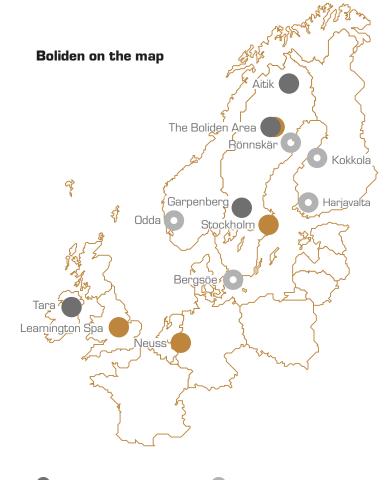


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**C**ontents



#### Mining areas

Tara - zinc and lead Garpenberg - zinc, silver, lead, gold and copper The Boliden Area – zinc, copper,

gold, silver, tellurium and lead Aitik - copper, gold and silver

#### Offices

Stockholm - Head Office and Business Area Smelters Boliden - Business Area Mines Neuss - Sales Office Leamington Spa - Sales Office

#### 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

Boliden's Annual Report is published in both Swedish and English. The Annual Report in Swedish is the binding version. The Annual Report comprises the Director's Report on pages 8-20, 22-53 and 98, the financial reports on pages 66-97 and sections of Boliden's sustainability reporting on pages 21 and 54-65

and addresses

The 2013 Annual Report describes Boliden's financial performance, together with its work on sustainability issues and the results thereof. Sustainability is a natural and integral part of Boliden's operations. The way in which relevant sustainability issues are managed and handled exert a very considerable influence on the company's profitability and risk, and hence on its value generation ability. 2013 is the first year in which Boliden's GRI Index, together with the associated information contained in the Annual Report and the GRI Report, has undergone an external limited assurance engagement. For a comprehensive presentation of Boliden's sustainability work, please visit the company's website, www.boliden.com/sustainability, where you will find a complementary GRI Report and additional information on Boliden's sustainability work. Boliden reports in accordance with GRI 3.0 and achieves level B+.

For further information on measurement methodology, definitions or other guidelines, please contact Boliden's Information Department on tel. +46 8-610 16 30.

#### www.boliden.com







## 2013 in brief

"2013 was a tough year, market-wise, with lower prices for metals and a weaker US dollar exchange rate. Boliden's production however, was good, taking into account the large scale, planned maintenance shutdowns that we carried out. We have focused heavily on the expansion projects and on process stability and safety work – all areas that will continue to be of major importance for us in 2014."

Lennart Evrell, President and CEO



**SEKm 34,409 (40,001)**Revenues

#### SEKm 2,271 (4,042)

Operating profit excluding revaluation of process inventory

**SEKm 1,803 (4,171)**Operating profit

**SEKm -1,466 (1,389)** Free cash flow

SEK 4.72 (12.21)

Earnings per share



#### Awards

- Boliden received the 2013 Swedish Industry Equality Prize.
- Boliden's Garpenberg mine received the 2013 SveMin work environment prize.
- Boliden's 2012 Annual Report came 5th in the international ranking, Annual Report of Annual Reports 2013.



- Aitik's ore production corresponded to an annual rate of 37 million tonnes at the turn of the year and the goal of 36 million tonnes per year was consequently achieved one year ahead of schedule.
- Major planned maintenance shutdowns at the smelters in order to upgrade processes and improve their efficiency.
- Cost reduction programmes at Tara and Odda.
- Increase in mineral reserves at Garpenberg and in the Boliden Area.





### Boliden's performance in 2013

Sales during the year totalled SEK 34,409 million (SEK 40,001 m). The year on year decrease was due to lower metal prices, lower by-products prices and to lower levels of metal production by the smelters which carried out maintenance shutdowns during the year.

The operating profit excluding the revaluation of process inventory fell to SEK 2,271 million (SEK 4,042 m), with the majority of the deterioration in the profit attributable to lower prices and negative exchange rate trends. The costs of consumables, spare parts and energy also increased. The year's maintenance shutdowns affected the profit to the tune of SEK –330 million (SEK –170 m).

The operating profit for Mines was SEK 1,598 million (SEK 2,974 m), while the operating profit excluding revaluation of process inventory for Smelters was SEK 679 million (SEK 1,095 m).

Net financial items totalled SEK -222 million (SEK -179 m) and the net profit for the year totalled SEK 1,294 million (SEK 3,341 m). Earnings per share totalled SEK 4.72 (SEK 12.21).

#### **Expansion projects**

The expansion of the Garpenberg zinc and silver mine is currently in an intensive phase and will result in an increase in production capacity from today's 1.4 to 2.5 Mtonnes of ore per year.

A facility for extracting silver from zinc concentrate, which contains increasing grades of silver, is currently being built at the Kokkola zinc smelter.

### Mineral reserves and resources

Mineral reserves at Garpenberg increased by almost 11 Mtonnes as a result of the upgrading of the Kvarnberget mineral resource. Mineral reserves in the Boliden Area increased by 3.2 Mtonnes. There were no major changes at either Aitik or Tara.

#### **Employees**

The average number of employees during the year was 4,815 (4,795). 17 per cent (17%) of the workforce are women.

The sick leave rate during the year was 3.9 per cent (3.7%). The accident frequency including contractors fell slightly during the year to 8.9 (9.1).

Key data	2009	2010	2011	2012	2013
Revenues, SEK m	27,635	36,716	40,323	40,001	34,409
Operating costs,					
excl. depreciation, SEK m	9,024	9,833	10,575	10,398	10,304
Depreciation, SEK m	1,562	1,802	1,937	2,560	2,829
Operating profit excl. revaluation		4 000	F 000	4.040	0.074
of process inventory, SEK m	2,350	4,830	5,008	4,042	2,271
Operating profit, SEK m	3,623	5,643	4,748	4,171	1,803
Investments, SEK m	4,915	2,996	3,998	4,569	4,974
Capital employed, SEK m	26,229	27,151	30,473	31,236	34,451
Return on capital employed, %	14	21	17	14	5
Number of full-time employees	4,379	4,412	4,597	4,795	4,815
Production, Mines	2009	2010	2011	2012	2013
Zinc, tonnes	307,128	293,814	283,217	271,203	271,674
Copper, tonnes	54,602	75,977	81,205	79,363	79,302
Lead, tonnes	56,669	49,585	49,477	48,809	48,365
Gold, kg	3,130	3,727	3,681	3,644	3,849
Gold, troy oz.	100,623	119,839	118,332	117,150	123,759
Silver, kg	214,120	230,756	231,388	229,791	261,804
Silver, troy oz. '000	6,884	7,419	7,439	7,388	8,417
Tellurium, kg	-	-	-	6,791	24,457
Production, Smelters	2009	2010	2011	2012	2013
Zinc, tonnes	434,022	456,006	460,552	467,389	455,130
Copper, tonnes	302,355	303,184	335,771	338,577	324,745
Lead, tonnes	13,013	17,013	11,429	18,970	24,039
Lead alloys, tonnes	38,561	42,166	41,009	42,558	44,674
Gold, kg	15,028	14,220	12,848	16,175	16,177
Gold, troy oz.	483,157	457,168	413,052	520,011	520,094
Silver, kg	539,564	450,280	488,147	575,959	537,941
Silver, troy oz., '000	17,346	14,476	15,964	18,517	17,294
Sulphuric acid, Ktonnes	1,123	1,372	1,597	1,634	1,564

## Comments and important events during the year

Q1

- Weak production by Mines and weak metal production by Smelters due to disruptions to production.
- The leaching plant for extracting tellurium from ore at the newly opened Kankberg mine came on line in late 2012 and fine-tuning of production continued during the first quarter.
- Boliden implemented the OECD Due Diligence guidance for Responsible Supply
   Chains of Minerals from Conflict-Affected and High-Risk Areas.
- Cost reduction programmes in progress at Tara and Odda. Decision taken to decrease Tara's workforce by approximately 50 employees.
- New and amended accounting principles for pensions and waste rock activation and which affected the comparison figures were introduced on 1st January.

#### Q2

- Strong production by Mines with high production levels at Aitik. Weak metal production by Smelters due to maintenance shutdowns.
- The Annual General Meeting was held on 3<sup>rd</sup> May and a dividend of SEK 4 was approved.
- The hedging programmes utilised in conjunction with the Garpenberg expansion project expired in June.
- 23<sup>rd</sup> April was the final trading day for the Boliden share on the Toronto Stock Exchange (TSX).
- The Swedish Tax Agency decided to impose an additional energy tax charge of SEK 212 million on Boliden in connection with the use of dyed diesel. Boliden has appealed the ruling.

#### Q3

- Low concentration and production levels by Mines. Metal production by Smelters normalised after the maintenance shutdowns.
- Remedial action programme launched at Rönnskär in order to get to grips with the process instability there.
- In July, the Swedish Land and Environment Court granted Boliden a new environmental permit for its operations at Rönnskär. The Swedish Environmental Protection Agency appealed the ruling. Proceedings in May 2014.
- Fire broke out in the Kristineberg mine and exposed three people to great danger, but no one was seriously hurt.
- In October, Boliden was served with a claim for damages of just over SEK 90 million in



relation to the export of metal residues from the Rönnskär smelter between 1984 and 1985. Boliden has contested the suit.

#### Q4

- Good production by Mines. Strong metal production by Smelters for all of Boliden's main metals, with the exception of silver.
- Aitik's ore production corresponded to an annual production rate of 37 Mtonnes and the goal of 36 Mtonnes was consequently achieved one year ahead of schedule.
- A ruling by the Swedish Land and Environment Court of Appeal prevented an
  expansion by Boliden Bergsöe. Boliden has
  appealed the ruling to the Supreme Court.
- Boliden's capital market days were held in Boliden and Rönnskär, with the focus on complex raw materials.

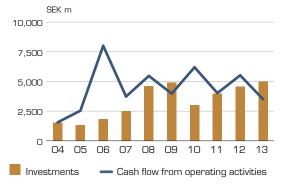
#### Revenues and operating profit

Volatile metal prices and exchange rates affect Boliden's sales and results, which have varied considerably since 2004 when Boliden, in its current structure, was formed. Revenues have fallen during the year, primarily as a result of lower metal prices.



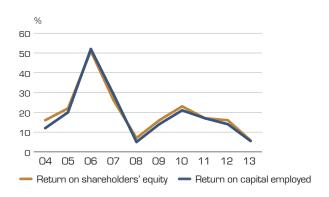
### Investments and cash flow from operating activities per year

Boliden's investments since 2004 total in excess of SEK 33 billion. This figure includes not only the ongoing annual investments, but a number of major expansion projects. Boliden's cash flow from operating activities since 2004 totals SEK 44 billion and has financed these investments.



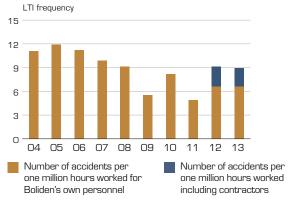
#### Return on shareholders' equity and capital employed

The returns on capital employed and shareholders' equity in 2013 were 5 per cent (14%) and 6 per cent (16%), respectively.



#### Accident frequency 1)

The number of accidents leading to absences from work (LTI) for Boliden's personnel, including contractors, fell slightly in 2013 from 9.1 to 8.9 per one million hours worked. Boliden's units had an average of 6 (8) accident-free months during the year.



<sup>1)</sup> Starting 2012 the accident frequency is reported for Boliden's own personnel including contractors.

## Boliden in brief

Boliden is an integrated producer of important base metals such as zinc, copper and lead for industrial customers throughout Europe. The production of precious metals, such as gold and silver, forms an increasingly important part of Boliden's operations.

#### Almost 90 years' experience

Boliden's history stretches all the way back to the 1920s, since when the company has established a competitive position in the fields of exploration, mining operations, concentration, smelting and recycling operations. Today's Boliden has cutting edge expertise in all of these areas.

### Eight mines in four mining areas and five smelters

Boliden's four mining areas produce ores containing zinc, copper, lead, gold and silver, along with smaller quantities of other metals. Aitik and the Maurliden mine in the Boliden Area are open pit mines, while the others are all underground mines. Aitik's productivity is higher than that of any other copper mine in the world.

Boliden's smelters, Rönnskär, Harjavalta, Kokkola, Odda and Bergsöe, produce pure metals, customised alloys, and a number of by-products, such as sulphuric acid. The raw material comprises metal concentrates from mines plus metal and electronic material and scrap car batteries. Rönnskär is the world's leading recycler of electronic scrap and the Bergsöe smelter is one of the biggest lead recycling smelters in Europe.

#### Industrial customers in Europe

The majority of Boliden's metals are sold to industrial customers in northern Europe. Steelworks, which use zinc to galvanise steel, are the main customers for Boliden's zinc. Infrastructure, the construction industry and the automotive industry are among the most important spheres in which this galvanised steel is used.

Wire rod and copper rod manufacturers make up the majority of Boliden's copper customers. Important applications include the construction and automotive industries and manufacturers of electrical and electronic components. Battery manufacturers make up the majority of Boliden's lead customers, while the main customers for gold and silver are the electronics and jewellery industries.

#### Boliden's stakeholders in the day-to-day operations











#### **Boliden in society**

Metals have a key part to play in society. Global inequalities are being reduced thanks to the rapidly improving living standards in China and other emerging economies. Development relies on the increased production of base metals that provide the fundamental building blocks for construction, infrastructure, energy systems, vehicles and railways, computers and mobile phones. They are a vital component of virtually everything we do. At the same time, however, the production of metals is complicated and has a variety of different impacts on the surrounding areas. Boliden strives to be a highly respected company that generates value for all of the company's stakeholders. It is only natural, therefore, that Boliden's value creation must include showing consideration for people, nature, the environment and society throughout the value chain.

#### Dialogues with local communities

Boliden's operations affect and touch the lives of many people and stakeholders, both in society as a whole and in the communities around Boliden's facilities, where Boliden is often a major and significant operator. It is, therefore, important to Boliden that we maintain a good dialogue and close cooperation with the local community.

This dialogue and communication naturally involve, in part, reducing the operations' environmental impact and managing the long-term effects, but they also entail highlighting the positive role that a responsible mining industry plays in society as a whole and in the places in which it operates – contributing to the maintenance of viable rural communities, generating job opportu-

nities and boosting economic development. Boliden is the biggest employer in many communities and hence also a key prerequisite for fundamental societal services and facilities in the immediate area.

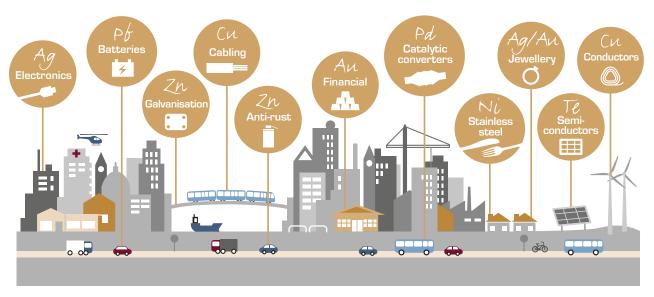
The most recent expansions at Aitik and Garpenberg are the Group's biggest investments to date. They have more than doubled the mines' lifespans and have generated the preconditions for long-term social planning in communities such as Gällivare and Hedemora.

#### Value generation

It is important, for investors, shareholders and society alike, that Boliden conducts efficient operations that are sustainable in the long-term. The past ten years have seen Boliden boost its competitiveness and longterm potential by means of investments totalling SEK 33 billion. These include investments designed to enhance the efficiency of the mines and smelters, e.g. in the form of upgrades and the implementation of new technology. A large part of the investments have been made in environmental improvements. Substantial investments have also been made in exploration and projects - both those designed to increase production and extend lifespans in existing facilities but also with a view to starting new operations, such as the Kankberg gold mine. These investments have been financed through internal cash flows.

The total return on the Boliden share has outperformed that of the international mining index, Euromoney (HSBC) Global Mining, over the most recent ten-, five- and three-year periods. This builds confidence among share-holders, lenders and employees and enhances Boliden's ability to attract the capital and

#### Metals for the modern society



Metals are vital to society's development. There are virtually no products or services nowadays that are not either made from or reliant on metals, and it is almost impossible to imagine how life would be without them.

expertise it needs for continued growth. Boliden's total return in 2013 was higher than that of the international mining index but lower than that of the OMX Stockholm 30.

#### Metals for the modern society

Metals are an ever-present and vital component of society. There are virtually no products in our modern society that either contain no metal or where metal has not been used in their production.

Demand for metals is constantly increasing in the world's emerging economies where there is a need for new and improved housing, and as prosperity and affluence increase, the demand for consumer products, such as electronics and cars, increases too. In mature economies, such as the EU, USA and Japan, demand is cyclically sensitive and is falling slightly over time, but still accounts for a substantial percentage of global metal consumption.

One of the important properties of many metals is that they can be recycled over and over again by smelting them down and turning them into new products. Boliden has decided to play an active part in this recovery and recycling work, which is expected to become increasingly important with time.

Boliden's most important metals have the following applications:

#### Zinc – prevents rust

Almost half of all zinc produced globally is used to galvanise steel, and modern vehicles have steel chassis. Coating the steel with zinc is a very effective means of providing long-term protection against rust.

#### Copper – technological products

Copper is a malleable metal that is extremely conductive of electricity and heat – properties that make it one of the world's most important metals. It is vital to energy supplies in every type of society, and is a critical component of today's hi-tech products. The increased use of renewable energy is boosting the demand for copper.

#### Lead - motor vehicles

The majority of the lead produced is used in motor vehicle batteries. The reason for this is that lead batteries are cheap and robust and can deliver large amounts of current quickly, which is important to vehicles' starting motors.

#### Gold – electronics and jewellery

Gold is a precious metal that is soft and malleable. Gold is used in jewellery and electronics and as a financial asset.

### Silver – heat and electricity conductor

Silver is a relatively soft metal that conducts heat and electricity better than any other metal. Over half of the silver produced today is used by the electrical and electronics industries.

#### Nickel - for stainless steel

Nickel is used, together with chromium, in the production of stainless steel. Nickel is also used in alloys with copper and/or zinc and is an important component in coin manufacture as nickel does not rust and is hard.

#### Palladium - catalytic converters

Palladium is a soft, rare metal that alloys easily with other metals. Spheres of use include catalytic converters, jewellery, watches, the dental care sector and surgical instruments.

### Tellurium – solar panels and semiconductors

Tellurium is a rare, brittle metalloid. Tellurium is a semiconductor used in solar panels and as an alloy component, primarily in alloys with copper and steel.

## President's Statement

Demand for Boliden's metals was relatively strong in 2013, but concerns about the global economy and increased global supplies resulted in a fall in metal prices. Production levels during the year were good, particularly at Aitik, which reached the production goal for 2014 one year ahead of plan. The smelter production was limited by the biggest planned maintenance shutdowns ever. Investments in the Garpenberg zinc/silver mine and the project to extract silver from silver-containing zinc concentrate at Kokkola both entered their most intensive phases during the year and proceeded according to plan. The focus on costs and increased productivity during 2013 helped keep costs largely unchanged. Work with cost control and productivity will continue in 2014.

