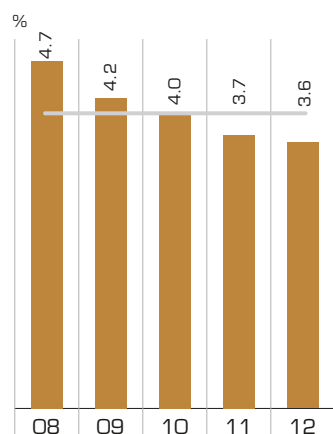


# Boliden in brief

Boliden is a metals company with a focus on sustainable development. Our core expertise lies within exploration, mining, smelting and recycling. Our roots are Nordic, our business is global. Boliden's main metals are zinc and copper, but the production of lead, gold, silver and other products is also of considerable importance for our profitability. The Group has approximately 4,800 employees. Revenues in 2012 totalled SEK 40,001 million (SEK 40,323 m).

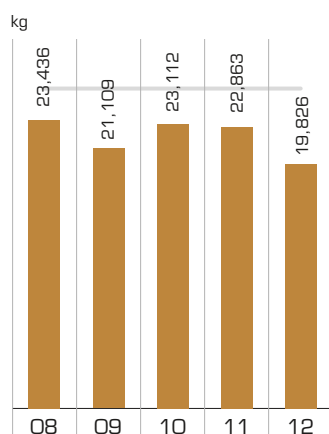
## Sick leave

In 2012, the sick leave rate was 3.6 per cent<sup>1)</sup> (3.7%) in relation to the goal of max. 4.0 per cent by the end of 2013. Boliden will continue to work towards all units meeting this rate or lower by 2013.



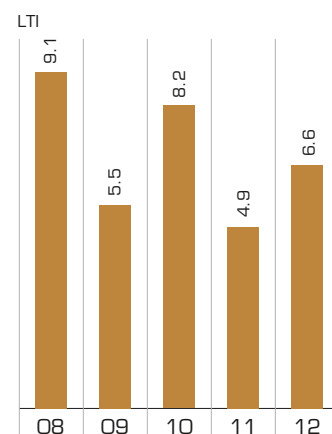
## Emissions of metals to air, 2007–2012

Emissions of metals to air have fallen by 43 per cent (35%) since 2007. No major deviations occurred in 2012, and performance levels have been generally good.



## Accidents

The number of accidents leading to absence from work (LTI) for 2012 increased to 6.6 per one million hours worked, compared with 4.9 in 2011. The level in 2010 was 8.2.



<sup>1)</sup> Absence due to accidents at Tara is not included. Including these hours, the total rate is 3.7. All hours will be included in the statistics as of 2013.

## Boliden's metals

# Zn

### SEK 7,000 million\*

Boliden is the world's sixth biggest producer of zinc from smelters and the eighth biggest producer of zinc concentrate from mines. Boliden's zinc is mainly sold to the European market. The zinc is primarily used to galvanise thin sheet metal and general goods, providing protection against corrosion. The end-users come primarily from the automotive and construction industries.

# Cu

### SEK 18,300 million\*

Boliden is a medium-sized producer of copper metal from smelters and a small producer of copper from mines, but enjoys a significant position in Europe. Boliden's customers manufacture semi-finished goods for further processing into wire, tubing, sheet metal and finished copper products, for example. Copper, which has good conductivity, is primarily used in the construction, electronics and transport industries.

# Pb

### SEK 1,000 million\*

Boliden is a medium-sized producer of lead from smelters and mines. Recycled batteries make up 75 per cent of the raw materials used in Boliden's lead production. Lead in mined concentrate form comes from Boliden's zinc mines, where lead is a subsidiary metal. Most of the world's lead production is used in vehicle batteries and back-up power supplies.

# Au

### SEK 5,700 million\*

Gold is an important metal in Boliden's mines and smelters and the Group's current investments will increase gold production. The gold comes from the recycling of electronic scrap and as a subsidiary metal from copper concentrate. Gold is used in the jewellery and electronics industries. The importance of gold as an asset class for financial players has increased.

# Ag

### SEK 3,800 million\*

Several of Boliden's mines contain substantial amounts of silver and once the Garpenberg expansion is completed, this mine will be a significant producer of silver. Silver, which is also recycled from electronic scrap, is used in the jewellery, photographic, electrical and electronics industries. As with gold, the importance of silver as an investment alternative for financial players has increased.

\* A simplified estimation of the market value of Boliden's metal production in 2012. The value is calculated on the basis of tonnage multiplied by the average price for the year.

Boliden also produces and sells other products, such as sulphuric acid, aluminium fluoride, sulphur dioxide and palladium concentrate.

# Boliden locations

## Putting Boliden on the map

### ● Mining areas

**Tara** – zinc and lead

**Garpenberg** – zinc, silver, lead, gold and copper

**The Boliden Area** – zinc, copper, gold, silver and lead

**Aitik** – copper, gold and silver

### ○ Smelters

**Kokkola** – zinc and sulphuric acid

**Odda** – zinc and aluminium fluoride

**Rönnskär** – copper, gold, silver, lead, zinc clinker and sulphuric acid

**Harjavalta** – copper, gold, silver, sulphuric acid and nickel smelting

**Bergsöe** – lead alloys

### ● Offices

**Stockholm** – head office and Business Area Smelters

**Boliden** – Business Area Mines

**Neuss** – sales office

**Leamington Spa** – sales office



● Mining areas

○ Smelters

● Offices

# Boliden sustainability reporting

## – GRI Appendix

Boliden's 2012 sustainability reporting is composed of two units: one integrated into the Annual Report 2012 that describes our social, environmental and economic responsibility, and one that reports our impact and results according to the GRI reporting framework. The information presented in the Annual Report discloses how Boliden works and performs in relation to a set of sustainability challenges that we have identified as prioritised. This GRI Appendix reports the Group's sustainability progress in greater detail and is structured according to the GRI-guidelines. Boliden declares that we report in accordance with level B of GRI's three-level system, graded from C to A. The sustainability information presented in the two units has not been submitted for third-party audit.

### GRI content index

The information below is a content index for the disclosure of strategy, organisational profile, report parameters, management approach, performance indicators and sector supplement indicators (MM) as specified by the GRI guidelines and reported by Boliden. It also includes references to Boliden's environmental, social and economic goals and results. Status statements are provided in the respective performance indicator reporting text.

GRI Appx = GRI Result Appendix 2012

AR = Annual report 2012

Profile disclosure		Reference
<b>Strategy and analysis</b>		
1.1	President's Statement	AR 6–7
1.2	Key impacts, risks, and opportunities	AR 6–9, 12–15, 30–31, 56–61, 68, GRI Appx 7–15, 23
<b>Organisational profile</b>		
2.1	Name of the organisation	AR 64, GRI Appx 1
2.2	Primary brands, products, services	AR 4–5, 8, 34–35, GRI Appx 2–3
2.3	Operational structure of the organisation	AR 34–35, 42–43, 50–51
2.4	Location of organisation's head office	AR 129
2.5	Number and names of countries where the organisation operates	AR 4, 18–19, 40, 42–43, 50–51, 129
2.6	Nature of ownership and legal form	AR 32–33
2.7	Markets served	AR 4–5, 18–19, 37, 40, 42–43, 50–51, 129
2.8	Scale of reporting organisation	AR 8–9, 14–15, 27–29, 89
2.9	Significant changes during the reporting period regarding size, structure, or ownership	No significant changes
2.10	Awards received in the reporting period	AR 3, 55
<b>Report parameters</b>		
3.1	Reporting period	Calendar year
3.2	Date of most recent previous report	Annual Report 2011 and Sustainability Report 2011, published in March 2012
3.3	Reporting cycle	Annually
3.4	Contact point for questions regarding the report or its contents	AR 129, GRI Appx 6
3.5	Process for defining report content	GRI Appx 7
3.6	Boundary of the report	GRI Appx 7
3.7	Specific limitations on the scope or boundary of the report	GRI Appx 7
3.8	Basis on reporting on entities that can significantly affect comparability from period to period, and/or between organisations	GRI Appx 7
3.9	Data measurement techniques and the bases of calculation	GRI Appx 7, 12
3.10	Explanation of the effect of any re-statements of information provided in earlier reports	GRI Appx 7
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	GRI Appx 7
3.12	Table identifying the location of the Standard Disclosures in the report	GRI Appx 4–6
3.13	Policy and current practice with regard to seeking external assurance for the report	AR 124, GRI Appx 4

Profile disclosure		Reference
<b>Governance and CSR management</b>		
4.1	Governance structure of the organisation	AR 30–31, 64–69, GRI Appx 7
4.2	Indicate whether the Chair of the highest governance body is also an executive officer	AR 65, 68, 70–72
4.3	Number of members of the highest governance body that are independent and/or non-executive members	AR 65, 70–72
4.4	Mechanism for shareholders and employees to provide recommendations or direction to the highest governance body	AR 64, GRI Appx 18
4.5	Linkage between compensation and the organisation's performance	AR 29, 64, 67, 89–90, GRI Appx 17
4.6	Process in place for the highest governance body to ensure conflicts of interest are avoided	AR 64–69
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body	AR 66–67
4.8	Internally developed statements of mission or values, codes of conduct and other principles	AR 2, 8, 12–13, 53, 61–63, 68, GRI Appx 7, 21–22
4.9	Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental, and social performance	AR 67–68
4.10	Process for evaluating the highest governance body's own performance	AR 64–67
4.11–13	Commitments to external initiatives	AR 3, 7, 53, 57–58, 61, 64, 68, GRI Appx 7, 10, 18–21
4.14	Stakeholder engagement	AR 61, GRI Appx 7, 18–21
4.15	Basis for identification and selection of stakeholders with whom to engage	AR 8, 61, 68, GRI Appx 7
4.16	Approaches to stakeholder engagement	AR 61, 64, GRI Appx 7, 21–22
4.17	Key topics and concerns that have been raised through stakeholder engagement	GRI Appx 7

Indicator		Reference
<b>Environmental performance (EN)</b>		
	Goals and results	AR 8–9, 12–15, 56–60, 123, GRI Appx 7–15
EN1	Materials used by weight	GRI Appx 9
EN2	Recycling and materials used that are waste	AR 59–60, GRI Appx 9
EN3–7	Energy use and energy efficiency	AR 56–57, 60, 123, GRI Appx 10
EN8–10	Water use	AR 56–58, GRI Appx 11
EN11–14	Biodiversity	AR 58–59, GRI Appx 11
MM1	Amount of land disturbed or rehabilitated.	AR 58–59, GRI Appx 11
MM2	Number and percentage of total sites identified as requiring biodiversity management plans and the number (percentage) of those sites with plans in place	AR 58–59, GRI Appx 11
EN16–18	Greenhouse gas emissions	AR 13–15, 56–58, 123, GRI Appx 12
EN20	Other significant air emissions	AR 13–15, 56–57, 123, GRI Appx 13
EN21	Water discharge	AR 56, 58, 123, GRI Appx 13
EN22	Waste types and disposal methods	AR 60, GRI Appx 14
MM3	Total amounts of overburden, rock, tailings, sludges and their associated risks	AR 60, GRI Appx 14
EN23	Significant spills	AR 56, GRI Appx 15
EN28	Significant fines	GRI Appx 15
EN29	Significant environmental impacts from transport and travel	GRI Appx 15
EN30	Environmental protection expenditures and investments	GRI Appx 15
<b>Social performance</b>		
	Goals and results	AR 8–9, 13–15, 53–55, 61, 68, 123, GRI Appx 7, 16–23
Labour practices and decent work (LA)		
LA1	Workforce	AR 55, 89, 123, GRI Appx 17
LA2	Employee turnover	GRI Appx 17
LA3	Benefits	GRI Appx 17

