliden's 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).

	2019		2020		2021	
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	89	9	56
Boliden Area	10	100	12	100	11	100
Garpenberg	6	100	6	100	6	100
Tara	6	100	6	100	6	100
Kylylahti	7	100	6	100	0	0
Kevitsa	9	78	8	88	9	78
Rönnskär	6	86	7	100	7	100
Bergsöe	8	100	7	86	6	100
Odda	5	100	5	100	6	100
Kokkola	7	100	7	100	6	100
Harjavalta	9	100	8	100	8	100
Total	**83**	**96.4**	**81**	**96.3**	**74**	**91.9**

SUSTAINABILITY TOPIC: CAPITAL MARKETS

Through governance, transparency and responsible business, Boliden aims to be the preferred metals and mining investment.

To ensure Boliden's continued access to sustainable loan markets, it is vital from a loan market point of view and its expectations to continuously develop Boliden's sustainability goals, strategy, and contribution toward a sustainable society.

Boliden strives to be transparent regarding alignment to the Paris Agreement and the EU climate goals. Closely cooperating across functions such as Finance and ESG, the aim is to show potential investors and lenders how Boliden's sustainability strategy and goals can provide opportunities for sustainable financing.

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 jobs and supplier business opportunities, they also affect supplier 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 3,133 m in 2021. Please see page 17 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 to assess any consequences for the community and to mitigate any negative effects as much as possible.

Mitigating the negative effects of closing the Kylylahti mine

Production at Kylylahti near the town of Polvijärvi in the North Karelia region of Finland ended in November 2020. This was after Boliden managed to extend the life of the mine by two to three years by creating a profitable business from low-grade nickel-cobalt ore. In its final year, Kylylahti beat all its production and financial targets. The local Boliden mill in Kaavi 40 km away that used to process ore from the mine has also begun a care and maintenance mode. This will give Boliden's Field Exploration team time to conclude its exploration activities in the area.

Boliden was fully transparent about the mine closure with all stakeholders. Employees and contractors were well prepared for the closure announcement long before it was officially made. The Kylylahti team also worked closely with Boliden Group functions, which provided support and expertise.

The local municipalities were another key stakeholder. Cooperation included regular report updates and site visits, as well as long-term monitoring of the site that will continue long after the closure. Boliden formed a team with three local mayors and the provincial business development organization, which held regular meetings to monitor and discuss the mine closure process.

Boliden was clear that no one would be made unemployed while the mine was still in production, which resulted in only 5% of employees quitting their jobs before the closure during the final year. The overall objective was for no one to be unemployed following the closure.

The company helped employees to find work within Boliden by inviting them to presentations and visits to other Boliden sites. They also helped employees to find jobs with other mining companies and in other industries. Boliden held a local job matchmaking fair to help employees find work. However, some efforts were hampered by the Covid-19 pandemic.

All 30-35 Kylylahti white-collar employees secured new jobs. Around 12 employees found work at other Boliden operations and were relocated to Kevitsa, Harjavalta, Kokkola, Garpenberg and Boliden Technology. However, only about half of the 65 or so blue-collar workers had found employment following the closure.

The Kylylahti mine had an excellent safety record with only one lost time accident in its last five years. It did not have a single lost time accident in its last three years, despite the closing activities and employees doing tasks that they do not normally do, such as stripping work.

Despite Boliden playing a key role in Polvijärvi and Kaavi, the closure of the mine is not fatal for either town as there are many other employers in the area.

Boliden's exploration teams continue their work with an aim to potentially bring new employment opportunities to the area.

SUSTAINABILITY TOPIC: ANTI-CORRUPTION AND ANTI-COMPETITIVE BEHAVIOR

205–1 Operations assessed for risks related to corruption

During 2020–2021, Boliden conducted a Group-wide risk assessment specifically targeting anti-bribery and anti-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 laid the foundation for Boliden's work with anti-bribery and corruption throughout the entire company. Certain high-risk areas such as agents, distributors and logistics providers are now addressed more carefully in compliance work.

Bribery and corruption

Boliden has identified and prioritized the measures that must be implemented to minimize risks and avoid fines, sanctions and reputational risk regarding bribery and corruption. The three priority risk areas are: 1) agents, 2) general lack of awareness and knowledge of risks in this area and 3) certain risks associated with purchasing and sales, for example when state-owned companies are involved or raw material suppliers in geographies and jurisdictions with a higher risk of corruption and bribery.

The following measures have been taken in the fight against bribery and corruption in these areas:

1. Boliden rarely hires agents if it can be avoided. In the few cases in which Boliden engages agents in particular jurisdictions, the agents' work is monitored. Boliden has also introduced new contractual provisions, in the contracts between the parties, to counter corruption. In addition, the agents' work is always documented, and this is followed up by Boliden to minimize the risks that the agent uses bribes or otherwise promotes corruption. To combat bribery and corruption, Boliden has recently updated its Code of Conduct for business partners. It aims to guide Boliden's employees and to communicate its commitments, requirements, and expectations to its business partners. The Code is based on an internationally agreed framework on which the ten principles of the UN Global Compact and Boliden's commitment to the ICMM's mining principles are based. The Code applies to all Boliden's counterparties, including suppliers, subcontractors, logistics suppliers, joint venture partners, agents, distributors and customers. The Code explicitly prohibits the use of bribes and clarifies how Boliden actively works to counteract them.

2. Several information and training initiatives were implemented during the year. Among other things, implementation of an e-learning in anti-corruption and anti-bribery for all employees was initiated. The training is mandatory for all employees, is interactive, and the outcome of the training is followed up by Boliden's Ethics and Compliance department. By year end, the completion rate was 41% of those who were invited to attend.

3. When purchasing raw material and selling products, we strive to carry out a thorough due diligence on the potential partner before the business relationship begins. For other products and services, due diligence is carried out before establishing relations with relevant business partners. This is to counter bribes and other corruption and various other risks in the supply chain, particularly state-owned companies. Prior to the sale of Boliden's products, both for long-term contracts and spot agreements, a thorough review of the customer and due diligence is also carried out to avoid bribery and corruption. When procuring logistics, the buyer must follow Boliden's procurement processes. When purchasing from Joint Ventures and when procuring raw material suppliers, all conditions are documented for those who work in geographies and jurisdictions with a higher risk of corruption and bribery. Boliden has also introduced specific clauses in customer contacts, which ensure that the parties understand that Boliden has zero tolerance for offering bribes and that Boliden works actively to counter corruption.

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. The anti-bribery and anti-corruption training program occurs every three years. The courses target a selected group of employees, normally those dealing with or having contact with potential competitors. In 2021, Boliden engaged in several additional steps to communicate and train employees in its existing anti-bribery and anti-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. In addition, 159 persons completed the anti-money laundering and prevention of terrorism training in 2021. Break down by region or category of the participants are not available.

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 whistleblower reporting system. There was one confirmed case of corruption during 2021. There were in total nine cases reported through the whistleblower reporting system - including one corruption, one HR, two environment, and five health and safety cases.

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 2021. There were no fines and non-monetary actions related to anti-competitive behavior initiated or pending against Boliden.

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 the company applies a zero-tolerance approach. 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: LEGAL FRAMEWORK & COMPLIANCE

All units within Boliden shall always meet permit values and legal requirements. The environmental target is to have no significant incidents. Improving local social and legal acceptance to obtain permits is also an important activity.

419-1 In the social and economic area

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

No significant fines or non-monetary sanctions regarding social performance have come to Boliden's attention during 2021. 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: STRATEGIC PARTNERSHIPS

Create positive financial, environmental and social impact through Boliden's business relations.

To be the most sustainable metal producer…

…we need to have the most sustainable supplier ecosystem

Rapid global development has led to an increased demand for raw materials such as minerals and metals, which is a trend that has also benefited Boliden. However, as there are economic, environmental and social challenges related to the extraction of minerals and metals, it is important to collaborate with business partners to ensure high-quality suppliers. Boliden works closely with strategic partners and expects them to follow the same sustainability practices and to contribute to develop Boliden's sustainability efforts. Boliden's strategic suppliers are expected to contribute to promoting safety, reducing environmental impact, and contributing to productivity.

There are several examples of how Boliden works in cooperation with suppliers – including strategically implementing digital applications to remotely monitor the condition of mines and mineral processing plants. Digital applications can partly allow Boliden to safely overcome human touchpoints and travel restrictions due to the Covid-19 pandemic and respond to increased demand for automation systems and platforms. Data-driven decision-making leads to smarter mine operations that maximize resource efficiency. This can be seen at the world's most advanced and integrated mine at Boliden Garpenberg in Sweden. The

mine's control solution is the "brain" behind the automated mine, collecting data from Garpenberg's 400+ electric motors, 280 variable speed drives and two massive hoists. Its operators and engineers, stationed at 33 different workplaces, are linked to tablet-equipped workers via a wired and wireless communication network installed in the mill and part of the mine. Early engagement between Boliden and technology providers, will continue to be a key.

Other projects where Boliden works in close cooperation with its strategic suppliers include:

1. Green Zink Odda 4.0
2. Electrification and autonomous trucks
3. Fossil free mines

Boliden asks its strategic partners to allocate R&D resources to tackle sustainability challenges and help create the most sustainable mining processes to further improve the company. Focus areas are:

- Health and safety
- CO_2 – reduction
- Energy efficiency
- Electrification
- Automation
- Waste reduction
- Emissions reduction
- Local community support

SUSTAINABILITY TOPIC: BUSINESS PARTNER ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) ASSESSMENT

Business partners are expected to follow Boliden's Business Partner Code of Conduct. This Code reflects the same requirements that Boliden has on itself.

Business partners shall ensure that all legally required taxes, fees and royalties related to mineral extraction, trade and export are paid to governments. This undertaking includes ensuring that such payments are disclosed in accordance with the principles set forth under the Extractive Industry Transparency Initiative (EITI). The EITI requirements are used in Boliden's assessment of business partners.

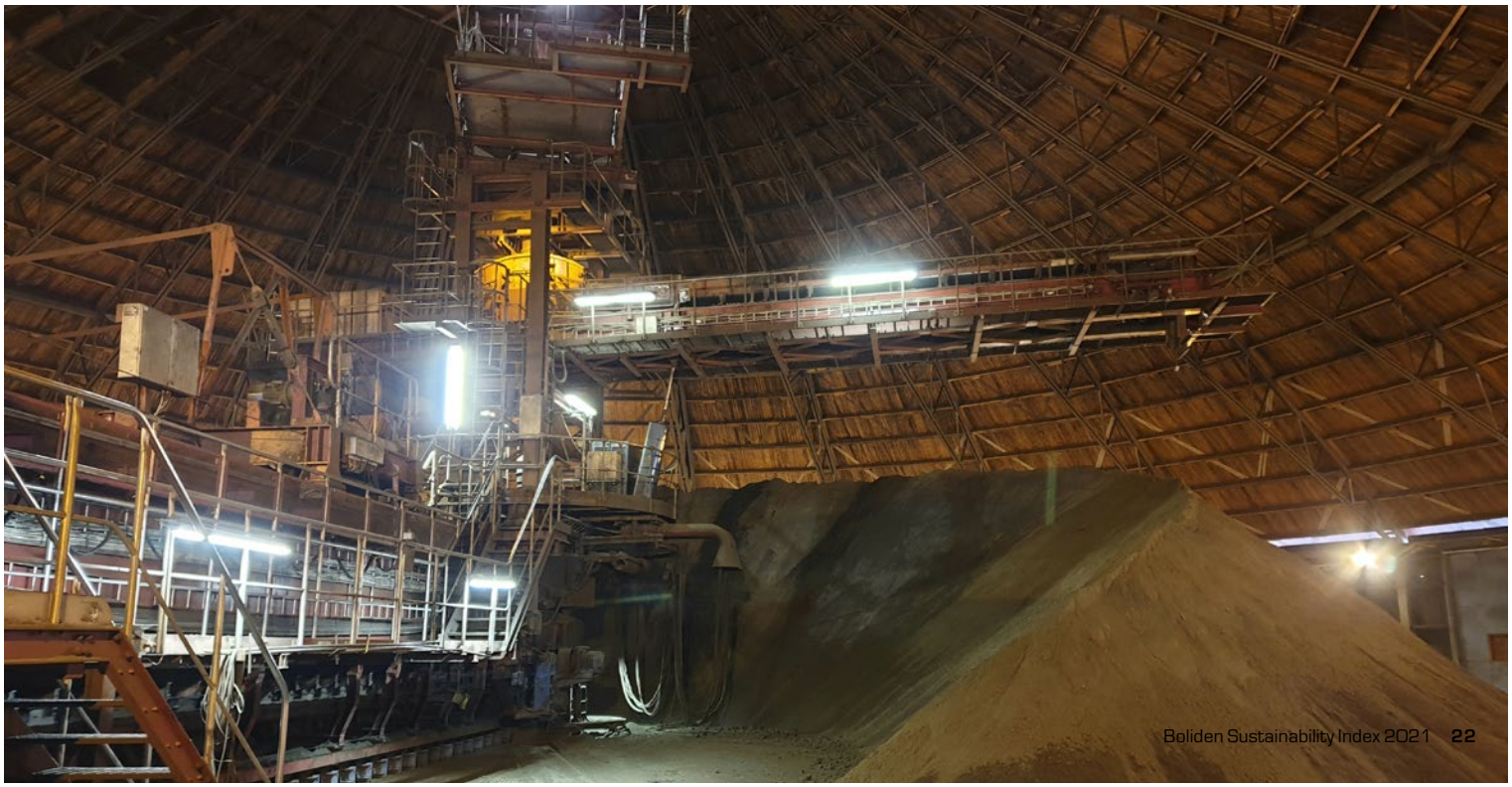
308–1 Percentage of new suppliers that were screened using environmental criteria

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.

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 2021. In total, 83% (88%) of all new raw material suppliers (new = no previous transaction with Boliden) and customers managed by Boliden Smelters were evaluated during 2021.

In the fields of logistics, products and services, 100% (62%) of new contracted suppliers (new = no previous contract with Boliden) with a spend over SEK 1 million were evaluated between December 2020 and November 2021.



CASE STORY:

Responsible raw material sourcing

Boliden's vision to be the most climate friendly and respected metals provider has a broad meaning. To be a respected metal provider, Boliden is committed to ensure the responsible sourcing of metals.