**[ [ We have successively** 

strengthened our long-

term potential through

expansion investments

financed from our own

well-positioned for the

cash flow. Boliden is

future. 33

Global demand for metals has continued to increase for a number of years in succession, driven by rapid economic development in densely populated countries that have begun to lift themselves out of poverty and political turbulence. The level of inequalities between the different countries of the world has consequently shrunk and the number of poor countries is dropping rapidly. China's position as the engine that drives the world's metals markets is expected to start retreating in around 2020 and the question then is whether other countries can achieve similar improvements in prosperity, with increased urbanisation and higher standards of living. Boliden's metals are fundamental components of this

equalisation in affluence. The mature economies are also important in terms of demand for metal. Their demand is not increasing over time, but cyclic economic patterns have a considerable influence on prices. The transition to renewable energy and the development of modern communication and information systems demand vast quantities of copper and zinc: energy systems based on wind power and solar panels, for example, require many times more copper than traditional energy forms, in that the

systems are dimensioned for windy or sunny days but are only utilised part of the time.

The New Boliden Way is Boliden's model for leadership and operations management with the aim of achieving stable processes and a reduced need for resources. Stable processes result not only in high production levels and low costs, but also help improve environmental performance and generate safer workplaces. Successful work using existing resources consequently generates substantial value in that it results in lower capital requirements and low costs. Establishing stable processes is not simply a matter of management and continuity. The work also leads to greater commitment and knowledge transfer within the company. Several units have taken new steps towards higher productivity and increased commitment

on the part of all employees during the year. Our New Boliden Way work is never-ending: it is a process of improvement in which each new level will be challenged and new improvements will be developed.

Boliden's two ongoing expansion projects – the Garpenberg zinc/silver mine and the silver extraction project at the Kokkola smelter - were launched in 2012 and the projects are now ready to go live in 2014. The majority of the facilities at Garpenberg, Boliden's second biggest investment ever, were built during the year. A new concentrator is being constructed directly adjacent to two shafts that go down to a depth of 1,200 m and has been

> tion areas. At its peak, 1,000 people were working on the project's rockwork, construction and equipment installation activities.

The investment in silver extraction at Kokkola is important not only because larger quantities of silver-bearing zinc concentrate from Garpenberg will be processed, but also because the zinc concentrates on the global market are showing a tendency to contain increasing silver grades.

sited in the middle of the new produc-

#### The past year

Production went well in 2013, costs were under control and the expansion projects proceeded according to plan. Yet the results weakened. This was due to Aitik producing in areas with low grades, the smelters carrying out planned maintenance shutdowns on an unprecedented scale, and a deterioration in market terms.

The Aitik copper mine achieved an ore production figure of 37 million tonnes, which was very good news indeed and means that the annual production target figure of 36 million tonnes was reached one year ahead of schedule. The Boliden Area and Garpenberg suffered from the deterioration in silver and gold prices, but production levels were good, particularly in the Kankberg gold mine which became operational in 2012. Garpenberg had a strong



year, despite certain disruptions in conjunction with the ongoing expansion project during the year. The Tara zinc mine in Ireland continued the cost reduction programme launched in 2012 within the framework of the New Boliden Way, with strong commitment from all employees.

The smelters' major maintenance shutdowns in the spring were conducted largely according to plan and resulted in production levels falling in comparison with the previous year. Harjavalta improved its process stability, was able to extract valuable metals from intermediate stocks, and reported an extremely good result. The trend at Rönnskär was, to some extent, the opposite with poorer quality raw materials leading to deteriorations in yields and lower production. An action programme has been implemented in order to rectify these problems. Odda continued to reduce costs and Kokkola reported a stable year.

The most recent compilations of the world's mines and smelters show that Boliden's competitiveness has increased, the strong Swedish krona notwithstanding. This is partially due to the ongoing fine tuning of new projects, but is largely due to the work on the

New Boliden Way and to the strengthening of the purchasing organisation that has resulted in costs being cut in a number of areas. During my meetings with personnel in various functions across Boliden, it is apparent that leadership and attitudes towards safety, the environment and equal opportunities have improved in recent years. The consensus that has been achieved with regard to crucial change requirements is hugely important in terms of Boliden's development. One area which, despite a strong focus, has not developed as well is our safety work. Boliden does have a lower accident frequency than companies in many other sectors, but it is also clear that the best companies are better than Boliden in this respect and it is vital that we continue to improve our safety culture if we are to achieve our ambitious goals. Boliden's environmental performance during the year was good and our reduced emission and discharge goals have been met with a good margin in most areas. Boliden is a signatory to the UN's Global Compact and our efforts to implement and promote its 10 principles continue.

Our work towards increasing equality of opportunity was rewarded with the 2013 Swedish Industry Equality prize, and our work to increase understanding of Boliden's operations was ranked fifth of over 400 companies in the Annual Report of Annual Reports 2013.

It is 90 years since the discovery of the gold deposit in Fågelmyra outside Skellefteå that led to the creation of Boliden, both as a community and as a company. A number of unique areas of expertise within mining, smelting and leaching processes and exploration have been developed over the long years since then, and even when times have sometimes been hard, Boliden has continuously honed its expertise in critical areas and built up its own project resources.

2013 ended well at most units and we are approaching the dates when the new facilities at Garpenberg and Kokkola will go live. 2014 will be an exciting year!

Stockholm, February 2014

Lennart Evrell President & CEO

## The Boliden share

The Boliden share is listed on the NASDAQ OMX Nordic Stockholm Exchange (NASDAQ OMX) in the Large Cap segment. The share price has, in common with the mining and metals sector as a whole, been affected by lower metal prices and the Boliden share fell by 19 per cent during the year, while the Euromoney (HSBC) Global Mining Index fell by 25 per cent.

#### **Trading of the Boliden share**

The number of Boliden shares traded on the NASDAQ OMX fell slightly in 2013, with a total of 587 million (662 m) shares traded during the year at a value of SEK 58 billion (SEK 70 b). An average of 2.3 million (2.6 m) shares were traded per trading day on the NASDAQ OMX, corresponding to 67 per cent (55%) of the total turnover in the share, while share trading in other marketplaces accounted for 33 per cent (45%) of this total. The Boliden share accounted for 2.0 per cent (2.6%) of the total number of shares traded on the NASDAQ OMX.

The biggest marketplace, after Stockholm, was the BATS Chi-X Europe, which accounted for 20 per cent of the total turnover in the share. A total of 1.1 billion shares were traded in all marketplaces in 2013 at a value of SEK 108 billion.

The share was delisted from the Toronto stock exchange during the year after several years of low turnover.

#### Price trend and dividend

At the end of 2013, the Boliden share was quoted at SEK 98.45 (SEK 122.10) on the NASDAQ OMX, corresponding to a market capitalisation of SEK 26.9 billion (SEK 33.4 b). In common with other raw material companies, the variation in the value of the Boliden share is, on average, greater than for the broad stock market indices. The beta value of the Boliden share over the last five years against OMXSPI is 1.55.

The price of the Boliden share fell by 19 per cent during the year in comparison with the Euromoney (HSBC) Global Mining Index, which fell by 25 per cent. The OMX Stockholm 30 index rose by 21 per cent.

The Board of Directors proposes to the Annual General Meeting that a dividend of SEK 1.75 (SEK 4.00) per share be paid for 2013. The proposed dividend corresponds to 37 per cent (32.8%) of the net earnings per share and a dividend yield of 1.8 per cent (3.3%), calculated on the basis of the share price at the end of the year.

The Boliden share's total return (the sum of the dividend paid and the price development) over the most recent 10-year period was, on average, 16 per cent per annum.

#### Share capital

There are a total of 273,511,169 Boliden shares. Every share has a nominal value of SEK 2.12 and the share capital totals SEK 578,914,338. Boliden's share capital comprises a single class of share in which every share has the same voting power and grants the same entitlement to dividends. The Boliden Articles of Association contain no provisions restricting the right to transfer shares or any limitations with regard to the number of votes that a shareholder can exercise at General Meetings of the company's shareholders. Boliden does not hold any of its own shares, nor has it issued any shares in 2013.

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

#### **Ownership structure**

Boliden had 90,963 (90,234) registered shareholders on 31st December 2013.

Approximately 41 per cent (44%) of the shares were owned by foreign shareholders. The ten biggest single shareholders represent 32 per cent of the share capital.

Boliden's employees hold shares via a profit sharing foundation for which voting rights cannot be directly exercised. The foundation held 700,113 (433,750) shares at the end of the year.

The table overleaf shows Boliden's ownership structure on 31st December 2013.

### Shareholder information on the website

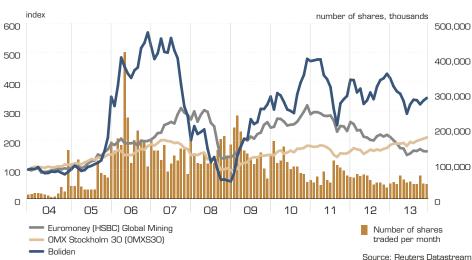
Boliden's website, www.boliden.com, provides information on Boliden, the performance of the Boliden share, metal prices and currencies, and financial reports, along with details of how to contact Boliden. Presentations of Interim Reports and capital market days are also available on the website.

Distribution of Boliden shares on 31st December 2013				
Shareholding	Number of shareholders	Number of shares	Holding, %	Votes, %
1 – 500	67,951	10,950,321	4.0	4.0
501 – 1,000	11,419	9,800,852	3.6	3.6
1,001 – 5,000	9,378	21,678,737	7.9	7.9
5,001 - 10,000	1,075	8,181,705	3.0	3.0
10,001 - 50,000	756	16,168,971	5.9	5.9
50,001 - 100,000	112	8,194,227	3.0	3.0
100,001 -	272	198,536,356	72.6	72.6
Total	90.963	273.511.169	100.0	100.0

Source: Euroclear

Banks who monitor	Boliden
ABG Sundal Collier	Goldman Sachs
Bank of America Merrill Lynch	Handelsbanken HSBC
Carnegie Citi	Kepler Cheuvreux
Credit Suisse	Morgan Stanley Nordea
Deutsche Bank Danske Bank	Pareto SEB
Erik Penser Exane	Sociéte General Swedbank

#### Share price, sector index and OMX



Share price, sector index and OMX. The share price fell by 19 per cent during the year and consequently slightly outperformed the Euromoney (HSBC) Global Mining sector index which fell by 25 per cent, but performed more poorly than the OMX Stockholm 30 total, which rose by 21 per cent.

#### **Trading in different** marketplaces



NASDAQ OMX Stockholm, 54%

BATS Chi-X, 20% Boat, 16%

Turquoise, 3% LSF, 3% Other, 4%

Source: Fidessa

#### Ownership by country



Sweden, 59% USA, 17%

Norway, 7% UK, 4% Other, 13%

Source: SIS Ägarservice

#### Ownership by category



Foreign companies, 41% Swedish private persons incl. close companies, 25%

Swedish equity funds, 17% Swedish institutional investors, 17%

Source: SIS Ägarservice

#### Trading in different market-

places. As a comparison, 48 per cent of all trade in the shares that make up the OMX30 index are traded on the OMX NASDAQ exchange in Stockholm; the figure for normal stock market trading for the same shares is 66 per cent (the remaining trading primarily comprises OTC trades). The corresponding figure for normal stock market trading in the Boliden share is 76 per cent. Boliden is one of the 30 shares that make up the OMX30 index.

#### Ownership by country.

Approximately 41 per cent of the shares were held by foreign investors at the end of the year.

### Boliden's 10 biggest owners

on a 1st December 2013	
Percentage of capital and vote	s, %
Norges Bank Investment	
Management	5.6
BlackRock Inc	5.0
SEB fonder	4.2
SHB fonder	3.2
AMF Försäkring och fonder	3.0
Swedbank Robur fonder	2.7
Nordea fonder	2.4
AFA Försäkring	2.3
Söderbloms Factoringtjänst AB	1.7
Danske Invest fonder (Sweden)	1.6
Total	31.7

Source: SIS Ägarservice

### Annual total shareholder return

Allinaal oodal ollal ollol				
on 31st December 2013	1 yr	3 yrs	5 yrs	10 yrs
Boliden	-16%	-7%	46%	16%
OMX Stockholm 30	25%	9%	19%	11%
Euromoney (HSBC) Global Mining SEK	-24%	-18%	5%	7%

The average total shareholder return on the Boliden share over the past 10 years was 16 per cent per annum and 349 per cent for the period as a whole. Boliden's annual total shareholder return has outperformed the international mining index in all of the one-, three-, five-, and ten-year periods. The annual total shareholder return has, furthermore, outperformed the OMX Stockholm 30 index during the fiveand ten-year periods, but was outperformed by that index during the one- and three-year periods.

Source: Reuters Datastream

#### The share in brief

Marketplace	NASDAQ OMX Stockholm
Short name	BOL
ISIN code	SE 0000869646
ICB code	1700
Highest price paid, 2013	SEK 126.7
Lowest price paid, 2013	SEK 80.15
Closing price, 2013	SEK 98.45
Market capitalisation, 31st Dec. 2013	SEK 26.9 bn
Turnover rate, 2013	211%
Number of shares	273,511,169
Beta value (5 years)	1.55

Source: NASDAQ OMX





# Market and pricing trends

Global demand for metals is driven by the population growth and urbanisation that goes hand in hand with economic growth and increasing prosperity in more and more parts of the world. The rapid urbanisation process in emerging economies is leading to a growing need for investments in housing and infrastructure, resulting in increased demand. The trend in treatment and refining charges for both copper and zinc was positive in 2013, while the average base metal prices were down from levels in 2012. Interest in precious metals waned and prices fell.

There are a number of factors to indicate that the demand for metals will continue to increase. One important indicator is that the demand for metals grows most rapidly when GDP per capita grows from USD 5,000 to USD 15,000. Around 37 per cent of the world's population live in countries with a GDP per capita in this interval, while approximately 41 per cent still live in countries with a per capita GDP of less than USD 5,000.

Mature economies in the west have relatively constant metal consumption rates, but the size of these countries ensures that they still account for a significant percentage of global metal consumption.

#### Market trends in 2013

Global GDP is estimated to have risen by 2.9 per cent in 2013, corresponding to a slow-down since the previous year, when GDP rose by 3.2 per cent. Growth levels in mature economies rose by 1.2 per cent during the year, in comparison with a rise of 1.5 per cent last year, while in developing countries, growth levels fell from 4.9 per cent in 2012 to 4.5 per cent in 2013. The EU as a whole continued to report zero growth, while in the USA, growth slowed from 2.8 per cent in 2012 to 1.9 per cent in 2013. China's growth rate is calculated to have been on a par with levels in 2012, at 7.7 per cent.

Demand for Boliden's main metals, zinc and copper, is driven primarily by trends in the automotive and construction industries, with the emphasis on infrastructural projects. China is currently the biggest market for base metals.

Industrial activity levels have increased in Europe but it was not until the fourth quarter that they exceeded last year's levels. The construction market has continued weak throughout the year, other than in a few countries such as Germany, where the trend was positive, albeit from low starting levels. European automotive production remained unchanged, overall, year on year, but increased in Eastern Europe. Industrial activity levels continued to improve in the USA and investments in the construction sector increased for the second year in succession. Automotive production increased in the USA, but did so more slowly than in 2012. Levels of growth in China's industrial production continued to be high in comparison with the preceding year and were slightly higher during the latter half of the year than the former. The rate of growth in infrastructural investments in China continued to be high and automotive production grew more rapidly than in 2012.

#### **Concentrate market trends**

The balance between the supply of concentrate from the world's mines and the smelters' demand for mined concentrate determines the trend in treatment charges, which are the payments smelters receive from mines for refining the concentrate into saleable metals.

#### Treatment charges - zinc

Smelters' production increased during the year, while global mined production remained virtually unchanged. This resulted in a surplus in mined concentrate in 2013, albeit a smaller one than in 2012. Spot market treatment charges rose continuously in 2012 from a very low level. 2013 saw a smaller rise in treatment charges and the yearly average for 2013 was substantially higher than in 2012. The annual treatment charge negotiations for 2013 resulted in benchmark contracts with a price level that was higher than in the previous year. The price sharing clause in place between zinc mines and smelters resulted in realised treatment charges that remained stable across the full year and which were 14 per cent higher than in 2012 as a whole.

#### Treatment and refining charges - copper

Mines' concentrate production increased during the year, resulting in a market surplus. This trend resulted, in turn, in a sharp rise in spot market TC/RC from the spring onwards, and by the end of the year, the spot price levels were considerably higher than those in the benchmark yearly and half-yearly contracts. The benchmark contracts negotiated for 2013 were approximately USD 70 (USD 62.5) per tonne of concentrate in treatment charges and USc 7.00 (USc 6.25) per pound in refining charges. The benchmark level negotiated at the end of June saw an increase in the treatment charge to approximately USD 73 and the refining charge to approximately USc 7.30.

#### **Metal premiums trend**

Boliden's main metals – zinc and copper – are primarily sold to industrial customers in Europe. The regional balance between metal consumption and smelter capacity determines the level of the metal premiums paid by industrial customers in addition to the metal price.

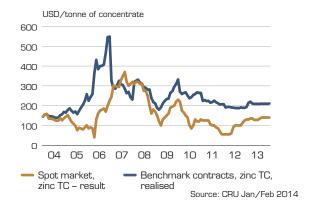
#### 7inc

The European contract premiums for zinc remained virtually unchanged in comparison with 2012. Spot market premiums in Europe remained stable at around USD 130–140 per tonne of metal during the first six months of the year, rising during the latter half to approximately USD 150 per tonne of metal.

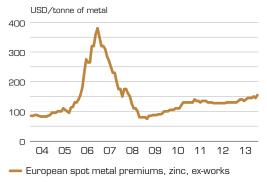
#### Copper

The European contract premiums for copper fell in comparison with 2012. Spot market premiums in Europe were lower than the contract premiums at the beginning of the year, but rose rapidly, and by the end of the year were considerably higher than the contract premium level.

#### Treatment charges - zinc

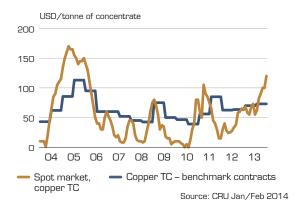


#### European spot metal premiums - zinc



Source: CRU Jan/Feb 2014

#### Treatment charges - copper



#### European metal premiums - copper



Copper metal premiums, European benchmark contracts

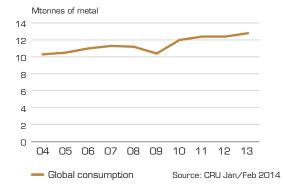
Source: CRU Jan/Feb 2014

#### Zinc

#### Price and stock trends - zinc



Demand trend - zinc



The average price of zinc on the London Metal Exchange (LME) was 2 per cent lower in 2013 than in 2012. The price rose at the beginning of the year only to fall during the spring, and then stabilise from the end of June onwards and by the end of 2013, the price of zinc was USD 2,053/tonne, which was on a par with the price at the end of 2012.