Indicator		Reference
LA4	Collective bargaining agreements	GRI Appx 18
LA5	Notice regarding operational changes	GRI Appx 18
MM4	Number of strikes and lock-outs exceeding one week's duration, by country	GRI Appx 18
LA6	Representation in health and safety committees	GRI Appx 18
LA7	Injuries and occupational diseases	AR 9, 13–15, 53–55, GRI Appx 2, 19
LA8	Assistance regarding serious diseases	GRI Appx 19
LA9	Health and safety topics covered in formal agreements with trade unions	GRI Appx 19
LA10 – LA11	Training, skills management and lifelong learning	AR 53–55, GRI Appx 20
LA12	Performance and career development reviews	GRI Appx 20
LA13	Composition of employees and governance bodies	AR 55, 70–72, 89, 123, GRI Appx 20
LA14	Equality in remuneration	GRI Appx 20
Human rights (HR)		
HR1–3	Investment and procurement practices	AR 61, GRI Appx 21
HR4	Incidents of discrimination and actions taken	GRI Appx 21
HR5	Freedom of association and collective bargaining	GRI Appx 21
MM5	Number of operations taking place in or adjacent to Indigenous Peoples' territories, and number and percentage of operations or sites where there are formal agreements	GRI Appx 21
HR6 –7	Child labour, forced and compulsory labour	GRI Appx 21
Society (SO)		
SO1	Local community engagement	AR 8, GRI Appx 22
MM6	Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples	GRI Appx 22
MM7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and Indigenous Peoples, and the outcomes	GRI Appx 22
MM8	Number of company operating sites where artisanal and small-scale mining takes place on, or adjacent to, the site; the associated risks and the actions taken	GRI Appx 22
MM9	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process	GRI Appx 22
MM10	Number and percentage of operations with closure plans	AR 58, GRI Appx 22
SO3	Training in anti-corruption policies and procedures	AR 68, GRI Appx 22
SO4	Incidents of corruption	GRI Appx 22
SO5	Public policy development and lobbying	GRI Appx 22
SO7– 8	Anti-competitive behaviour and compliance	GRI Appx 22
Product responsibility (PR)		
MM11	Programmes and progress relating to materials stewardship	AR 56–61, GRI Appx 23
PR1	Customer health and safety	GRI Appx 23
PR3	Product and service labelling	GRI Appx 23
PR5	Practices related to customer satisfaction	GRI Appx 23
<b>Economic performance (EC)</b>		
	Goals and results	AR 8–9, 14–15, 27–29, GRI Appx 2, 24–25
EC1	Economic value generated and distributed	GRI Appx 24
EC2	Climate change implications, risks and opportunities	AR 30, 56–60, GRI Appx 25
EC3	Benefit plan coverage	AR 89–90, 99–100, GRI Appx 25
EC4	Significant financial support received from government	GRI Appx 25
EC5	Entry and minimum wage	GRI Appx 25
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	GRI Appx 25
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	AR 8, GRI Appx 24–25

For further information on our measurement methods, definitions or other guidelines, please contact Boliden Group Communications.

## Management approach, organisational profile and report parameters

Sustainability is an integral part of Boliden's operations and management. The basis for Boliden's sustainability work is that all of our operations are conducted in accordance with legislative provisions and permits in the countries in which we operate. Boliden works proactively by formulating and setting guidelines and goals that address the social and environmental aspects that we consider to be fundamental to our operations from a sustainability perspective. In order to work systematically to control and develop our operations, we have management systems that cover the significant aspects of our operations. Taken together, this enables us to minimise the risks associated with metal production, while also facilitating adaptation in line with market conditions and ensuring compliance with future legislation. Boliden is a signatory to the UN Global Compact since 2012.

## The New Boliden Way

The New Boliden Way (NBW) is the Group's organisational and production philosophy and governs our overall policies, guidelines and instructions. Its purpose is to improve productivity in every aspect of the operations and create a culture characterised by continuous improvements. The starting points for NBW are our mission, our vision and our core values. It describes how to develop Boliden into a world class metals partner, acknowledged for its added value to customers, shareholders and other stakeholders. We focus on activities that add value as well as standardised processes and methods that can be replicated throughout the Group.

## Policies and management systems

Boliden has a governance model comprising Group-wide and local policies, instructions and guidelines, tools and local management systems that correspond to the challenges we face. The overall steering documents are collated in the Management Manual, which is available to every employee via Boliden's intranet. Work at our operations is conducted in accordance with certified environmental plus occupational health and safety management systems (ISO 14001 and OHSAS 18001). The Group's smelters are also certified in accordance with the ISO 9001 quality management system. An updated energy management system in accordance with ISO 50001 is being implemented and will gradually replace the former systems based on EN 16001. This upgrade of the energy management system started in 2012 and is expected to be completed before the end of 2014. Work is ongoing to implement ISO 26 000 at Group level.

## Responsibility and monitoring

Boliden's Group management has the ultimate responsibility for the Group's sustainability work. The management group includes the Senior Vice President - Corporate Responsibility who ensures that sustainability issues are addressed continuously. The work is largely carried out through Group-wide networks in order to facilitate the dissemination of Boliden's goals and strategies and the exchange of expertise and experience between the Business Areas and between production units. There are networks for health and safety, environment, chemicals management, energy efficiency, HR and communication issues, the managers of which report directly to the Group management. Boliden's Board of Directors review the Group's sustainability work annually. Results on emissions, sick leave rate and accident rate are presented at every Board Meeting.

An important part of the continuous improvement work is the internal audits. Every mine and smelter undergoes biennial theme-based audits. The theme of any given audit is chosen on the basis of identified Group-wide requirements. Improvements following an audit shall be implemented and feedback provided within six months of receiving the audit report.

## Dialogue for greater responsibility

Boliden's operations affect many people to varying degrees and they, in turn, have different views and expectations of Boliden and the way we act. Genuine and relevant sustainability work requires the ongoing identification of the top priority issues. By conducting ongoing dialogues with our stakeholders, Boliden can emphasise the importance we attach to

both increased transparency and information exchange. The stakeholders identified by Boliden are the Group's employees, shareholders, customers, business partners, investors, the local communities, authorities, industry and NGOs. The aim is to conduct a dialogue that has a high level of transparency and continuity, and which is based on the stakeholders' needs and context.

Boliden's ambition is to be the first sustainable step in the metals' value chain. In order to achieve that ambition, the Group works together with our suppliers and business partners. Boliden must lead by example and be a stable, long-term and responsible business partner. The choice of suppliers and partners will impact on our total sustainability performance. In most cases, however, Boliden only has a limited influence over our partners' actual environmental and social management.

Two years ago, Boliden began systematically evaluating the way in which business partners address sustainability issues in the context of their operations. The Evaluation of Business Partners (EBP) is a systematic process in which the business partner is evaluated not only from a strictly business perspective but also from a sustainability perspective. The evaluation is based on the principles in the UN Global Compact, the ILO and applicable ISO standards. The evaluation addresses working conditions, human rights and environmental management. As part of the evaluation process, suppliers conduct a self-assessment. So far, 460 suppliers have completed the self-assessment and five audits have been performed.

## Prioritising sustainability challenges

Identifying and choosing the most important and relevant sustainability challenges is an ongoing process. The key element in all of the areas we prioritise is that they have a direct impact on Boliden's success and a significant impact on our stakeholders. Other important factors are that we can be in control and that the challenge is fundamental to Boliden's ability to operate. This approach helps us to set relevant goals and identify new ways of further improving what we do.

Boliden has identified the following key sustainability challenges (in no particular order):

- Creating a safe workplace
- Diversity and a more even gender distribution
- Securing tomorrow's skill pool
- Minimising emissions and discharges to air and water
- Limiting the impact on the physical environment
- Responsible waste management
- Improving energy efficiency
- Adapting to climate change
- Continuously improving our own and our industry's ethical standards
- Generating a positive economic impact on the local community

## Limitations

Some of the areas that need to be addressed are wholly or partially beyond our direct control, e.g. the way in which our business partners manage and work with environmental and safety issues or the available mix of electricity sources we use. We address these matters by cooperating with various external parties and stakeholders in order to identify joint ways to improve. One of the ways in which we do this is through the EBP programme. Learn more at [www.boliden.com](http://www.boliden.com)

## Accounting Principles

The financial data and most data relating to human resources presented are taken from Boliden's audited annual accounts. The Boliden Group reports in Swedish kronor (SEK).

Environmental data, including energy-related data, is collected from all operations on a monthly, quarterly or annual basis and consolidated at Group level.

Calculation methods for CO<sub>2</sub> emissions are stipulated by national legislation, and in connection with the EU emissions trading scheme. All other emissions have either been measured and/or calculated based on periodic measurements.

Each operation has an environmental reporting manual that defines and describes measurement and calculation methods according to Group directives.

# Environmental performance (EN)

Boliden's environmental responsibility entails continuous work towards reducing the negative environmental impact of our operations. Our ambition is to go beyond legislative and regulatory requirements. Systematic and far-sighted environmental work facilitates compliance with future legislation and the expectations of our stakeholders. It will also strengthen our long-term competitiveness.

Environmental goals 2009–2013	Results in 2012
With a view to promoting development in the environmental sphere, Boliden has set the following goals:	
<ul style="list-style-type: none"> <li>Discharges of metals<sup>1)</sup> to water shall be reduced by 25 per cent.</li> </ul>	<ul style="list-style-type: none"> <li>Discharges of metals to water have fallen by 53 per cent (49%) since 2007.</li> </ul>
<ul style="list-style-type: none"> <li>Discharges of nitrogen to water shall be reduced by 20 per cent.</li> </ul>	<ul style="list-style-type: none"> <li>Discharges of nitrogen to water have fallen by 14 per cent (30%) since 2007. The discharges to water are due not only to the use of explosives, but also to large volumes of water arising from rainfall or snow melt. Discharges increased by 23 per cent during the year due to a combination of heavy and long-lasting precipitation and increased production in several of our mining areas. Reducing these nitrogen discharges will be one of our focus areas in 2013.</li> </ul>
<ul style="list-style-type: none"> <li>Emissions of metals <sup>2)</sup> to air shall be reduced by 25 per cent.</li> </ul>	<ul style="list-style-type: none"> <li>Emissions of metals to air have fallen by 43 per cent (35%) since 2007.</li> </ul>
<ul style="list-style-type: none"> <li>Emissions of sulphur dioxide to air shall be reduced by 10 per cent.</li> </ul>	<ul style="list-style-type: none"> <li>Emissions of sulphur dioxide to air have fallen by 5 per cent (8%) since 2007. The trend in sulphur emissions has been negative in the last two years. Harjavalta suffered technical problems resulting in increased emissions at the beginning of the year. These problems have now been resolved and there is every chance of meeting the 10 per cent reduction goal during 2013.</li> </ul>
<ul style="list-style-type: none"> <li>Emissions of carbon dioxide shall not increase by more than 3 per cent (taking planned production increases into account).</li> </ul>	<ul style="list-style-type: none"> <li>Carbon dioxide emissions have increased by 4 per cent since 2007 at comparable measurement points (excluding emission sources added through the smelters' implementation of ETS. If these sources are taken into account, Boliden has seemingly increased its carbon dioxide emissions by 23 per cent (12%). The excess over the 3 per cent target can be largely explained by Boliden's mining expansion causing a major contribution to total carbon emissions. The expansion at Boliden's smelters (e-scrap recycling) has also contributed to a significant increase in total carbon dioxide emissions. These emissions are mainly those referred to as "Direct emissions".</li> </ul>
(Base year 2007)	
<sup>1)</sup> Copper, zinc, lead, nickel, cadmium and mercury	
<sup>2)</sup> Copper, zinc, lead, nickel, cadmium and arsenic	
The environmental goals are presented in absolute figures (kilos or tonnes). The goals have been broken down by the various operating units in order to facilitate follow-up work, and are also reported internally every month in order to increase transparency.	
Boliden is performing well in relation to our established environmental goals. A majority of our emission and discharge levels are well below the limit values set in our environmental permits, and we are consequently also well prepared for future legislation in the environmental sphere.	