Nickel and copper are metals needed in the transition to climate friendly energy solutions. To ensure the responsible production of raw materials, Boliden has a robust sourcing process that is based on the five-step framework in the OECD Guidelines for Multinational Enterprises.

The process for the responsible sourcing of raw materials is guided by Boliden's Business Partner Code of Conduct. The Business Partner Code of Conduct helps Boliden to define risks to people and the environment connected to its supply chain.

One of the most important parts of the engagement with suppliers is to prevent and mitigate risks. This is achieved in close dialogue with suppliers of mineral raw materials, through on-line meetings, site-visits and the engagement of independent and external expertise.

For independency, external expertise is sometimes used to provide consultation in the counterpart's compliance program and human rights management.

Boliden encourages responsible behavior by its business partners throughout the supply chain.

ENVIRONMENTAL PERFORMANCE

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 risk assessments and clear action plans.

0 incidents

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

ENVIRONMENTAL PERFORMANCE 2021

Boliden's environmental performance is detailed in the Annual and Sustainability Report.

ENVIRONMENTAL TARGETS 2021 AND BEYOND

Climate	Decrease carbon dioxide intensity by 40%* by 2030. Reduce absolute CO_2 total emissions.
Air pollution emissions	No increase of the amount of metals to air. Reduce sulfur dioxide to air.
Water	All sites shall have a water management plan. No increase of the amount of metals to water or N-tot to water.
Biodiversity	Contribute to increased biodiversity by 2030 in all regions where Boliden operates.
Environmental compliance	No environmental incidents** should occur. No permit value violations should occur.
Waste & resource usage	Tailings/slag management in line with GISTM*** by August 2023 and August 2025.

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

* Base year 2012 **Risk class 3 ***Global Industry Standard for Tailing Management

301-103 MANAGEMENT APPROACH ENVIRONMENT

Environmental topics

Environmental topics such as energy use, water, emissions, effluents and waste, compliance and transport are directly related to how Boliden conducts its operations. These are important metrics that determine whether the company maintains stable processes that comply with permit requirements. Many of the topics are linked and impact Boliden's overall performance and compliance. Climate, materials, biodiversity, closure planning, grievance mechanisms and supplier assessments are also important environmental topics. These impact external stakeholders, and determine Boliden's license to operate and ability to develop its business.

Materials and circular economy

Materials are 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 Boliden. Care and consideration for people, society and the environment are themes throughout 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 energy management systems in accordance with ISO 50001, which are integrated into the Boliden Management System. All units are obliged to work continuously to make 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 15% (14%) of the Group's total operating costs.

Climate

Boliden's target is to reduce its greenhouse gas emissions by 40% measured in CO_2 intensity by 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 capabilities, resource efficiency, and replacing fossil fuels with renewables, are important components of Boliden's efforts to reduce CO_2 emissions.

Waste

By their nature, mining and smelting operations have the potential to impact natural areas, ecosystems and biodiversity, directly or indirectly. Therefore, internal waste storage facilities, such as landfills, waste rock dumps and tailings dams, which are required for Boliden's operations mean that land, ecosystem and biodiversity management have high priority. Apart from 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, which is managed in line with local requirements.

Tailings are a common by-product of the mining process, and tailings management is a critical element in the design, operation and closure planning of mines. During 2020, new global dam safety guidelines known as the Global Industry Standard on Tailings Management (GISTM) were issued on the initiative of the International Council on Mining and Metals (ICMM), the United Nations Environmental Program (UNEP) and the Principles of Responsible Investments (PRI) industry organization. The new standard seeks to sharpen the focus on matters and contribute to greater transparency and uniform global management. The implementation of this new standard is in progress at Boliden. Boliden's target is to implement tailing and slag management in line with GISTM by August 2023 for its significant dams and by August 2025 for its other dams.

Biodiversity

Boliden's overall goal is to contribute to increased biodiversity by 2030 in all regions where it operates. Boliden has developed a biodiversity approach to long-term land management – from exploration to rehabilitation and long-term management. The ambition is to be net positive on biodiversity in all new projects by working according to a mitigation hierarchy (an explanation of the mitigation hierarchy can be found on p. 40). Developing ecological rehabilitation plans and working with ecological compensation is a natural part of the work to achieve this ambition.

Water

All Boliden's units shall have a Water Management Plan. Water conservation is an important part of Boliden's environmental work. 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 expenditure.

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

Compliance with environmental requirements 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 are therefore a crucial part of the evaluation of business partners 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. This requires business partners to conduct their business in a responsible way with as little impact on the environment as possible. This is achieved by preventing, mitigating and controlling environmental damage from their operations. They shall also constantly strive to minimize their environmental impact, greenhouse gas emissions and their 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. More specifically these are related to energy, greenhouse gas emissions, waste and water consumption.

Grievances about environmental impacts

Reported issues received by Boliden include noise, vibration, dust, and other types of environmental disturbance to Boliden's sites. Complaints are handled in accordance with local procedures. Neighbors and other stakeholders are welcome to contact either the Business Unit or any of the Group functions through a variety of channels, including phone, e-mail, and written correspondence. It is the responsibility of every employee to ensure that operations are conducted properly and in compliance with the given instructions. Employees must promptly report any suspected environmental violation.

SUSTAINABILITY TOPIC: CIRCULAR ECONOMY AND RESOURCE USAGE

301–1 Materials used by weight or volume

Levels of mined rock and milled ore decreased in 2021, as well as smelting materials and concentrates produced, compared to last year. Boliden added the tonnage of rock, ore and concentrates to its reporting. Other materials specified in the table include the fuels, explosives and chemicals used in production processes.

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

Materials 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 small proportion of the input materials is calculated from input and stock.

Materials used by weight, (k metric tons)	2019	2020	2021
Mined rock	116,207	117,880	114,044
Milled ore	56,000	59,000	57,000
Concentrate produced	1,252	1,282	1,179
Smelting materials	2,628	2,777	2,680
Other materials	1,257[1)]	784[1)]	689
Non-renewables[2)]	153[1)]	142[1)]	154

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. Boliden Smelters began recycling electronic scrap in 2012, and Boliden is today 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 proportion of secondary materials in the total input to Boliden Smelters. Recycled materials include secondary materials from external sources and secondary materials sent from one plant to another within the Group. By-products and non-product outputs recirculated internally at the sites, and slag sent from smelters to mines, are not included in these figures.

Recycled materials (metric tons)	2019	2020	2021
Total secondary feed	347,100	313,600	330,400
Total feed (primary and secondary)	2,628,000	2,777,000	2,680,000
Recycling input rate	13%	11%	12%

Boliden contributes toward a more circular economy

As a sustainability leader 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-efficient industrial synergies, and continuously finding new methods of creating value from the company's own waste materials.

Promoting 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 "pure 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 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 95,000 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 230,000 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.

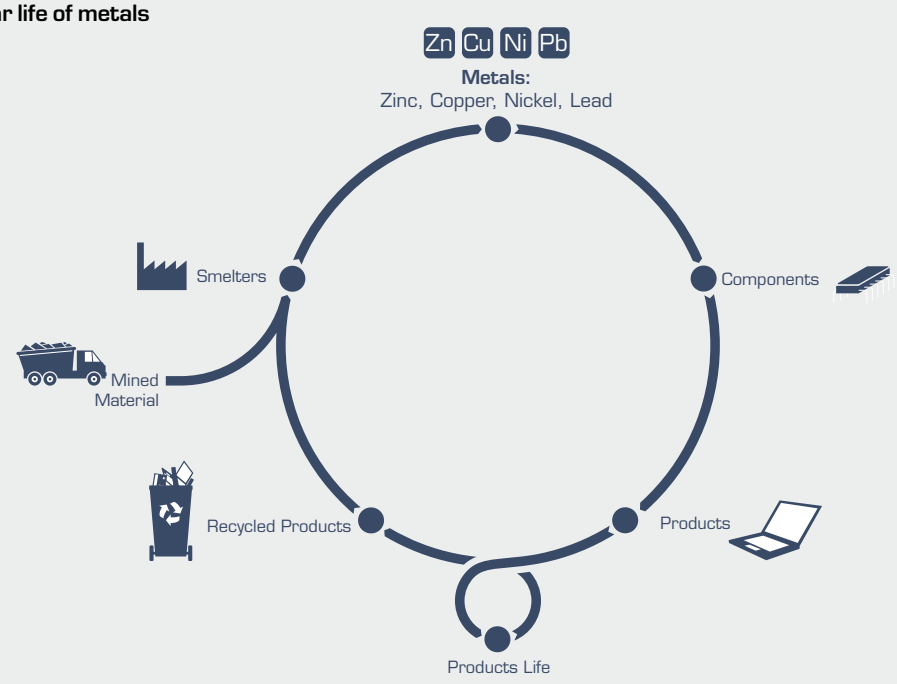
2020 was the first full year of operation for Boliden's separation plant at Bergsöe which recycles plastic battery casing that is sold to industrial customers. The investment avoids annual emissions of around 10,000 metric tons CO_2 and has improved both safety and quality at Bergsöe.

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 and Kokkola recycles Waelz Oxide feeds, 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.

The circular life of metals



SUSTAINABILITY TOPIC: EXTRACTIVE WASTE AND SLAG

306–3 Waste generated

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, and in some cases to landfill or deep repository.

Correctly processed waste can be turned into valuable products. Some of the process residues generated are sent to other Boliden sites for metals recovery or final deposition. What is considered waste for one operation can often constitute a raw material for another. When appropriately managed, the trade in waste and by-products can be of benefit to society by increasing overall resource efficiency and circularity. Boliden works continuously to identify internal and external recycling or landfill solutions for any process waste 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. The plastics serve as an energy source in metal production. The excess heat from the process is used for district heating.

As there are no significant waste losses in the production processes at Boliden's units, the waste Boliden generates is considered the same as waste that is either diverted or directed for disposal.

306–4 Waste diverted from disposal

Each unit is responsible to report the waste they consider most significant in their waste streams. The division between the internal and external treatment of waste is followed up internally.

Waste diverted from disposal by treatment method (metric tons)	2021
Non-hazardous waste, total	
Recycling	6,753
Used for construction	449
Other recovery operations	100,853
Hazardous waste, total	40,828
Recycling	9,859
Other recovery operations	30,970

306–5 Waste directed to disposal

Each unit is responsible to report the waste they consider most significant in their waste streams. The division between the internal and external treatment of the waste is followed up internally.

Waste directed to disposal by disposal or treatment method (metric tons)	2021
Non-hazardous waste, total	109,734
Incineration with energy recovery	1,148
Storage before final disposal	4,900
Landfill	102,793
Other disposal operations	893
Hazardous waste, total	971,586
Incineration with energy recovery	136
Incineration without energy recovery	2,110
Storage before final disposal	5,975
Deep-well injection/underground deposit	189,304
Landfill	773,778
Other disposal operations	283

MM3 Waste types and disposal methods including overburden, rock, tailings and sludge, and their associated risks

Mining and smelting operations generate residual waste consisting of waste rock, tailings, slag and sludge. Boliden extracts and processes several different minerals and metals that are potentially both toxic and environmentally harmful. For example, some of the tailings and waste-rock generated are potentially acid generating, which requires adequate management to minimize the generation and release of acid rock drainage. There is considerable awareness of the importance of waste issues within the Boliden Group, and the company conducts selective waste management, waste sorting, recycling of process residues and scrap, reporting procedures and ongoing waste R&D projects. Boliden's waste streams are managed in accordance with the EU Directive on the Landfill of Waste and the Extractive Waste Directive. Progressive reclamation is applied where suitable, for example waste rock facilities are covered and re-vegetated progressively to minimize weathering and leaching. Boliden's extractive 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.

Boliden follows international guidelines on dam safety and as a member of the ICMM, Boliden implements the GISTM. Boliden is responsible for operative and closed tailings facilities in Sweden, Finland and Ireland. Boliden is also responsible for various dams used for water management.

In underground mining operations, tailings and waste rock are used as backfill, as reinforcement and to optimize the mineral extraction process. About 6% of the tailings and 25% of Boliden's waste rock were reused in 2021. This decreased the number of tailings and waste rock needed to be deposited above ground. Selective waste rock management makes it possible to use parts of the waste rock by complying with set criteria to allow it to be used as construction materials, both on and off site. Tailings and waste rock used for backfilling are not considered to be waste and are not reported as such.

Waste from extractive industries (metric tons)	2019	2020	2021
Reuse - backfilling of mine			
Waste rock	8,887,000	9,183,000	1,289,000
Tailings	3,174,000	2,870,000	2,049,000
Reuse - construction material [1]			
Waste rock	-	-	12,220,000
Tailings	-	-	1,008,000
Waste rock (landfill dumps)	50,180,000	48,215,000	41,600,000
Sold waste rock	5,900	14,000	13,000
Tailings management facility	51,677,000	52,843,000 [2]	52,432,000

1) Numbers for construction and backfilling were separated in 2021.
2) Corrected calculations.

At open pit mines, Boliden selectively manages overburden and topsoil, which are stored separately and used in the reclamation of the different sites.

In early 2021, the construction of a new leaching plant at the Rönnskär smelter was completed. The plant enables waste materials that have been stored at the site since 1975 to be reprocessed. This will eventually reduce the 460,000 metric tons of waste materials currently stored to 220,000 metric tons. The remaining waste will be stored in an 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 and is the only place in the world where a deep underground repository has been constructed at a smelter site.

Boliden's operations generate 1.2 million tons of hazardous and non-hazardous waste, which is sorted at the respective sites and collected by authorized waste management companies for further processing or final deposition according to the applicable legislation. Smaller amounts of everyday waste, such as waste generated from canteens, are sent for municipal treatment.

Safe and responsible tailings management

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

Boliden's position regarding the implementation of the Global Industry Standard on Tailings Management (GISTM) is that all Boliden's facilities with "Extreme" or "Very high" potential consequences will conform with the Global Industry standard on Tailings Management within three years from August 5, 2020, and all other facilities within five years. Two of Boliden's Mines are rated as facilities with very high consequences. A high-level structure for the implementation of the GITSM and starting up the site-specific implementation was ongoing in 2021. During 2021, large investment projects related to tailings management also commenced and continued – both to enhance Boliden's operations and minimize risk. For example, Boliden's mine sites have increased their tailings storage capacity with planned dam uplifts and risk assessments have been performed in accordance with current standards to minimize risks.