Global consumption of zinc metal totalled approximately 12.8 million tonnes, corresponding to a year on year increase of approximately 3.5 per cent. Consumption increased in China by 5 per cent, while in mature economies and other developing countries, consumption increased by just over 2 per cent.

Global production of metal by zinc smelters totalled approximately 13 million tonnes, corresponding to a year on year increase of approximately 5 per cent. Production in China increased by just under 12 per cent in comparison with 2012, when production decreased by just under 9 per cent. China's share of global production increased to just under 40 per cent (38%). Production levels remained unchanged in mature economies but increased by 4.5 per cent in developing countries, excluding China.

Global mined production of zinc concentrate increased slightly compared with 2012. Production increased in China after several years of steep increases, while production in the rest of the world fell slightly, taken as a whole. Production fell in North America by just over 10 per cent and by just under 4 per cent in Europe, but increased by just over 5 per cent in South America and by just over 11 per cent in Asia excluding China. Global official zinc stocks at the LME and the Shanghai Futures Exchange (SHFE) fell during the year by 23 per cent to just under 1.2 million tonnes at the end of 2013, corresponding to 33 (45) days' global consumption.

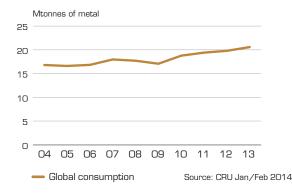
#### Copper

#### Price and stock trends - copper



Source: Thomson Reuters

#### Demand trend - copper



The average price of copper on the LME fell by 8 per cent in 2013 in comparison with the previous year. The price rose at the beginning of the year, only to fall again during the spring and then stabilise from the end of June onwards. By the end of 2013, the price was USD 7,376 per tonne, corresponding to a year on year fall of 7 per cent.

Global consumption of copper increased by approximately 4 per cent in comparison with 2012, to approximately 20.5 million tonnes. Consumption in China increased by just under 8 per cent and by just over 1 per cent in the rest of the world. Consumption fell in mature economies during the first six months of the year, only to rise again during the latter half of the year. China's consumption totalled approximately 8.7 million tonnes, or just under 43 per cent (41%) of global consumption.

Global production of copper metal by smelters and refineries increased by just under 4 per cent in comparison with 2012 and totalled approximately 20.6 million tonnes. Production increased in all regions with the exception of Europe, where it fell by 2 per cent. Production in China increased by 10 per cent. China produced approximately 6.2 million tonnes of copper in 2013 and increased its share of global production to just under 30 per cent (28%).

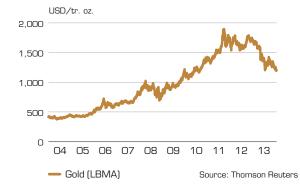
Global mined production of copper concentrate increased by just over 8 per cent in comparison with 2012. Production rates rose more rapidly than in 2012 in all of the world's regions with the exception of Europe, where production increased by just under 2 per cent. Production increased by just over 10 per cent in South America and disruptions had a lesser effect on production than in 2012. At the same time, new production capacity was added.

Global official stock levels at LME, SHFE and Comex at the end of the year were down by approximately 14 per cent on levels at the end of the previous year and totalled 0.5 million tonnes. Stock levels rose sharply until the end of June, after which they successively declined. Stock levels at the end of 2013 corresponded to 9 (11) days' global copper consumption.

#### Gold

The average price of gold fell by 16 per cent in 2013. The gold price at the end of the year was USD 1,202 per troy ounce, corresponding to a year on year price fall of 27 per cent. Gold has long been an important asset class among financial investors and is often regarded as a lower risk option when the global economy is weak. Interest in gold as an investment class has, however, declined in 2013 and capital has shifted to other asset classes.

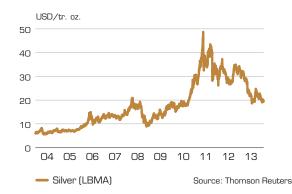
#### Price trend - gold



#### Silver

The price of silver was on average 24 per cent lower than during 2012. By the end of 2013, the price was USD 19.50 per troy ounce, corresponding to 35 per cent lower than at the end of 2012. Silver consumption by the manufacturing and jewellery industries is estimated to have increased by approximately 4 per cent, while the supply from mines and recycled silver is estimated to have fallen by approximately 3 per cent, yet still continued to exceed total consumption. The supply surplus is estimated to have been balanced out by financial investors and increased metal exchange stocks and unofficial, non-reported stocks.

#### Price trend - silver



#### Lead

The average LME price of lead rose by 4 per cent in 2013. The price rose at the beginning of the year, only to fall during the spring and then stabilise from the end of June onwards, and by the end of the year, the price was USD 2,191 per tonne, corresponding to a fall of 5 per cent. Lead stock levels on the LME fell by 33 per cent in 2013.

Much of the world's lead consumption is met through metal recycling and changes in the mined production of lead have less of an effect on the market balance than is the case for other base metals.

Global demand for lead metal increased by around 2 per cent to approximately 10.8 million tonnes. Demand in China rose by just over 3 per cent, and by 1.5 per cent in the rest of the world. The demand for lead for automotive batteries, to new cars and for the replacement market, is estimated to have increased.

The supply of mined lead metal concentrate tracks, to some extent, the mined production of zinc as lead is a subsidiary metal for many zinc mines. Global mined production is estimated to have increased by just under 4 per cent during the year and there is thought to have been a balance between supply and demand in the concentrate market.

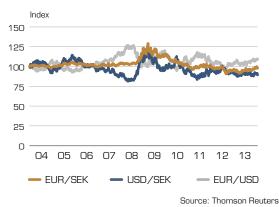
#### Price and stock trends - lead



#### Exchange rates

Boliden's revenues and costs for raw materials purchases are largely in USD, while its other costs are mainly in SEK, EUR and NOK, and the USD exchange rate consequently has a significant effect on the Group's operating profit. 2013 began with a weakened US dollar, primarily driven by risk appetite and a very expansive monetary policy in the USA. As the signals indicated an increasingly strong US economy in the spring, the market prepared itself for an impending normalisation in US monetary policy, resulting in a stronger US dollar. This trend slowed somewhat in the autumn, partly as a result of budgetary difficulties in the USA. The strengthening of the Euro, principally during the last six months of the year, was driven by increased confidence in a recovery in the Euro zone in the wake of the debt crisis, and the EUR/SEK exchange rate was 8.94 at the end of the year. The USD/SEK exchange rate reached a peak during the spring/summer, after which it returned to the levels seen at the beginning of the year and was 6.51 at the end of the year. The USD was generally weaker compared with 2012 against both the SEK and EUR by 4 and 3 per cent, respectively.

#### Exchange rate trend

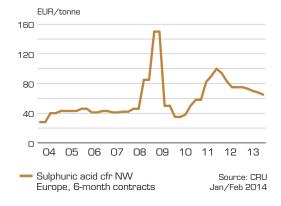


#### Sulphuric acid

Sulphuric acid is a by-product of the smelting process (primarily at copper smelters) and is mainly used in the artificial fertiliser, pulp/paper, mining, and petrochemical industries. Sulphuric acid must be stored in special tanks and it is vital, therefore, that smelters have an outlet for their sulphuric acid production and that there is a balance between demand for metal and sulphuric acid.

Demand for sulphuric acid in northern Europe is estimated to have remained stable during the full year in Boliden's key customer segments, and the price level for 2013 as a whole was on a par with the previous year. The European market price fell, according to market analysts, to an average level of just over EUR 69 per tonne, corresponding to a fall of approximately 12 per cent in comparison with 2012.

#### Price trend - sulphuric acid



## Boliden's market position

Boliden is one of the world's biggest zinc mining and smelting companies and is one of Europe's leading copper companies. Boliden also enjoys a position as a world leader in the recycling of electronic materials and is a substantial operator when it comes to recycling lead from batteries. Boliden's position and expertise generates healthy preconditions for achieving our goal of being one of the best companies in the metals industry.

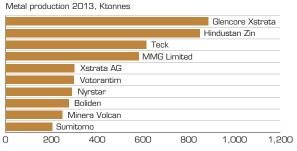
Boliden is the world's eighth largest zinc mining company and sixth largest zinc smelting company. Tara is a large zinc mine by international standards, Garpenberg is medium-sized, and the Boliden Area is a small mining area. The zinc mines in Sweden – Garpenberg and the Boliden Area – also receive income from other metals, such as silver, gold, lead and copper, while Tara in Ireland earns minor revenues from subsidiary metals. The Kokkola zinc smelter is a major zinc producer by international standards, while the Odda zinc smelter is a medium-sized plant.

Boliden is a significant global player in its role as a purchaser of mined concentrate, but a smaller producer. The Aitik mine is a medium-sized copper mine by international standards in terms of metal production and a significant copper mine in terms of ore

extracted. Aitik has a high productivity level and also earns income from its subsidiary metals of gold and silver. Boliden is a medium-sized copper smelting company, ranked sixteenth in the world, and one of the three largest in Europe. The Rönnskär copper smelter is a medium-sized one, but a world-leader in the field of electronic recycling. The Harjavalta copper smelter is a small one, by international standards, but its contract nickel smelting operations are the biggest in Europe.

Boliden is the fourteenth biggest lead mining company in the world, but is a medium-sized lead smelting company. In Europe, Boliden holds a more prominent role as a smelting company, as a recycler of lead batteries and as a producer of secondary lead.

#### The ten biggest zinc mining operators



Boliden is one of the world's ten biggest zinc mining operators.

Source: Wood Mackenzie Jan/Feb 2014

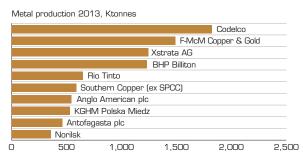
#### The ten biggest zinc smelting operators



Boliden is one of the world's ten biggest zinc smelting operators.

Source: Wood Mackenzie Jan/Feb 2014

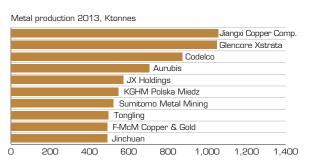
#### The ten biggest copper mining operators



Boliden, with a production of approximately 80,000 tonnes, is Europe's third largest copper producer. Globally, Boliden is a smaller operator.

Source: Wood Mackenzie Jan/Feb 2014

#### The ten biggest copper smelting operators



Boliden, with a production of approximately 325,000 tonnes, is Europe's third biggest player. Globally, Boliden is a smaller copper smelting operator.

Source: Wood Mackenzie Jan/Feb 2014

## Boliden's cost position

Boliden's prices are set on the global market and cost control is, therefore, an important factor for success. Cash cost is a commonly used strength metric in the mining industry. Smelters' income streams can vary and in the smelting industry cash margin is a commonly used strength metric.

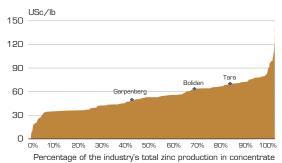
Mines' competitiveness depends both on the level of operating costs and on the scale of the income received from subsidiary metals. Mines with weak competitiveness often have little or no income from subsidiary metals, while competitive mines often receive substantial income from subsidiary metals and have a good operating cost level.

Smelters' competitiveness depends on their capacity to extract metals from raw materials, on their income from other metals, and on their cost efficiency. Including complementary operations in cash margin comparisons is often difficult, but these operations can have a significant part to play in the overall strength position.

#### Cash cost in the mining industry, C1 Composite costing

The graphs show global cash cost curves for zinc and copper mines, with Boliden's mines highlighted. The curves are based on the databases produced by the analysis company, Wood Mackenzie, and which comprise their estimates and assumptions. Boliden's own cash cost per mine data may differ from those of Wood Mackenzie due to differences in the basic input data. See page 123 for a description of the cash cost concept

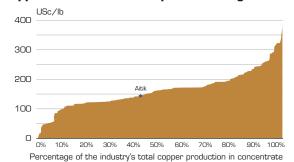
#### Zinc - cash cost C1 composite costing



Wood Mackenzie's global cash cost compilation is used to compare mines' cost position. The cash costs at Garpenberg, Tara and in the Boliden Area are, based on this compilation, 48, 62 and 68 USc/lb. of metal, respectively. Garpenberg and the Boliden Area's figures are, in accordance with Wood Mackenzie's definitions, calculated using pro rata costing, while Tara's are calculated using normal costing.

Source: Wood Mackenzie Jan/Feb 2014

#### Copper - cash cost C1 composite costing



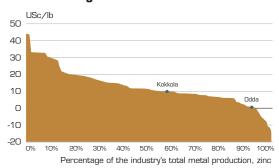
Aitik has, according to Wood Mackenzie's compilation, a cash cost of USc 152/lb. under normal costing.

Source: Wood Mackenzie Jan / Feb 2014

#### Cash margin for smelters

The graphs show global cash margin curves for zinc and copper smelters, with Boliden's smelters highlighted. The curves are based on the databases produced by the analysis company, Wood Mackenzie, and which comprise their estimates and assumptions. See page 123 for a description of the cash margin concept.

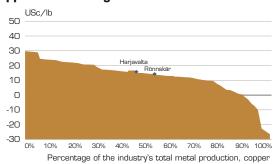
#### Zinc - cash margin for smelters



Wood Mackenzie's global compilation is used to compare smelters cost position. Kokkola and Odda have, based on this compilation, cash margins of USc 10/lb. of metal and USc 1/lb. of metal. respectively.

Source: Wood Mackenzie Jan/Feb 2014

#### Copper - cash margin for smelters



Hariavalta and Rönnskär have, according to Wood Mackenzie's compilations, cash margins of USc 16/lb. of metal and USc 14/lb. of metal, respectively. Source: Wood Mackenzie Jan/Feb 2014

## Strategic orientation

Efficient and stable processes, financial strength and respect for people and the environment are the cornerstones of Boliden's long-term profitability and growth.

Mission Boliden produces metals that make modern life work. Metals are vital to society's development. Boliden produces base and precious metals through exploration, mining operations, smelting operations and recycling. No effort is spared, throughout Boliden's value chain, to live up to society's demands for safety, environmental consideration and good ethical conduct.

Vision Boliden shall be a world class metals company. This means that Boliden shall be among the leading companies in the industry in terms of customer satisfaction, efficiency and responsibility. Boliden operates in a raw materials market in which the trade in metal concentrates and finished metals is global, while the customer base is regional. Operational excellence is critical to success in this volatile sector.

#### Strategy Boliden shall be the natural first choice

Boliden endeavours to maintain a leading position among medium-sized metals companies by creating competitive mines and smelters and by being the natural choice for business partners. The primary focus for Boliden's mining operations is the creation of growth through increased exploration and investments in organic growth, coupled with improved productivity. For the smelters, meanwhile, the focus is on increasing profitability by reducing costs, improving process stability and improving the ability to process complex raw materials.

To achieve these goals, Boliden focuses on:

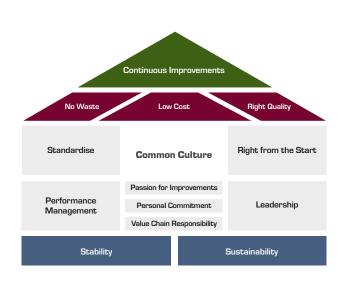
- Increased operational efficiency

   the New Boliden Way
- 2. Organic growth
- 3. Acquisitions of producing mines and mine projects

#### Increased operational efficiency

The New Boliden Way (NBW) constitutes the Group's overall guidelines for values and areas with scope for continuous improvement. NBW describes how Boliden will develop into a world class metals company, respected for its ability to generate added value for its customers, shareholders and other stakeholders. NBW is integrated into the day-to-day operations in order to ensure high standards and a level of competitiveness that stands up well to international comparison at every stage of our value chain. The aim of the New Boliden Way is to implement value creation as well as attitudes and actions that will promote a natural spirit of continuous improvement in every aspect of our operations, supported by the unwavering commitment of every single Boliden employee.

Stability and sustainability are the cornerstones of NBW and the basis of Boliden's success. Boliden's values guide us to passion for improvements, personal commitment, and responsibility for the value chain. The improvements are based on standards and methods collectively drawn up within Boliden. The improvement work is driven both by personal leadership and good example. Ultimately, NBW is all about Boliden's future competitive advantages and the results can be seen in many units in the form of improvements and enhanced efficiency.



Who we are

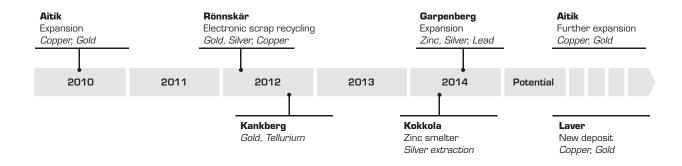
#### **Organic growth**

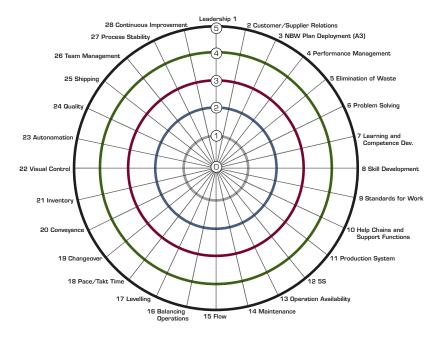
Increased stability and productivity at existing plants boost growth by enabling higher volumes to be produced without the need for additional investments. Boliden has invested significant resources in a range of organic growth projects for several years now, over and above its efficiency enhancement work, in the form both of a number of expansion-related investments in existing mines and facilities and of an increased level of investment in exploration.

### Acquisition of producing mines and mine projects

Boliden is constantly evaluating acquisition projects and compares and evaluates them in competition with organic growth projects. This involves both operational mines and new mine projects. Any potential acquisition must enable Boliden to generate additional value in the form of knowledge and expertise within the mining operations sphere. Investments in Boliden's existing operations are always compared with the

alternative approach of new acquisitions. Boliden has participated in numerous acquisition discussions over the years but has, to date, elected to invest in organic growth because the investment calculations have proved more favourable than the potential acquisitions studied by Boliden.





how far the operations have come in terms of actual implementation. Working with all 28 elements of the spider diagram enables Boliden to achieve its vision of being a world class metals company.

The spider diagram illustrates the elements

that make up a complete implementation

of NBW. It is also a tool for measuring

How we do it

## Financial performance and...

Boliden operates in a cyclic and capital-intensive industry in which long-term value creation is achieved through improvements in productivity, strict cost control and investments in profitable new production. Stable processes and financial stability are prerequisites of sustainable growth and long-term value creation. Boliden's overall goal is to prioritise growth in the Group's mines and focus on profitability throughout the operations in order to create value for its shareholders while simultaneously acting responsibly in relation both to people and the environment.

Boliden has three communicated financial goals: the return on capital employed, the net debt/equity ratio, and the dividend. Follow-up work monitors not only how well Boliden's financial goals are achieved, but its sustainability goals as well. Identifying and focusing on the most important and relevant challenges in

the sustainability work field is an ongoing process. The key components of the areas that Boliden elects to prioritise are that they not only have a direct impact on Boliden's success, but also have a significant impact on Boliden's stakeholders.