### EN1 – Materials used by weight

There are no significant changes in the use of materials in 2012 compared to 2011. The total smelting material feed comprises concentrates both from our own mines and from external mines, purchased secondary materials and secondary materials sent from one smelter to another.

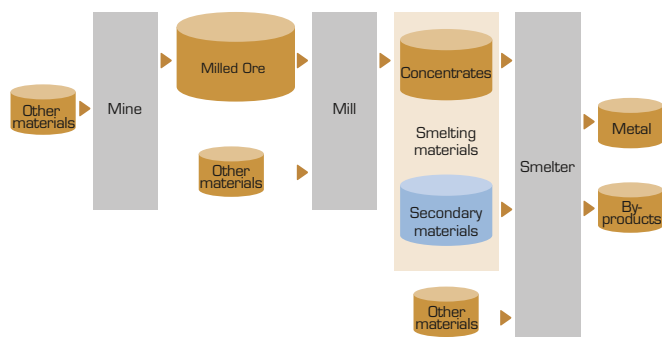
Materials used	Unit	2008	2009	2010	2011	2012
Milled ores (Mines)	ktonnes	23,000	24,000	33,000	37,000	40,000
Smelting materials (Smelters)	ktonnes	2,254	2,023	2,098	2,254	2,337
Other materials	ktonnes	576	499	578	651	657
<b>Total</b>	<b>ktonnes</b>	<b>25,830</b>	<b>26,522</b>	<b>35,676</b>	<b>39,905</b>	<b>42,994</b>

### EN2 – Percentage of materials that are recycled input materials

Boliden makes use of both its own and other companies' by-products and residues by extracting and recycling metals. A new electronic scrap recycling facility at the Rönnskär copper smelter, which operated according to plan at full capacity in the second half of 2012, made Boliden the biggest recycler of electronic scrap in the world. Boliden Bergsöe is the only secondary lead smelter in the Nordic region. The plant recycles 70,000 tonnes of lead acid batteries and other lead scrap per year.

The recycling input rate (RIR) shows the fraction of secondary materials in the total input to our smelters. Recycled materials include secondary materials from external sources and secondary materials sent from one plant to another within the Boliden Group. By-products and non-product outputs recirculated internally at the sites are not included.

In the beginning there was rock...



Recycling and materials used that are waste	Unit	2008	2009	2010	2011	2012
Recycling rate (RIR)	%	13	13	13	12	14

### EN3-7 – Energy use and energy efficiency

Metal production can be very energy-intensive, both in the mining of minerals and in the extraction and purification of the metals. Boliden's energy consumption is a major cost item, accounting for approximately 17 per cent (18%) of the Group's total costs. Energy consumption in 2012 totalled 16.1 (15.6) million gigajoules (GJ). Electricity accounts for 14 (13.5) million GJ, which is equivalent to 3.9 (3.7) TWh.

Boliden's energy policy states that energy efficiency is a continuous process in which the work should be conducted systematically and based on good scientific and technical principles.

#### Direct energy

Coke, coal, oil and fuel gases are used for the reduction and smelting of copper, lead and zinc concentrates. Diesel is used for transportation purposes, in mining operations and for internal transportation. Limited amounts of heating oil and gas are used for heating purposes during the cold season.

#### Indirect energy

The origin of the electricity varies between the countries in which Boliden operates. In Norway, hydropower is the dominating source, while hydro and nuclear power dominate in Sweden, in Finland the supply is a combination of different sources, and in Ireland there is a higher proportion of fossil fuels. The actual outcome for 2012 depends on residual mix calculations which have not yet been provided, but based on the 2011 outcome the source distribution for purchased electricity is estimated to be 31 per cent fossil, 39 per cent renewable, and 30 per cent nuclear.

Boliden is co-owner of BasEl, a company founded in 2005 with the aim of promoting the Swedish industries' long-term interests with regard to a stable and competitive electricity supply. The goal is to obtain permits for and launch projects with a combined production of 1 TWh per annum by 2014.

Boliden and a number of other energy-intensive companies in Sweden have formed a production company for wind-based power, VindIn AB, with a view to developing, building and operating wind farms in Scandinavia. Two wind farms with a total of 35 units have been brought into operation, producing a total of 47 443 MWh for the owner companies.

#### Energy management systems

Boliden is in the process of upgrading its energy management systems. As part of that upgrade, all units are to implement energy management systems in accordance with ISO 50001. By the end of 2012, two units, Boliden Tara and Boliden Harjavalta, had met the requirements to become ISO 50001 certified. Operations certified according to EN 16001 are expected to make the transition to ISO 50001 before the end of 2014.

#### Energy efficiency initiatives

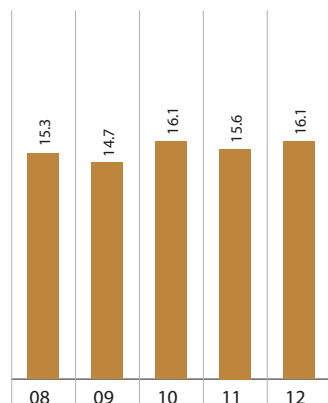
Boliden also promotes energy efficiency on a broader scale through voluntary commitments in national programmes, for example through the Swedish Energy Agency's PFE programme, the Finnish equivalent called MOTIVA, and collaborations with Enova in Norway and SEAL in Ireland. With a view to fostering awareness and promoting changes in personnel behaviour, these projects typically entail elements aimed to promote improved routines and methods for measuring and monitoring. They also promote the introduction of more efficient technologies or process redesigns to increase the overall efficiency. In practical terms, this refers to the optimisation of mills, ventilation systems, simplified drive mechanisms, more efficient pumps and compressors etc.

Boliden strives to take advantage of excess heat from the processes and transforming it either to electric power or to be used for external district heating or steam deliveries. In 2012, 568 GWh of heat have been used internally, and 844 GWh have been delivered externally to be used, for example, in public district heating systems in Finland and Sweden.

#### Total energy use, 2008–2012

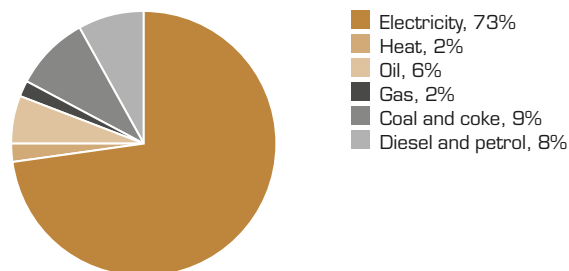
Energy use totalled 16.1 (15.6) million gigajoules (GJ) in 2012.

million GJ



#### Energy input, 2012 per source

Energy accounts for approximately 17 per cent (18%) of the Group's total costs.



Energy use and energy efficiency	Unit	2008	2009	2010	2011	2012
Direct energy, coal & coke	GJ	2,138,000	1,862,000	1,793,000	1,708,000	1,711,000
Direct energy, gas	GJ	379,000	376,000	376,000	394,000	382,000
Direct energy, oil	GJ	1,176,000	135,000	1,354,000	1,071,000	1,050,000
Direct energy, diesel & petrol	GJ	1,130,000	1,192,000	1,196,000	1,368,000	1,601,000
Indirect energy, purchased electricity	MWh	3,414,000	3,253,000	3,661,000	3,736,000	3,897,000
Indirect energy, purchased heat	MWh	159,000	139,000	148,000	102,000	112,000
Produced energy used internally	MWh	–	484,000	617,000	659,000	568,000
Produced energy sold	MWh	675,000	586,000	635,000	772,000	844,000
<b>Total energy use</b>	<b>GJ</b>	<b>15,257,000</b>	<b>14,664,000</b>	<b>16,147,000</b>	<b>15,579,000</b>	<b>16,140,000</b>
Energy intensity (per tonne produced metal)	GJ/t	11.74	11.77	12.65	11.99	12.38

## EN8-10 – Water use

Recirculating process water, wherever possible, is an important part of Boliden's water management. Boliden aims to reduce both the withdrawal of fresh water and the discharge of used water in order to

reduce both the amount of flow into our waste water treatment plants and our discharges to recipient. In 2012, the total amount of process water used was 361,720,000 (345,000,000) cubic metres.

Water use	Unit	2008	2009	2010	2011	2012
Total water withdrawal	m <sup>3</sup>	133,970,000	134,790,000	140,280,000	153,030,000	181,940,000
of which rainwater that naturally feeds into the system		–	–	–	–	21,920,000
Total volume of water recycled	m <sup>3</sup>	187,250,000	185,120,000	198,300,000	191,950,000	179,780,000
Percentage of water recycled	%	140	137	141	125	112

## EN11-14, MM1-MM2 – Biodiversity

Boliden needs access to large areas of land for exploration, mining, smelting and the construction of tailings ponds and dams. Today, Boliden is considered a big landowner. The land holdings include key habitats, habitat protection areas, nature reserves and voluntary designated areas for nature conservation.

Close to 30 per cent of Boliden's total land holdings of approximately 19,800 (19,500) hectares comprises used and affected land. The remaining land consists of forest and woodland adjacent to operations. Approximately 9,700 hectares of our total land and holdings comprise productive forest.

Soil conservation and the reclamation of mining areas that have reached the end of their productive lifespan are part of Boliden's operations and responsibility. The reclamation programmes are designed to reduce the impact on surrounding areas of land and the local biological diversity. In 2012, approximately 6 hectares (24 hectares) were restored/ reclaimed, while 137 hectares (12 hectares) were utilised. Boliden had a total of just under 5,800 hectares (5,700 hectares) in use and not yet restored by the end of 2012. Boliden is responsible for around 40 dam facilities in Sweden, Norway, Finland, Ireland and Canada. They are used or have been used to deposit tailings sand or other waste and for water management. This figure includes both operational and decommissioned facilities.

At the end of 2012, a total of SEK 1,618 million (SEK 1,110 m) had been allocated for the reclamation of both mining areas and smelters.

In order to promote responsible forestry, Boliden's forests are FSC certified and Boliden has assigned approximately 10 per cent of our productive forested land for nature conservation. This area is partly protected in the form of nature conservation land, key habitats and habitat protected areas, and partly managed to promote nature conserva-

tion interests. The areas protected by Boliden mainly comprise older forests, wetlands and areas dominated by deciduous forest. Over time, some of the older forests are becoming more and more primeval. In areas dominated by deciduous forest, forestry is conducted in a way that prioritises deciduous tree species. Deer hunting occurs on all possible land to maintain biodiversity and keep grazing pressure at an acceptable level.

On the productive forestland, Boliden manages the forestry from a landscape ecological perspective. Over the past years, our forestry management in these areas has included prescribed felling, which is intended to benefit deciduous wooded pastures, and controlled burning in order to promote certain species and biological diversity. By adapting the forest management in areas used for outdoor recreation, social values are created and maintained. The ambition is that wildlife on Boliden's land should be in harmony with the forestry, hunting and other public interests. Current long-term plans extend for at least ten years and include remediation, planned measures and allocated money for a number of abandoned pit mines. Boliden is constantly working to develop new options for remediation. Our interventions in older abandoned mining areas are often aimed towards complementing the old techniques with new.

The establishment of new mines and the expansion of existing businesses require land to be utilised. A mine cannot be relocated, and thus protected land or land worthy of protection must be utilised in some cases. In the permit application process for new activities, all relevant areas' natural and cultural values are inventoried.