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

SUSTAINABILITY TOPIC: ENERGY AND CLIMATE

302–1 Energy consumption within the organization

Energy consumption in 2021 totaled 20.7 (20.3) million gigajoules (GJ). Electricity accounted for 16.6 (16.7) million GJ of this consumption, which equated to 4.6 (4.6) TWh and represents 70% of the total energy input.

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 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. 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 predominant source of indirect energy in the Group, where 77% is considered to be fossil free according to IEA.

Energy consumption within the organization (GJ)	2019	2020	2021
Direct energy			
Coal & coke	1,814,000	1,788,000	2,032,000
Gas	306,000	315,000	302,000
Oil	2,000,000	1,720,000	1,758,000
Diesel & petrol	1,568,000	1,528,000	1,683,000
Wood chips	67,000	118,000	109,000
Total direct energy	**5,754,000**	**5,468,000**	**5,884,000**
Renewables[1]	89,000	365,000	356,000
Indirect energy			
Electricity, purchased	16,055,000	16,727,000	16,641,000
Heat&steam, purchased	128,000	1,170,000	1,272,000
Total indirect energy	**16,183,000**	**17,897,000**	**17,913,000**
Total energy input	**21,937,000**	**23,365,000**	**23,798,000**
Produced energy, for internal use	4,700,000	2,739,000[2]	2,797,00
Produced energy, sold	3,054,000	3,062,000	3,116,000
Total energy consumption	**18,884,000**	**20,304,000**	**20,682,000**

1) Wood chips and biodiesel.
2) Corrected calculations.

302–3 Energy intensity

Boliden's energy intensity was 14.40 (13.74) GJ/metric ton metal, which shows an increase in energy usage from the previous year, partly due to a slightly lower production. 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 distinctively different character of mining and smelting operations, Boliden has chosen to work with local energy targets, rather than Group targets.

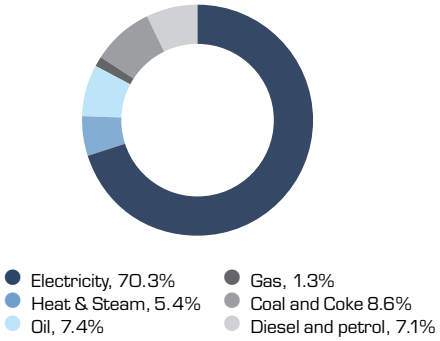
Boliden's smelting operations strive to take advantage of excess heat from their processes, either transforming it to electric power or supplying it for use in external district heating. In 2021, 2,797,000 (2,739,000) GJ of heat was used internally, and 3,116,000 (3,062,000) GJ was delivered externally for use in district heating systems.

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

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

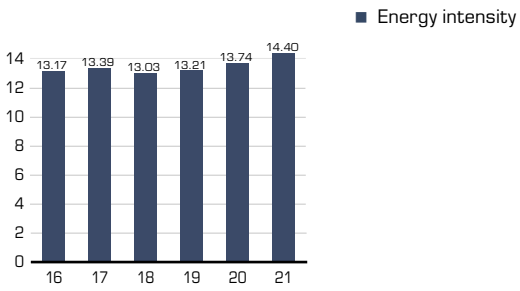
Year	Improvement
1980s	Boliden Rönnskär started to focus more on heat recovery when the price of oil soared due to the oil crisis, by building a district heating network.
2005	The project ECOEL delivered an expansion of the district heating network to increase the recovery of steam.
2010s	To recover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

ENERGY INPUT FOR GROUP, 2021 PER SOURCE



ENERGY INTENSITY

GJ/t metal



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

Boliden is working to reduce its climate impact and to constantly improve low-carbon metal production. There is a growing global demand for metals to meet societal challenges such as climate change. Addressing these challenges will require replacing carbon intensive fuels with fossil-free energy by increasing renewable energy capacity for a more sustainable metals production. The electrification of carbon intensive technologies in society will require more metals. Several of Boliden's metals are identified as being of special strategic interest for the development of a fossil-free society.

Therefore, Boliden is well positioned to help limit Europe's heavy dependence on metal imports and to provide these critical metals with a lower environmental footprint. Although Boliden is competitive in providing metals with a low environmental impact, its operations still face climate-related challenges. Mining and smelting activities generate significant amounts of greenhouse gas emissions. However, as a sustainability leader in the metals and mining sector, Boliden has a responsibility to significantly reduce climate impact and drive positive change throughout the industry.

Boliden's Climate Program presents how the company 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.

Boliden's Climate Program

Purpose: To provide the metals essential to improve society for generations to come.

Vision: Becoming the most climate friendly and respected metal provider in the world.

Goal
Reducing carbon dioxide intensity by 40% by 2030[1)]

Long-term Goal
Net zero Scope 1 and 2 greenhouse gas (GHG) emissions by 2050

Activities defined in Boliden's strategy plans:

- Investigate fossil-free reducing agents
- Reduce carbon footprint in transportation
- Increased metal recovery
- Improved energy efficiency
- Increased use of fossil-free energy and optimized power generation technologies
- Investigate the potential for carbon capture

1) Base year 2012

Governance

Proactive climate governance

The Boliden Environmental Board, which consists of the Boliden Group Management team, has the overall responsibility for the Group'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

Climate governance

issues. Group Management is supported by an Environmental Council.

The Boliden Climate Committee is an expert group that updates the Boliden's Climate Program and 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.

Strategy: Boliden's climate-related risks and opportunities

Decarbonization presents opportunities and will enhance competitiveness and drive long-term profitability. Scenario analysis of Boliden's portfolio shows that there will be an increased need for Boliden's 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 fuels and the dependency on process reduction agents, such as those related to rising fuel costs and more stringent future regulations related to CO_2 emissions.

Risks

- Carbon leakage
- Balancing circular economy and climate obligations
- Regulation risks
- Physical climate risks

Opportunities

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

Risks

Carbon leakage

Boliden's greatest risk is that society does not realize the necessity for sourcing primary metals. The International Energy Agency (IEA) has highlighted the point that although recycling will facilitate the transition to a greener economy, mining primary materials is required to meet the future societal demand for metals. Permits have become more difficult to obtain because of increasingly stringent environmental criteria. However, the consequence of not being able to mine within Europe is that metals will be produced in countries with less stringent climate legislation. This means that such metals then have a larger carbon footprint compared with metals produced in Europe. Moving mining and metal production activities out of Europe may reduce some of Europe's emissions. However, these savings in emissions within Europe will come at the expense of overall increased global emissions. This is known as carbon leakage and must be avoided.

Balancing circular economy and climate obligations

The creation of circular systems that gain maximum value from resources by recovering waste and reusing materials is an essential part of Boliden's sustainability agenda. Coke is needed to recycle lead from lead car batteries and coal is needed to recover zinc from industrial dust. Approximately 40% of Boliden's direct CO_2 emissions (25% of total CO_2 emissions) are from recycling materials. However, in the process of recovering valuable metals from societal and industrial waste, the treatment of other materials in the waste such as plastics can produce more CO_2 emissions. In its processes, Boliden recovers valuable metals that would otherwise be wasted in landfill. Some components of e-scrap can generate even more harmful methane emissions if deposited in landfill. It is essential to find the optimal balance between circularity and climate obligations to minimize the environmental impact and maximize the benefits of outgoing metals.

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. In the current legislation, the limit or the "cap" of the allowed carbon emissions will continue to decrease in the future. However, metal demand for decarbonization efforts will increase, creating more CO_2 emissions without efforts to mitigate the carbon intensity of the emissions produced. This will cause increased demand for the EU ETS futures, increase the cost of CO_2 and potentially decrease profit margins. Legislative efforts to accelerate decarbonization present an even greater risk to the operational cost of producing CO_2. Decarbonization is Boliden's strategy to mitigate the company's exposure to these future risks.

Investments that promote decarbonization are increasingly required for acquiring permits to operate. An efficient and reliable permitting process from the authorities is crucial to ensure that new, necessary, and climate-smart investments are made possible. This applies to both the applications of new permits and renewals of ongoing operations.

Physical climate risks

There are a wide range of natural weather events that have the potential to impact on Boliden assets, 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. Chronic climate change such as a rise in global temperature can increase the amount of precipitation that falls because greater quantities of water can be stored in the air. Temperature increases can disrupt processes where water is used for cooling processes.

Various weather-related risk assessments and scenario analyses have long since been carried out on separate occasions, including on development projects and permit application processes within Boliden operations. Boliden considers several different scenarios to prepare for a busness-as-usual scenario with no climate mitigation as well as scenarios that factor some successful climate change reduction.

Opportunities

Resilience - metals for a sustainable society

As a leading sustainability metals and mining companies, 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 while working proactively 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.

Physical climate opportunities

Boliden operates in areas that have relatively low water stress compared to other mining companies. As there is still abundant freshwater and precipitation in the countries Boliden operates in, a warming climate can provide new opportunities for biodiversity and the land reclamation of tailings ponds. Wind has increased in speed globally over the past decade, which presents opportunities to generate more renewable energy from wind power.

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. Under current market conditions, reducing the CO_2 footprint of Boliden's metals is expected to generate greater value to its customers.

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, CO_2 emissions and financial cost.

Risk management

Risk and opportunities

Boliden's business 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 Business Unit.

Roles and responsibility

The CEO has ultimate responsibility for Boliden's strategic orientation and for ensuring the compliance with and implementation of the Board's decisions. They are also responsible for ensuring that risk management, control, systems, organization and processes are all of a satisfactory standard.

Boliden's risk and opportunity 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 opportunity 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. In 2021, Boliden became a member of ICMM. This organization works with the leading metals and mining companies within sustainability to provide guidelines to operate responsibly and in a sustainable manner.

Control activities

Several 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. The controls used to manage risks 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 Communication 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 – with the aim of investigating how the process to consolidate the results of the various risk assessments can be clarified at different organizational levels.

Climate-related risk management

Boliden seeks to mitigate climate 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 Business Unit.

Opportunities are handled in the Strategy process. Significant identified risks are addressed directly by the respective unit where they occur. Boliden's two Business Areas conduct analyses of strategic opportunities and climate risks as an integrated part of their management systems. Opportunities and risks are compiled per Business Area.

The most significant risks are presented to Group management and are compiled annually for the Board.

Assessing physical climate risks

Boliden defined its climate-related physical risks and opportunities in a high-level screening of climate physical risks for all sites in 2020. The risk assessment was performed by an external consultancy firm. 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. In assessing the physical risks, the RCP 4.5 and RCP 8.5 scenarios were applied. The RCP 4.5 scenario simulates the climate change that would result from a mild regression of carbon emissions. Although this is a scenario that would be expected given the attention and ambitions of companies to mitigate carbon emissions, Boliden has also evaluated scenarios with worsening emissions. Therefore, to plan for a "worst case scenario", Boliden performed an RCP 8.5 scenario. An overall climate risk assessment survey for Boliden was performed in 2021, which provided an insightful general overview of all its assets. This assessment highlighted Boliden's exposure and future trends to specific physical climate risks. These physical climate risks were combined with Boliden's internal risk matrix to create site specific evaluations of all Boliden's sites. The first assessments were done at Bergsöe and Garpenberg in 2020. The findings in the site-specific assessments could then be presented and actions taken to mitigate physical climate risks. Boliden will continue to use a similar risk framework at the other Boliden sites. The assessments are delayed due to difficulties in holding workshops at sites due to Covid.

Physical risk assessment

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

Key climate hazards assessed

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

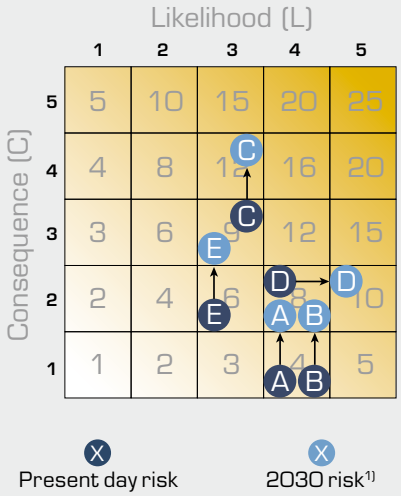
The objectives of the workshop were:

1. To provide an overview of identified climate-related risks and their importance for specific sites within Boliden.
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.
4. Provide a framework for identifying climate-related risks for other mine and smelter operations within Boliden.

The output of the workshop was an assessment and dashboard with identified risk items for selected climate hazards. These hazards were evaluated and presented in a Boliden Risk Matrix to be used in the 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 (in this example for Bergsöe) for present day (Dark blue) and 2030 (light blue).



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

Risk	Relevant Hazard	Risk Item
A	Sustained high temperatures	Unsafe working conditions for personnel working near the furnace area in high-temperature conditions as a result of extreme temperatures.
B	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.
C	Intense rainfall events	Flooding events have the potential to physically 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 two meters 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.

Climate metrics and targets – Smelters

Decarbonization presents opportunities to establish cleaner operations in Boliden's 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 metals. Several of Boliden's metals have, furthermore, been identified as being of special strategic interest for the continent.

Smelters are challenged compared to the Mines Business Area because some of the carbon emissions are tied directly to the feed concentrate or materials that enter the smelting process (e.g. zinc recovery from industrial waste, e-scrap and lead car batteries). This creates another source of CO_2 besides the movement of concentrates. Furthermore, the smelting processes require substantial amounts of heat and are more energy intensive. Boliden's efforts in reducing CO_2 emissions going forward are focused on:

- Substituting heating oils with bio-based gas and hydrogen or electricity
- Using bio-based reducing agents
- Investing in research and development for fossil-free production processes
- Increasing access to fossil-free electricity with a low total-system cost and high reliability
- Exploration of carbon capture and storage methods
- Cooperate with external vendors to reduce scope 3 emissions

These measures will have steps that will ensure Boliden is able to make positive progress in the short, medium, and long-term horizons.