#### Returns

## The investments Boliden makes shall generate a high return and shall be made in line with Boliden's strategy and available resources

The projects' internal interest rates shall be higher than Boliden's weighted average cost of capital (WACC) plus a risk surcharge. The WACC before tax is currently nominally approximately 12 per cent. Calculations for major and long-term projects are normally conducted in real terms. They are based on forecast interest rates, metal prices, exchange rates, inflation and other relevant assumptions based on internal analyses and external assessments.



The return on capital employed totalled 5 per cent (14%). The average per annum return during the period from 2009 to 2013 was 14 per cent.

Capital employed — Return on capital employed

#### Net debt/equity ratio

### The net debt/equity ratio in an economic upturn shall be no higher than 20 per cent

The aim is to maintain a reasonable financial ability to act in a recession.



The net debt/equity ratio at the end of 2013 was 38 per cent (28%). The year on year increase was due to a fall in the operating profit, a rise in the working capital, and major investments.

#### Dividend

## Boliden's dividend policy states that the dividend shall correspond to approximately one third of the net profit

The dividend share during the period 2009–2013 totals 33.5 per cent of the aggregate net profit for the period.

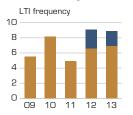


The proposed dividend is SEK 1.75 (SEK 4) per share, corresponding to 37.0 per cent (32.8) of the profit for the year.

## ... sustainability development

#### Social goals

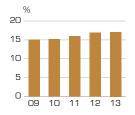
### Zero accidents resulting in absence from work (LTI)<sup>1)</sup> every month at all units



The number of accidents suffered by Boliden's own personnel, including contractors, and which result in absence from work (LTI) fell slightly in 2013 from 9.1 to 8.9 per one million hours worked.

- LTI frequency including contractors
- LTI frequency for Boliden's own personnel

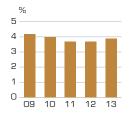
### Female employees shall comprise at least 20 per cent of the workforce by 2018



At the end of 2013, 824, or 17.1 per cent, of Boliden's workforce were women, corresponding to an increase of 0.2 percentage points since 2012.

Percentage of female employees

### A sick leave rate that does not exceed 4.0 per cent



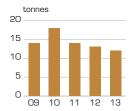
The goal of a sick leave rate that is below 4.0 per cent has been achieved. The trend has been positive in recent years and the sick leave rate for 2013 was 3.9 per cent (3.7%), which means that the goal has been achieved for the past four years across the Group as a whole. There were four units that failed to achieve this goal in 2013.

Sick leave rate

1) The accident frequency is reported, starting in 2012, for Boliden's own personnel including contractors. The accident frequency is measured as the number of accidents/one million hours worked. An accident is defined as an accident that occurs at work and which results in absence from work on the following day or for a longer period of time.

#### Environmental goals

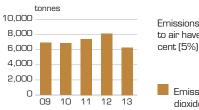
### Discharges of metals<sup>2</sup> to water shall be reduced by 25 per cent



Discharges of metals to water have fallen by 58 per cent (53%) since 2007.

Discharges of metals to water

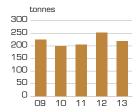
## Emissions of sulphur dioxide to air shall be reduced by 10 per cent



Emissions of sulphur dioxide to air have fallen by 27 per cent (5%) since 2007.

Emissions of sulphur

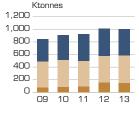
## Discharges of nitrogen to water shall be reduced by 20 per cent



Discharges of nitrogen to water have fallen by 26 per cent (14%) since 2007.

Discharges of nitrogen to water

## Carbon dioxide emissions shall not increase by more than 3 per cent<sup>4)</sup>

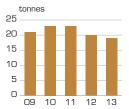


Carbon dioxide emissions have increased by 4 per cent (4%) since 2007 under the 2007/2008 calculation method.

Direct emissions Direct emissions (augmented (comparable since sources) 2007/2008)

Indirect emissions

## Emissions of metals<sup>3)</sup> to air shall be reduced by **25** per cent



Emissions of metals to air<sup>3</sup> have fallen by 45 per cent (43%) since 2007.

Emissions of metals to air

For additional comments on the results, see the Sustainability section on pages 54–65. Boliden's new sustainability goals are presented on page 64.

- 2) Copper, zinc, lead, nickel, cadmium and mercury.
- 3) Copper, zinc, lead, nickel, cadmium and arsenic
- 4) Taking into account planned production increases.

## Income model

The metals market comprises two subsidiary markets, namely the market for concentrates (raw materials), where mines and smelters are the market players, and the market for finished metals, where smelters and metal consumers are the market players. Boliden operates in both of these markets.

Sales between Boliden's mines and smelters are made on market terms. There are a number of synergies between Boliden's mines and smelters when it comes to metallurgy and marketing, e.g. improvements to the ways in which plans and investments are adapted in line with future market trends and with natural changes in the mines' metal mixes. There are numerous similarities between concentration and smelting processes and the cooperation between smelters and mines helps develop Boliden's technical expertise.

Supplying the company's own smelters with the company's own raw materials also offers advantages in the form of lower transport costs, more reliable deliveries and revenues, and a reduced need for stockpiling.

#### The mines' income

The bases for the mines' income are the metal concentrates sold to the smelters in

a global market. The mines' remuneration is based on the base metal prices that are set daily on the London Metal Exchange (LME) and the precious metal prices that are set by the London Bullion Market Association (LBMA). These prices are governed by the global supply of and demand for base and precious metals at the time.

Mines' income is also affected by other factors: concentrates with a higher payable metal content and only smaller amounts of impurities yield higher income.

A high valuable subsidiary metal content is another factor that has a positive impact on the mine's income and competitiveness. Boliden's primary subsidiary metals are gold, silver and lead.

The mines' price to the smelters comprises the metal value less treatment charges and deductions for impurities on agreed terms. Treatment and refining charges (TC/RC) consequently affect the mine's income.

Lower TC/RC mean an increase in the mine's income and a decrease in the smelter's income.

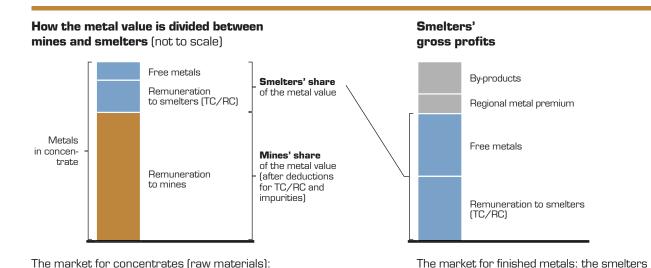
#### The smelters' income

The smelters sell the finished metal at the LME price plus a regional metal premium. The concentrate cost comprises, as noted above, the LME price and other terms. The zinc smelters' income is also affected by price sharing clauses whereby changes in the metals' market prices are shared by the mines and smelters. TC/RC and price sharing clauses are determined by the global balance between mined production and the smelters' demand for raw materials.

The regional metal premium is a surcharge on the LME price paid by customers. The premium is determined by regional supply and demand and includes such factors as localisation and transport aspects and compensation for payment terms other than

are the vendors and metal consumers are

the purchasers.



the mines are the vendors and the smelters

are the purchasers.

those obtaining on the LME. The end-user may also pay for a special metal format, special alloys and technical service. Boliden almost exclusively sells its metals directly to industrial customers at a premium under contracts negotiated on an annual basis. These customer relationships are important to Boliden because they not only ensure more reliable demand, but help establish a stable cash flow.

The smelters' income is also, in addition to TC/RC and price sharing terms, affected by the volume of free metals produced, which is determined by the smelter's ability to extract quantities of metal over and above that assumed in the concentrate agreements. The free metals are sold at market price.

Smelters also earn money from the sale of by-products. The biggest by-product is sulphuric acid, but aluminium fluoride, sulphur dioxide, copper sulphate, nickel sulphate, cadmium and selenium are other important by-products.

The base metals market's income components	
Income components	
LME price, USD/tonne	Α
The concentrate's metal grade, %	В
The concentrate's payable metal content, %	С
Fees for any impurities present in the metal concentrate, USD/tonne of metal concentrate	D
Percentage of metal content that individual smelters are able to refine, $\%$	Е
Treatment charge (TC), USD/tonne of metal concentrate	F
Refining charge (RC), USD/tonne of payable metal content	G
Effects of any price escalators, USD/tonne of metal concentrate	Н
Income from any subsidiary metals and other by-products in the metal concentrate, USD/tonne of metal concentrate	ı
Income from extraction of any subsidiary metals and other by-products in the smelting concentrate, USD/tonne of metal concentrate	J
Metal premiums, USD/tonne of sold metal	К
Transport cost for metal delivery from smelter to customer, USD/tonne of metal concentrate	L
Mines' income	
Metal concentrate (per tonne dry weight)  A* B* C - (D+F+G) +/- H	+ I
Smelters' income	
Metal concentrate (per tonne dry weight)	
Treatment and refining charges F + G +/- H +	- D

A\*B\*(E-C)

B\* E\* (K - L)

Free metals

by-products

Extraction of subsidiary metals and

Value of metal premiums

#### The metals market's cyclic pattern

The balance between the supply of concentrates from the world's mines and the global demand for smelters' products is the primary factor controlling the metals market's price cycle.

This balance affects the price level on the London Metal Exchange (LME), where base metals are traded, as well as the treatment and refining charges (TC/RC) levied by the smelters for processing the mines' raw materials into a finished metal product.

Prices that compensate for exploration activities, risks associated with growth investments, and production costs are key to the mines' willingness to invest in future production. When metal prices fall, mines' investments in growth also fall, which, in turn, results in a reduction in supply a few years later.

This results in declining availability of raw materials for the smelters. TC/RC fall and this, in turn, puts pressure on the smelters' profitability, leading to production cutbacks or the closure of smelters and ultimately a reduction in the availability of refined metals.

Reduced smelter capacity leads, in the long-term, to rising market prices for metals while TC/RC remain low until the pricing scenario has adjusted in line with supply and demand.

This means metal prices rise once more, as do TC/RC, provided that the demand for refined metals is good. New decisions are taken on the expansion of mine capacity in response to the increase in prices.

## LOW METAL PRICES and HIGH TC/RC and HIGH TC/RC

The metals market's cyclic pattern



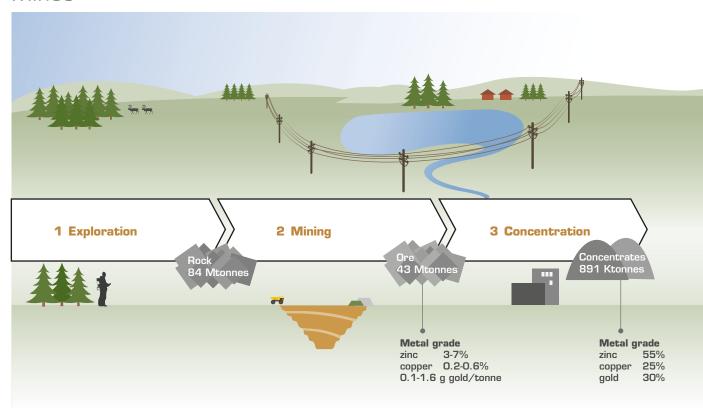




# This is Boliden – from deposit to customer

Boliden's value chain comprises Mines and Smelters. Mines carries out exploration, mining, concentration and concentrate sales, while Smelters handles raw materials feed and recycling, metal production and sales of metals and by-products.

#### Mines



#### 1 Exploration

Boliden's exploration focuses on deposits that contain zinc, copper and precious metals. Zinc-bearing ores often also contain silver and lead as subsidiary metals. Successful explorations conducted since 2003 have resulted in an increase in Boliden's mineral reserves and mineral resources. This has enabled the expansion of the Aitik and Garpenberg mines. There were 30 active and ongoing investment projects in 2013. SEK 298 million has been invested in exploration and a total of 158,957 m of bedrock was drilled.

#### 2 Mining

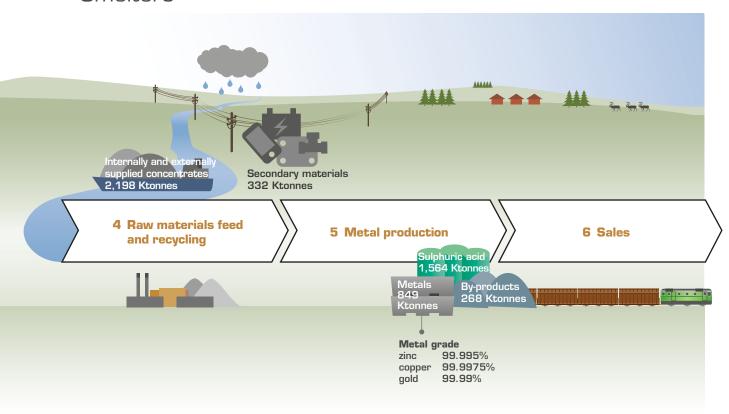
The ore extracted in Boliden's eight mines in the four mining areas contains zinc, copper, lead, gold, silver and other by-products. The work is conducted in discrete stages and comprises drilling, blasting, loading and crushing of the ore. The miners must also install ventilation and water ducting and reinforce the galleries, as the mining work progresses.

#### 3 Concentration

When the ore comes out of the mine, the valuable mineral is bound up in waste rock. Separating the ore out from the waste rock requires the ore to be processed in a concentrator, where the ore is crushed and ground to a fine powder and mixed with water. When air and special additives are added, the mineral particles adhere to the bubbles formed. The particles rise to the surface, where they are skimmed off and then dried to form a finegrained concentrate. The mineral can also be extracted with the help of chemical leaching.

All copper concentrate is delivered to Rönnskär, while zinc and lead concentrates are also sold to external customers.

#### **Smelters**



#### 4 Raw materials feed and recycling

Turning concentrates into high-quality metals requires the concentrates to be processed in a smelter. Boliden's five smelters process the concentrates in a variety of different ways, depending on the type of metal to be extracted. Copper, lead and precious metals are smelted in furnaces and then purified in a series of processes, while zinc can be leached and purified using completely chemical methods.

The zinc and copper concentrates produced by Boliden's mines meet approximately 60 per cent and 30 per cent of the zinc smelters' and copper smelters' requirements, respectively. Approximately one third of the raw materials comprise recycling materials – primarily metal and electronic materials and lead batteries.

#### 5 Metal production

The smelters produce zinc, copper, lead, gold and silver, along with a number of by-products such as sulphuric acid, zinc clinker, aluminium fluoride, liquid sulphur dioxide, palladium concentrate, and small quantities of a number of other metals. The smelted metals are cast as zinc ingots, copper cathodes, lead ingots, and gold and silver granules, etc.

#### 6 Sales

The majority of Boliden's metals and other products are sold to industrial customers in Europe. The automotive and construction industries are important end-consumers of base metals. The zinc is supplied to steel companies, among others, while the copper is supplied to manufacturers of wire rod, copper rods and copper alloys. In 2013, 91 per cent and 9 per cent were sold to industrial customers and metal dealers, respectively.

## This is exploration

Exploration is the prerequisite of long-term mining operations and growth and Boliden is Europe's leading company when it comes to exploration. Boliden has over its almost 100-year history built up a level of expertise lacking in many other market players.

#### **Boliden's exploration areas** Boliden's exploration is primarily conducted in existing mining areas - what is known as mine-site exploration - and focuses on ores that contain zinc, copper and precious metals Boliden also conducts field exploration in order to identify deposits in new areas in Sweden and Ireland. 6 Ireland 1. Tara - Zn, Pb Strokestown Sweden & Slievedart - Zn, Pb Aitik and Norrbotten - Cu, Au, Mo 3. Tullamore - Zn, Pb Salmijärvi, Liikavaara, Laver 4. Limerick - Zn, Pb The Skellefte field - Zn, Cu, Pb, Au Kristineberg, Maurliden, Maurliden Östra, Renström, Kankberg 7. Dorotea - Zn, Cu, Pb Rockliden 8. Along the western mountain range – **Zn, Pb** 9. Garpenberg and Bergslagen - Zn, Pb

#### **Priorities**

Exploration involves identifying, prioritising and investigating areas in order to locate mineral deposits. Mineral reserves and mineral resources are the basis of a mining company's operations. Successful exploration means that mineral reserves and resources increase at a higher rate than mined production and thereby generate the conditions for long-term growth.

Boliden focuses primarily on identifying ores that contain zinc, copper and precious metals (gold and silver).

Exploration can be divided into field exploration, which involves searching new areas, and mine-site exploration in the vicinity of already operational mines.

Boliden's strategy in recent years has been to prioritise mine-site exploration, principally because it has been very successful, but also because it saves both time and resources. Mine-site exploration is being conducted in all of Boliden's mining areas.

The scale of field exploration has increased over the years and involves securing the company's long-term survival with the help of completely new ore deposits. Boliden conducts field exploration in both Sweden and Ireland, using its own resources and, in Finland and on Greenland, via partnerships.

Exploration is associated with uncertainties and risk, not least due to the time factor. The final outcome of exploration work is often not known until many years later and between five and ten years may pass between the initial investigations and a decision being taken to open a mine.

For more information on Boliden's exploration, mineral reserves and mineral resources, see pages 111–114.



Survey technicians at Boliden, collect geophysical data during a so-called electromagnetic measurement survey. Deposits can be discovered at up to around 1 km's depth under the surface with the aid of Boliden's in-house developed electromagnetic method.

#### From exploration to mine

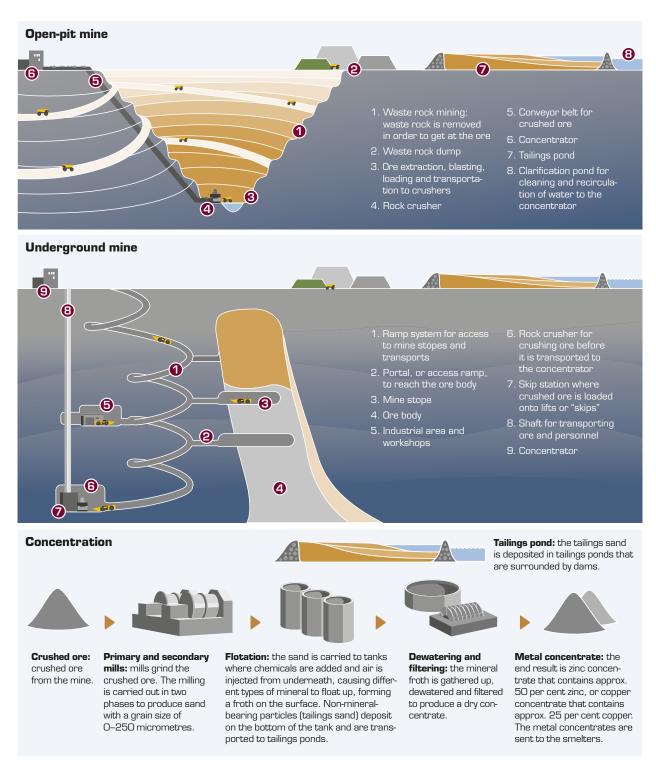
Geological potential 1-15 years Mineral resources<sup>1)</sup> 2–10 years Mineral reserves<sup>2)</sup> 1–5 years Evaluation of target areas Project idea generation Testing of target areas Delimitation of mineral Concept study Decision to mine Pilot study Pilot project resources 10,000 1,000 50 Number of areas to be tested

<sup>1)</sup> Mineral resources are those parts of an indicated deposit that may be commercially extractable but which does not qualify for classification as a mineral reserve due to insufficient knowledge.