Strategies will be developed to define proper compensation measures to be applied when utilizing land and thus causing loss of biodiversity. A methodology for creating biodiversity is being developed at closed mines. The purpose is to optimise the surface potential of previously utilised land.

Land management (in reporting period)	Unit	2008	2009	2010	2011	2012
Disturbed	hectares	305	735	238	12	137
Rehabilitated	hectares	3	22	38	24	6

## EN16-18 – Greenhouse gas emissions

Boliden's direct carbon dioxide emissions primarily arise from the use of carbonaceous reducing agents, and from fuels in metal extraction processes and the use of fuels for mining operations and road transportation within the company. The indirect carbon dioxide emissions derive from purchased electricity.

The direct emissions are calculated according to the procedures in the WBCSD GHG Protocol as well as additional guidelines from the EU and/or national authorities. The indirect emissions resulting from electricity have been calculated with a constant emission factor for the current target period from 2008-2013. In addition to this, Boliden is currently developing routines to calculate indirect emissions from transportation of external raw material and product deliveries. These numbers are not yet presented, but will be disclosed as Scope 3 emissions in future Carbon Disclosure Project (CDP) reports.

Emissions of carbon dioxide have increased by 4 per cent (1%) since 2007 at comparable measurement points, excluding emission sources added through the smelters' implementation of ETS. The goal was to limit the increase to 3 per cent, given the planned production increases.

The calculation method, however, has been updated and adapted to ETS during this monitoring period. The original estimate was essentially based on the consumption of fuel and reducing agents during the production process as well as indirect emissions from purchased electricity. In conjunction with the realisation of the ETS at five smelters within the Group, it became necessary to implement a more comprehensive emissions computation. This was commenced during 2009-2010 and also takes into account input of carbon from concentrates and other raw materials. We do not have acceptable data (i.e. reliable carbon analyses for all materials) to make an accurate and comparable calculation of these emissions retroactively from the beginning of the monitoring period. Boliden has, therefore, seemingly increased carbon dioxide emissions by 23 per cent (12%) compared to the base year.

Ongoing initiatives to reduce greenhouse gas emissions include:

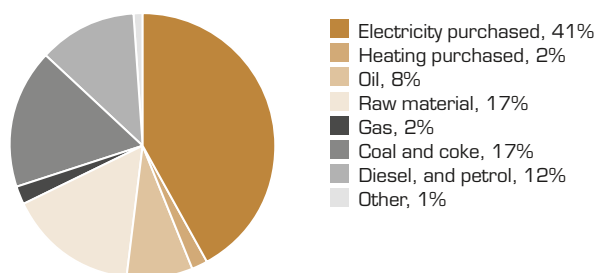
- Energy efficiency measures,
- Fuel substitution, tests with alternative fuels in smelting processes,
- Improved heat recovery/heat pumps, phasing out fossil fuels for heating purposes during the cold season,
- Increased deliveries of heat for district heating purposes,
- Collaboration with other energy-intensive companies to extend power production, i. e. by wind power.

EU's trading system for carbon dioxide emission rights, Emission Trading Scheme (ETS), currently covers the Rönnskär copper smelter and the Bergsöe lead smelter. The two smelters have been allocated emission rights for 78,909 tonnes of carbon dioxide for the period from 2008 to 2012.

All of Boliden smelters will take part in the ETS third trading period from 1 Jan 2013. Boliden has submitted the application for free allocation of EUAs for the period 2013-2020. The final allocation for the coming period has not yet been decided by the EU.

### Carbon dioxide emissions, 2012 per source

Coal and coke, which are used in the metallurgical processes, are the single largest source of direct carbon dioxide emissions.



Greenhouse gas emissions	Unit	2008	2009	2010	2011	2012
Direct emissions (including added sources since 2008)	tonnes	450,000	486,000	510,000	499,000	574,000
Indirect emissions, purchased electricity	tonnes	357,000	356,000	398,000	408,000	416,000
Indirect emissions, purchased heat & steam	tonnes	–	5,000	6,000	17,000	18,000
Total CO <sub>2</sub>	tonnes	807,000	848,000	913,000	924,000	1,008,000
CO <sub>2</sub> intensity, emissions per tonne produced metal	tn/tn	0.62	0.68	0.72	0.71	0.77

## EN20 – Other significant air emissions

Sulphur dioxide emissions to air are mainly attributable to gases generated during the smelting processes at the Harjavalta and Rönnskär copper smelters. The amount of sulphur dioxide emitted during the process depends, among other things, on process stability and the efficiency of the abatement systems, and to some extent on the amount of sulphur contained in the raw material. The work continues with a focus on process control.

Diffuse dust emissions are generated at both mines and smelters, and the environmental impact is due to dust particles containing metals being dispersed by the wind. All operations are working systematically to reduce particle emissions to air, for example by increased the salting and watering of roads. The emission of metals to air decreased mainly due to good performance by abatement systems and stable processes with few disturbances.

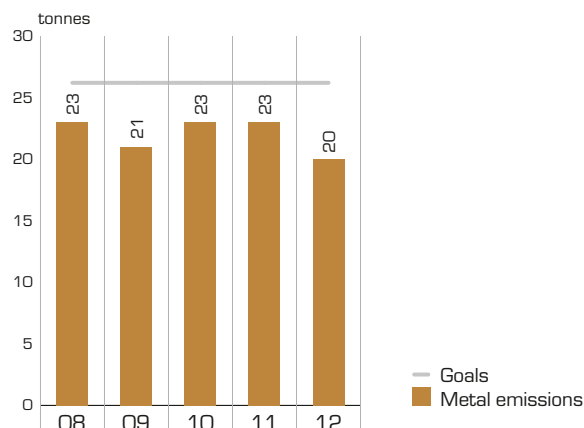
### Summary of managing the reduction efforts

Boliden's efforts to reduce emissions are based on an overall analysis of the Group's environmental impact as well as the identification of a number of focus areas. The environmental impact and risk assessments are revised on a regular basis, as are measures to be taken, the identification of relevant milestones and the resources needed to achieve the overall objectives. The work is controlled and conducted by each separate unit as local circumstances might differ. The Group then makes monthly follow-ups.

Emissions of sulphur dioxide are partly due to the characteristics of the raw material in the smelting process and partly to how the process

is run. One way to reduce emissions is thus to control the smelting process and let the emission levels be a factor when deciding what raw material should be smelted at a specific time. The monitoring and control of abatement systems for effective gas cleaning is important work which is carried out on a daily basis.

Emissions of metals to air, 2008–2012



Emissions to air	Unit	2008	2009	2010	2011	2012
NOX	tonnes	440	520	480	530	510
NOX, indirect emissions from fuel and explosives	tonnes	160	210	230	190	190
SOX	tonnes	8,260	6,930	6,850	7,410	8,140
SO <sub>2</sub> , indirect emissions from fuel	tonnes	31	37	59	37	37
Dust containing metals	tonnes	79	60	67	65	64
Metal emissions to air (Cu+Zn+Pb+Ni+Cd+As)	tonnes	23	21	23	23	20

## EN21 – Water discharge

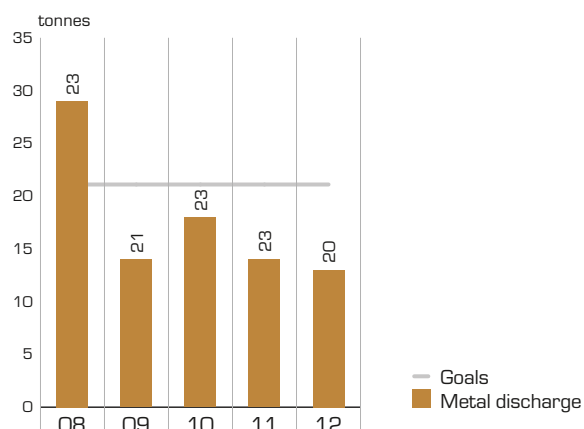
Boliden's smelters account for approximately 65 per cent of metal discharges to water and the mines account for the remaining 35 per cent. Discharges to water come from dams and tailings ponds at the mines, as well as water treatment plants and surface water at both smelters and mines. When it comes to nitrogen, the Boliden mines account for just over 80 per cent of the discharges and the nitrogen mainly arises from explosives and their handling. The remaining 20 per cent comes from recycling wastewater at the Kokkola smelter.

An important part of reducing discharges to water is ensuring the efficient and stable operation of water treatment plants, recirculating the process water as much as possible. The water treatment plants within Boliden not only purify the process water but also a significant amount of the rainwater that falls within the industrial areas. Increased heavy rainfall frequency as a result of climate change has stressed the need for increased water treatment capacity, and several of our units have carried out measures during the past years to meet those needs. Boliden has good knowledge of the nitrogen flow and nitrogen compounds that occur as a result of its processes, and is therefore able to work systematically to handle those levels. Reduction of nitrogen is about investing in and using the right technology, and continuously improving the handling of explosives and blasting procedures.

One focus area in 2012 has been compliance with the environmental quality standards set in the Water Framework Directive (2000/60/EC). This is part of our proactive work to reduce the negative impact from Boliden's operations. Knowing the physical and chemical conditions in the recipient water body is important as the degree of impact

from a metals discharge is determined not only by the total metal concentration itself, but also by its bioavailability. Reduction of water discharges and reuse of water is a continuous process that will be in focus also during the coming years.

Discharges of metals to water, 2008–2012



Water discharge	Unit	2008	2009	2010	2011	2012
Discharged water volume	m <sup>3</sup>	137,250,000	109,160,000	116,530,000	105,890,000	118,790,000
Metal discharges to water (Cu+Zn+Pb+Ni+Cd+Hg)	tonnes	29	14	18	14	13
Nitrogen N-tot	tonnes	283	225	199	205	253

## EN22, MM 3 – Waste types and disposal methods including overburden, rock, tailings and sludge, and their associated risks

EU waste legislation currently has a strategic approach to waste as being a resource and deposition as being the last option (Waste Framework Directive, 2008/98/EC). The main drivers are increasing resource efficiency and reducing the negative environmental and health impacts over the life cycle of the resources. There is already considerable awareness of the importance of waste issues within the Boliden Group: e.g. waste sorting, significant recycling of process residues and scrap, good reporting procedures and ongoing waste projects.

Boliden processes a number of different metals and substances that are both toxic and environmentally harmful. The mining and smelting operations generate residual waste consisting of waste rock, tailings, slag, sludge and dust.

Correctly processed waste can be turned into valuable products. What is waste for one operation can often constitute a raw material for another. Approximately 45 per cent of the process residues generated are sent to another Boliden site for metals recovery or final deposition. Correctly and adequately handled, trade in wastes and by-products can be of benefit to society by increasing resource efficiency. During the year, the project of mapping the Group's waste streams – one of the

goals for this period – has been finalised, resulting in an inventory containing all waste and process residue streams within the Group. Ten waste streams were identified to be of particular importance and worthy of further investigation, and an action plan to further optimise the use of waste as raw materials is under development. Boliden wants to reduce process wastes and identify internal recycling or landfill solutions for any process wastes generated. We are also identifying external solutions, e.g. recycling by a third party. Boliden is receiving significant amounts of waste from external parties for recycling, construction purposes or safe deposition in landfills.

Exports of waste to landfills or for recycling are regulated by extensive legislation. 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 viewpoint.

An expansion during 2012 has made the copper smelter at Rönnskär the world's leading recycler of electronic scrap with an annual capacity of 20,000 tonnes. The lead smelter in Landskrona is one of Europe's four biggest players in lead recycling. The plant takes delivery of about 70,000 tonnes of lead batteries and lead scrap from all over the Nordic region annually.