Climate metrics and targets – Mines

The Mines Business Area faces similar although less demanding challenges than the Smelters Business Area in terms of addressing CO_2 emissions. Unlike the Smelters Business Area, the Mines Business Area focuses on the transport of concentrates from the mines to Boliden's smelting sites and customers. Boliden's efforts in reducing CO_2 emissions going forward are focused on:

- In the short term, substituting diesel consumption with bio-based alternatives.
- Electrification of trolleys with dynamic charging in open pit mining units.
- Electrification of trolleys in underground mining operations.
- More efficient heat exchangers within the mines.

The electrification plans will increase the speed of hauling and benefit operational productivity while reducing CO_2 emissions.

Assessing opportunities

In 2020, a third party conducted a climate risk competitive analysis for Boliden that evaluated the risks for 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 is ranked favorably compared with competitors in the overall climate competitiveness score and in these risk dimensions listed below.

Carbon pricing risk

- Projected carbon price based on a 2°C scenario
- Regulatory risks from carbon price

Water stress risk

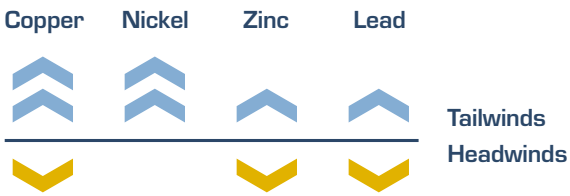
- Projected basin-level water stress levels
- Physical risk from changes in water availability

Future commodity alignment

- Projected demand of metal based on the 2°C scenario
- Metals are required for low-carbon technologies such as solar PV, battery storage, LED etc.

Boliden aims to:

- have low CO_2 emissions per metric ton of metal.
- 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.



Generally, Boliden sees its portfolio as having "tailwinds" from the metal applications to address climate change. Copper and nickel are expected to see market growth that will outpace their

recycling rates as they are critical for many applications needed to decarbonize society. Zinc and lead also have positive outlooks, although their overall market growth will lag rapidly growing segments like copper and nickel. Copper faces slight "headwinds" from higher recycling rates and accounting for most of Boliden's recycled materials. Although lead is an exemplary case for circularity and recycling, this weakens the market demand for new lead production. Zinc has lower market growth compared to the other metals in Boliden's portfolio.

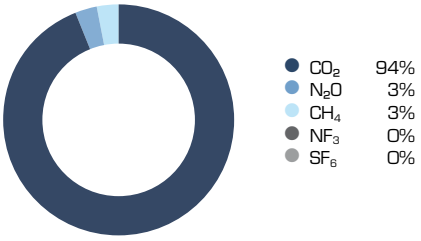
Carbon footprint

Boliden's direct CO_2 emissions primarily arise from metallurgical processes, transportation, and heating requirements. Indirect CO_2 emissions are derived from purchased electricity, heat and steam. Indirect emissions are also generated by the production phase of purchased concentrates, capital goods, the production phase of purchased fuel and from fuels used for transportation.

Boliden's main contribution to a low-carbon society is to produce metals with a low-carbon footprint. The focus has therefore been to calculate the footprint of our metals, which is described more on page 18.

To define its significant GHG emissions, Boliden has analyzed all its direct and indirect emissions, including CO_2, CH_4, N_2O, NF_3 and SF_6. PFC and HFC were excluded as they are assumed to be insignificant according to a life cycle assessment. The GHG emissions analysis showed that CO_2 generates 94% of the emissions. Therefore, Boliden measures only CO_2 in its climate performance, however also CH_4, N_2O, NF_3 and SF_6 are included in the carbon footprint of our metals. Detailed contribution of the different GHG emissions, presented in CO_2 equivalents, can be seen in the figure below. SF_6 and NF_3 have none or below cut-off criteria impact (<1%) and are therefore not shown in the figure.

GHG EMISSIONS PARTIATION



Climate performance

305–1 Direct (Scope 1) GHG emissions

Boliden reports this indicator for the units over which it has operational control. Direct CO_2 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 emission factors used for calculating the figures are obtained from the suppliers for the corresponding fuel/material.

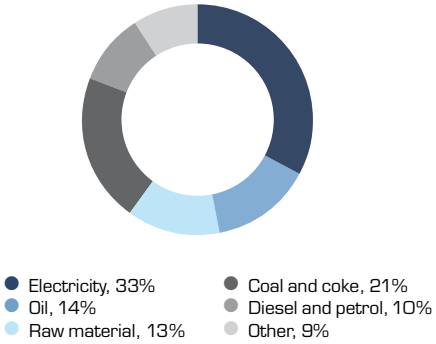
The direct emissions are calculated in accordance with the procedures laid down in the WBCSD[1] GHG[2] Protocol, together with additional guidelines from the EU and/or national authorities.

1) World Business Council for Sustainable Development.
2) Greenhouse Gas.

The CO_2 reporting within the framework of the 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 the ETS. Overall, 75% of the scope 1 emissions are covered by the ETS.

CARBON DIOXIDE EMISSIONS (SCOPE 1 + SCOPE 2), 2021 PER SOURCE

The total reported CO_2 emissions amounted to 952 (896) k metric tons for the year.



305–2 Indirect (Scope 2-3) GHG emissions

To improve the footprint from purchased goods and services, training is performed for Boliden's suppliers and contractors. CO_2 emissions from purchased transports is also reported and followed up on from the largest suppliers to drive improvements.

Boliden reports purchased electricity, heat and steam. The scope is the units over which Boliden has operational control and only includes production-related indirect emissions. Location-based emission factors are used. 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), 2021 PER SOURCE

Boliden Group

Carbon dioxide emissions, Scope 1+2, metric tons	2019	2020	2021
Direct emissions, (305-1)	598,000	544,000	579,000
Indirect emissions, (305-2)	319,000	352,000[1]	373,000
Total (305-1 + 305-2)	**917,000**	**896,000[1]**	**952,000**

1) Corrected calculations.

Mines

Carbon dioxide emissions, Scope 1+2, metric tons	2019	2020	2021
Direct emissions, (305-1)	173,000	145,000	152,000
Indirect emissions, (305-2)	139,000	137,000	135,000
Total (305-1 + 305-2)	**312,000**	**282,000**	**287,000**

Smelters

Carbon dioxide emissions, Scope 1+2, metric tons	2019	2020	2021
Direct emissions, (305-1)	425,000	398,000	427,000
Indirect emissions, (305-2)	179,000	215,000[1]	238,00
Total (305-1 + 305-2)	**605,000**	**614,000[1]**	**665,000**

1) Corrected calculations.

305–4 GHG emission intensity

Boliden's GHG intensity was 0.66 (0.61) 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 from the Mines Business Area and metal production at the Smelters Business Area. The intensity increased slightly due to lower production during the year.

GREENHOUSE GAS EMISSION INTENSITY

t CO_2/t metal

Boliden group

Carbon dioxide emissions, Scope 1+2, metric tons/ production volume	2019	2020	2021
Direct intensity	0.42	0.37	0.40
Indirect intensity	0.22	0.24	0.26
Total intensity	**0.64**	**0.61**	**0.66**

Mines

Carbon dioxide emissions, Scope 1+2, metric tons/ production volume	2019	2020	2021
Direct intensity	0.36[1)]	0.30	0.34
Indirect intensity	0.29	0.28	0.30
Total intensity	**0.66**	**0.58**	**0.64**

1) Corrected calculations.

Smelters

Carbon dioxide emissions, Scope 1+2, metric tons/ production volume	2019	2020	2021
Direct intensity	0.45[1)]	0.40	0.43
Indirect intensity	0.19[1)]	0.22	0.24
Total intensity	0.63[1)]	**0.62**	**0.67**

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.

Recent initiatives have focused on reducing diesel use, which typically has a significant impact on reducing both financial costs and emissions. Most 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 must preheat incoming ventilation air in winter when outdoor air temperatures are low, 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 direct CO_2 emissions. During 2021, the oil-fired nickel concentrate dryer was 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. The profitability of this investment will also be boosted by higher diesel prices. A fully battery driven loader has been tested at Boliden's Kristineberg mine since 2020 and a battery swapping station has been constructed.

Innovation

Boliden aims to identify multiple pathways toward low-carbon smelting and refining. Different technological 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 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:

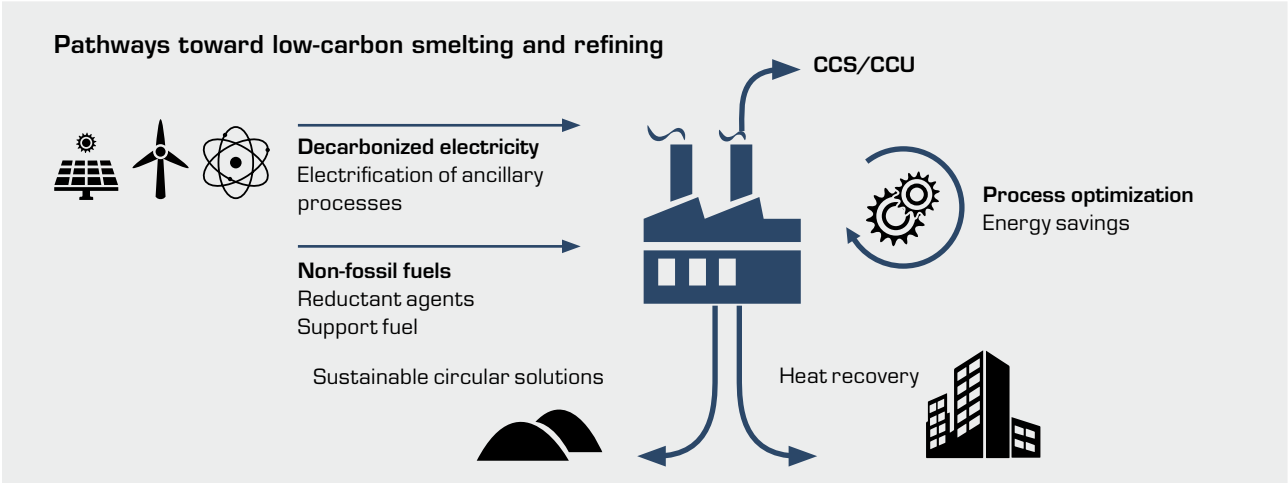
- The evaluation of hydrogen and bio-based alternatives as reduction agents.
- Switching to fossil free fuels for process heating.
- Installing heat recovery where not yet installed.
- The investigation of carbon capture solutions.
- Fossil free transport solutions.
- Energy efficiency program.

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 these challenges enable Boliden to be 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 long-term electricity supply agreements for fossil-free energy from two wind power developers. The agreements involve 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

Boliden's operations are located in areas with little water scarcity, and no water sources are significantly affected by water withdrawal by Boliden's operations. None of Boliden's operations are located within an area of high or extremely high water stress, according to World Resource Institute. 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 impacts on the business, operations, revenue or expenditure. No major incidents of non-compliance associated with water quality permits, standards and regulations occurred during the year.

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 reuse water from other organizations, but at Harjavalta and Kokkola, wastewater from adjacent operations is treated in Boliden's wastewater treatment plants before being either returned or discharged. 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)	2019	2020	2021
Recycled volume	114	206	201
Percentage of water recycled	46%[1)]	58%	59%

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 data. Breaking down water withdrawn by freshwater and other water is under investigation.

Total water withdrawal by source (million m³)	2019	2020	2021
Surface water (sea)	74	80	84
Surface water (inland)	39[1)]	44	36
Groundwater	15	19	17
Collected rainwater	1	1	1
Municipal water	2	2	2
Total water withdrawal	**132**	**147**	**141**

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 the water treatment plants as well as recirculating process water are important steps of reducing discharges to water. Boliden's operations include purifying process water as well as a significant amount of rainwater that falls within the industrial areas.

Aiming to achieve good ecological and chemical conditions close to Boliden operations, the status of aquatic environments is monitored annually where water is discharged. The impacts of discharges in each aquatic environment is analyzed from water, sediment, and biota according to monitoring programs approved by the relevant authorities.

Aquatic environments that receive water discharges are monitored to assess their status compared with local environmental quality standards. The quality water and sediment in marine and freshwater environments is monitored according to monitoring programs approved by the local authorities.

The breakdown of discharged water into freshwater and other water is currently being investigated.

Water discharge	2019	2020	2021
Metal discharges to water, metric tons (me-eq)	51	37	47
Metal discharges to water, metric tons (mass)	15	12	14
Nitrogen /N-tot/ to water metric tons (mass)	228	201	276

Discharged water volume (million m³)	2019	2020	2021
To wetland	0	0	0
To inland surface water	43	47	56
To sea surface water	66	85	77
To municipal treatment plants	0.03	0.03	0.03
Total	**109**	**132**	**133**

303–5 Water consumption

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

Water consumption (million m³)	2019	2020	2021
Total water withdrawal	132	147	141
Discharged water volume	109	132	133
Water consumption	23	15	8

SUSTAINABILITY TOPIC: BIODIVERSITY

Boliden's overall goal is to contribute to increased biodiversity by 2030 in all regions where it operates.

The following measures have been identified to proactively promote a biodiversity net gain:

1. Create social benefits by supporting the Sustainable Development Goals.
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. Minimize risks.
8. Facilitate business planning and increase the rate of innovation.

Boliden's operations shall be sustainable across the entire value chain from prospecting and during production, through to post-treatment and in the long term following the completion of post-treatment. Boliden takes responsibility for the impact of its operations and works proactively to minimize losses of biodiversity and ecosystem services, and to enhance ecosystems. During 2021, plans to reach biodiversity goals and how to measure progress were initiated.

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

- First, avoid impact if possible.
- Second, minimize impact that cannot be avoided with mitigation measures.
- Third, restore impacts by, for example, environmental remediation.
- Fourth, offset the impacts caused and strive toward creating a net gain for biodiversity.

Collaboration with stakeholders

Boliden's work builds on an understanding of and collaboration with other industries and all kinds of stakeholders. This means that Boliden initiates respectful cooperation and relations with local society. Through close dialogue and the exchange of knowledge, Boliden strives to create a net gain for biodiversity and ecosystem services.

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

Environmental protection is common in the countries where Boliden operates. Consequently, all mine sites and more or less all smelters are located adjacent to some form of protected area. Therefore, all mineral reserves are located near protected areas and biodiversity management is an area of strategic importance for Boliden to manage.

A review has been conducted of all operative sites regarding what habitats and species are protected and what kind of risks may affect them. For all mine sites, a summary report has been made as a basis for the operations' biodiversity work and reporting. For smelters, the same type of data has also been compiled.