<sup>2)</sup> Mineral reserves are those parts of an indicated deposit that can be reliably mined and processed in accordance with the company's profitability requirements.

## How mines work

Boliden has both open-pit mines and underground mines. The geometry and composition of the ore body determine how it is mined and concentrated. The ore is crushed in several stages in the concentrator. Different minerals are then separated out from one another and from waste rock through a variety of concentration methods, of which flotation is the most common for base metals.



## How smelters work

Boliden's smelters refine mined concentrates into pure metals. The concentrates are processed to separate out the impurities from the metals with the aid of high temperature reactions. Different processes are used to refine the concentrates at the zinc and copper smelters, respectively.



The zinc process comprises five general stages including roasting/leaching, as well as purification and electrowinning, before the finished zinc is smelted and cast. Zinc production is more energy-intensive than copper production.



#### Metal concentrate

Metal concentrate from mines usually comprises approximately 50 per cent zinc.

#### Roasting

The concentrate is roasted in a furnace in order to remove the sulphur dioxide. The result. is what is known as calcine, which comprises approximately 60 per cent zinc. The so-called direct leaching method enables the roasting stage to be eliminated.

#### Leaching

The calcine is leached with sulphuric acid in order to precipitate out and filter off the iron content. The result is a zinc sulphate solution with small amounts of impurities.

#### **Purification**

The zinc sulphate solution is purified in three stages to remove any copper, cobalt, nickel and cadmium, after which it contains approximately 150 grams of zinc per litre of solution.

#### Electrowinning

The zinc is separated out of the solution using electrical current and then adheres to cathode plates. The result is zinc cathodes with a zinc content of around 99.995 per

#### Casting

The zinc cathodes are smelted in electrical furnaces and then cast to form zinc ingots. The ingots are sold as is or alloyed in line with specific customer requirements.

#### Copper smelters

Copper smelters have no uniform process in that they are often specialised and tailored for handling specific raw materials. Processes such as smelting and converting are, however, a common denominator. These processes take place at very high temperatures and often comprise a substantial part of the overall refining process.



#### Sulphuric acid plant

The process gases, primarily sulphur dioxide, are ducted away to the sulphur products plant for the production of sulphuric acid and other sulphur products.

#### Precious metals plant

Other metals, such as gold, silver, palladium and platinum, which have fallen down to the bottom of the electrolysis tanks, are refined.



#### Metal concentrate

Metal concentrate from mines usually comprises approximately 25 per cent copper.

#### **Smelting**

The smelting takes place in different types of furnaces, depending on the raw material and process technology. An upper layer of slag and a lower one of copper matte, which has a copper content of approximately 55 per cent, form in the furnace

#### Converting

The copper matte is tapped into a converter where iron and other impurities, together with sulphur, are separated out. The converter is also charged with metal scrap and smelted electronic scrap, known as black copper, which is then refined using the same process. The result is known as blister copper, and contains 97-98 per cent copper.



#### Anode furnace and casting plant

The blister copper is further processed in an anode furnace to reduce the oxygen content. This increases the purity level to 98-99 per cent and the copper is then cast to form anodes.



99.9975 per cent

**Electrolytic refining** The anodes are placed in tanks with steel cathode plates. Chemical solutions and electrical current cause the anodes to dissolve and the copper ions to migrate to the steel plates. The cathodes are then stripped from the steel plates and washed, after which they are ready for delivery.

## How to interpret Boliden's figures

Boliden's results are reported under two Business Areas, namely Mines and Smelters. Transactions between the Business Areas are settled at market price. This presentation provides a brief summary of Boliden's accounts and profit performance at Business Area and Group level.

- ① MINES' REVENUES are affected by metal prices, exchange rates, TC/RC and metal price and exchange rate hedging.
- (2) THE OPERATING PROFIT is affected not only by metal prices, exchange rates and price hedging, but also by metal grades and production volumes, the metal recovery during the concentration process, TC/RC levels, and the operating costs trend.
- (3) SMELTERS' REVENUES are affected by metal prices and metal premiums, which are paid over and above the LME prices. The smelters' sales of a number of by-products are also an important part of the revenues. The results of metal price and exchange rate hedging are also included in this figure.
- (4) THE GROSS PROFIT is made up of metal premiums, treatment charges and income from free metals and by-products, and comprises the difference between what the smelters pay for the raw material and the sales revenues.
- (a) THE OPERATING PROFIT comprises the gross profit minus the operating costs. The most important cost items for the smelters are those in connection with energy, personnel and external services, which are largely affected by maintenance of the facilities. The operating profit is shown both including and excluding the revaluation of the smelters' process inventories. Excluding the effect of process inventory revaluation provides a better picture of the underlying trend.
- 6 OTHER AND ELIMINATIONS includes Group staff functions and Group-wide functions, differences in certain accounting principles between the Business Areas and the Group, and the elimination of profits on intra-Group sales.

	Business Area Mines, SEK m	2013	2012	
1	Revenues	8,303	9,509 2,974	ا
2	Operating profit	1,598	2,974	
	Investments	3,763	3,570	
	Capital employed	18,288	16,125	

	Business Area Smelters, SEK m	2013	2012	
3	Revenues	33,410	38,753	lacksquare
4	Gross profit excl. revaluation of process inventory	6,908	7,288	<b>©</b>
<b>(5)</b>	Operating profit excl. revaluation of process inventory	679	1,095	(D)
	Operating profit	210	1,224	
	Investments	1,200	993	
	Capital employed	15,791	15,569	

6	Other and Eliminations, SEK m	2013	2012
	Revenues	-7,305	-8,261
	Operating profit, internal profit eliminations	110	111
	Operating profit, other	-115	-138
	Investments	12	6
	Capital employed	372	-458

The Group, SEK m	2013	2012
Revenues	34,409	40,001
Operating profit	1,803	4,171
Operating profit excl. revaluation of process inventory	2,271	4,042
Investments	4,974	4,569 E
Capital employed	34,451	31,236

See page 68 for complete Income Statements.

(A) REVENUES FELL by 13 per cent due to lower average prices in SEK for the majority of Boliden's metals and a stronger Swedish krona

#### THE OPERATING PROFIT FELL by 46 per cent as a result of lower prices and terms, and higher costs. The year on year

volume effect was positive.

- (B) REVENUES FELL by 14 per cent due to lower metal prices and terms, and negative exchange rate effects.
- © THE GROSS PROFIT excluding process inventory for the smelters fell by 5 per cent. Positive TC/RC and metal premium trends were countered by lower metal prices, negative exchange rate trends, and lower prices for by-products in general and sulphuric acid in particular.
- ① THE OPERATING PROFIT excluding the revaluation of process inventory fell. Higher volumes of free metals were counteracted by poorer prices.
- (E) INVESTMENTS INCREASED, primarily as a result of the expansion project at Garpenberg and the silver extraction investment at Kokkola.

## The Group

#### Revenues and operating profit

The year was characterised by a continued strong focus on expansion projects at mines and smelters and by efforts to increase production stability. Major maintenance shutdowns in Smelters, coupled with lower prices for both metals and by-products and a stronger Swedish krona, resulted in a fall in profits.

Boliden's revenues fell, year on year, and totalled SEK 34,409 million (SEK 40,001 m). The fall in revenues was primarily due to the sharp fall in metal prices during the first quarter of the year (since when they have been relatively stable), lower prices for byproducts, and a stronger Swedish krona, but decreases in metal production by the smelters which carried out major maintenance shutdowns during the year also played a part. The operating profit totalled SEK 1,803 million (SEK 4,171 m), and the operating profit excluding revaluation of process inventory was SEK 2,271 million (SEK 4,042 m).

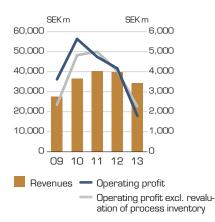
The operating profit for Mines totalled SEK 1,598 million (SEK 2,974 m), while for Smelters, the operating profit excluding the revaluation of process inventory was SEK 679 million (SEK 1,095 m).

The volume effect from Mines was positive, totalling SEK 246 million, and derived from the record production levels at Aitik. The volume effect for Smelters was also positive, totalling SEK 41 million, in spite of the extensive maintenance shutdowns carried out at all smelters. The maintenance shutdowns affected the operating profit by SEK -330 million (SEK -170 m). The positive effect derives mainly from higher volumes of free metals.

Lower average prices for all metals with the exception of lead had a combined effect on the profit of SEK –1,199 million, year on year. The Swedish krona strengthened against the US dollar and the euro also strengthened, which, coupled with other exchange rate fluctuations, affected the profit to the tune of SEK –422 million. The realised profit on metal price and currency hedging was on

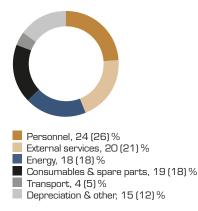
Operating profit	2013	2012
Revenues, SEK m	34,409	40,001
Operating costs before depreciation, SEK m	10,304	10,398
Depreciation, SEK m	2,829	2,560
Operating profit excl. revaluation		
of process inventory, SEK m	2,271	4,,042
Operating profit, SEK m	1,803	4,171
Profit analysis, SEK m	2013	2012
Operating profit	1,803	4,171
Revaluation of process inventory	-469	129
Operating profit excl. revaluation of process inventory	2,271	4,042
Change		-1,770
Analysis of change		
Volume effect		287
Prices and terms		-1,818
Metal prices and terms		-1,199
By-products, prices and terms		-325
Realised metal price and		-15
currency hedging *		-13 108
TC/RC terms Metal premiums		35
Exchange rate effects		-422
Of which translation effects		4
Costs		-136
Depreciation		-280
Internal profit elimination		-1
Items affecting comparability		171
Other		7
Change		-1,770
*Operating profit for respective period	2013	2012
Realised metal price and currency hedging	227	242

#### Revenues and operating profit



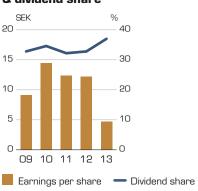
The operating profit excluding revaluation of process inventory fell, primarily as a result of poorer metal prices and terms and negative exchange rate effects.

#### **Breakdown of operating costs**



Operating costs increased in local currencies by approximately 1 per cent.

### Earnings per share & dividend share



Earnings per share totalled SEK 4.72 (SEK 12.21) and a dividend of SEK 1.75 is proposed, corresponding to a dividend share of 37 per cent

a par with that reported last year and totalled SEK 227 million (SEK 242 m). The metal price and currency hedging utilised in conjunction with the decision to expand Garpenberg matured at the end of June. Boliden's production is now, with the exception of its gold production, fully exposed to market prices.

The Group's operating expenses, excluding depreciation, totalled SEK 10,304 million (SEK 10,398 m), corresponding in local currencies to an increase of 1 per cent. The operating expenses included non-recurring items attributable to Tara and totalling SEK 171 million. The non-recurring items comprised both SEK 217 million in positive effect due to the raising of the retirement age at Tara, and a negative effect of SEK 46 million in restructuring costs arising from the reduction of the workforce by 50 people. If the non-recurring items from Tara are excluded, personnel costs were on a par with those last year. Energy, spare parts and consumables costs increased, year on year, while transport costs fell. The maintenance shutdowns and other maintenance accounted, in part, for the increase in costs. Increased energy costs were due both to higher prices and higher volumes.

The net financial items for the year totalled SEK -222 million (SEK -179 m) and the profit after financial items was SEK 1,581 million (SEK 3,992 m). Interest expenses were negatively affected by increased loan volumes, but this was countered by lower interest rates, and by interest expenses on defined benefit pension liabilities.

The reported tax for the year totalled SEK –288 million (SEK –651 m), corresponding to an average tax rate of 18.2 per cent. The net profit for the year totalled SEK 1,294 million (SEK 3,341 m), corresponding to earnings per share of SEK 4.72 (SEK 12.21).

#### **Investments**

Investments for the year totalled SEK 4,974 million (SEK 4,569 m). The biggest investments during the year were in the ongoing expansion project at Garpenberg, where production capacity is expected to increase from its current level of 1.4 Mtonnes of ore per year to

2.5 Mtonnes, and the construction of a facility at Kokkola to extract the increasingly high percentage of silver present in zinc concentrate.

Investments in development work and push-backs in mines increased during the year.

Investments, SEK m	2013	2012
Investments – Mines <sup>1)</sup>	3,763	3,570
Investments - Smelters	1,200	993
Investments – Other	12	6
Total investments	4,974	4,569

<sup>1)</sup> Of which SEK 383 million is attributable to changes in accounting principles in 2012

#### **Cash flow**

The cash flow from operating activities totalled SEK 4,052 million (SEK 5,518 m) in 2013. Tax paid for the year totalled SEK 303 million (SEK 1,145 m). A Swedish Tax Agency excise duty totalling SEK 173 million was paid in 2013 due to the use of incorrectly dyed diesel at the Aitik mine. Boliden has appealed the Tax Agency's taxation ruling and requested both a review and discharge from payment liability and the payment has consequently not been booked as a cost. The working capital increased by SEK 546 million (SEK -320 m), primarily due to lower accounts payable.

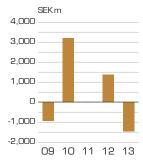
Lower profit, a negative change in working capital, and increased investments account for the deterioration in the free cash flow, which totalled SEK-1,466 million (SEK~1,389 m).

Cash flow, SEK m	2013	2012
Cash flow from operating activities before changes in working capital	4,052	5,198
Changes in working capital	-546	320
Cash flow from operating activities	3,505	5,518
Cash flow from investment activities	-4,971	-4,129
Free cash flow (before financing)	-1,466	1,389

### Investments and cash flow from operating activities



#### Free cash flow



### Cash flow from operating activities and investments.

The cash flow from operating activities before investments fell due to reduced profits and a negative change in working capital.

Free cash flow. The free cash flow fell by SEK 2,855 million. Investments increased, year on year, by 9 per cent as a result both of the Garpenberg expansion and waste rock capitalisation, and of the major maintenance shutdowns in 2013.

#### **Financial position**

On 31st December 2013, Boliden's net debt totalled SEK 8,673 million (SEK 6,276 m). Shareholders' equity totalled SEK 23,075 million (SEK 22,354 m) including the net market valuation of currency, interest and raw materials derivatives totalling SEK 267 million (SEK -145 m) after fiscal effects. The negative cash flow for the year resulted in the net debt/equity ratio increasing to 38 per cent (28%) by the end of 2013.

The average term of Boliden's total granted loan facilities was 2.6 years (3.5 yrs.) at the end of the year. The average interest level in the debt portfolio on 31st December was 1.8 per cent (3.1%) and the average fixed interest term was 0.7 years (0.9 yrs.). The interest term was extended on an ongoing basis throughout the year with the aid of interest swaps.

At the end of the year, Boliden's current liquidity totalled SEK 6,356 million (SEK 9,150 m), comprising liquid assets and unutilised binding credit facilities with terms of over one year, less commercial papers issued and other credit raised with terms of less than one year. The reduction in current liquidity was due to a negative free cash flow and dividend payment.

For further information on Boliden's debt portfolio, see Note 25 on page 93.

Capital structure and return	2013	2012
Balance Sheet total, SEK m	41,841	40,080
Capital employed, SEK m	34,451	31,236
Shareholders' equity, SEK m	23,075	22,354
Net debt, SEK m	8,673	6,276
Return on capital employed, %	5	14
Return on shareholders' equity, %	6	16
Equity/assets ratio, %	55	56
Net debt/equity ratio, %	38	28

#### **Revised accounting regulations**

Items referring to the 2012 comparison year have been adjusted in both the Income Statement, Other Comprehensive Income, and the Balance Sheet in response to new and revised accounting standards and interpretations (see Note 1 Significant accounting and valuation principles and Note 30 Restatement of the financial reports. The revision of IAS 19, Employee Benefits, resulted in an increase in the pension liability and a decrease in shareholders' equity, which led to an increase in the net debt. A new accounting interpretation, IFRIC 20, which addresses when waste rock costs shall be capitalised also led to an increase in waste rock capitalisation, resulting in increases in investments and increased depreciation.

#### **The Parent Company**

The Parent Company conducts limited operations on what is, for fiscal purposes, commission from Boliden Mineral AB and has no employees. The Income Statements, Balance Sheets and Statements of Cash Flow for the Parent Company are shown on page 72.

#### Principles for remuneration to the President and other senior executives

The remuneration paid by Boliden to senior executives shall comprise a fixed salary, variable remuneration, pension benefits and other benefits. Remuneration to senior executives is described in Note 3 on pages 80–81.

The variable remuneration component shall be linked to the Group's profitability and the individual in question's sphere of responsibility and shall primarily comprise one or more financial parameters. The maximum variable remuneration shall be 60 per cent of the fixed annual salary for the President and 40–50 per cent of the same for other senior executives. 10 percentage points of this shall be conditional upon Boliden shares being purchased for the gross sum before tax. Senior executives are, in common with all Boliden Group employees, part of a profit-sharing system in which the maximum profit share per full-time employee is SEK 25,000. Senior executives have a defined contribution pension solution and a retirement age of 65. The Board does not intend to propose any changes to these guidelines to the Annual General Meeting to be held in May 2014.

### Mines

Boliden Mines comprises eight mines in four mining areas: Aitik, the Boliden Area and Garpenberg in Sweden, and the Tara mine in Ireland. The Business Area also includes responsibility for exploration, technological development, the environment/reclamation, and sales of mined concentrates.



#### Revenues and operating profit

The majority of Mines' sales are made to the Group's smelters, with a smaller percentage sold to external smelters. All sales are made on market terms.

Revenues fell by 13 per cent to SEK 8,303 million (SEK 9,509 m), of which external sales totalled SEK 834 million (SEK 1,088 m). Mines' operating profit fell to SEK 1,598 million (SEK 2,974 m).

The Swedish mines reported a fall in operating profit, year on year, while the operating profit at Tara improved. Tara's operating profit was affected by a couple of items affecting comparability and totalling SEK 171 million, of which SEK 217 million was attributable to an increase in the retirement age of the mine's employees and SEK –46 million to restructuring costs in connection with reductions in the workforce.

Aitik's strong production performance resulted in an increase in Mines' milled ore tonnage. Metal production of base metals fell, while production of precious metals increased.

Metal prices had a negative effect on the operating profit, with lower prices for all metals with the exception of lead. The operating profit was also negatively affected by the strengthening of the Swedish krona.