Wastes	Unit	2008	2009	2010	2011	2012
Hazardous waste, total	tonnes	719,000	664,000	722,000	750,000	756,000
Whereof waste to external use, treatment or recovery	tonnes	600	2,800	3,300	3,800	5,300
Whereof waste to external disposal	tonnes	500	1,100	1,100	500	600
Non-hazardous waste, total	tonnes	486,000	406,000	362,000	340,000	443,000
Whereof waste to external use, treatment or recovery	tonnes	67,500	53,600	59,600	63,200	64,500
Whereof waste to external disposal	tonnes	1,300	1,100	700	800	900
Waste rock, total	tonnes	25,082,000	32,380,000	29,270,000	31,646,000	41,635,000
Waste rock for internal construction	tonnes	6,305,000	2,507,000	3,811,000	3,417,000	5,013,000
Storage of waste rock for future use	tonnes	2,746,000	16,643,000	5,892,000	11,954,000	30,280,000
Sold waste rock	tonnes	155,000	72,000	107,000	23,000	54,000
Tailings, total	tonnes	22,171,000	22,814,000	26,304,000	35,974,000	39,290,000
Tailings for internal construction	tonnes	10,837,000	1,309,000	1,278,000	2,362,000	1,957,000

### EN23 – Significant spills

Seven significant spills and leakages occurred in 2012.

In April, approximately 360 m<sup>3</sup> of water leaked from a clarification basin at the Mauriliden mine in the Boliden Area. Fortunately, the metal concentration was very low and the total metals discharge is calculated to 20-25 grams. The clarification basin had been in use for about a week and reconstructions to prevent similar events were performed immediately.

In late autumn, there was a leakage from a direct leaching reactor at Boliden Odda. It generated a spill of zinc solution that was to an abso-

lute majority collected in Boliden's own systems. The discharge to recipient was estimated at 600 kg zinc, 8 kg copper and 4 kg cadmium. No limit values were exceeded.

Four major oil spills, from around 100 to around 400 litres, have been reported by the Aitik mine during the year. All occurred in the mining area and cleanup actions were taken immediately by means of absorbents and the excavation of contaminated soil. A spill of an estimated 50 to 100 litres of diesel onto the ground outside an industrial area in Garpenberg occurred in October after an excavator caught fire. It was cleaned up immediately and the contaminated soil was removed.

### EN28 – Significant fines

Boliden has been fined four times in the past five years for violating environmental laws and regulations. A fine of SEK 2,341,000 was imposed in 2008 for an environmental accident at the Odda zinc smelter in 2007 when non-treated process water leaked out from a thickening tank. An amount of SEK 75,000 was charged in 2010 for exceeding the air shock wave limit at a blasting round in the Aitik mining area in

2007. In 2011, Boliden was fined an amount of SEK 50,000 for an oil leakage into the sea at the Rönnskär smelter that occurred in 2010, and in 2012 Boliden was fined an amount of SEK 100,000 for pursuing operations in a quarry by the Hötjärn tailings pond in the Boliden Area when the permit had not yet been renewed.

Fines	Unit	2008	2009	2010	2011	2012
Significant fines	number	1	–	1	1	1
Monetary value of significant fines	SEK	2,341,000	–	75,000	50,000	100,000

### EN29 – Significant environmental impact of transporting products and other goods and materials used in the organisation's own operations, and transporting members of the workforce

When aiming to reduce emissions to air, transportation is a significant factor. A lot of material is transported internally within our operations. In 2012, 39,000 (33,000) tonnes of fuel was used for internal transportation.

In order to reduce travelling within the Group, Boliden has invested in video conferencing equipment. This has significantly reduced our need for air travel.

Boliden's transports are dominated by three main flows: transports within our facilities, especially the mines; smelting material from mines to own and external smelters; metals and by-products from smelters to our customers.

Most of these transports involve moving large volumes between fixed destinations and are thereby well suited for ship and rail transports. Where this is not possible, truck transport is used. A high fill factor and a large share of return load make road transportation efficient too.

About 90 per cent of the raw material is transported by ship or rail. For example, Boliden's sharp increase in shipments of recyclable materials has basically been managed by our existing Copper Shuttle rail solution.

Boliden uses shipping to a considerable extent for long distance transports. Shipping is a better alternative to land transportation from an emissions perspective. In 2011, new regulations concerning the sulphur content in marine fuels were introduced by the UN's International Maritime Organization (IMO), and are scheduled to come into force from 2015. Boliden generally welcomes stricter laws and regulations in the context of reducing environmental impact. At the same time, the rules must be both environmentally and cost effective. The extent of the consequences for Boliden and other industries located in northern Sweden and Finland, and which are largely dependent on maritime transport, is still uncertain, but as it stands today, the new rules could negatively impact Boliden's competitiveness.

This is why Boliden participates in joint initiatives with other Swedish and Finnish industry players, at both national and EU level, to promote rules that are constructed in such a way that they do not lead to competition distortions for industries in more northern latitudes.

### EN30 – Environmental protection expenditures and investments

	Unit	2008	2009	2010	2011	2012
TOTAL	SEK m	112	166	210	165	131
Personnel	SEK m	26	32	32	31	33
External	SEK m	34	30	38	33	45
Provisions for reclamation costs	SEK m	30	76	118	76	24
CAPEX related to EHSQ operations improvements	SEK m	219	236	182	356	213

As a producer and importer of metal concentrates, Boliden has taken measures to comply with the new IMO MARPOL Annex V criteria for substances harmful to the marine environment.

In practice, it is a vehicle that extracts contaminated wash water and delivers it to Boliden's internal landfills or water treatment plants.

# Social performance

Boliden's long-term growth and profitability demand that we work efficiently, responsibly and with high-quality standards. We deliver customer benefits and offer our employees a safe working environment and good occupational health. Our operations shall be conducted within a corporate culture that is characterised by a willingness to change and a wealth of learning opportunities. Responsible behaviour in Boliden's dealings with our stakeholders help, in turn, to maintain our good reputation as a metals company and employer.

## Goals 2009–2013

With a view to promoting social development, Boliden has set the following goals:

- The Group has adopted a zero harm philosophy, which means that all units shall endeavour to have zero accidents every month

- The Group's sick leave rate shall not exceed 4.0 per cent by the end of 2013

- By 2018, 20 per cent of Boliden's workforce are to be women

## Goals 2013

All white-collar workers in Boliden will be trained in performance evaluation.

## Results in 2012

- Boliden had no month with zero accidents in 2012. On average, the nine operational units achieved eight accident-free months. Boliden Bergsöe had zero accidents among own employees and contractors throughout 2012.

The accident frequency increased from 4.9 per one million hours worked in 2011 to 6.6 in 2012. Boliden started to include our contractors in the statistics in 2012 and this is followed up on a monthly basis. Including contractors, the LTI frequency was 9.1 in 2012. Work on establishing a comprehensive safety culture continues unabated. Investments in new technology are an important factor, but consistent and consistently present leadership is even more important when it comes to maintaining routines and influencing attitudes. Risks and incidents reports increased by 40 per cent, from approximately 3,000 to 4,200 reports, which shows a greater understanding of the importance of working with preventative measures. We will continue our efforts to reduce accidents by focusing on consistent leadership, personal responsibility and less risky behaviour during 2013.

- Sick leave rate was 3.6 per cent<sup>1)</sup> (3.7%) at the end of 2012. Work will continue up until the end of 2013 on the established goal of reducing absence due to sickness figures to this rate at all units.

- Women accounted for 16.9 per cent (16.1%) of the Group's employees on 31st December 2012.

<sup>1)</sup> Absence due to accidents at Tara is not included. Including these hours, the total rate is 3.7. From 2013, all hours will be included in the statistics.

## Labour practices and decent work (LA)

### LA1 – Workforce

#### Number of employees<sup>1)</sup>

Country	2010	2011	2012
Sweden	2,429	2,488	2,893
Finland	944	904	947
Norway	326	321	308
Ireland	699	696	697
Other	14	14	12
<b>Total in Group</b>	<b>4,412</b>	<b>4,423</b>	<b>4,857</b>

<sup>1)</sup> Number of employees 31 December 2012 legally reported.

### LA3 – Benefits

In general, Boliden offers a comprehensive and competitive package that includes such elements as market-oriented salaries and benefits. We deem this a prerequisite for being able to recruit and retain competent employees. In 2012, total wages and benefits for our employees amounted to SEK 2,437 million (SEK 2,382 m).

The profit-sharing system for all employees, introduced in 2007, means a profit share is payable when the return on capital employed reaches 10 per cent. The maximum profit share (SEK 25,000/full-time employee) is payable when the return on capital employed reaches 20 per cent. In 2012, the return on capital employed was 13 per cent (17%) and the amount the programme will receive for 2012 is now to be decided. In 2011, the amount per employee was SEK 16,800 according to the statutes in the respective countries. While the benefits offered by Boliden are similar in all the regions in which we have a presence, they are not identical.

There are, for example, major differences in the legislation between the countries in which Boliden operates, such as with regard to parental leave, maternity pay and opportunities for working shorter hours during the early childhood years, and Boliden thus provides compensation for employees on parental leave in some of the countries in which we operate.

#### Finland

All the employees in Finland have valid contracts of employment, regulating their salaries and other general working conditions. Furthermore, all employees, including temporary workers and those working part time, receive benefits in addition to what is included in the collective agreements and individual employment contracts. The benefits are: employers' liability insurance (statutory), travel insurance, leisure time accident insurance, sports insurance, insurance against treatment injury (statutory), group life assurance (statutory), employment pension insurance (statutory), maternity/paternity leave. All employees benefit from the various leisure and healthcare activities provided by the company.

#### Ireland

All employees in Ireland are paid competitive salaries, allowances and bonuses, as well as shift premiums (as outlined in collective agreements and/or individual employment contracts). Furthermore, employees are entitled to the following benefits: life assurance, health insurance (sub-

### LA2 – Employee turnover

Personnel turnover was 4.4 per cent (4.5%). The total number of employees leaving employment during the reporting period was 204 (201) of whom 30 (24) were women.

#### Employees leaving employment, total

Age group	2010	2011	2012
<30 years	16	13	20
30–50 years	39	48	48
>50 years	133	140	136

sidised or fully paid), access to company healthcare, disability cover (white-collar employees only), pension, retirement provision, maternity/paternity leave, annual leave and public holidays, travel and other work-related expenses reimbursed.

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

#### Norway

All employees in Norway are entitled to the following benefits: life assurance, travel insurance (company official journey), health insurance (fully paid), disability cover, defined contribution of five or eight per cent from base salary, and a defined benefit of 70 per cent (inc. state pension) of salary between 62 and 67 years of age, possibility to get a loan for consumer goods (max. NOK 30,000), maternity/paternity leave (10 per cent paid by company), annual leave and public holidays, and travel and other related expenses reimbursed.

The benefits do not differ between full-time and part-time employees. Temporary workers, however, are not entitled to consumer goods loans (max. NOK 30,000) and company pensions.

Temporary workers on short-term contracts (e.g. summer students) are only entitled to the life assurance, travel insurance (company official journey) and disability cover.

#### Sweden

All employees in Sweden have valid contracts of employment regulating their salaries and other general working conditions. All employees, including temporary workers and people working part time, also have benefits in addition to what is 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. Furthermore, all employees are included in the various leisure and healthcare activities arranged at the different sites.

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

## LA4 – Collective bargaining agreements

The number of employees at Boliden covered by collective agreements is 4,784 (4,669), representing 98.5 per cent of the total workforce.

Boliden does not keep records of individual memberships in the different trade unions. Whether or not an employee chooses to be a member of a trade union, he or she is still included in and treated according to the agreements.

The regions and units have different methods and unions representing employees, as shown below in the following regional description.