Sites	Operation	Country	Size, ha	Protected areas
Aitik	Mine	Sweden	9,339	Yes[1) 2)]
Bergsöe	Smelter	Sweden	13	Yes[2)]
Boliden Area	Mine	Sweden	5,335	Yes[2)]
Garpenberg	Mine	Sweden	1,692	No
Harjavalta	Smelter	Finland	534	Yes[2)]
Kevitsa	Mine	Finland	1,420	Yes[1) 2)]
Kokkola	Smelter	Finland	340	Yes[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 Boliden's 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

Boliden's impacts on biodiversity have been evaluated. Land use, discharges to water, water extraction and emissions to air (GHG and dust) have been identified as the most significant influences on biodiversity. A land use for the development of existing or new operations is managed according to the mitigation hierarchy. Out of Boliden's active mine sites, 70% are expected to produce some acid rock drainage, which they actively mitigate. Emissions to air are managed in specific programs and networks for the reduction of GHG and dust suppression. As of December 31, 2021, Boliden owned or controlled 25,600 (24,800) hectares of land related to its 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.

Every operation has 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 the objective to re-establish 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 developed according to Boliden's standards for every operational site that will be closed.

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 Boliden's operational sites are considered to be situated in high biodiversity areas. During 2021, approximately 50 biodiversity improvements were reported.

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

Results from inventories and how the project has been developed in relation to them is described in the application for an environmental permit.

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

There are various types of protected areas in the vicinity 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 based on 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 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 Aitik	Ecological compensation	837	2017	2022
Långdal	Reclamation work, water	8	2019	2023
Holmtjärn	Reclamation work	4.5	2018	2019
Laver	Reclamation work	14	2016	2022

Examples of Boliden's development and habitat restoration projects

Boliden works together with different partners to develop the way it works with biodiversity and to restore habitats. This includes collaboration with expert consultants as well as research organizations.

In Kylylahti, an extensive plan for ecological rehabilitation at the closed mine site was developed during 2021. The work according to the plan has commenced and will be completed in 2022.

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 created a meadow that can be used for recreational activities by the local community.

Boliden has an ambitious goal to be net positive on biodiversity. To fulfill this goal in a responsible way, Boliden has collaborated with other industry partners to initiate a project to develop a metric for biodiversity – CLImB – Changing Land use Impact on Biodiversity. The purpose of this project is to develop a valuation model to measure biodiversity in the event of land use changes. The project is a collaboration between Boliden, Cementa, LKAB, SCA, Skellefteå Kraft, Specialfastigheter, Svenska Kraftnät, Vattenfall and Ecogain.

The goal for the project is to develop a biodiversity assessment model for land use change that is widely applicable and communicative. The project will be completed in the first quarter of 2022 with an elaborate, industry-wide and cross-industry proposal for a valuation model that is accessible to everyone, via open access. Ideally this will apply to different types of habitats. The methodology will be adopted by the Swedish authorities, and other organizations and stakeholders.

Boliden also has a collaboration with the Swedish University of Agricultural Sciences (SLU). Three research projects are currently ongoing regarding biodiversity.

Together with SLU, Boliden has initiated one of Sweden's most comprehensive research projects investigating ecological compensation. Two areas totaling 837 hectares around Boliden's Aitik mine are part of the compensation work. This involves financing a PhD student 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 project also includes studying how transferring these species has led to increased bird populations in the new habitats. Hiking trails have also been created.

During 2021, a project has been initiated with SLU, LKAB and Sveaskog. The Impacts of mining dust deposition on forest biodiversity and ecosystem services (MINEDUST) project is a three-year study into how biodiversity is affected by dust emissions from mines. The project will combine large-scale field surveys around two of the country's largest mining areas, Svappavaara and Aitik, with carefully planned and executed greenhouse experiments.

Another project with SLU is investigating how to reestablish reindeer grazing species on former mine sites. Two test pilots have been conducted and SLU are continuously monitoring the situation.

Boliden smelters has extensive monitoring programs in place to assess their impact on biodiversity and surrounding environment. Seawater discharges are monitored for quality both in the water and the sediment. Emissions to water are on a low level and a good chemical status is mainly achieved. Emissions to air are extensively

monitored according to a monitoring plan approved by the authorities. Ambient air quality is also monitored continuously on some sites to understand the impacts of emissions on ambient air quality.

One example is the Zinc smelter in Kokkola that is implanting whitefish (52,000) and trout (26,000) on yearly basis to compensate the possible negative impact of effluents to fish stock. There is also a project in co-operation with local fishermen and fishing communities to release 3.5 million white fish juveniles to the sea every year.

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

Red list species and national conservation list species with habitats in areas affected are documented for each Boliden site.

MM1 Amount of land disturbed or rehabilitated

Boliden owns and holds licenses over large areas of land. The reclamation of mining areas that have reached the end of their productive lifespans is 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 2021, a total of SEK 6,472 (4,837) million had been allocated for the future reclamation of mining areas and smelters. Rehabilitation efforts currently focus on old mine sites.

Land management (ha)	2019	2020	2021
Total land holding	23,600	24,800	25 660
Disturbed and not yet rehabilitated (opening balance)	7,050	7,217	7,234
Disturbed in the reporting period	168	61	1
Rehabilitated in the reporting period	1	39	129
Disturbed and not yet rehabilitated (closing balance)	7,217	7,229	7,105

New mines and the expansion of existing businesses

The establishment of new mines and the expansion of existing businesses require access to land. The goal is to strive to be net positive on biodiversity. Boliden's operations shall be sustainable throughout its operations – from prospecting and production to post-processing in the long-term. Boliden respects legally designated protected areas and neither explores nor develops mines in World Heritage sites.

Most of the company's mines are located in rural areas. The exception is Tara Mine, 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 to protect biodiversity and ecosystem services. In practice, this means that Boliden not only avoids or minimizes negative impact, but also adds or creates new ecological value. The work is based on the four steps of the so-called mitigation hierarchy: avoidance, minimization, restoration and offsetting.

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

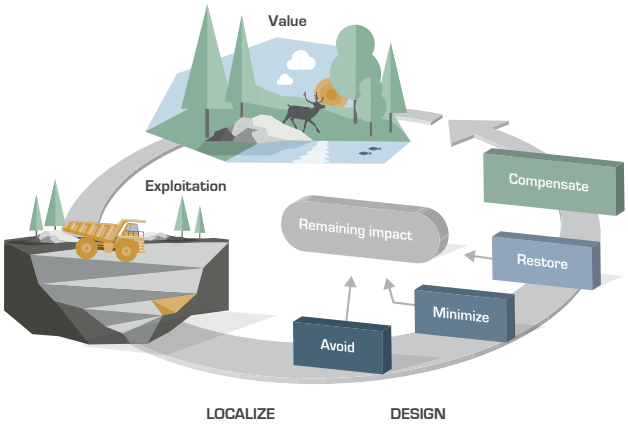
During operations, different types of monitoring programs are set up, both according to permits and voluntarily. For example, the programs involve the evaluation of mosses, berries, fungi, reindeer grazing species, moor frogs, smews, tufted ducks, and-fish and algae in water. Ecological rehabilitation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

The majority of Boliden's owned land in northern Sweden and Finland is adjacent to reindeer grazing land. Boliden prioritizes in-depth dialogues with representatives of the reindeer industry to ensure their interests are taken into consideration. For example, 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 value. Boliden has assigned approximately 10% of its productive forested land for nature conservation. This area is partly protected through the establishment of nature conservation areas, 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.

The Group's forestry management has included prescribed felling, which is intended to benefit deciduous wooded pastures, and controlled burning to promote certain species and biological diversity. By adapting forest management in areas used for outdoor recreation, social value can be 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 offsetting.

Boliden's operations take advantage of exploration, mining, enrichment, and transport. Boliden consequently designs and conducts its ongoing work to minimize social and environmental impacts.



SUSTAINABILITY TOPIC: AIR POLLUTION EMISSIONS

305–7 Significant air emissions

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 is sulfur dioxide (SO_2), and Boliden generally uses the expression "sulfur dioxide" to describe this emission. The figures for SO_2 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 at Boliden's sites. The sulfur deposition and the total deposition of acidifying substances, which are counted as hydrogen ions, and 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 related to dust particles containing metals being dispersed by the wind. All operations are working systematically to reduce particle emissions to the air, for example by the enclosure of dust-generating equipment and by salting and watering roads. 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.

SO_2 emissions to air are mainly attributable to gases generated during the smelting processes at the Harjavalta and Rönnskär copper smelters. The amount of SO_2 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 2021 at Boliden Smelters since more materials with sulfur content was used in the smelting processes. This was a result of the Covid-19 pandemic, which reduced the supply of e-scrap. The metal emissions to air have decreased due to improved filtration techniques at Boliden's smelters.

Emissions to air are mainly based on periodic monitoring in accordance with applicable national standards. Emissions from fuel are calculated using the fuel properties data provided by the supplier. For the protection of human health, the ambient air quality is monitored continuously close to operation sites or at the border of living areas. The following pollutants are monitored: Particulate matter (TSP, PM10, PM2.5), SO_2 and NOx. Metal concentrations in particulate matter (PM-10) are analyzed annually. Data received is compared with valid ambient air limit and target values. Emissions of VOCs are not considered significant among the units and are therefore not disclosed.

Emissions to air (metric tons)	2019	2020	2021
NO_X	450	530	520
SO_2	6,240	6,310	6,430
Particulate matter	164	158	155
Metal emissions to air (me-eq)[1)]	69	60	37
Metal emissions to air (mass)	26	19	20
Where of lead (Pb)	2.6	2.2	1.2
CO	-	-	388

1) The model for the calculation of metal-equivalence is based on the framework for the Natural Capital Protocol.

SUSTAINABILITY TOPIC: ENVIRONMENTAL COMPLIANCE

307–1 Non-compliance with environmental laws and regulations

Boliden was not subject to any significant corporate environmental fine during 2021. Four minor corporate environmental fines were charged at a total of 160,000 SEK.

ENVIRONMENT – PART OF THE 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 mitigation technologies and solutions. 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 to develop solutions that return valuable materials back into the economy.

CASE STORY:

Scrap lead batteries recycled to new raw material

Boliden Bergsöe recycles lead scrap, lead alloys and PP-plastic from four million waste lead-acid car batteries from the Nordic region each year. Around 90% of the produced lead is sold to the battery industry in Europe and becomes new batteries. The battery cases consist of PP-plastic that were previously used as a reducing agent in lead production. However, since 2019, the PP has been recycled at Bergsöe and sold back to the battery industry. The smelting process also generates excess heat. Some of this excess heat is used for district heating, equivalent to the annual heating requirements of 2,000 homes, with the heat being supplied to the municipal district heating system in Landskrona.

"Our facility helps to recycle a finite resource that is crucial to modern society, but which can be highly toxic if not correctly managed during smelting and recycling. At Bergsöe, Boliden constantly refines its state-of-the-art systems to further minimize air emissions and water discharge," says Fredrik Kanth, General Manager at Boliden Bergsöe.

Bergsöe strives to minimize the environmental impact of its water discharges and air emissions, and the facility far exceeds several national and EU regulations. Total lead discharge to water in 2020, for example, was over five times lower than allowed by Bergsöe's environmental permit. The facility also already complies with the EU Industrial Emissions Directive rules of the Best Available Techniques in the Non-Ferrous Metals industry.

Comprehensive state-of-the-art systems treat wastewater containing metals and clean process air, including lead-bearing exhaust ventilation and filter dust, which are captured and re-used in the production of new metals At Boliden Rönnskär.

SOCIAL PERFORMANCE

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.

0 serious accidents

Boliden's target is to have 0 serious accidents

SOCIAL PERFORMANCE 2021

The performance is presented in the Annual and Sustainability Report.

SOCIAL TARGETS 2021 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 (RC3R).
Sick leave	Sick leave rate not exceeding 4.0%.
Diversity	Boliden strives for diversity among its employees, which reflects the local communities in which Boliden operates. An important part of Boliden's diversity work is to increase the proportion of women. At least 21% female employees by 2023.
People management	Staff turnover not to exceed 6.0%.

The table shows part of Boliden's environmental performance indicators that are followed up on a monthly, quarterly or annual basis.

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

Guided by its values Care, Courage and Responsibility, Boliden aims to fulfill its vision. The values describe how employees shall work together in Boliden's daily operations. Boliden employees bring many different competences and skills and together with the values, shape Boliden's corporate culture around 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 toward 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, and that no hazardous/dangerous work is assigned to those under 18 years of age. 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 confidentially 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. Violations of the Code of Conduct are 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 making the necessary corrections and will take remedial action to prevent recurrence.

Boliden's whistleblower system is a confidential communication channel through which you are allowed to anonymously raise concerns about serious wrongdoings. The system is not intended to replace our internal reporting channels, but to serve as a complement to these. The whistleblower system is only for reporting actual or suspected serious wrongdoings within the Boliden group. A whistleblower does not need to have firm evidence for expressing a suspicion, but the report must have been made in good faith. Our whistleblower system is a closed system provided by an independent external third party WhistleB Whistleblowing Centre AB ("WhistleB"). The system is entirely disconnected from Boliden's intranet or external website. All messages are encrypted. To ensure the anonymity of the person sending a message, WhistleB does not save IP addresses or other meta-data. Reporting can be done 24 hours a day, all year round. During 2021, there were nine reports filed - including one related to corruption, one to HR, two to the environment, and five to health and safety.

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, is 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 have 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 and 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. Informal leaders in the workforce are trained as safety ambassadors to create a bottom-up approach that supports the practical implementation of the value-adapted BeSafe concept in Boliden's daily operations.

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 involving 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

In 2021, Boliden continued to work proactively to prevent the spread of Covid-19 in its workplaces and all production units maintained their production levels despite some disruptions and slightly higher sick leave. 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 the spread of Covid-19 in society in general. Boliden took an extraordinary step by allowing employees with professional medical training to contribute directly by temporarily working in hospitals and medical clinics while retaining their Boliden salaries. 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 at site level and the overall work is coordinated at BA/Group level through a continuous and regular exchange of good practice.

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.