Key data	2013	2012
Revenues, SEK m	8,303	9,509
Operating costs excl. depreciation, SEK m	4,924	5,008
Depreciation, SEK m	1,917	1,669
Operating profit, SEK m	1,598	2,974
Investments, SEK m <sup>1)</sup>	3,763	3,570
Capital employed, SEK m	18,288	16,125
Return on capital employed, %	9	20
Average number of employees, FTE	2,459	2,440

<sup>1)</sup> Of which SEK 383 million attributable to changes to accounting principles.

Mines' operating costs before depreciation fell by 2 per cent to SEK 4,924 million (SEK 5,008 m), with a 2 per cent fall in costs also seen in local currencies. The reduction in costs was mainly due to lower personnel costs at Tara resulting from the raising of the retirement age for the mine's employees, but reduced purchases of external services, lower transport costs and increased waste rock capitalisation due to new accounting regulations also played a part in the fall. This trend was, however, countered by increased personnel costs in the Boliden Area and Aitik as a result of the expansion and maintenance work, and by increased costs for spare part purchases for Aitik. Mines also incurred higher energy and spare part costs, year on year. Adjusted for the positive pension effect at Tara, Mines reported a cost increase of 6 per cent in local currencies.

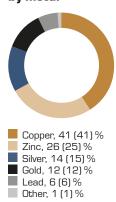
Depreciation increased, year on year, to SEK 1,917 million (SEK 1,669 m), corresponding to a 15 per cent increase. The increase in depreciation was due to the increase in fixed assets, to a higher production rate, and to the effects of the new accounting regulations with regard to open-pit mines.

Profit analysis, SEK m	2013	2012
Operating profit	1,598	2,974
Change		-1,377
Analysis of change		
Volume effect		246
Prices and terms		-1,451
Exchange rate effects		-305
Costs		-96
Depreciation		-250
Items affecting comparability		171
Other		3
Change		-1,377
Operating profit for resp. period		
Realised metal price and currency hedging	184	184

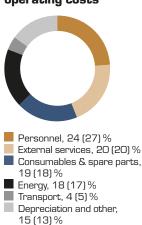
#### Revenues and operating profit



#### Breakdown of revenue by metal



#### Breakdown of operating costs



**Revenues and operating profit.** All of the Swedish mines posted poorer profits than in 2012, primarily due to lower metal prices.

Breakdown of revenue by metal. Zinc's share of revenues increased slightly, while that of silver fell slightly. The breakdown was otherwise in line with

Breakdown of operating costs. Costs fell by 2 per cent, primarily due to Tara, while depreciation increased by 15 per cent.

#### **Production**

Mines' milled ore tonnage increased in 2013, largely due to Aitik where a record production level of 37 million tonnes (34 Mtonnes) was achieved, corresponding to a year on year increase of 8 per cent. Achieving this production level meant that the goal of Boliden's biggest ever investment, Aitik 36, was reached one year ahead of plan. Lower grades and recovery countered the positive production trend, but copper production still managed to increase by 6 per cent and silver production by 4 per cent. Gold production, however, fell by 10 per cent. Aitik's production will continue in 2014 in areas with below-average grades for copper and gold in terms of the overall reserve.

The Boliden Area's milled ore tonnage totalled 1,809 Ktonnes (1,862 Ktonnes), corresponding to a year on year fall of 3 per cent. This decrease was due partly to the resetting of one of the ore lines over a six-week period in order to concentrate slag from Rönnskär. Copper production in the Boliden Area fell due to a decline in extraction at the Maurliden Östra copper mine, and indeed, the ore mix in the Boliden Area is gradually shifting towards an increased percentage of zinc and gold ore and a smaller percentage of copper ore. Zinc and silver production increased by 15 per cent and 9 per cent, respectively, due to the change in the ore mix, which now also includes tellurium, and to higher grades. Gold production

increased by 26 per cent due to the new Kankberg gold mine, which came on line in 2012, and to higher grades and recovery.

The milled ore tonnage at Garpenberg was on a par with last year and totalled 1,495 Ktonnes (1,484 Ktonnes). Zinc production fell by 6 per cent due to lower grades, while silver production rose by 20 per cent due to higher grades.

The milled ore tonnage at Tara was on a par with 2012 and totalled 2,493 Ktonnes (2,502 Ktonnes). Zinc production was on a par with last year, but lead and silver production fell due to lower grades and recovery.

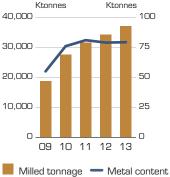
The trend in 2013 for Mines as a whole saw production of base metals remain on a par with levels last year, while silver and gold production increased.

#### Investments

#### Garpenberg expansion

Boliden's expansion of the Garpenberg zinc and silver mine is now entering its final phase. The new facilities at Garpenberg are expected to come on line during the first half of 2014, in accordance with the previously announced plan. The goal is to increase the current ore production level of just over 1.4 million tonnes to 2 million tonnes in 2014. Full production of 2.5 million tonnes of ore per year is to be achieved towards the end of 2015. The





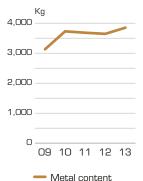
#### Zinc production



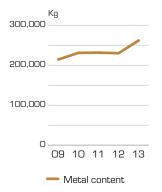
Copper production. The milled tonnage increased to 37 Mtonnes at Atik but lower grades resulted in only a marginal increase in copper production. Production fell in the Boliden Area.

**Zinc production.** The milled ore tonnage fell, but better recovery resulted in production levels on a par with 2012.

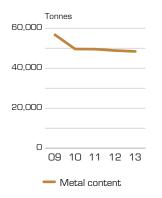
#### **Gold production**



#### Silver production



#### Lead production



**Gold production.** Gold production increased in the Boliden Area in conjunction with the start-up of the Kankberg mine at the end of 2012. Lower grades and recovery at Aitik resulted in a reduction in gold volumes.

**Silver production.** Higher silver grades at Garpenberg, in the Boliden Area and Aitik resulted in higher production.

**Lead production.** Production fell slightly, year on year, as poorer recovery counteracted the positive effect of higher grades.



investment is Boliden's second largest ever and is expected to total SEK 3.9 billion. The project accounts for just over SEK 1.7 billion (SEK 1.2 bn) of this year's investments.

#### Other investments and improvement projects

At Aitik, Boliden is continuing to investigate the preconditions for increasing production to 45 million tonnes per year and, at the same time, extending the life of mine. A decision is expected in 2014.

The Laver copper deposit, located approximately 100 km north of the Boliden Area, was classified as a mineral resource during the previous year. The deposit is of a type similar to Aitik, with low grades but high volumes. Test excavations were carried out in the autumn but the project is still in an early phase and any decision on whether to commence mining operations lies some time into the future. The next stage involves submitting an exploitation concession application.

#### Focus areas

Mines is working, within the framework of the New Boliden Way, to improve processes in all areas in accordance with NBW. The focus over the past year has been on increasing stability within the organisation by improving the operational management structure.

Several of the mining areas have achieved and exceeded the goal of establishing reserves corresponding to at least 10 years' production and the possibility consequently now exists of a gradual shift of resources from mine-site exploration to field exploration and eventually to external growth. The reallocation of resources in this way

increases the chances of growth in the form of new deposits in new areas while maintaining growth in existing mining areas.

Productivity will be increased through the introduction of new technology, namely mine automation, which enables continuous production, more efficient production control, and increased safety. The introduction of wireless data transfer underground in Boliden's mines – something that is being successively introduced in all of Boliden's mines – is a prerequisite of mine automation.

Developing techniques for extracting metals and minerals from mineralisations that cannot currently be exploited due to their mineral composition is an important developmental area for Boliden. A range of different leaching techniques has been developed and is a future focus area for the company. One example of this work in practice is the Kankberg gold mine where an in-house developed process for gold and tellurium extraction has been brought on line. Another is the deposit at Rockliden, but there the problem is the presence of antimony in the copper concentrate. By leaching the antimony out of the copper concentrate before the smelting process, it becomes possible, however, to produce a product that is acceptable to the smelters. A leaching plant on a pilot scale is currently under construction in Boliden and will be used to verify the process.

Reclamation and water treatment are important developmental areas in the field of environmental technology. A number of projects are currently in progress with the aim of developing water treatment techniques, including a passive treatment method for acidic and metal-rich leaching water and the treatment of sulphur compounds in water.

# Four mining areas and exploration

Boliden's mines mainly extract complex polymetallic ores that contain several different metals, and which consequently impose stricter demands on both mining techniques and the concentration process. Zinc and copper are the most important metals, but the ore also contains gold, silver, lead and tellurium in payable quantities. Boliden's mines, with the exception of Aitik, have relatively high metal grades from a global standpoint.

Boliden has developed and refined its mine design, extraction methods and concentration processes over the years. This expertise is an important reason for the high productivity and cost-effectiveness of the mines from an international standpoint. Our inhouse expertise in the fields of mine design, mining technology and extraction methods, coupled with a high level of in-house technological development, has resulted in several of Boliden's mines achieving world-class productivity levels.

The majority of the zinc concentrates and all of the copper concentrates are processed to produce metals at Boliden's own smelters. Some of the metal concentrates are sold to external customers.

Boliden conducts ongoing and extensive exploration work, both in existing mining areas and elsewhere. The work is carried out in order both to ensure future growth as demand increases and to compensate for mine closures. Trial drilling totalling almost 160,000 m was carried out in 2013 and the

cost of exploration activities totalled approximately SEK 298 million (SEK 350 m).

All of Boliden's mines are reclaimed in accordance with legislative requirements once mining operations there have ceased.

See the illustration on page 30, "How a mine works", for a description of operations at both open-pit mines and underground mines.



**Aitik** is Sweden's biggest copper mine and one of the world's most productive open-pit copper mines. The deposit comprises chalcopyrite that contains copper, gold and silver. The ore is extracted in two open-pits and all the mined concentrate is delivered to Rönnskär.

The open-pits work with large scale extraction where large volumes and high levels of automation ensure high levels of productivity. High productivity and favourable waste rock conditions combined with the gold and silver subsidiary metal production ensure that in spite of the ore's low copper grades, the mine's cost position is healthy.

#### 37 million tonnes

Aitik has been working since 2010 on the fine-tuning of the new facilities constructed with the aim of doubling the mine's ore production from the then current level of 18 to 36 Mtonnes per year by 2014. The fine-tuning work has proceeded according to plan and in 2013, production totalled 37 Mtonnes (34 Mtonnes) of ore – which meant that the goal had been achieved one year ahead of plan – and 71 Ktonnes (67 Ktonnes) of copper. Metal production will be limited in

2014 by the fact that mining is taking place in areas with grades that are lower than the average for the mine's mineral reserve. The expansion investment, which totalled just over SEK 6 billion, is one of the biggest industrial investments made in Sweden in the last few years.

#### Continued expansion and exploration work

The potential for further expansion in the Aitik area is currently under investigation. An extended feasibility study suggests that further expansion would enable an increase in production to 45 Mtonnes per year.

	2013	2012
Revenues, SEK m	3,593	4,170
Operating profit, SEK m	882	1,732
Investments, SEK m	1,143	1,207
Milled tonnage, Ktonnes	37,070	34,321
Average number of employees, FTE	675	672
Accident frequency	7.8	8.4

The Boliden Area is located in the mineral-rich Skellefte field where Boliden has operated over 30 mines since production began in the 1920s. The area currently comprises the Renström, Kristineberg and Kankberg underground mines and the Maurliden and Maurliden Östra open-pit mines. All of the mines in the area supply ore to the concentrator at Boliden, which is also home to leaching plants for gold and tellurium production. Complex ores that contain zinc, copper, lead, gold and silver are extracted at all of the mines, with the exception of Kankberg.

#### **Extensive exploration work**

Extensive field exploration is being conducted in the Boliden Area in addition to the minesite exploration work, and exploration successes have successively extended the life of mine of the Boliden Area. Exploration work has identified new mineralisations at greater depths and in the vicinity of the ores currently being mined. A number of studies conducted during the year have enabled mineral resources to be upgraded to mineral reserves, and the Area's mineral reserves consequently increased by 3.2 million tonnes.

#### Gold and tellurium mine at Kankberg

The Kankberg mine, which became operational in 2012, offers an example of minesite exploration that has injected new life into a mining area. The area was previously the site of a zinc and copper mine, but exploration activities subsequently found gold in the area, too. After a total investment of SEK 475 million, the new mine is now operational and is producing gold and tellurium. 2,810 kg (1,619 kg) of gold doré bullion and 24 tonnes (8 tonnes) of tellurium were produced at Kankberg in 2013. The mine will produce an average of 1,150 kg of gold and 41 tonnes of tellurium per year, and has an anticipated life of mine that extends to 2020.

	2013	2012
Revenues, SEK m	1,317	1,552
Operating profit, SEK m	19	369
Investments, SEK m	364	623
Milled tonnage, Ktonnes	1,809	1,862
Average number of employees, FTE	519	483
Accident frequency	16.5	12.3





**Garpenberg's** deposits were first mined back in the 13th century, making Garpenberg one of the world's oldest mines still operational. It was acquired by Boliden in 1957.

Complex ores containing zinc, silver and lead, along with small amounts of copper and gold, are mined at Garpenberg. The metal mix and the relatively high silver grades have resulted in an advantageous cost position for the mine.

Successful exploration work in Garpenberg has resulted in the identification of completely new ore bodies that led to a sharp increase in mineral resources and extended the useful life of the mine, which was scheduled for closure. Garpenberg's mineral reserves increased during the year with the upgrading of the Kvarnberget mineral resource.

#### Expansion increases capacity to 2.5 Mtonnes

An expansion project that will increase ore production at Garpenberg from 1.4 Mtonnes to 2.5 Mtonnes per year is being conducted between 2011 and 2014 in an investment totalling SEK 3.9 billion. Production will be successively increased, starting in the first half of 2014 and reaching full production by the end of 2015. The expansion has proceeded according to plan and within approved cost frameworks in 2013.

	2013	2012
Revenues, SEK m	1,675	1,876
Operating profit, SEK m	776	1,033
Investments, SEK m	2,045	1,459
Milled tonnage, Ktonnes	1,495	1,484
Average number of employees, FTE	376	366
Accident frequency	9.6	11.9

**Tara** is Europe's largest zinc mine and the ninth largest zinc mine in the world, and produces not only zinc, but also lead concentrate. Mining operations began in 1977 and the mine was acquired by Boliden in early 2004.

Tara's relative cost position is hurt by the fact that it contains no subsidiary metals, other than lead, and that mining is taking place at ever greater depths. Tara has consequently focused, in recent years, on improving its cost position through investments and cost-cutting measures designed to boost productivity.

The consolidation of Tara continued in 2013 and included both an agreement

drawn up by the parties concerned on work structures that will cut costs and boost productivity and a reduction in the workforce



of 50. Tara's mineral resources and mineral reserves remained largely unchanged during the year.

	2013	2012
Revenues, SEK m	1,542	1,727
Operating profit, SEK m	195	100
Investments, SEK m	201	268
Milled tonnage, Ktonnes	2,493	2,502
Average number of employees, FTE	667	718
Accident frequency	10.0	4.9

### **Smelters**

Boliden Smelters comprises the Kokkola and Odda zinc smelters, the Rönnskär and Harjavalta copper smelters, and the Bergsöe lead smelter. The Business Area also includes purchases and refining of mined concentrates and recycled raw materials, and sales of metals and by-products.



Boliden's smelters refine mined concentrates into pure metals that are sold to industrial customers in Europe. The operations are based on a high level of process technology expertise and on the ability to produce high quality metals from complex mined concentrates and recycled raw materials.



"Metal production fell during the year, mainly due to the extensive maintenance shutdowns and to process instability at Rönnskär. This was countered by the higher volume of free metals at Harjavalta. The investment in extracting silver from zinc concentrate at Kokkola is proceeding according to plan and production is scheduled to begin in the third quarter of 2014."

Kerstin Konradsson President, Boliden Smelters



#### Revenues and operating profit

Revenues totalled SEK 33,410 million (SEK 38,753 m) and the gross profit, excluding the revaluation of process inventory, was SEK 6,908 million (SEK 7,288 m). The falls in revenues and the gross profit were due to lower prices for both metals and byproducts, with the market for sulphuric acid, in particular, performing poorly during the year. Higher treatment and refining charges (TC/RC) for copper and zinc counteracted the negative effects of a weaker US dollar.

All of the smelters were, therefore, positively affected by TC/RC, while lower prices for metals and by-products had a negative effect on both the copper and zinc smelters. Harjavalta was positively affected by the increased volume of free metals, but this was countered by the lower free metal volumes from Rönnskär as a result from production disturbances. The volume of free metals at Harjavalta should be seen as a one-off occurrence as

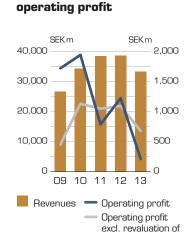
intermediate stocks with a low book metal content have been processed during the year.

The operating profit, excluding the revaluation of process inventories, fell to SEK 679 million (SEK 1,095 m). If the inventory revaluation effect of SEK -469 million (SEK 129 m) is included in the calculations, the operating profit was SEK 210 million (SEK 1,224 m). The operating profit was impacted to the tune of SEK -330 million (SEK -170 m) by maintenance shutdowns that resulted in both reduced revenues and higher operating costs.

Smelters' operating costs, excluding depreciation, increased year on year by 0.5 per cent and totalled SEK 5,346 million (SEK 5,330 m). The cost increase in local currencies was 1 per cent. The increase was primarily attributable to the major maintenance shutdowns in the second and third quarters. Costs continued to fall at Odda during the year as a result of improvement programmes. Costs also fell at Harjavalta, where energy costs were among the cost

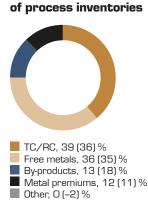
Key data	2013	2012
Revenues, SEK m	33,410	38,753
Gross profit, excluding revaluation of process inventory, SEK m	6,908	7,288
Operating costs, excluding depreciation, SEK m	5,346	5,330
Depreciation, SEK m	913	891
Operating profit, excluding revaluation of process inventory, SEK m	679	1,095
Operating profit, SEK m	210	1,224
Investments, SEK m	1,200	993
Capital employed, SEK m	15,791	15,569
Return on capital employed, %	1	8
Number of employees, FTE	2,232	2,242

Operating profit analysis, SEK m	2013	2012
Operating profit	210	1,224
Revaluation of process inventory	-469	129
Operating profit, excluding revaluation of process inventory	679	1,095
Change		-416
Analysis of change		
Volume effect		41
Prices and terms		-362
Exchange rate effects		-125
Costs		-67
Depreciation		-31
Other		2
Change		-416
Operating profit for respective period		
Realised metal price and currency hedging	43	58



process inventory

**Revenues and** 



**Breakdown of gross** 

profit excl. revaluation

# Energy, 23 (23) % Personnel, 23 (23) % External services, 17 (16) % Consumables & spare parts, 16 (16) % Transport, 5 (6) % Depreciation and other, 16 (16) %

**Breakdown of** 

operating costs

Revenues and operating profit. Lower prices, negative exchange rate effects and increased maintenance shutdowns led to a lower year on year operating profit.