Employees covered by collective bargaining agreements per country	Unit	2010	2011	2012
Sweden	%	99.7	99.2	100
Norway	%	94.9	94.1	99.7
Finland	%	100.0	99.9	99.6
Ireland	%	91.9	92	92
<b>Total</b>	<b>%</b>	<b>98.2</b>	<b>98.1</b>	<b>98.5</b>

## LA5 – Notice regarding operational changes

National legislation and collective agreements set the framework and regulations for how information sharing and negotiations are to be carried out in connection with operational and organisational changes. This differs between the countries in which Boliden operates.

The actual notice period can vary from weeks to months depending on the project or proposals and the urgency to make the required changes. The trade union representatives are continuously updated about the development of the company's operations and informed before any decisions about significant changes in its operations are made. Where significant changes in company operations are necessary, employees and/or their union representatives are involved from an early stage in the process.

Minimum notice periods as required by labour legislation are always adhered to at all Boliden operations. In general, notice periods for significant operational changes are as long as possible, and consultation with employees and relevant parties commence as soon as possible.

### Finland

According to national legislation, negotiation with the unions must take place before the termination of employees' contracts. The trade union representatives are also to be given written information about the reasons for layoffs, the number of people that might be affected and to whom the collective agreement is applicable.

If more than ten employees are at risk of being laid off temporarily, the employment authorities must be informed. The minimum negotiation period is six weeks in cases of permanent layoffs or temporary layoffs (more than 90 days). The minimum negotiation period is 14 days in cases of employees being laid off temporarily for not more than 90 days. Notice periods on an individual level are regulated in the collective agreements.

### Ireland

Minimum notice periods for ending employment depend on length of service according to labour legislation, and/or are written into employment contracts. Minimum notice periods for other issues are not written into collective agreements, but are included in labour legislation.

### Norway

The notice period is always related to employment status and ranges from 14 days for new employees on six months probation to a notice period of six calendar months for permanent employees with a length of service over ten years and aged 60+.

### Sweden

According to national legislation, the company and the unions must conduct negotiations before significant changes in the operations are decided upon and before employee layoffs can be effected. The trade unions are also to be given written information about the reasons for layoffs, the number of people that might be affected and which collec-

Region	Trade unit representation
Finland	<ul style="list-style-type: none"> <li>The Finnish Metalworkers' Union</li> <li>Trade Union Pro</li> <li>Federation of Professional and Managerial Staff</li> </ul>
Ireland	<ul style="list-style-type: none"> <li>The Services, Industrial, Professional and Technical Union (SIPTU)</li> <li>Power Union (TEEU)</li> <li>British and Irish trade union UNITE</li> </ul>
Norway	<ul style="list-style-type: none"> <li>Industri Energi</li> <li>The Norwegian Engineers and Managers Association (FLT)</li> <li>Lederne</li> <li>Negotia</li> <li>The Norwegian Society of Engineers and Technologies (NITO)</li> <li>The Norwegian Society of Graduate Technical and Scientific Professionals (Tekna)</li> </ul>
Sweden	<ul style="list-style-type: none"> <li>Unionen</li> <li>The Swedish Association of Graduate Engineers</li> <li>Ledarna, Swedish Organisation for Managers</li> <li>IF Metall</li> </ul>

tive agreements are applicable. If more than five employees are at risk of being subject to layoffs, the regional Employment Office must be informed. If more employees are involved, the notice timeframes range from two to six months.

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

Boliden has not had any strikes or lockouts during 2012.

Boliden enjoys good relations with the different unions and there is, from Boliden's perspective, mutual trust. The employees have three representatives on the Board of Directors. Boliden also has a Works Council comprising employee representatives from all the countries in which Boliden operates. At local level, employee representatives/union representatives sit on a number of different councils relating to employee management, production planning, health and safety etc. The dialogue frequency ensures a constant flow of relevant information, enabling the unions to understand how Boliden is performing and promoting a two-way dialogue on strategic matters.

## LA6 – Representation on health and safety committees

All units are certified in accordance with the OHSAS 18001 health and safety standard. Furthermore, all units have procedures for risk assessments, incident reporting and safety inspections.

Boliden has a fair if not a full picture of the number of workforce representatives: 5–10 per cent of employees are representatives on the health and safety committees. Around 3 per cent assist with supervising and advising on health and safety issues. Safety inspections are carried out in order to verify that procedures are being followed and measures implemented at all units on an ongoing basis. In order to further underline the importance of establishing a genuine safety culture, Group management representatives have taken part in a number of Group Safety Walks. The Group Safety Walk programme has continued at Boliden's units throughout 2012. All Group management members have participated at least once and all units have been visited. A conference on environment, health and safety (EHS) was held in 2012. It comprised 48 hours dedicated to EHS and the theme was Excellence Beyond Zero. In addition to EHS managers, participants included, for example, the Group management, site management teams and managers from production and maintenance. Both external and internal lecturers took part in the programme. The conference was summed up at a panel discussion where participants had the opportunity to pose questions to Group management.

Boliden Work Councils include safety representatives, and over 75 per cent of the total workforce is represented by these committees.

Boliden also promotes initiatives to involve employees on a more informal basis by encouraging them to contribute suggestions for improvements within the sphere of health and safety.

## LA7 – Injuries and occupational diseases

Boliden has a zero harm philosophy with regard to accidents at work. The goal for each unit is zero accidents every month. Absentee rates together with low injury rates can generally be linked to positive trends in staff morale and productivity.

Boliden has a responsibility to create structures, procedures and other conditions for a safe working environment. This is, however, not enough. The decisive action lies with each person through his or her own behaviour. Each person needs to take responsibility and devote time to considering and following routines essential to avoiding accidents. It must be clear that safety always comes first. Equipment, instructions, risk assessments, incident reporting, safety audits and inspections all help safeguard the individual's safety. Boliden continuously invests in safer machinery and equipment. In addition, all operations regularly conduct safety training for all employees according to a fixed schedule, with a view to improving knowledge and awareness and to provide constant reminders of the importance of working safely.

During 2012, 54 (38) accidents with absence were reported at Boliden's units. The total number of days of absence due to accidents was 1405 (887), an average of 26 (23) days per accident. There were no fatalities in 2012.

## LA8 – Assistance regarding serious diseases

Boliden has a long tradition of encouraging and promoting employees' health and of taking measures to prevent incidents and serious diseases. As part of our occupational hygiene monitoring programmes, Boliden regularly checks the workplaces regarding exposure, ergonomics, air quality, noise and vibrations. The results are analysed, actioned where necessary and reported to the authorities.

Employees are screened regularly via the occupational health services provided at the workplace to ensure each individual is fit to do his or her assigned work. Any sign of illness that could be associated with work is documented and reported.

Boliden also offers all employees special assistance, such as anti-flu vaccinations, where necessary. Furthermore, every unit has an activity programme designed to promote employees' health.

Boliden's systematic health and wellness work is based on prevention as well as rehabilitation. A large number of the preventative activities managed by the units focus on identifying lifestyle and environmental factors that may have a negative impact on the level of diseases for some employees. Boliden seeks to facilitate physical activity as work tasks often mean the employee is sedentary.

Employees are encouraged to keep fit by cycling to work and by participating in activities such as work-out sessions, ice hockey, football, volleyball and tennis. Boliden invites experts to speak on various health risks such as cancer, diabetes and heart conditions, and on how to prevent potential health issues that may arise due to working shifts. Anti-smoking and healthy eating campaigns are carried out on an ongoing basis.

Some good examples gathered from the units include:

- Boliden Tara offers the PSA test for prostate cancer to males aged 50 or over. In addition, the Employee Wellbeing Programme gives employees and their family members access to free independent expert information, advice and counselling on any issue that concerns them including addiction, health, financial, marital or family problems.
- The Swedish mines and the Rönnskär copper smelter are running a health project called "Life and Health" with the aim of promoting a healthier lifestyle. The occupational health service identifies employees at a high risk of falling sick and invites them to join the programme. Action plans on an individual basis, depending on the person's health status, are implemented. More than 100 people are included in the programme.

In 2011, Boliden conducted a Group-wide mapping of sick leave at the nine units. The mapping provided a basis for changing the approach and managing absenteeism in a more efficient way.

## Lost time injury (LTI) frequency, 2008– 2012

Year	LTI	Fatalities
2012	6.6	0
2011	4.9	0
2010	8.2	0
2009	5.5	0
2008	9.1	1

The number of accidents per one million hours worked (LTI frequency) increased from 4.9 in 2011 to 6.6 in 2012. The average number of accident-free months reported by our operating units was eight (nine). As of 2012, Boliden started to include contractors in the LTI statistics. Including contractors, the LTI frequency rate was 9.1.

## LA9 – Health and safety topics covered in formal agreements with trade unions

Boliden freely provides personal protection equipment at all sites and demands that it be used in accordance with the work procedures that were established based on the risk assessments carried out before any work is commenced.

There are joint management/employee health and safety commitments at each site, and it is mandatory for safety representatives to participate in health and safety inspections, audits, and accident investigations.

All sites give training according to a training matrix that defines the mandatory training for each position. The training each person has received is documented in the HR system and training records serves as a basis for promotion, further training and/or repetition.

Every person has the right and is under obligation to stop any work that is considered to be unsafe. If a hazardous condition is discovered, every person has the right and is under obligation to report this in our deviation system. All near misses, incidents and accidents are reported in this system and followed up systematically. If a serious deviation occurs, all employees have access to a whistleblower function where they can file an anonymous report.

Safety inspections are carried out according to schedules at each site. On top of this, unannounced safety inspections are carried out in conjunction with maintenance work and projects, or for no particular reason at all. Managers, safety coordinators and safety representatives are examples of those participating in the safety inspections.

Group management take part in so-called Group Safety Walks at least once a year, whereby all operational sites are visited and safety issues are discussed with workers on site.

Boliden is a UN Global Compact signatory and Swedish legislation makes it mandatory to also comply with the ILO standards. Employees are covered by collective agreements and all Boliden employees are expected to comply with our core values and the Code of Conduct.

All units within Boliden are certified according to OHSAS 18001 and implementation of ISO 26000 has started at Group level.

### LA10-LA11 – Training, skills management and lifelong learning

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. Boliden's ability to respond to changes in the market is affected by the company's talent pool, and the skills and knowledge possessed by our employees are therefore vital if Boliden is to achieve its strategic and operational objectives. Boliden runs several training programmes. Keeping employees updated regarding technology, leadership and functional skills is essential to Boliden's performance. While the work with skills management is coordinated across the whole Boliden Group, much of the responsibility is local as each unit has knowledge of its own specific needs and circumstances.

Boliden's approach is to facilitate skills development occurring mainly during daily work. This means the company does not keep account of the number of training days or hours per employee.

All new employees receive introduction and orientation training in their new workplace, following a structured procedure and checklist that is signed off by the employee. All employees also receive the necessary training to enable them to perform their duties in a safe, efficient and competent manner. This applies to all blue-collar and white-collar employees, in all categories and at all levels in the organisation.

Training measures are usually conducted locally in order to optimise the way in which they are controlled and customised in line with the needs of the unit in question. The training activities include an ongoing traditional leadership development programme for first-line managers, focusing on leadership and employee development. A number of statutory training

measures are also provided, along with training in representing the employer in legal, labour law and HR issues, and on ethical concerns.

Boliden provides opportunities for all our employees to develop as individuals and professionals. All employees have an individual development plan, agreed upon together with their manager.

Ongoing Group-wide programmes and initiatives include:

- The Boliden Academy – programmes for Young Professionals, High Potentials, and the Top 100 Management Team.
- The annual Strategic Skills Provision Report – identifies skill requirements and proposes actions to address potential shortages.
- Management Reviews and Succession Planning processes – further enhances our skills management programmes.
- All employees receive yearly training according to ISO 9001, ISO 14001 and OHSAS 18001. This is documented in a training register.