Human rights

Boliden's own operations are located in countries where the risks of human rights violations are generally low. There are, however, material aspects to consider, such as non-discrimination and the rights of indigenous people. The majority of Boliden's human rights risks are related to the supply chain. All material human right aspects are covered by Boliden's Business Code of Conduct.

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 its 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 work-life balance.
- Forcefully act against and counter any incidents 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

Some of Boliden's operations in northern Sweden and northern Finland are located in reindeer-herding areas. Boliden promotes open dialogue 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 will be shared among SVEMIN members as well as Sami organizations. During 2021, Boliden also published a commitment regarding the rights of indigenous people.

Resettlement and closure planning

Boliden's operations involve land use for mining, industrial areas, and ponds for use as tailings and clarification ponds. The conservation and reclamation of mining areas that reach the end of their production lifespans therefore 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. The resettlement of people and communities is something that Boliden strives to avoid. In such cases where resettlement is not possible to avoid, voluntary agreements are prioritized and a mitigation hierarchy and actions of remedies are applied.

Society

Boliden's business strategy is based on responsible mining and on minimizing negative impacts related to other interests, such as the environment, society and reindeer herding. Boliden has a proactive approach to society that 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. None of Boliden's proven or probable reserves are located in or near areas of conflict according to the Uppsala Conflict Data Program.

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. Local grievance mechanisms are in place at each site. Boliden is in the process of implementing a new local grievance IT system, to ensure that all local grievances are systematically handled and achieved at each Business Unit by the end of 2022.

Boliden's Business Partner Risk Management Program and Boliden's Business Partner Code of Conduct address 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 them 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 into with a follow-up of the development plan.

However, if Boliden believes it to be very difficult or impossible for the business partner to sufficiently improve, 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 always be provided for, 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 time.

BOLIDEN'S 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 Area Mines, Business Area Smelters and the Business Units. Each unit is responsible for identifying their 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. Work plans for exploration or public meetings are held 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.

102–42 Identifying and selecting stakeholders

Boliden's operations affect many people in a variety of ways, and similarly, its stakeholders have different views and expectations of the company. 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 that have expectations, influence perceptions of the company, and are relevant from a sustainability performance perspective. 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 former 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) confirm 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 for Boliden means evaluating environmental impact, taking social considerations into account, and securing strong economic results.

SUSTAINABILITY TOPIC: TALENT ATTRACTION AND RETENTION

102–8 Information on employees and other workers

The number of employees for the disclosures on page 51-54 refers the actual number of employees on December 31 for the years 2019-2021 (head count). Other disclosures in the Sustainability Index and Annual and Sustainability report 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

	2019			2020			2021		
	Number	%	Female, %	Number	%	Female, %	Number	%	Female, %
Permanent	5,912	95.2	18.7	6,067	95.0	19.3	6,010	90.8	20.0
Temporary	295	4.8	39.7	319	5.0	45.1	608	9.2	38.7
Total	**6,207**	**100.0**	**19.7**	**6,386**	**100.0**	**20.6**	**6,618**	**100.0**	**21.7**

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

	2019		2020		2021	
Region	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
Sweden	3,326	147	3,426	181	3,450	342
Norway	302	34	320	46	337	106
Finland	1,625	90	1,703	78	1,591	131
Ireland	590	24	600	14	614	29
Other	19	0	18	0	18	0
Total	**5,912**	**295**	**6,067**	**319**	**6,010**	**608**

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

	2019			2020			2021		
Employment type	Number	%	Female, %	Number	%	Female, %	Number	%	Female, %
Full-time	5,809	98.3	18.5	5,963	98.3	19.0	5,924	98.6	19.7
Part-time	103	1.7	30.1	104	1.7	34.6	86	1.4	37.2
Total	**5,912**	**100.0**	**18.7**	**6,067**	**100.0**	**19.3**	**6,010**	**100.0**	**20.0**

401–1 New employee hires and employee turnover

Boliden aims to have a diverse workforce in all its operations. Boliden has instituted a policy aimed at facilitating its goal of female employees constituting at least 21% of the total workforce by 2023. In 2021, 27% of all new permanent employee hires were women.

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

	2019		2020		2021	
	Number	%	Number	%	Number	%
Group Total	**537**	**9**	**474**	**8**	**285**	**5**
<30 years	211	39	181	38	113	40
30–50 years	271	51	219	46	135	47
>50 years	55	10	74	16	37	13
Men	399	74	341	72	208	73
Women	138	26	133	28	77	27
Sweden	364	68	338	71	191	67
Norway	34	6	31	7	20	7
Finland	127	24	94	20	63	22
Ireland	12	2	11	2	11	4
Other countries	0	0	0	0	0	0

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

	2019		2020		2021	
	Number	%	Number	%	Number	%
Group Total	**376**	**6**	**346**	**6**	**384**	**6**
<30 years	53	14	29	8	61	16
30–50 years	144	38	154	45	163	42
>50 years	179	48	163	47	160	42
Men	296	79	272	79	303	79
Women	80	21	74	21	81	21
Sweden	215	6	210	6	234	6
Norway	24	8	18	6	13	3
Finland	104	6	93	5	117	7
Ireland	33	6	24	4	20	3
Other countries	0	0	1	6	0	0

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 executives, General Managers (GMs), directors and other managers consists of fixed salary, variable remuneration, pension benefits and other benefits. The variable remuneration in 2021 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 shifts 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 that regulate 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 healthcare, 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 that 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% (including 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 the company), annual leave and public holidays, and the 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 (such as summer students) are only entitled to life assurance, travel insurance (official company journeys), and disability coverage.

Sweden

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

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 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 2021, Boliden experienced no strikes or lockouts. 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 Workers' 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, 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 to promote 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, 2021 was 6,419 (6,228) representing 97% (97%) of the total workforce.

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	2019	2020	2021
Men	21.1	11.0	14.3
Women	22.2	12.0	18.3
White-collar	23.9	11.6	15.2
Blue -collar	19.9	10.9	15.3
Total	**21.3**	**11.2**	**15.2**

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 skill 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 these programs.

Examples of training provided by Boliden Group HR:

- Young Professionals Program: Onboarding and personal development program for all young academics in Boliden. The program that began in 2020 but was postponed due to Covid-19 was carried out in 2021 in digital form with 23 participants. In addition, a new program started in 2021 with 16 new participants. In total, 417 participants have now completed the program since it began in 2005.
- High Potentials Program: Assessment program for future top leaders in Boliden. One new Program with 17 participants started in 2021. In total, 102 employees have participated since the start in 2008.
- Senior Middle Management Program: Improve leadership skills among Boliden's senior middle management leaders. One program was carried out in 2021 with 16 participants. In total, 128 participants have completed the program since it began 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 2021 was postponed, but will commence in 2022. In total, the program has had 222 participants since it began 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 2021, 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 was 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. It does this by enabling 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

	2019	2020	2021
Group Total	77	78	85
Men	74	77	84
Women	88	82	92
White-collar	85	80	99
Blue-collar	68	72	78

New HR master data system implementation

At the end of 2019, a decision was taken by the Boliden Board of Directors to invest in a new common HR master data system for the entire Boliden Group. The purpose was to enable the secure, shared and efficient management of data regarding organization, HR related processes, employees and their competence 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 began, with three focus areas: Data and Integration, Standardization of Processes, and Change Management. In the beginning of 2021, the work within phase one was launched and a governance organization was installed to support the local Business Units in the new way of working. Phase two of the implementation began later in 2021 with the focus areas Recruitment, Training and Job architecture. The new functionalities and processes connected to Recruitment and Training were launched in the new system for all Business Units in November 2021.

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 is for at least 21% of all employees to be women by the end of 2023, calculated as FTE. In 2021, the portion of female employees was 20.7% (19.8). The proportion of women at management level, among Boliden's so-called top-100, was 28% (26) and 3 (3) of Boliden's 10 mines and smelters were led by women at the end of 2021. Boliden does have employees from minority groups. However, this is not recorded out of concern for individual privacy.

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

	2019			2020			2021		
	Board of Directors	Group Management	Supervisors	Board of Directors	Group Management	Supervisors	Board of Directors	Group Management	Supervisors
Total number	**10**	**5**	**648**	**10**	**5**	**677**	**11**	**5**	**727**
Women, %	50	20	17	50	20	17	36	20	19
Men, %	50	80	83	50	80	83	63	80	81
<30 years, %	0	0	5	0	0	4	0	0	5
30–50 years, %	20	20	61	20	20	59	9	20	60
>50 years, %	80	80	34	80	80	37	91	80	35

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

Employees	2019	2020	2021
Total number	**6,207**	**6,386**	**6,618**
Blue-collar, %	65	65	65
White-collar, %	35	35	35
Women, %	20	21	21
Men, %	80	79	79
<30 years, %	16	16	20
30–50 years, %	52	52	50
>50 years, %	32	32	30

SUSTAINABILITY TOPIC: OCCUPATIONAL HEALTH AND SAFETY

403–1 Occupational health and safety management system

All Boliden units have occupational health and safety management systems in line with ISO 45001:2018. Present certificates are available at 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 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. Work identified as hazardous/dangerous may not be assigned to those under 18 years of age.

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 are taken when required, and are reported to the authorities. Employees are screened regularly via the occupational health services provided at their workplace to ensure that everyone 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 developed additional Group Safety Standards, which encourages daily health and safety 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 the committees. The health and safety committees identify potential hazards, evaluate them, recommend corrective actions, and follow up on implemented recommendations. The committees also hold regular meetings and carry out workplace inspections. Additionally, committee members are 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 and safety committee are encouraged to submit suggestions on improvements.

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 health and safety even further.

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. A senior mid-management program was conducted in 2021 to promote safety training among emerging leaders in the company. Root-cause analysis training was also conducted in 2021. A program to train informal leaders to become safety ambassadors (Safety Savvy) was held at the Tara site.

It is estimated that of the annual total amount of skill training per employee, about six hours are specifically related to health, safety and emergency training for employees and four hours for contractors.

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 and new technology to improve safety and productivity. However, no matter how much effort is put into new and improved systems and techniques, they still require individuals to behave in a safe manner. 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, for both employees and contractors, to decrease in recent years with the number of accidents with absence (LTI) decreasing by 15% during the period 2012–2021.

In 2021, minor injuries increased for a second year in a row. 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 at 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 for example 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 were discussed in local working groups and a joint action plan with local measures was implemented during the first half of 2021. It is hoped that implementing these proposals will reverse the accident trend again in all units.

The sick leave rate was stable in 2021, 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 Boliden's production units and offices. Boliden also took an extraordinary measure by offering employees an opportunity to assist in the overstretched healthcare sector while still retaining their Boliden 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 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 units.

403–9 Work-related injuries

Boliden's operations include a large variety of different 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 creation of products at smelters and transport to customers. The focus is therefore on active risk reporting at daily pulse meetings and regular safety inspections to detect and mitigate serious hazards and risks (considered as risk class 3, RC3) before they become incidents. RC3 cases are followed up with a Root Cause Analysis (RCA), which includes preventive and corrective actions. In 2020, employees submitted 18,453 risk reports.

Despite efforts to decrease work-related injuries, the number of accidents leading to absence from work (LTI) increased slightly by 2% during 2021, from 5.8 to 5.9 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 2021 due to the Covid-19 pandemic. In 2021, 56 (50) accidents resulting in absence from work were reported at Boliden's units by Boliden employees. The most common form of accidents included 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 90 (88). The number of workdays of absence due to accidents among Boliden's employees was 580 (530).

The MSHA all-incidence rate are 1.1 for employees and 1.4 for contractors while the near miss frequency rate is 36.5 for employees and 19.3 for contractors.

LTI Frequency[1] Boliden employees

	2019	2020	2021
Sweden	3.4	4.2	4.6
Norway	7.3	3.5	8.6
Finland	5.1	6.6	6.7
Ireland	2.7	4.5	4.6
Group	**4.0**	**4.9**	**5.4**

LTI Frequency[1] Boliden contractors

	2019	2020	2021
Sweden	5.8	7.2	5.3
Norway	0.0	10.1	4.1
Finland	5.7	9.8	9.7
Ireland	2.0	2.1	8.6
Group	**5.2**	**7.7**	**6.9**

LTI Frequency[1] employees and contractors

	2019	2020	2021
Sweden	4.2	5.2	4.8
Norway	5.2	5.2	7.3
Finland	5.3	7.7	7.7
Ireland	2.5	3.8	5.8
Group	**4.4**	**5.8**	**5.9**

Lost day rate[1] Boliden employees

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

Work days	2019	2020	2021
Sweden	31	62	64
Norway	213	3	133
Finland	63	110	32
Ireland	19	42	41
Group	**49**	**70**	**56**

Sick leave rate[1] Boliden employees

Percentage	2019	2020	2021
Sweden	3.9	4.8	4.6
Norway	6.6	5.9	6.6
Finland	4.8	4.8	4.4
Ireland	4.1	4.9	6.9
Group	**4.3**	**4.8**	**4.9**

Work-related fatalities employees and contractors

Percentage	2019	2020	2021
Employees	0	0	0
Contractors	0	0	0
Total	**0**	**0**	**0**

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, the frequency/rate stated above is divided by five. The number of days absence for contractors is not reported as there is no reliable data available. The sick leave rate is the total number of hours of absence due to injury or disease divided by the total number of scheduled working hours. Boliden currently lacks the ability to monitor sick leave for contractors working for several clients (other than Boliden).

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

403–10 Work-related ill health

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 contain information on the latest developments in health and safety. The reports include detailed information on proactive safety employee engagement indicators and the number of accidents and serious risk situations. Furthermore, the reports contain information related to short-term and long-term 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 as well as disclose in this report. 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: 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).

Four incidents of discrimination were reported through the formal grievance mechanisms during 2021. All of the incidents were resolved during the reporting period. One of the incidents of discrimination were reported through the whistleblowing channel.

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 secure its social license to continue to operate. With 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 as a responsible actor respects 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:

1. 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 project MINEDEER to find better ways to evaluate reindeer disturbance zones. This project is financed by Boliden and 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 (SLU).
2. Re-establishment of reindeer grazing species like lichens on former mine sites – Pilot tests have been set up in Boliden and Aitik in partnership with SLU.
3. The influence on reindeer grazing species by dust will be studied in a new project together with LKAB, Sveaskog and SLU. This will be done by combining large-scale field surveys around two of the country's largest mining areas, Svappavaara and Aitik, with carefully planned and executed dust emission experiments.