Breakdown of gross profit. Free metals, treatment and refining charges, and premiums contributed more to the gross profit than in 2012. Revenues from by-products decreased, primarily as a result of lower sulphuric acid prices.

**Breakdown of operating costs.** Operating costs excluding depreciation increased in local currencies by 1 per cent.

items that were lower. The cost increased at Rönnskär as a consequence of maintenance shutdowns and production disturbances. Kokkola reported higher costs due to higher energy costs, while at Bergsöe, consumables costs increased in connection with the selection of different input goods for the process.

Maintenance shutdowns and production disruptions resulted in a year on year deterioration in the operating profit, excluding the revaluation of process inventories for all smelters, with the exception of Bergsöe.

#### **Production**

Metal production at the smelters fell during the year, primarily as a result of the extensive maintenance shutdowns, production disruptions and of lower input grades in the raw material. The maintenance shutdowns were carried out during the second and third quarters and proceeded largely according to plan.

At Rönnskär, the comprehensive maintenance shutdown meant that both the raw materials feed and copper metal production were down, year on year. Copper production fell by 4 per cent. Lead feed and production increased year on year, however. Rönnskär had

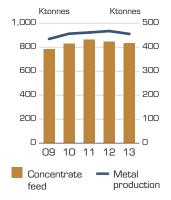
problems with production stability during the year due to lower metal concentrate grades and an increasingly high percentage of impurities in electronics material. The fine-tuning of the increased flow of black copper from the new e-Kaldo plant has also affected stability. This resulted in lower feeds, increased intermediate stocks, lower free metals volumes, and high costs. The electronic materials feed at Rönnskär totalled 109 (108) Ktonnes.

Harjavalta was also affected by maintenance shutdowns, resulting in a fall in copper production by 5 per cent. The precious metals plant remained in production throughout the maintenance shutdown and higher grades in the input concentrate resulted in slightly increased volumes of gold. Nickel feeds were slightly up on last year, when an extended maintenance shutdown was carried out in the nickel smelter.

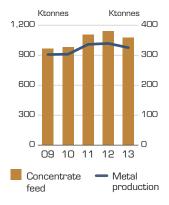
Kokkola's production remained stable during the year and came close to repeating last year's record zinc production figure of 312 Ktonnes (315 Ktonnes).

Odda's production was affected by the maintenance work carried out in much of the facilities, including the rebuilding of a cell house and the installation of a new transformer. The sealing on the

#### Zinc production



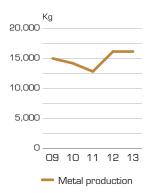
#### Copper production



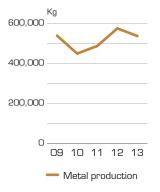
**Zinc production.** Concentrate feed and zinc production both fell year on year at Kokkola and Odda alike.

Copper production. Both concentrate feed and copper production fell at Rönnskär and Harjavalta alike. The secondary material feed increased at Harjavalta and decreased at Rönnskär.

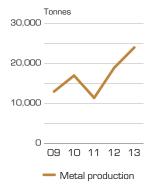
#### **Gold production**



#### Silver production



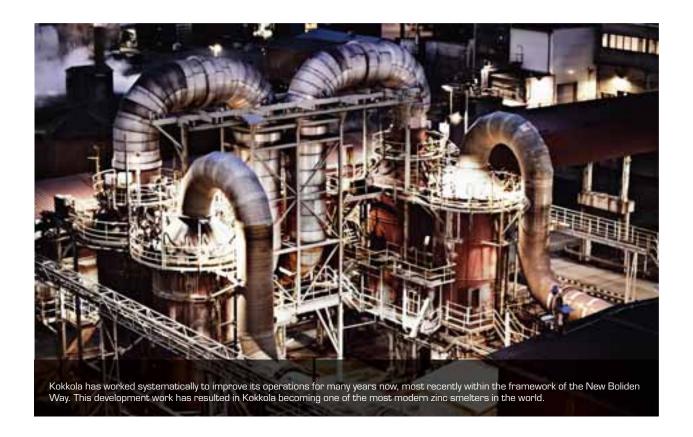
#### Lead production



**Gold production.** Gold production was on a par with last year at both Rönnskär and Harjavalta.

**Silver production.** Silver production fell at both Rönnskär and Harjavalta, with the biggest fall seen at Harjavalta where production levels were very high in 2012.

**Lead production.** Rönnskär's lead production increased sharply during the year.



electrolysis tanks was improved in order to boost production. These measures enabled an older cell house to be closed, which will cut costs. Odda's production was also affected by last year's breakdown in a leaching tank which meant only three of the four leaching tanks were operational during the year. The reduction in leaching capacity led to an increased use of zinc clinker, resulting in a slightly higher production cost. A replacement tank will be installed in early 2014. Odda's production of cast zinc fell by 6 per cent.

Bergsöe's production of lead alloys remained stable during the year and increased year on year by 5 per cent.

#### **Investments**

#### Silver extraction at Kokkola

An investment in constructing a facility to extract silver concentrate from zinc raw materials is currently in progress at Kokkola. The project has now entered an intensive phase, with production scheduled to start in the third quarter of 2014. The entire investment totals SEK 240 million, of which SEK 165 million (SEK 25 m) comprises investments during the year. The amount of silver extracted from the concentrate is expected to total approximately 25 tonnes per year.

#### Focus areas

Safety, the environment and other CSR work will be developed. Smelters has experienced a negative trend in accidents leading to absence from work (LTI) and the measures taken to turn this trend around are focusing on both cultural and systemic issues.

Suppliers will be trained and processes will be developed to handle different types of impurities, thereby increasing the supply base for raw materials and extending the potential for optimising the input raw materials mix.

Development work is being carried out with the aim of increasing the extraction of metals and by-products, and thereby reducing the quantities sent to landfill.

Process improvements and investments in new process stages will enable increased extraction of existing and new metals, leading, in turn, to increased productivity and an improved cost position. NBW and continuous improvement are important tools in boosting Boliden Smelters' competitiveness.

Stable production, a high degree of delivery reliability and continuous development of alloys and new by-products will help develop the customer portfolio.

Boliden Smelters has a substantial annual requirement for reinvestment in order to secure both production and the environment and considerable planning work is done in relation to both of these prioritised areas to ensure the minimum possible impact on the company's stakeholders.

### Five smelters

Boliden's smelters enjoy strong market positions. The operations are based on advanced process technology expertise, flexible smelting processes, and the ability to produce high quality metals from complex mined concentrates and secondary raw materials. Boliden is the world's biggest operator in the electronic recycling sector.

The smelters are supplied with concentrates from Boliden's mines and with concentrates and recyclable raw materials from external suppliers. Boliden's in-house copper concentrate production meets approximately 30 per cent of the smelters' demand, while the corresponding figure for the zinc smelters is approximately 60 per cent. The zinc smelters primarily produce zinc metal, zinc alloys and

sulphuric acid, but Odda also produces aluminium fluoride. Kokkola is currently conducting a project with the aim of extracting silver concentrate from zinc raw materials.

The copper smelters mainly produce copper, gold, silver and lead, but Harjavalta also produces nickel materials for external customers. The copper smelters' processes also produce a number of by-products, such as

sulphuric acid, sulphur dioxide, zinc clinker, selenium, copper sulphate, copper telluride and, palladium and platinum concentrate. The Bergsöe lead smelter produces lead alloys from recycled car batteries. For a review of the smelter processes for zinc and copper, see the illustration entitled "How smelters work" on page 31.

Rönnskär's main products are copper, gold, silver and lead, plus a number of byproducts such as sulphuric acid and zinc clinker. Rönnskär processes Boliden's entire internal production of copper concentrate. The
smelter has the capacity to handle numerous
different raw materials, with recycling materials becoming increasingly important.

#### World leader in electronic scrap recycling

Rönnskär's recycling facility enables the copper production to be complemented with the recycling of metals from electronic scrap and other secondary materials. Rönnskär has long been one of the world's biggest recyclers of electronic scrap and the expansion of the plant's capacity in recent years has made Boliden a world leader in this sphere.

Quantities of electronic waste are increasing rapidly throughout the world, but there are few smelters that can handle electronic scrap. Rönnskär has the capacity to process 120 Ktonnes of electronic scrap per annum.

Rönnskär has suffered from production process stability problems during the year. The most significant causes of these problems include lower metal grades in the concentrate, increases in the quantities of impurities present in the electronic scrap material, and changes in the raw material mix. Remedial action programmes have been launched during the year in order to restore stability to the production processes, including reviews of the selection of raw materials, the implementation of stronger process controls, and adaptations of the processes to handle more complex raw materials.

	2013	2012
Revenues, SEK m	2,029	2,398
Operating profit, SEK m	53	535
Investments, SEK m	345	481
Copper production, Ktonnes	206	214
Av. no. of employees, FTE	866	859
Accident frequency	6.9	8.6





Harjavalta produces copper, gold and silver plus a number of by-products such as sulphuric acid. The raw material consists primarily of metal concentrates from external copper mines in South America, South East Asia and Portugal. Harjavalta also smelts nickel concentrate on behalf of external customers.

Harjavalta's operating profit was positively affected in 2013 by free metals, which was an effect of an intermediate stock with a low book value in terms of metal content being processed during the year, and the volume of free metals was, therefore, exceptionally high.

At the end of the year, Harjavalta suffered a cable fire which negatively affected the operating profit for the year to the tune of approximately SEK 30 million.

	2013	2012
Revenues, SEK m	1,631	1,666
Operating profit, SEK m	316	324
Investments, SEK m	246	215
Copper production, Ktonnes	119	125
Av. no. of employees, FTE	391	388
Accident frequency	10.7	14.8

**Kokkola** produces zinc and zinc alloys, and sulphuric acid. It is the world's eighth largest zinc smelter with a production capacity of over 300 Ktonnes.

The majority of the zinc concentrate smelted comes from Boliden's mines in Sweden and Ireland. Approximately 85 per cent of the zinc production is exported to primarily European customers.

Kokkola uses both the in-house developed direct leaching method and conventional roasting techniques, and is consequently able to optimise its raw material usage.

#### The next stage - silver extraction

Construction of a new silver extraction facility continued at Kokkola in 2013. The investment totals approximately SEK 240 million and production is scheduled to begin in the third quarter of 2014. The investment will improve Kokkola's competitiveness as the trend in zinc concentrate globally is towards a higher silver content.



	2013	2012
Revenues, SEK m	1,795	1,778
Operating profit, SEK m	248	261
Investments, SEK m	318	210
Zinc production, Ktonnes	312	315
Av. no. of employees, FTE	545	561
Accident frequency	9.3	7.4



Bergsöe is one of Europe's biggest recyclers of lead batteries and its main products are pure lead and customised lead alloys. Approximately 60 per cent of the smelter's lead production is sold to the battery industry in Europe, with the remainder used in other applications, including lead sheet and radiation shields.

The shortage of battery raw materials continued in 2013, and the price of raw materials consequently continued to increase.

By recycling approximately 63 Ktonnes of scrap lead from the entire Nordic region – the equivalent of around 4 million scrap car batteries – Bergsöe helps establish an ecocycle for lead metal.

A ruling by the Swedish Land & Environment Court of Appeal is preventing Boliden Bergsöe from expanding its lead recycling operations from 50 Ktonnes to 65 Ktonnes of lead. The ruling has no impact on the smelter's operations in the short-term, but will prevent the desired long-term expansion. Bergsöe plays an important part in the recycling of lead and the restriction is, therefore, also unfortunate from an environmental viewpoint. Boliden has decided to appeal the ruling.

	2013	2012
Revenues, SEK m	715	698
Operating profit, SEK m	39	34
Investments, SEK m	12	10
Lead alloy production, Ktonnes	45	43
Av. no. of employees, FTE	69	72
Accident frequency	7.0	0.0

Odda produces pure zinc and zinc alloys, as well as aluminium fluoride and sulphuric acid. Approximately 55 per cent of the raw materials for production is supplied by Boliden's mines, with the remainder coming from mines in countries such as Portugal and Ireland. Zinc clinker is supplied by Boliden's Rönnskär copper smelter. The raw materials for the production of aluminium fluoride are fluorspar and aluminium hydrate. The majority of the zinc production is exported and primarily sold to the steel industry within the EU. Aluminium fluoride is an additive used in the aluminium industry and the majority of the production is sold in Norway. Odda, like Kokkola, uses both the direct leaching and conventional roasting techniques, and thereby enables optimum raw materials usage.



#### Odda's P100 improvement programme

A comprehensive programme designed to improve the smelter's competitiveness was launched at Odda in 2011. The programme includes both cost-cutting measures and a number of other measures designed to boost productivity. The improvement programme has continued in 2013 and has focused on further cost-cutting measures and rectifying the bottlenecks in production. Odda has, in comparison with the base year of 2010, cut its annual costs by approximately SEK 120 million, adjusted for the maintenance shutdown in 2013.

	2013	2012
Revenues, SEK m	1,070	1,184
Operating profit, SEK m	- 26	31
Investments, SEK m	269	61
Zinc production, Ktonnes	143	153
Av. no. of employees, FTE	295	297
Accident frequency	7.4	1.5

# Purchasing goods and services

Boliden currently has just over 6,000 suppliers, but 160 suppliers account for 80 per cent of the purchasing volume value, excluding raw materials. The annual purchasing volume, excluding raw materials, totals just under SEK 12 billion, with investments in machinery and equipment etc. accounting for just over SEK 3.5 billion of this total. Mines and Smelters account for approximately 60 per cent and 40 per cent of the total purchasing volume, respectively.

#### **Cost trends**

Boliden's purchasing volume is divided into strategic categories which, depending on their nature, are handled at local area, Business Area, or Group level. Boliden's purchasing categories are affected in many different ways by market trends. The primary driving forces are described below.

Services – The market trend for services purchased by Boliden normally tracks inflation in the country in question. The supplier market is generally in balance while demand and the cost trend have been steered by inflation and specific indices. New business models and supplier consolidation over the past year have resulted in enhanced efficiency and Boliden's cost trend during the year has been markedly lower than the general cost trend.

**Electricity** – Electricity prices in the Nordic region are primarily driven by access to hydroelectricity and nuclear power, electricity transmission capacity between the Nordic

countries, Nordic electricity consumption, and taxes and charges. Higher grid tariffs and taxes are among the factors that contributed to the negative cost trend and the past year has seen Boliden work to reassign and optimise existing contracts.

Bulk goods and chemicals – The market trend in 2013 was turbulent, with dramatic price reductions for a number of product groups that were countered by equally dramatic price rises for other product groups. This wide-ranging category is primarily driven by fluctuations in local markets and global raw materials indices, but is also affected by Boliden's ability to consolidate volumes and create innovative logistics set-ups. The overall price trend for 2013 as a whole was slightly downwards.

Indirect materials and services, IT and other – Stable and non-inflation-driven categories which are driven by Boliden's ability to consolidate volumes and harmonise specifications.

**Fixed installations** – Currently characterised by a market balance with long-term supplier relationships. The cost trend is steered by overhauled operating set-ups, low cost option elements, and indexable manpower.

Mobile equipment – Primarily characterised during the year by market balance and, at the end of the year, by markedly improved lead times and pricing scenarios. Boliden works with long-term supplier relationships where the focus is partly on productivity and total cost and partly on activities designed to promote competitiveness and on analyses of low-cost alternatives.

**Tools and consumables** – Primarily driven by Boliden's ability to consolidate volumes and to establish alternative suppliers, and by national rates of inflation and access to low-cost alternatives.

Logistics – The market trend in 2013 was stable. This category is primarily affected by fuel costs (diesel and bunker oil), stricter legislative requirements with regard to emissions and alternative fuels, and a balance between capacity and demand. Some long-term contracts are regulated via fuel and payroll cost indices. The total cost level for rail, ship and road transports has remained unchanged.

Electrical installations and electrical equipment – The market trend for this category has largely tracked inflation in the countries in question in 2013 and was characterised by long-term supplier relationships, safety requirements, and market balance.

#### **Prioritised areas**

The focus in 2013 (and in the years ahead) was on consolidating volumes within Boliden and, as a consequence, reducing the number of suppliers. The focus during the first stage of this process is on synergies within Smelters and Mines for the majority of the above-mentioned categories. Boliden's purchasing organisation is working with the following prioritised areas:

### Increase the purchasing volume analysed Increasing the number of purchasing projects

is the single most effective way of identifying and enabling greater cost savings.

Generate cost savings Increase procurement capacity. Focus on enhanced expertise, efficient tools, supplier market information, and the drawing up of procurement strategies.

#### Operational productivity and efficiency

Reduce internal lead times and improve delivery precision in order to minimise disruptions to production and the need for stockpiles and safety stock.

**Secure supply chains** Increase the ability to select the right suppliers in accordance with the strategy for each sub-category and in accordance with local requirements.

#### **Purchasing volume per category**



Services, 28 %
Electricity, 13 %

Bulk goods and Chemicals, 12 %

IM&S, IT and Other, 11 % Fixed installations, 10 %

Logistics, 10 %

Mobile equipment, 9 % Tools and Consumables, 4 %

Electrical installations and Electrical equipment, 3 %

## Risk management

Boliden's operations are cyclically sensitive and are exposed to fluctuations in, first and foremost, metal prices and exchange rates. The operations have an impact on the surrounding environment and many processes are associated with work environment and safety risks. Boliden works unceasingly to reduce these risks, e.g. through active scenario planning based on a range of different market fluctuations.

#### Operational risks

Operational risks are managed by the operating units in accordance with the guidelines and instructions adopted by Boliden at both Business Area and Group level.

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#### **Description of risk**

#### Management and comments for the year

#### Health and safety

Boliden handles large material flows, high temperatures and substances that are hazardous to health. Deviations from established routines or inadequate maintenance can give rise to dangerous situations and the risk of injury to employees. The risk of serious accidents that can result in personal injury or death is ever-present and ongoing efforts to minimise it are vital.

Boliden has well-established health and safety routines, with a zero tolerance vision and a new, Group-wide safety symbol, "B-safe". B-safe entails an agreement on the part of Boliden's employees whereby they undertake to comment on risky behaviour and to take other people's views on risky behaviour seriously. Incidents are reported via an incident reporting system, followed up and reported, and result in improvement work.

The number of accidents resulting in lost time (LTI) in 2013 and involving Boliden's own personnel increased year on year between 2012 and 2013 and totalled 7.0 (6.6) at the end of the year. The number of accidents including contractors fell slightly to 8.9 (9.1). A Health & Safety Director has been appointed at Group level and tasked with further coordinating and improving the health and safety work

#### Environmental impact

Environmental impact – the outside world's impact on Boliden

Boliden is affected by the rising global temperatures. Climate change in the form of increased precipitation creates the risk of increased discharges of metals and nitrogen to water for Boliden and, hence, a greater risk that mandated environmental limits will be exceeded.