It is also possible to receive financial support and be granted sabbatical leave for education with a guaranteed return to work, when an employee wishes to take time out for external training or education relevant to their position. There are also initiatives to provide pre-retirement courses for employees close to retirement, including transition to a nonworking life.

### LA12 – Performance and career development reviews

In 2012, all top 100 managers participated in a 360° evaluation programme. Each manager received his or her own results and a development plan. All management teams were given one-day team development training based on the results of their 360° evaluation.

### LA13 – Composition of employees and governance bodies

Increasing diversity in the Group is one way of managing skill development and there is still work to be done to secure a more diverse workplace. With this in mind, Boliden is striving to improve the balance of men and women in the Group. One important aspect is to increase the level of women within the organization and thereby create a more diverse team. This goal is a consideration when recruiting. In order to safeguard the right skills for our business, Boliden recruits from several different countries. Boliden is a member of several university networks in both the Boliden markets and beyond. When recruiting new employees, Boliden must ensure that the job specification is designed such that it truly attracts the most qualified and relevant persons as candidates. At the end of 2012, 16.84 per cent (16.1%) of the Group's workforce were women. A long-term goal has been set to reach 20 per cent by the end of 2018. The percentage of women on the Board of Directors totalled 29 per cent (27%). Boliden practices the principle of equal pay for work of equal value, irrespective of gender, at all units. Any identified differences are immediately corrected.

#### Percentage of women at corporate management level

	Unit	2009	2010	2011	2012
Board of Directors	%	27	27	27	29
Group management	%	17	0	0	20
Supervisors	%	11	–	11	12
In management groups	%	19	–	17.4	25

#### Gender total

		2010	2010	2011	2011	2012	2012
Subsidiaries	Unit	Women	Men	Women	Men	Women	Men
Sweden	%	19	81	20	80	20	80
Finland	%	15	85	16	84	15	85
Norway	%	13	87	14	86	15	85
Ireland	%	4	96	4	96	5	95
Other	%	28	72	29	71	50	50
<b>Total</b>		<b>84</b>	<b>84</b>	<b>16</b>	<b>84</b>	<b>17</b>	<b>83</b>

Number of employees on 31/12 2012, divided by gender.

Countries	2010	Of whom women	Of whom men	2011	Of whom women	Of whom men	2012	Of whom women	Of whom men
Sweden	2,634	499	2,135	2,789	556	2,233	2,893	592	2,301
Finland	926	138	788	938	145	793	947	142	805
Norway	333	44	289	324	43	281	308	45	263
Ireland	695	30	665	699	31	668	697	33	664
Others	3	0	3	11	6	5	12	6	6
<b>Total in Group</b>	<b>4,591</b>	<b>711</b>	<b>3,880</b>	<b>4,761</b>	<b>781</b>	<b>3,980</b>	<b>4,857</b>	<b>818</b>	<b>4,039</b>

### LA14 – Equality in remuneration

Boliden pursues an active equal opportunities policy throughout the organisation. There is also a policy that condemns all forms of discrimination or harassment based on gender. For all the countries where Boliden operates, the principle of equal pay for work of equal value is applied. There is a salary scale for every job category and employees within a category are paid according to the scale regardless of gender.

In Sweden, there is also a structured process for mapping and analysing the salaries of all employees from a gender perspective. This process is carried out annually and together with representatives from all trade unions. The purpose of this work is to identify differences in salary between men and women that are without proper cause. Such differences are followed by corrective actions.

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## Human rights (HR)

### HR1-3 – Investment and procurement practices

Boliden adheres to the UN Declaration of Human Rights, to the ILO's core conventions and is a signatory to the UN Global Compact.

One way to develop and promote sustainability management within our industry is to cooperate with our business partners. Boliden has been continuously conducting reviews of its business partners in a process known as EBP (Evaluation of Business Partners) since 2010. This is a systematic process in which the business partner is not only evaluated from a strictly commercial viewpoint but also from a sustainability one. Based on the 10 principles of the UN Global Compact and ILO and ISO standards, Boliden has identified a number of areas of responsibility which we have chosen to address in cooperation with our partners. These areas are those relating to human rights, working conditions, environmental responsibility and systematic environmental work, anti-corruption and, finally, the way in which a company's own sustainability work is followed up and evaluated.

The process starts with an online self-assessment that is subsequently followed up and evaluated. A dialogue is established with regard to the potential for improvement identified. To date, around 460 business partners have completed the self-assessment and five audits have been conducted. The audits are followed up in the form of reporting on the measures implemented. Working with improvements is a precondition for a continued partnership. The self-assessment forms together with Boliden's CSR criteria are available on Boliden's website. <http://www.boliden.com/Sustainability/Business-partners/>

### HR 4 – Number of cases of discrimination and action taken

In 2012, two minor incidents of discrimination occurred in Sweden. Action has been taken in both cases using existing action plans.

### HR5 – Freedom of association and collective bargaining

Boliden adheres to the ILO's core conventions and is a signatory to the UN Global Compact.

All employees have freedom of organisation and the right to join trade union associations. It is also stated in the company's policy document "Code of Conduct" that the company shall respect the right of employees to organise into trade unions and shall support all cooperations between employers and employees, as well as their respective representatives, in all areas of mutual interest.

The freedom of organisation and the right to join trade union associations is stated by national law in all countries in which Boliden operates.

There are slight differences between the countries, however; regarding compulsory membership. In Ireland, for example, it is mandatory for blue-collar workers to be members of a trade union but not mandatory for white-collar workers. In the Nordic countries, it is not mandatory to be a member of a trade union with which Boliden has signed a collective agreement – nor does the company keep registers of union memberships at individual level. Nevertheless, all employees are treated in accordance with the collective agreements signed by Boliden.

To learn more about employee and management relations, please see indicators LA 4 and MM 4.

The Evaluation of Business Partners (EBP) project described above (indicator HR 1-3) also covers matters relating to the freedom of association and collective bargaining.

### HR6-7 – Child labour, forced and compulsory labour

In the countries in which Boliden operates, child labour is strictly forbidden by law. Boliden opposes all forms of child labour and all forms of forced and compulsory labour. We consider it to be contrary to the Group's core values. The Code of Conduct states: "We shall ensure that none of the operations controlled by the company lead to the exploitation of children. We never, either directly or indirectly, collaborate with suppliers or customers where we have reason to believe that harmful child labour is used."

Furthermore, Boliden adheres to the UN Declaration of Human Rights, to the ILO's core conventions and is a signatory to the UN Global Compact.

Boliden has also extended this approach to collaborations with business partners. Boliden has instigated a process to methodically evaluate the way in which commercial partners address sustainability issues in the context of their operations. The aim is to establish a dialogue with partners about the ways in which the industry can achieve social and environmental improvements. This will, in turn, result in an ability to minimise the risks associated with the purchase and sale of raw materials, including recycling materials, by-products and waste.

The sustainability evaluations primarily take the form of questionnaires, followed by targeted audits based on criteria which are founded on the ten principles of the UN Global Compact and ILO and ISO standards.

The Evaluation of Business Partners (EBP) project described above (indicator HR 1-3) also covers matters relating to child labour, forced and compulsory labour.

### MM5 – Total number of operations taking place in or adjacent to Indigenous Peoples' territories, and number and percentage of operations or sites where there are formal agreements with Indigenous Peoples' communities

All operations in northern Sweden (i.e. all mines within the Boliden Area and the Aitik mine) are in the reindeer herding areas. Consultation is ongoing with the Sami villages affected in active mining areas. Agreements on compensation issues and cooperation are generally in place between Boliden and the Sami villages.

## Society (SO)

### SO1 – Local community engagement

Boliden's business operations are often of considerable importance in terms of employment in the local community, making Boliden an important local stakeholder.

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

Local involvement in the form of support for and partnerships with voluntary organisations and associations is another way in which Boliden can make a positive contribution to the areas in which we operate. Our support focuses primarily on local sporting and cultural events, schools and hospitals, often linked to children and young people. In 2012, our units sponsored local activities to the tune of approximately SEK 7.2 million (SEK 5.4 m).

Boliden's mines and smelters utilise large amounts of resources and land that affect both people and the environment to various degrees. Dialogue with the numerous stakeholders with whom we need to interact is ongoing, and primarily conducted through discussion and cooperation but also, to meet some specific needs, through social impact assessments.

### MM6–7 – Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples, plus the extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and Indigenous Peoples, and the outcomes

There were no such cases in 2012. Boliden has routines for informing and including nearby and local residents. When the company is applying for new exploration permission or to expand the operation, there are mechanisms such as open houses and post-exploration forms that enable nearby and local residents and businesses to state their opinion. Certain parts of this process are required by law.

### MM8 – Number (and percentage) of company operating sites where artisanal and small-scale mining (ASM) takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risks

Boliden's operations do not involve artisanal mining or small-scale mining, and hence the risk does not exist. The industrial areas are nevertheless fenced with controlled access points for safety reasons to prevent unauthorised visitors coming to harm or causing accidents.

### MM9 – Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process

There have been no resettlements of any villages in Boliden's corporate history. The latest significant case of resettlement was when the Hötjärn tailings pond in the Boliden Area was being planned (finalised year 2010). Dialogue was initiated with two permanent residents and two holiday cottage residents in 2003, and a satisfactory agreement regarding compensation and practical solutions was reached.

As a rule, Boliden buys properties within proximity of the operations as they are put up for sale, and thus no residents are affected once the mine expands in that direction. In cases where a resident feels disturbed by a nearby operation, Boliden offers to buy the property and compensate for any inconvenience. The aim is always to come to a solution that suits the individual needs and makes the residents feel fully compensated.

### MM10 – Number and percentage of operations with closure plans

All of Boliden's present operations, mines and smelters, have closure plans. In 2012, Boliden worked actively on the reclamation of eight former mine sites, all of which have closure plans.

### SO3 – Training in anti-corruption policies and procedures

Boliden's Code of Conduct provides a framework for what is deemed responsible conduct. It applies to all employees throughout the world, to the members of the Board of Directors of Boliden AB and to its subsidiaries. The organisation's anti-corruption policies and procedures are stated in the Code.

Line managers are responsible for making the guidelines known and for monitoring compliance.

All managers and other employees whose work involves extensive external and competitor contacts are given anti-corruption training in accordance with their area of responsibility, starting with the Management Development Programme – a training programme for the top 130 managers. Implementation of the UK Bribery Act began in 2012.

In 2012, a risk survey was carried out to identify the risks that exist within each group from an anti-corruption perspective. Functions with external contacts were prioritised. Boliden revised its anti-corruption policy and the new version was adopted by the Board of Directors. Business ethics are covered in Boliden's Code of Conduct, but new legislation imposed new demands on Boliden and thereby presented a need to provide a more focused policy. In addition to the new policy, more detailed guidelines have been developed to further support employees. Boliden has a whistleblower function which can be used to report suspected cases of fraud. No cases were reported in 2012.

### SO4 – Incidents of corruption

No incidents of corruption or actions taken against corruption were reported during the year.

### SO5 – Public policy development and lobbying

Conducting exploration work and operating mines and smelters require a variety of permits and Boliden therefore seeks to establish dialogues with authorities at local, regional, national and international level. Close monitoring of legislative issues and our commitment to take an active part in the dialogue about their possible consequences are of strategic importance. Boliden is a member of several national, European and global industrial organisations.

Boliden seeks to promote energy efficiency and sustainable energy solutions on a broader scale through membership in the Swedish Energy Agency's voluntary programme (PFE), Finnish MOTIVA and Irish Sustainable Energy Ireland (SEI).

In 2005, Boliden entered into a joint partnership with a number of Swedish electricity intensive industrial companies to form BasEl with a view to promoting the industries' long-term interests with regard to a stable and competitive electricity supply. Boliden is also involved in similar projects in Finland (Fennovoima) and in Norway (Industriell A/S).