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 provide 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 the hearings and meetings is planned based on need and may consist of anything from single meetings to extensive citizen dialogues.

SUSTAINABILITY TOPIC: SUSTAINABLE BUSINESS GROWTH AND STAKEHOLDER RELATIONS

Boliden's ambition is to maintain good community relations and effective operations management in order to ensure its social license to operate.

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

Good social relations are important to Boliden, both for its current business operations and for new projects – everything from the initial exploration to rehabilitation over the long-term needs to be properly managed. Boliden maintains continuous dialogue with stakeholders and continuously conducts consultation processes where the public and various stakeholders 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 citizens dialogue regarding Gillervattnet and the Boliden industrial area is a good example of a developed consultation process.

All (100%) 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 2021, Boliden's units sponsored 314 (286) local activities with a combined value of approximately SEK 12.4 (11.4) m.

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 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 its 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 ensuring its continued 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. 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, for example 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 created on average.

None of Boliden's units are located in any of the 20 lowest ranking countries on the Transparency International's Corruption Perception Index.

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 1.5 and 3 km respectively to the north-east part of the Aitik pit. The Laurajärvi village is located about 5 km east of the mining area.

The Liikavaara expansion project, which is currently undergoing a permitting process, is located close to the village of Liikavaara and about 1.5 km 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 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 the city of Gällivare and with a 25% bonus. During 2021, agreements have been signed with all residents in the affected villages.

MM10 Number and percentage of operations with closure plans

All of Boliden's present operations, both mines and smelters, have environmental closure plans, which have been approved by the authorities. In 2021, Boliden worked actively on the reclamation of former mine sites. At the end of 2021, a total of SEK 6,472 (4,837) m was set aside for the reclamation of mining areas and smelters. Additions to existing provisions during the reporting year are primarily attributable due to a reduction of the discount rate by 1.5 percentage points from 2% to 0.5%.

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. If risks to external stakeholders are significant, the emergency management plan is prepared in collaboration with potentially affected stakeholders. Boliden's emergency preparedness procedures have worked satisfactorily and led to the minimization of damage to people, property, and the environment.

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, the International Council of Mining and Metals (ICMM), 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 that act for or on behalf of Boliden. The program states that it is always forbidden to give or accept political contributions or charity donations.

SOCIAL – PART OF THE 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 Assessment specifically focus on freedom of association and collective bargaining, child labor, forced and compulsory labor among other topics.

Boliden has Human Rights Grievance Mechanisms that cover its 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 and silver 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 the environment and avoid contributing to conflict through their mineral sourcing practices." Companies included on the list have implemented routines to ensure that the raw material supply chain complies with the OECD due diligence guidance for responsible supply chains of minerals from conflict-affected and high-risk areas

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 to Boliden's business, any stakeholder is welcome to contact either the company's local managers or any of its functions, by a variety of channels: for example by phone, e-mail, and written correspondence. Anonymous reporting can be done through Boliden's whistleblower channel, which can be accessed both on the internal intranet and the external website of Boliden www.boliden.com.

LABOR – PART OF THE UN GLOBAL COMPACT

Principle 3 (GRI 407): Boliden should uphold the freedom of association and the effective recognition of the right to collective bargaining
97% 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 or 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 based on gender, ethnicity, age, disability, religion, sexual orientation, or any other factor. More information can be found in GRI disclosure 103-2&3.

CASE STORY:

Boliden Co-worker and Leader Principles

The implementation of Boliden's new purpose, vision and values started in 2020 with workshops for all employees and continued in 2021 to include the whole organization. At the same time as the new values were implemented throughout the company in 2021, Boliden also started the development work of defining common Leadership and Co-worker Principles. Boliden's values – Care, Courage and Responsibility – are the building blocks and guidance for appropriate conduct, mindset and behavior within the organization that altogether form the culture within Boliden. Developing a purpose and value driven company culture is supporting Boliden's journey to become a sustainability leader.

Good leadership is crucial for employees to be able to perform at their best and at the same time feel joy, motivation and commitment. Collaboration with employees is also important and "co-worker ship" means that employees take responsibility for their work and contribute to the development of both the business and a good working climate.

The Leadership and Coworker principles were launched at the General Management Meeting in September 2021 where Boliden's Top 100 managers, representing all Boliden operations, participated, as well as union representatives. The principles and the way they would impact the daily work within Boliden were discussed in two separate workshops during the meeting.

The finalized principles will be implemented throughout the whole organization by July 2022 through the line management organization. The implementation will be conducted through workshops with small and mixed groups of employees to enable a high level of involvement, active participation and to increase different perspectives in the discussions.

Boliden's Leadership Principles for Co-workers and Leaders

CO-WORKER PRINCIPLES

I am a Boliden co-worker
I am open minded and willing to learn
I collaborate and support my colleagues
I take initiative
I am honest and respectful
I give and take feedback
I contribute to a positive work environment
I act on risks

LEADER PRINCIPLES

I am a Boliden leader
I lead towards targets
I communicate clearly
I delegate with trust
I show commitment and dedication
I am present and available
I coach and develop people
I am fair and inclusive
I act with integrity
I lead by example

CONTENT INDEXES

SI = Sustainability index 2021
ASR = Annual Sustainability Report 2021
◒ = Partially reported - details of omitted components can be found at corresponding disclosure.

GRI CONTENT INDEX

General Disclosures		Omissions	Reference
GRI 100: General Disclosures ASR Annual and Sustainability Report SI Sustainability Index			
Organizational profile			
102-1	Name of the organization		Boliden AB (publ)
102-2	Activities, brands, products, and services		ASR 6
102-3	Location of headquarters		SI back cover
102-4	Location of operations		ASR 16-17
102-5	Ownership and legal form		ASR 89
102-6	Markets served		ASR 14, 48-51
102-7	Scale of the organization		ASR 110-116, SI 40
102-8	Information on employees and other workers		ASR 80 note 5, SI 51
102-9	Supply chain		ASR 38-39, SI 13-14
102-10	Significant changes to the organization and its supply chain		SI 3
102-11	Precautionary Principle or approach		ASR 30, 56, SI 7, 26, 44
102-12	External initiatives		ASR 31, SI 6
102-13	Membership of associations		SI 59
Strategy			
102-14–15	CEO statement (Statement from senior decision-maker)		ASR 4-5
Ethics and integrity			
102-16–17	Values, principles, standards, and norms of behavior		ASR 32, 38 SI 47
Governance			
102-18–39	Governance structure		ASR 59-68, SI 6-12
Stakeholder engagement			
102-40	List of stakeholder groups		SI 7, 50
102-41	Collective bargaining agreements		SI 49, 52, 53, 60
102-42	Identifying and selecting stakeholders		SI 6, 50
102-43	Approach to stakeholder engagement		SI 10, 40, 50, 57-60
102-44	Key topics and concerns raised		SI 50
Reporting practice			
102-45	Entities included in the consolidated financial statements		ASR 86 Note 16
102-46	Defining report content and topic boundaries		SI 4-6
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 2020
102-50	Reporting period		Calendar year
102-51	Date of most recent report		March 2021
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, 5
102-55	GRI content index		SI 62-65
102-56	External Assurance		SI 71
GRI 103: Management Approach			
103-1	Explanation of the Sustainability topic and its boundary		SI 9
103-2	The management approach and its components		SI 13
103-3	Evaluation of the management approach		SI 13

ESG Disclosures		Omissions	Reference
GRI 200: Economic standard series			
Management approach – Economic			
201-103	Management approach – Economic		SI 16-17
Economic performance			
201-1	Direct economic value generated and distributed		ASR inside cover, SI 18
201-2	Financial implications and other risks and opportunities for the organization's activities due to climate change		ASR 6, 34, SI 18
201-3	Defined benefit plan obligations and other retirement plans		ASR 80-81, Note 5
Market presence			
202-2	Proportion of senior management hired from the local community		SI 19
Indirect economic impacts			
203-2	Significant indirect economic impacts, including the extent of impacts		SI 19
Anti-corruption			
205-1	Operations assessed for risks related to corruption		ASR 38, SI 20
205-2	Communication and training on anti-corruption policies and procedures	◒	ASR 38, SI 21
205-3	Confirmed incidents of corruption and actions taken		ASR 38, SI 21
Anti-competitive behavior			
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices		ASR 34, SI 21
GRI 300: Environmental standard series			
Management approach – Environment			
301-103	Management approach – Environment		SI 25, 26
Materials			
301-1	Materials used by weight or volume		SI 26
301-2	Recycled input Materials used		SI 26, 27
Energy			
302-1	Energy consumption within the organization		ASR 8,36, 115, SI 30
302-3	Energy intensity		ASR 34, SI 39
302-4	Reduction of energy consumption		ASR 34, SI 30
Water and Effluents (GRI indicators are from 2018)			
303-1	Interactions with water as a shared resource		SI 39
303-2	Management of water discharge-related impacts		ASR 34, SI 39
303-3	Water withdrawal	◒	SI 39
303-4	Water discharge	◒	ASR 34, SI 39
303-5	Water consumption		SI 39
Biodiversity			
304-1	Operational sites owned, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas		SI 40
304-2	Significant impact of activities on biodiversity		SI 41
304-3	Habitats protected or restored		SI 41
304-4	IUCN Red list species and national conservation list species with habitats in the area affected by operation.	◒	ASR 34, SI 39
MM1	Amount of land disturbed or rehabilitated		SI 39
Emissions			
305-1	Direct (Scope 1) GHG emissions		ASR 11, 116, SI 36
305-2	Energy indirect (Scope 2) GHG emissions		ASR 11, 116, SI 36
305-4	GHG emissions intensity		ASR 11, 116, SI 37
305-5	Reduction of GHG emissions		ASR 36, 116, SI 37
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions		ASR 13, 116, SI 43

ESG Disclosures		Omissions	Reference
Waste			
306-3	Waste generated		SI 28
306-4	Waste diverted from disposal	◒	SI 28
306-5	Waste directed to disposal	◒	SI 28
MM3	Total amount of overburden, rock, tailings, etc.		SI 28-29
Environmental Compliance			
307-1	Non-compliance with environmental laws and regulations		SI 25-26
Business Partner Social and Environmental Assessment			
308-1	New suppliers screened using environmental criteria		SI 22
GRI 400: Social standards series			
Management approach – Social			
401-103	Management approach – Social		SI 48
Employment			
401-1	New employee hires and employee turnover		ASR 115, SI 51
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees		SI 52
MM4	Strikes and lock-outs exceeding one week		SI 53
Occupational Health and Safety			
403-1	Occupational health and safety management system		SI 55
403-2	Hazard identification, risk assessment, and incident investigation		SI 55
403-3	Occupational health services		SI 55
403-4	Worker participation, consultation, and communication on occupational health and safety		SI 55
403-5	Worker training on occupational health and safety		SI 55
403-6	Promotion of worker health		SI 55
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships		SI 56
403-8	Workers covered by an occupational health and safety management system		SI 56
403-9	Work-related injuries		SI 56
403-10	Work-related ill health	◒	SI 56
Training and Education			
404-1	Average hours of training per year per employee		SI 53
404-2	Programs for upgrading employee skills and transition		SI 53
404-3	Percentage of employees receiving regular performance and career development reviews		SI 53
Diversity and Equal Opportunity			
405-1	Diversity of governance bodies and employees		SI 54
Non-discrimination			
406-1	Incidents of discrimination and corrective actions taken		SI 57
Rights of Indigenous Peoples			
411-1	Incidents of violations involving rights of indigenous people		SI 57
Local Communities			
413-1	Operations with local community engagement, impact assessments, and development programs		SI 58
413-2	Operations with significant actual and potential negative impact on local communities		SI 58
Resettlement and Closure Planning			
MM9	Sites where resettlements took place		SI 59
MM10	Number and percentage of operations with closure plans		SI 59

ESG Disclosures		Omissions	Reference
Business Partner Social and Environmental Assessment			
414-1	New suppliers screened using social criteria		ASR 38, SI 22
Public policy			
415-1	Political contributions		SI 59
Socioeconomic Compliance			
419-1	Non-compliance with laws and regulations in the social and economic area		ASR 66, SI 59

SASB CONTENT INDEX

Topic	Accounting metric	Code	Reference
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations.	EM-MM-110a.1	SI 36
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets.	EM-MM-110a.2	SI 30-38
Air Quality	Air emissions of the following pollutants: (1) CO, (2) NOx (excluding N2O), (3) SOx, (4) particulate matter (PM10), (5) mercury (Hg), (6) lead (Pb), and (7) volatile organic compounds (VOCs).	EM-MM-120a.1	SI 43
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable.	EM-MM-130a.1	SI 30
Water Management	(1) Total freshwater withdrawn, (2) total freshwater consumed percentage of each in regions with High or Extremely High Baseline Water Stress.	EM-MM-140a.1	SI 39
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations.	EM-MM-140a.2	SI 39
Waste & Hazardous Materials Management	Total weight of tailings waste, percentage recycled.	EM-MM-150a.1	SI 28
	Total weight of mineral processing waste, percentage recycled.	EM-MM-150a.2	SI 28
	Number of tailings impoundments, broken down by MSHA hazard potential.	EM-MM-150a.3	SI 28
Biodiversity impact	Description of environmental management policies and practices for active sites.	EM-MM-160a.1	SI 40-42
	Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2) actively mitigated, and (3) under treatment or remediation.	EM-MM-160a.2	SI 40
	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat.	EM-MM-160a.3	SI 40
Security, Human Rights & Rights of Indigenous People	Percentage of (1) proved and (2) probable reserves in or near areas of conflict.	EM-MM-210a.1	SI 49
	Percentage of (1) proved and (2) probable reserves in or near indigenous land.	EM-MM-210a.2	SI 57
	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict.	EM-MM-210a.3	SI 57-58
Community Relations	Discussion of process to manage risks and opportunities associated with community rights and interests.	EM-MM-210b.1	SI 58
	Number and duration of non-technical delays.	EM-MM-210b.2	SI 53
Labor Relations	Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees.	EM-MM-310a.1	N/A
	Number and duration of strikes and lockouts.	EM-MM-310a.2	SI 53
Workforce Health & Safety	(1) MSHA all-incidence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees.	EM-MM-320a.1	SI 56-57
Business Ethics & Transparency	Description of the management system for prevention of corruption and bribery throughout the value chain.	EM-MM-510a.1	ASR 36, SI 20-21
	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index.	EM-MM-510a.2	SI 58

	Activity metric	Code	Reference
	Production of (1) metal ores and (2) finished metal products.	EM-MM-000.A	ASR 10 Year Overview
	Total number of employees, percentage contractors.	EM-MM-000.B	Data not yet available

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 38-39, SI 60
Principle 2: make sure that they are not complicit in human rights abuses.	ASR 38-39, SI 60
Labour	
Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	ASR 38-39, SI 60
Principle 4: the elimination of all forms of forced and compulsory labor;	ASR 38-39, SI 60
Principle 5: the effective abolition of child labor, and	ASR 38-39, SI 60
Principle 6: the elimination of discrimination in respect of employment and occupation.	ASR 38-39, SI 60
Environment	
Principle 7: Business should support a precautionary approach to environmental challenges,	ASR 30-36, SI 44
Principle 8: undertake initiatives to promote greater environmental responsibility, and	ASR 30-36, SI 44
Principle 9: encourage the development and diffusion of environmentally friendly technologies.	ASR 30-36, SI 44
Anti-corruption	
Principle 10: Business should work against corruption in all its forms, including extortion and bribery.	ASR 38, 60-69, SI 21

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.