### SO7–8 – Anti-Competitive Behaviour and compliance

Boliden conducts extensive domestic and international operations and is occasionally involved in disputes and legal proceedings arising in the course of its activities.

#### Legal dispute arising from the earlier copper tubing cartel

In June 2012, Boliden was served with claims in the UK courts by a number of companies in the Travis-Perkins corporate Group. Travis-Perkins claims to have sustained losses as a consequence of the copper tubing cartel in which Boliden and seven other companies were involved during the period from June 1988 to March 2001, and for which the companies concerned were fined by the European Commission in 2004. The fine and the interest on the same – a sum totalling SEK 367 million – were paid by Boliden in July 2010. Boliden has contested the claim and has, in order to ensure that all relevant parties are involved, also brought contribution claims against the other cartel members. One of these companies has now also submitted a claim against Boliden's former subsidiary company, Boliden Fabrication AB, which was also found to have participated in the cartel. This company was transferred to Outokumpu in 2004 in conjunction with which Boliden undertook to indemnify Outokumpu in respect of claims that may arise and which relate to the period prior to the transfer of the company. The indemnity undertaking is not expected to increase Boliden's total potential exposure in that the European Commission found Boliden to be jointly and severally liable with its former subsidiary company.

It is currently not possible to evaluate the financial effect that the cases may have on Boliden with any degree of certainty and no provision for any obligations that may arise has hence been made.

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## Product responsibility (PR)

### MM11 – Programs and progress relating to materials stewardship

Boliden has prioritised three challenges with regard to direct environmental impact; to reduce emissions to air and discharges to water; to mitigate the environmental impact; to conduct responsible waste management. These goals influence the way in which the daily operations are carried out.

Boliden implements the New Boliden Way – an organisational and production philosophy designed to increase efficiency in every aspect of the production process. It includes machinery maintenance, the quantity and choice of input materials in the process with the explicit aim of increasing efficiency, reducing the quantity of resources used, and replacing fossil resources and hazardous substances with renewable and less hazardous alternatives.

Boliden performs business partner reviews based on different sustainability factors, including their environmental impact management such as discharges to water and emissions to air management. The contracts with suppliers include specifications of environmental aspects in their delivery, such as levels of substances and waste management methods.

Boliden has made significant investments in the recycling industry and is now the largest electronic scrap recycler in the world.

Boliden is systematically managing the energy and heat generated in its core processes. In 2012, Boliden reused 568,000 MWh of energy and heat and delivered 844,000 MWh of energy and heat to public networks.

Boliden owns land and forest and is practising responsible forestry according to the Forest Stewardship Council (FSC) by promoting and protecting biodiversity and creating environmental and social values.

### PR1 – Customer Health and Safety

Boliden works throughout the operating chain to meet our business partners' demands and preferences. Boliden has an active dialogue with our business partners on environmental and quality management issues and provides relevant, factual information about our products. This limits both risks and the collective environmental impact.

The customer dialogue mainly takes the form of ongoing contacts during the contract period, in conjunction with contract renewals and during recurring customer audits by Boliden.

Written information is available in the form of a Material Safety Data Sheet (MSDS). These are updated on a regular basis according to legislative demands and new science. In addition to being distributed to customers, the MSDSs are available at [www.boliden.com](http://www.boliden.com).

The EU's chemical legislation (REACH) is implemented in the daily work within all Boliden's units.

### PR3 – Product and Service Labelling

Boliden is committed to meeting the increased demand for metals in a way that minimises the negative impact on people and the environment. Our strength lies mainly in our years of experience and expertise in the production of base and precious metals through high-quality exploration, mining and smelting operations, and recycling. We achieve this, among other things, by continuously developing new technologies and methods as well as providing accurate factual information about our products. Products put on the market by Boliden are labelled according to relevant legislation concerning transportation, storage and use, and accompanied with the necessary documentation.

In addition, we describe our environmental performance and how our production affects the environment in a transparent and detailed manner using common assessment methods and benchmarks.

### PR5 – Practices related to customer satisfaction

Boliden collects feedback from customers through planned customer visits and via our contract administrators throughout the contract execution process. Complaints are reported and handled systematically across interfaces to smelter units. We also cooperate with customers in developing new products and other technical solutions through our technical customer support service.

Customers are included in the business partner reviews (EBP), offering additional channels of dialogue.

# Economic performance (EC)

Boliden's operations impact and affect many people – sometimes whole communities. Our business concept is to extract minerals and produce high-quality metals in a cost-effective and sustainable manner in order to meet the markets demand and thereby create value for Boliden's shareholders. By doing so, we can also continue to take extensive responsibility and to enhance the contribution we are making to positive economic and social development within the community.

Financial goals	Results in 2012
Boliden has established the following financial goals:	
<ul style="list-style-type: none"> <li>The return on capital employed shall exceed 10 per cent over a business cycle.</li> </ul>	<ul style="list-style-type: none"> <li>The return on capital employed was 13 per cent (17%) in 2012. The average return on capital employed during the period 2008–2012 was 14 per cent per annum.</li> </ul>
<ul style="list-style-type: none"> <li>The net debt/equity ratio in an economic upturn shall not exceed 20 per cent in order to maintain a reasonable financial capacity to act in a recession.</li> </ul>	<ul style="list-style-type: none"> <li>The net debt/equity ratio was 25 per cent (29%) at the end of 2012. The net debt/equity ratio increased due to a reduction in cash flow resulting from the profit performance, an increase in working capital, an increase in the rate of investment, and a substantial increase in the amount of tax paid.</li> </ul>
<ul style="list-style-type: none"> <li>The dividend paid shall correspond to approximately one third of the net profit.</li> </ul>	<ul style="list-style-type: none"> <li>The Board proposes a dividend for 2012 of SEK 4 (SEK 4) per share, corresponding to a total of SEK 1,094 million (SEK 1,094 m) or 33.4 per cent (32.3%) of the net profit for 2012. The ordinary dividends paid during the period 2008 to 2012, including the proposed dividend for 2012, correspond to 33.1 per cent of (32.2%) the aggregate net results for the period.</li> </ul>

## EC1 – Economic value generated and distributed

Boliden generates profit and value through metal production and deliveries that acknowledge their social and environmental responsibility. Total net sales in 2012 amounted to SEK 40,001 million (SEK 40,323 m).

Component, SEK M	Stakeholder group	2010	2011	2012	Comment
<b>Direct economic value generated</b>					
a) Revenues	From customers	36,716	40,323	<b>40,001</b>	Net sales plus revenues from financial investments and sales of assets.
<b>Economic value distributed</b>					
b) Operating costs	To suppliers and business partners	-30,038	-34,404	-34,636	Payment to suppliers, non-strategic investments, royalties and facilitation payments.
c) Employee salaries and benefits	Employees	-3,203	-3,282	-3,471	Total monetary outflows for employees (current payments).
d) Payments to providers of capital	Banks and financial institutions	-319	-259	-266	All financial payments made to the providers of the organisation's capital.
e) Payment to government	Society	-1,374	-1,171	-628	Gross taxes.
f) Community investments	Society	-5	-5	-7	Sponsored local activities.

## EC2 – Climate change implications, risks and opportunities

Boliden is impacted by the effects of climate change. One example is heavy rain putting stress on Boliden's water management systems. Over the past two years, heavy rains have led to capacity investments by Boliden in order to comply with the limits stipulated in relevant permits and to achieve the Group target of reducing discharges to water.

Metals production is a very energy-intensive process that generates both direct and indirect emissions of carbon dioxide. Boliden's direct carbon dioxide emissions primarily arise from the combustion processes and transportation. The indirect carbon dioxide emissions derive from purchased electricity. To learn more about how Boliden works to reduce energy consumption, replace fossil fuels with renewables and reduce carbon dioxide emissions, please see indicators EN 3–7 and EN 16–18.

The European Union's trade in carbon dioxide emission allowances, Emission Trading Scheme (ETS), currently covers the Rönnskär copper smelter and the Bergsöle lead smelter. The two smelters have been allocated emission allowances for 78,909 tonnes of carbon dioxide for the period from 2008 to 2012. With new legislation in force in 2013, all of Boliden's smelters and, to varying degrees, mines, will be covered by ETS. The trade in emission allowances is very much a strategic challenge for Boliden, entailing not only calculating the costs that may be entailed in future purchases of emission allowances, but also working on ways to reduce emissions, given our production levels and available technology. The units' emission allowance application for the period from 2013 to 2020 has been submitted with the aim of achieving an allocation for free emission allowances that covers Boliden's needs up until 2020.

## EC3 – Benefit plan coverage

### Pension undertakings

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

Boliden has defined benefit pension plans in Sweden, Norway and Ireland that may or may not be placed in funds. Defined contribution pension plans have been established in these three countries. In Finland there is no company pension. The pension cost for the year comprises the present value of pensions earned during the year, plus interest on the undertaking at the start of the year, less deductions for the return on each pension plan's assets held for investment purposes. Amortisation of actuarial profits/losses and for changes to plans is added to this figure. Accumulated profits and/or losses totalling less than 10 per cent of whichever is the higher of the pension undertaking and the fair value of the assets held for investment purposes are not amortised. When the accumulated profit or loss exceeds this 10 per cent limit, the excess amount is amortised over the average remaining period of employment of each pension plan's employees.

Costs, undertakings and other factors in pension plans are calculated by means of the Projected Unit Credit Method. The Group's reported pension liability totals SEK 707 million (SEK 653 m), which sum includes endowment insurance totalling SEK 61 million (SEK 62 m) in respect of defined premium plans in Sweden.

## EC4 – Significant financial support received from government

Boliden does not receive financial support from any government of the countries in which we operate.

## EC5 – Entry and minimum wage

New employees at Boliden are not compensated based on wages subject to minimum wage rules. In general, the entry level wages for employees are set much higher than the minimum wage, and average salaries and wages are higher than the national industrial average.

For blue-collar employees, there is an entry-level wage stated within the local salary agreement that is used for setting the salaries for new employees.

For white-collar employees hired directly out of universities, Boliden applies entry-level wages depending on the level of education needed for different jobs.

## EC8–9 – Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement, plus understanding and describing significant indirect economic impacts, including the extent of impacts

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

Instead we pay taxes to the communities in which we operate, and as we are often among the bigger companies in the local area, our contribution can be considered significant.

Boliden participates in the development of education for future engineers within the mining and metals industry.

Zinc is a mineral that is essential for the human body and deficiency is common among children. Boliden therefore supports the "Zinc Saves Kids" initiative. Learn more at <http://www.zincsavekids.org/>

Boliden's operations affect and touch the lives of many people – sometimes entire communities. Our value creation depends on the ability to show consideration for people, society and the environment throughout the value chain. Boliden aims to be a positive economic force.

Boliden is the biggest employer in many communities and hence also a key prerequisite for fundamental societal services and facilities in the immediate area. Boliden's indirect effect is difficult to calculate but a rough estimate suggests that for every person employed by Boliden, an average of three to five more job opportunities are created locally.

Boliden's ambition is to continue to be a force for good in the local community. The expansions at Aitik and Garpenberg are the Group's biggest investments. They have not only more than doubled the mines' productive lifespans, they have also created the preconditions needed by communities such as Gällivare and Hedemora for long-term societal planning. The impact of the Group's operations not only affects the local communities in large. Employees, shareholders, customers and suppliers all depend on Boliden's profitability, and by improving this aspect of our operations even further, Boliden will be able to continue making a positive economic and social contribution to the development of these communities and their society.

The background of the entire page is a light gray line art illustration of industrial machinery. It features various components such as gears, shafts, and structural frames, rendered in a minimalist, schematic style. The lines are thin and white, creating a complex geometric pattern across the gray background.

**NEW BOLIDEN**  
Metals for modern life