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 60-66
Board and/or board committees consider climate-related issues when reviewing and guiding strategy	SI 31, 33
Board monitors and oversees progress against goals and targets for addressing climate-related issues	ASR 63-65, SI 31
Description provided of the processes by which the board is informed about climate-related issues disclosed	ASR 65, SI 31
Organization has assigned climate-related responsibilities to management-level positions or committees	ASR 65, SI 31
Description provided of the associated organizational structure(s)	SI 31, 32
Description provided of how management monitors climate-related issues	SI 31, 32
Strategy	
Assessment of potential climate-related impacts on business conducted	ASR 8-24, 37, SI 34
Description provided of what they consider to be the relevant short-, medium-, and long-term time horizons	ASR 36, SI 35
Description provided of the specific climate-related issues potentially arising in each time horizon	ASR 36, SI 32, 33, 35
Company discloses information on the potential impacts of climate-related risks and opportunities	ASR 6, 34, 36, 56, SI 32-36
Description provided of how the organization's strategies might be affected by climate-related risks and opportunities	ASR 6-9, 56, SI 32-36
Climate-related scenario analysis conducted by the company	SI 32-36
Company discloses how resilient the organization's strategies are to climate-related risks and opportunities	ASR 7, 8, 36, SI 35, 36
Risk management	
Processes for identifying climate-related risks defined, covering potential size and scope of identified climate-related risks	ASR 56, SI 7-9, 18, 32-36
Description provided of processes used to manage climate-related transition risks (policy and legal, technology, market, reputation)	SI 32, 33
Description provided of processes used to manage climate-related physical risks (acute and/or chronic)	SI 33-35
Description provided of processes used to manage climate-related opportunities (resource efficiency, energy source, products & services, markets, resilience)	SI 35
Processes for managing climate-related risks defined	SI 32-34
Processes for identifying, assessing, and managing climate-related risks are integrated into overall enterprise risk management framework	SI 18, 32-34
Climate-related risks and opportunities are integrated into current decision making and strategy formulation	ASR 1, 4-7, SI 32-34
Metrics and targets	
Company discloses GHG emissions quantitative metrics used to measure & manage climate-related risks & opportunities	ASR 11, 13, 116, SI 35-37
Company discloses quantitative metrics (other than GHG emissions) used to measure & manage climate-related risks & opportunities	SI 11, 18, 32-36
Company discloses quantitative information regarding the financial implications on its metrics used to measure & manage climate-related risks & opportunities	SI 18, 32-36
Quantitative disclosures relate to climate-related opportunities, such as revenue from products and services designed for a lower-carbon economy	SI 11, 18, 32-36
Performance metrics are incorporated into remuneration policies	ASR 80-82, note 5, SI 24, 52
Company defines an internal price of carbon, which is factored into business decision-making	ASR 57, 83, SI 35
Industry-specific GHG efficiency ratios disclosed	SI 36, 37
GHG targets in place	ASR 11, SI 37
Climate change non-GHG targets in place, covering: water, energy, land use, and waste management where relevant and applicable	ASR 11, 13, SI 39

ICMM PRINCIPLES CONTEXT INDEX

Principles	Reference
Principle 1: Apply ethical business practices and sound systems of corporate governance and transparency to support sustainable development	
Establish systems to maintain compliance with applicable law. ***Note:*** *ICMM's member companies are already required to comply with all applicable laws in the countries that they operate in. However, many stakeholders want mining companies to show that they have strong systems in place that ensure legal compliance.*	ASR 19, 30, 38, 39, 59, 60, 66 SI 8, 13, 14, 16, 17, 59
Implement policies and practices to prevent bribery, corruption and to publicly disclose facilitation payments.	ASR 30, 38, 59, 65 SI 4, 8, 12-14, 17, 20-22, 59
Implement policies and standards consistent with the ICMM policy framework.	ASR 38-39, 65, SI 13
Assign accountability for sustainability performance at the Board and/or Executive Committee level.	ASR 65 SI 3, 6, 9, 14, 31, 33
Disclose the value and beneficiaries of financial and in-kind political contributions whether directly or through an intermediary.	SI 59
Principle 2: Integrate sustainable development in corporate strategy and decision-making processes	
Integrate sustainable development principles into corporate strategy and decision-making processes relating to investments and in the design, operation and closure of facilities.	ASR 16, 17, 26, 28, 30, 34 SI 6-8, 16, 18, 24, 25, 33, 35, 37, 42-44, 49
Support the adoption of responsible health and safety, environmental, human rights and labor policies and practices by joint venture partners, suppliers and contractors, based on risk.	ASR 30, 38 SI 7, 13, 14, 17, 20-22, 26, 39, 49, 58, 60
Principle 3: Respect human rights and the interests, cultures, customs and values of employees and communities affected by our activities	
Support the UN Guiding Principles on Business and Human Rights by developing a policy commitment to respect human rights, undertaking human rights due diligence and providing for or cooperating in processes to enable the remediation of adverse human rights impacts that members have caused or contributed to.	ASR 39 SI 5, 13, 14, 48, 49, 60
Avoid the involuntary physical or economic displacement of families and communities. Where this is not possible apply the mitigation hierarchy and implement actions or remedies that address residual adverse effects to restore or improve livelihoods and standards of living of displaced people.	ASR 30 SI 7, 8, 49, 59
Implement, based on risk, a human rights and security approach consistent with the Voluntary Principles on Security & Human Rights.	ASR 39 SI 7, 13, 48, 49, 60
Respect the rights of workers by: not employing child or forced labor; avoiding human trafficking; not assigning hazardous/dangerous work to those under 18; eliminating harassment and discrimination; respecting freedom of association and collective bargaining; and providing a mechanism to address workers grievances.	ASR 39 SI 47-49, 53, 54, 57, 60
Remunerate employees with wages that equal or exceed legal requirements or represent a competitive wage within that job market (whichever is higher) and assign regular and overtime working hours within legally required limits.	SI 16, 49
Respect the rights, interests, aspirations, culture and natural resource-based livelihoods of Indigenous Peoples in project design, development and operation; apply the mitigation hierarchy to address adverse impacts; and deliver sustainable benefits for Indigenous Peoples.	ASR 30, 39, 64 SI 7-9, 48, 49, 57-60
Work to obtain the free, prior and informed consent of Indigenous Peoples where significant adverse impacts are likely to occur, as a result of relocation, disturbance of lands and territories or of critical cultural heritage, and capture the outcomes of engagement and consent processes in agreements.	ASR 39 SI 8, 49, 57, 58
Principle 4: Implement effective risk-management strategies and systems based on sound science, and which account for stakeholder perceptions of risk.	
Assess environmental and social risks and opportunities of new projects and of significant changes to existing operations in consultation with interested and affected stakeholders, and publicly disclose assessment results. ***Note:*** *These should cover issues such as air, water, biodiversity, noise and vibration, health, safety, human rights, gender, cultural heritage and economic issues. The consultation process should be gender sensitive and inclusive of marginalized and vulnerable groups.*	ASR 55-59 SI 33-36, 41, 55, 58
Undertake risk-based due diligence on conflict and human rights that aligns with the OECD Due Diligence Guidance on Conflict Affected and High Risk Areas, when operating in, or sourcing from, a conflict-affected or high risk area.	SI 6, 13-14, 49, 60
Implement risk-based controls to avoid/prevent, minimize, mitigate and/or remedy health, safety and environmental impacts to workers, local communities, cultural heritage and the natural environment, based upon a recognized international standard or management system.	ASR 56-60 SI 33-34, 55-57
Develop, maintain and test emergency response plans. Where risks to external stakeholders are significant, this should be in collaboration with potentially affected stakeholders and consistent with established industry good practice.	SI 59

Principles	Reference
Principle 5: Pursue continual improvement in health and safety performance with the ultimate goal of zero harm	
Implement practices aimed at continually improving workplace health and safety, and monitor performance for the elimination of workplace fatalities, serious injuries and prevention of occupational diseases, based upon a recognized international standard or management system.	ASR 57 SI 3, 6, 13 55
Provide workers with training in accordance with their responsibilities for health and safety, and implement health surveillance and risk-based monitoring programs based on occupational exposures.	ASR 56 SI 48, 53, 56
Principle 6: Pursue continual improvement in environmental performance issues, such as water stewardship, energy use and climate change	
Plan and design for closure in consultation with relevant authorities and stakeholders, implement measures to address closure-related environmental and social aspects, and make financial provision to enable agreed closure and post-closure commitments to be realized.	SI 8, 19, 20, 25, 41, 48, 58, 59
Implement water stewardship practices that provide for strong and transparent water governance, effective management of water at operations, and collaboration with stakeholders at a catchment level to achieve responsible and sustainable water use.	ASR 34, 56 SI 8, 24-25, 28, 39
Design, construct, operate, monitor and decommission tailings disposal/storage facilities using comprehensive, risk-based management and governance practices in line with internationally recognized good practice, to minimize the risk of catastrophic failure. ***Note:*** *Riverine tailings, freshwater lake and/or shallow marine tailings disposal may be considered only if deemed to be the most environmentally and socially sound alternative, based on an objective and rigorous environmental and social impact assessment of tailings management alternatives. The scope of the assessment should be agreed between the member company and the host government.*	ASR 34, 56 SI 8, 24, 25, 28-29, 39
Apply the mitigation hierarchy to prevent pollution, manage releases and waste, and address potential impacts on human health and the environment.	ASR 11 SI 8-12, 14, 24, 25, 28, 36, 43
Implement measures to improve energy efficiency and contribute to a low-carbon future, and report the outcomes based on internationally recognized protocols for measuring CO_2 equivalent (GHG) emissions.	ASR 22, 30-38, 44 SI 33-40, 55-57
Principle 7: Contribute to the conservation of biodiversity and integrated approaches to land-use planning	
Neither explore nor develop new mines in World Heritage sites, respect legally designated protected areas, and design and operate any new operations or changes to existing operations to be compatible with the value for which such areas were designated.	ASR 34, 56 SI 8, 11, 24-25, 40-43
Assess and address risks and impacts to biodiversity and ecosystem services by implementing the mitigation hierarchy, with the ambition of achieving no net loss to biodiversity. ***Note:*** *The ambition of no net loss applies to new projects and major expansions to existing projects that impact biodiversity and ecosystem services.*	ASR 34-35, 56 SI 24, 25, 40-42
Principle 8: Facilitate and support the knowledge-base and systems for responsible design, use, re-use, recycling and disposal of products containing metals and minerals	
In project design, operation and de-commissioning, implement cost-effective measures for the recovery, re-use or recycling of energy, natural resources, and materials.	ASR 9, 13, 34-35 SI 11, 28-38, 45
Assess the hazards of the products of mining according to UN Globally Harmonized System of Hazard Classification and Labelling or equivalent relevant regulatory systems and communicate through safety data sheets and labelling as appropriate.	SI 14
Principle 9: Pursue continual improvement in social performance and contribute to the social, economic and institutional development of host countries and communities	
Implement inclusive approaches with local communities to identify their development priorities and support activities that contribute to their lasting social and economic wellbeing, in partnership with government, civil society and development agencies, as appropriate.	ASR 34 SI 9, 12, 14, 16, 26, 40, 50
Enable access by local enterprises to procurement and contracting opportunities across the project life-cycle, both directly and by encouraging larger contractors and suppliers, and also by supporting initiatives to enhance economic opportunities for local communities.	SI 8, 16, 19, 50, 58
Conduct stakeholder engagement based upon an analysis of the local context and provide local stakeholders with access to effective mechanisms for seeking resolution of grievances related to the company and its activities.	SI 7, 14, 26, 48, 50, 57
Collaborate with government, where appropriate, to support improvements in environmental and social practices of local Artisanal and Small-scale Mining (ASM).	Not applicable

Principles	Reference
Principle 10: Proactively engage key stakeholders on sustainable development challenges and opportunities in an open and transparent manner. Effectively report and independently verify progress and performance	
Identify and engage with key corporate-level external stakeholders on sustainable development issues in an open transparent manner.	ASR 30 SI 3, 4, 6-8, 50
Publicly support the implementation of the Extractive Industries Transparency Initiative (EITI) and compile information on all material payments, at the appropriate levels of government, by country and by project.	ASR 39 SI 16, 22
Report annually on economic, social and environmental performance at the corporate level using the GRI Sustainability Reporting Standards.	ASR 30 SI 2, 5
Each year, conduct independent assurance of sustainability performance following the ICMM guidance on assuring and verifying membership requirements.	SI 13

AUDITOR'S LIMITED ASSURANCE REPORT ON BOLIDEN AB'S SUSTAINABILITY REPORT

To Boliden AB, corporate identity number 556051-4142

Introduction

We have been engaged by the Board of Directors and the President of Boliden AB to undertake a limited assurance engagement of the Boliden AB Sustainability Report for the year 2021. The Company has defined the scope of the Sustainability Report on page 62-66.

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 1 March 2022

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