Boliden works proactively with continuous monitoring and process optimisation and with the potential for an increase in the capacity of Boliden's water treatment processes.

Carbon dioxide emissions – climate change Boliden's operations result in the emission of greenhouse gases, mainly carbon dioxide. It is difficult, in the short term, to implement transformations that result in reduced emissions without simultaneously reducing production. Boliden's goal is to ensure its carbon dioxide intensity does not increase. A concept study was conducted in 2013 with the aim of identifying technically and financially viable opportunities to reduce both direct and indirect carbon dioxide emissions.

Carbon dioxide emissions – financial impact
Boliden's smelters are subject to the EU's Emissions
Trading Scheme, EU ETS. This can, potentially, result in
increased costs. The mines are also indirectly affected
by higher costs as a result of the power sector raising
the price of electricity due to higher emissions costs.

Boliden carries out regular analyses of future emissions costs and attempts, through its industry organisations, to promote transparency and predictability in the Emissions Trading Scheme during not only the current trading period (2013–2020), but also for subsequent periods.

Emissions and discharges of metals
Metal emissions and discharges to air and water are
a side-effect of the operations. The risk lies in the
potential for exceeding limit values or in emissions/
discharges that damage the environment.

Efforts to manage the risk of emissions and discharges of metals are based on risk analyses. Ongoing monitoring and maintenance are carried out in line with the management systems' instructions. Boliden also invests in new technology, and efficiency enhancing measures for its processes and operations. Continuous measurements, follow-up work and reporting are also carried out to ensure that Boliden achieves its emissions and discharges goals.

#### Dam safety

Dams for tailings sand account for one of Boliden's biggest impacts on the external environment. The risks comprise both the environmental impact of building a dam and the risk of a dam failure resulting in the discharge of contaminated water.

Boliden works proactively to minimise its safety- and environmentrelated impact on its surroundings and works systematically with inhouse monitoring and inspections. Every operating unit with its own dam has a Dam Safety Manager and a Dam Operations Manager. The dams are operated in accordance with the GruvRIDAS dam safety guidelines produced by the Swedish industry organisation for mining and metal companies, SveMin.

Risk	Description of risk	Management and comments for the year
Unplanned stoppages	Boliden's production essentially comprises continuous processes and unplanned stoppages can affect production, emissions and discharges to air and water, and financial results. The stoppages can, in some cases, be long-term ones. Unplanned stoppages can, for example, occur due to technical problems, accidents or strikes.	Boliden carries out preventative maintenance work at all of its production facilities. Major maintenance shutdowns are carried out every year within the smelting operations, while maintenance work is an integral part of the day-to-day operations for the mines. The smelting and mines operations have been working with a range of internal benchmark projects and knowledge exchange between the production facilities for a number of years now, and Boliden has also adopted a zero tolerance vision for accidents in order to help prevent unplanned stoppages.
Talent pool	A significant percentage of Boliden's employees will retire over the next 10 years. Stiff competition for skilled employees increases the difficulty of replacement recruitment.	Boliden has an ongoing programme of succession and knowledge transfer work that involves replacement planning and skills development as well as the transfer of skills from senior employees to less experienced employees in order to ensure the existence of internal candidates for key positions within Boliden's operations.  Boliden has also, over the past year, extended its involvement in universities, colleges of further education and networks for young academics in order to increase awareness of Boliden. The 10-year partnership with Luleå University of Technology (LTU) has, for example, resulted in the launch of the Mining Research Programme. Boliden is also involved in educational programmes and targeted recruitment activities at trade fairs.

#### Market and commercial risks

 $Boliden's\ market\ and\ commercial\ risks\ are\ primarily\ managed\ within\ the\ individual\ Business\ Areas.$ 

Risk	Description of risk	Management and comments for the year
Metal prices	Changes to metal prices have a significant impact on Boliden's profits and cash flow.	Boliden's policy is not to hedge metal prices, but rather to allow changes to be reflected in the result. There are some exceptions to this, e.g. when mining ore bodies with short residual lifespans or in order to ensure financial effectiveness in conjunction with major investment projects. See also under the "Financial risks" section. Boliden also continuously hedges Smelters' metal price and currency exposure (with the exception of process inventory) in what is known as transaction exposure. See also under the "Financial risks" section.
Treatment and refining charges	Treatment and refining charges make up a large part of the smelters' gross profit and are determined by the supply/demand in the metal concentrates market.	The terms are negotiated annually by the major players in the mining and smelting industries. Boliden applies these terms.
Revaluation of process inventory	Stock tied up within the smelters' production process.	Boliden's policy is not to hedge price and currency exposure for the process inventory. Changes in metal prices and exchange rates affect the Group's profit in conjunction with the revaluation of process inventory. The item is reported separately in the Income Statement in order to clarify the effect. Price changes have no effect on the cash flow. The exposure to price changes in any stock volumes that exceed or fall short of the production's process inventory is, however, always hedged. See also under the "Financial risks" section.
Customers	Significant reliance on a small number of large copper customers. Reduced sales to industrial customers in Europe increase the risk of sales via the London Metal Exchange (LME), with slightly lower margins as a result.	Boliden endeavours to reduce the risk by expanding the customer portfolio through targeted sales activities. The number of sales resources has been increased during the year and the number of industrial customers has grown.
Raw materials supply	The raw materials supply is important in enabling the smelters to produce at high levels of capacity utilisation and consistent quality. Approximately 70 per cent and 40 per cent, respectively, of the smelters' copper and zinc requirements are met by external suppliers.	Boliden endeavours to conclude long-term agreements with external metal concentrate and recycling materials suppliers.
Energy prices	Energy accounts for approximately 18 per cent of operating costs and changes in energy prices can have a significant effect on profitability.	Boliden has long-term agreements with price clauses in Sweden and Norway. In Finland and Ireland, Boliden is exposed to market prices and changes in energy prices hence affect the operating profit. Boliden monitors opportunities to enter into longer term agreements if and when such opportunities arise. Boliden continues to participate in collaborative projects based on investments in subsidised power generation.

#### Financial risks

Boliden has a centralised treasury function that is responsible, inter alia, for managing financial risks with the exception of credit risks in accounts receivable. The treasury function is tasked with supporting the management and operating units at Parent Company and Group level. This structure ensures good internal risk monitoring and offers both financial and administrative economies of scale. The treasury function is responsible for identifying and efficiently limiting the Group's financial risks in line with the financial policy adopted by the Board of Directors.

#### Risk Description of risk Management

#### Exchange rate and metal price risks

The pricing terms for Boliden's products are primarily determined on raw materials exchanges such as the London Metal Exchange (LME) and the London Bullion Market Association (LBMA), and the currency and money market. Boliden's products are largely priced in USD and fluctuations in the USD/SEK/EUR exchange rates hence have a significant impact on Boliden's profits and cash flow. The Group's exchange rate and metal price exposure covers transaction exposure and translation exposure:

The Group's total sensitivity to the factors listed (see sensitivity analysis table below) is calculated on the basis of the quarterly reports detailing the Group companies' planned exposure resulting from metal production, exchange rates and interest. The effects of different market scenarios can be quantified on the basis of the information on sensitivity to market changes, and can then act as source data for the management of financial risks and be reported to the Board of Directors, management, and the market.

#### Transaction exposure:

Boliden's transaction exposure comprises both binding undertakings and forecast cash flows.

Transaction exposure in conjunction with binding undertakings is hedged with the exception of the smelters' process inventory. Exposure in conjunction with forecast cash flows is normally not hedged in line with Boliden's policy. See also the "Market and commercial risks" section above.

Exposure in connection with binding undertakings. This exposure arises when Boliden undertakes to participate in a transaction at a fixed value and which is not compensated for by a simultaneous opposite transaction of a corresponding size and nature. The Group buys metals in the form of raw materials which it processes into refined metals, and where the acquisition value of the raw materials as well as the exchange rates may differ from the final sales value. Such differences arise as a result of variations in size, purchasing date, processing and selling. Furthermore, some customers receive fixed prices in different currencies that are sometimes set well in advance of delivery.

Boliden's policy stipulates that risks from exposure in conjunction with binding undertakings shall be hedged in full, with the exception of the smelters' process inventory. See also the "Market and commercial risks" section above. The Group uses futures contracts to ensure that the sale price and exchange rate correspond to those applicable in conjunction with the signing of a sales agreement at a fixed price. Hedge accounting is applied to the futures contracts, thereby hedging the fair value in the Income Statement.

Exposure in conjunction with forecast cash flows
This exposure arises due to the fact that a substantial percentage of the Group's future income – primarily that relating to extracted metals and to treatment and refining charges – is affected by fluctuations in metal prices and exchange rates.

Boliden continuously calculates the way in which changes in metal and exchange rate markets will affect the Group's future financial position. See the sensitivity analysis of the operating profit table below. Boliden's policy is not to hedge metal prices and exchange rates in relation to the Group's future income under normal commercial conditions. Boliden can, however, in order to limit the risk in certain situations, hedge part of the forecast cash flows. There may be special justification in conjunction with major investments or investments in mines with a short lifespan, in order to limit the financial risks. The Group can use futures and options contracts to hedge metal prices and/or exchange rates for the cash flows from forecast metal sales. The derivatives are hedge accounted as cash flow hedging under Other comprehensive income. See page 52 for a sensitivity analysis of how the Other comprehensive income result is affected by a change in the value of financial derivatives (cash flow hedging).

#### Sensitivity analysis - operating profit, excluding outstanding derivatives

The table below contains an estimation of the effect on the operating profit, before tax, of changes in market terms for the following year. The effect is calculated on the basis of closing day prices on 31st December 2013 and is based on forecast metal sales. The sensitivity analysis does not take into account the effects of metal price and exchange rate hedging, nor does it take into account the effect of the smelter' process inventory revaluation or contracted TC/RC. The analysis does not include assumptions regarding such factors as cost infla-

tion, discrepancies in production trends or macroeconomic conditions. The starting point for calculating the effects of a 10 per cent change in metal prices is the so-called "cash price" on the LME or LBMA on 31st December 2013. The corresponding starting point for changes in the value of the US dollar is spot rates on the same date. The effect of changes to treatment and refining charges is based on changes in relation to the average level during the fourth quarter.

Change in metal prices, +10%	Effect on operat- ing profit, SEK m	Change in USD, +10%	Effect on operating profit, SEK m	Change in TC/RC, +10%	Effect on operating profit, SEK m
Copper	400	USD/SEK	960	TC/RC Copper	90
Zinc	485	EUR/USD	385	TC Zinc	40
Lead	90	USD/NOK	85	TC Lead	-10
Gold	140				
Silver	140				

#### Sensitivity analysis - other comprehensive income, taking into account outstanding derivatives

The table below contains an estimation of the effect on the Other comprehensive income (income and cost items including reclassification adjustments not reported under the profit), before tax, of changes in the value of outstanding derivatives based on the closing day prices on 31st December 2013.

Changes in the value of financial derivatives in respect of binding undertakings and translation exposure have a very limited or no effect on the profit or Other comprehensive income. The table below hence contains the effect of changes in the value of derivatives intended to counter the Group's forecast exposure.

Change in metal prices or exchange rates, +10%	31-12-2013 Effect on Other comprehensive income, SEK m	31-12-2012 Effect on Other comprehensive income, SEK m
Copper	-	-73
Zinc	-	-84
Lead	-	<b>-17</b>
Gold	–126	-244
Silver	-	<b>-30</b>
USD/SEK	<b>–150</b>	-283

Risk	Description of risk	Management
Exchange rate risk	Translation exposure A translation difference arises, when converting net investments in overseas operations into Swedish kronor, in conjunction with exchange rate fluctuations and which affects Other comprehensive income within the Group.	The effect of translation exposure is eliminated with the help of external borrowing and currency futures contracts in accordance with Boliden's financial policy. Other comprehensive income was affected in 2013 to the tune of SEK -212 million (SEK 219 m) as a result of hedging in currency futures contracts and borrowing in foreign currencies.
Interest rate risk	Changes in market interest rates affect the Group's profits and cash flows. The rapidity with which a change in interest rate levels affects the Group's net financial items depends on the fixed interest term of the loans.	Boliden's financial policy provides the scope for an average fixed interest term of up to 3 years. The Group's loan portfolio had, on 31st December 2013, an average fixed interest term of 0.7 years (0.9 yrs.). Interest swaps are used to extend the fixed interest term.

#### Sensitivity analysis - Other comprehensive income, taking into account the market rates of outstanding interest derivatives

	31-12-2013	31-12-2012
Change in market rate, +1%	Effect on Other comprehensive income, SEK m	Effect on Other comprehensive income, SEK m
Interest derivatives	41	32

Risk	Description of risk	Management
Refinancing and liquidity risk	The risk that Boliden will be unable to extend existing loans or meet its payment undertakings due to insufficient liquidity.	Boliden limits the refinancing risk by ensuring that its loan liability has a good spread in terms of counterparties, financing sources and durations. Boliden works actively to ensure satisfactory current liquidity by making appropriate use of unutilised credit facilities with market- and operations-adjusted loan durations. The refinancing requirement is reviewed regularly by Boliden's treasury function. The refinancing requirement is dependent, first and foremost, on market trends and investment plans. The loan agreements carry loan covenants which oblige Boliden to comply with certain defined key ratio conditions in order to avoid early repayment. A deterioration in the global economic climate may entail increased risks in respect of profit performance and financial position, including the risk of Boliden coming into conflict with loan terms and conditions. Boliden has complied with all loan covenants in 2013.  The average term of total loan facilities is 2.6 years (3.5 yrs.), which is in accordance with established Group policy. On 31st December 2013, Boliden's payment capacity totalled SEK 6,356 million (SEK 9,150 m) in liquid assets and unutilised binding credit facilities with a term in excess of one year, less deductions for utilised loans that mature within the space of one year. Boliden has established a cash pool structure that enables it to maintain a central overview of liquidity flows and ensures efficient management of the Group's overall liquidity.

Risk	Description of risk	Management
Credit and counterparty risk	Credit risks in financial operations The term, credit and counterparty risk, refers to the risk that a counterparty in a transaction may fail to fulfil their obligation, thus causing the Group to incur a loss. Boliden's financial exposure to counterparty risk mainly occurs when trading in derivative instruments.	In order to limit credit and counterparty risk, only highly creditworthy counterparties are accepted and, wherever possible, the commitment per counterparty is limited. These restrictions are laid down in Boliden's financial policy in the form of a lowest acceptable Standard & Poor's credit rating of A when the transaction is entered into and a maximum investment of liquid assets per counterparty. The treasury function continuously monitors exposure to counterparty risks, and the creditworthiness and counterparty spread of these derivatives is deemed to have been good in 2013. Two of Boliden's counterparties have an A- credit rating in a deviation from the financial policy that has been approved by the Board of Directors. On 31st December 2013, the credit risk in derivative instruments corresponded to a market value of SEK 500 million (SEK 322 m), which relates to Boliden's receivables from external counterparties.  Offsetting of financial assets and liabilities is regulated under ISDA agreements (International Swaps and Derivatives Association) which handles both offsetting between contracted counterparties during day-to-day operations and in conjunction with special circumstances, such as failure to pay. Boliden, during the course of its day-to-day operations, offsets market values in the same currency with a single counterparty that mature at the same time and the excess sum is paid by the party with the biggest liability. In the event of a breach of contract, all outstanding obligations covered by ISDA agreements are terminated in a sum that is paid by the counterparty with the biggest liability.
	Credit risks in accounts receivable The risk of the Group's customers failing to fulfil their obligations consti- tutes a credit risk.	Credit risks are managed through an established credit rating process, active credit monitoring, short credit periods, and daily routines for monitoring payments. The requisite provisions for bad debts are also monitored continuously. The concentration of accounts receivable is otherwise low and the credit periods are short. The quality of the accounts receivable is deemed to be very good. Write-downs of outstanding accounts receivable on 31st December 2013 have only been effected in very limited amounts and have also, historically speaking, been insignificant. See also Note 18 on page 88, Accounts receivable.
Risk manage- ment and insurance	The risk of damage or injuries that give rise to financial losses	The objective of the Risk Management function at Boliden is to minimise the total cost of the Group's damage and injury risks. This is achieved both by continuously enhancing the damage and injury prevention and control work conducted within the operations, and by introducing and developing Group-wide insurance solutions.
Financial reporting	The risk of inaccurate financial and operational reporting	Boliden has an efficient internal control structure. Control functions exist both locally, in individual units, and within Business Areas and at the Head Office. All of the functions work within a Group-wide internal control framework for financial reporting that is based on COSO. The framework's controls are tested annually, both internally and by external auditors. The internal tests have also resulted in the transfer of knowledge and experience between departments and units.  The operational reporting is followed up and controlled by the Group's Controller function, which works closely with the local units and Business Areas.

#### Other risks

Risk	Description of risk	Management
Legal risks	Boliden conducts extensive operations and may occasionally become involved in disputes and legal proceedings arising in the course of these operations. Boliden's various operations are, furthermore, widely subject to licensing requirements and to wide-ranging environmental and other regulations. The continuation of Boliden's operations is, to a large degree, dependent on the retention of existing licences and the acquisition of new ones.	Boliden continuously monitors legal developments in relevant spheres and implements, follows up on and ensures compliance with laws, regulations and the directives contained in applicable legislation. Boliden is active in the environmental law sphere, among others, through its membership of industry and trade associations, in the form of lobbying activities, and by means of presentations and educational measures for decision-makers and other stakeholder groups.  Information on legal proceedings and disputes is provided in Note 29 on page 96 and Note 31 on page 97.
Political risks	Political decisions can have an effect in Sweden and the countries in which Boliden and Boliden's commercial partners operate.	Boliden and industry organisations are actively involved in lobbying work and are often an expert body to which reports are referred for comment ahead of impending political decisions that impact Boliden's operations.
Risks to confidence	Boliden may suffer incidents that adversely affect confidence in the company, when, for example, suppliers and customers fail to live up to the environmental, quality, ethical etc. requirements adhered to by Boliden.	Evaluations of customers and suppliers, Boliden's business partners, are conducted within the framework of Boliden's CSR work before entering into any partnership. This is done by means, inter alia, of what is known as an EBP (Evaluation Business Partner) checklist.  Customer and supplier audits are also conducted to ensure that the standards maintained by these parties are as high as those within Boliden. Discrepancies can result in termination of the partnership.





## Boliden's employees

To generate value, Boliden must offer its employees safe work environments, skill development programmes, opportunities for career development, and the possibility for employees to establish a balance between their professional and private lives.

Boliden's priority areas from an employee perspective for the period from 2009 to 2013 were:

- · Create a safe work environment
- · Secure the future talent pool
- · Create diversity and a better gender balance

#### Create a safe work environment

Boliden's operations entail risks such as handling substantial material flows, high temperatures and, from time to time, substances that are hazardous to health. A safe work environment is a top priority for Boliden and the Group has adopted a zero tolerance vision for accidents at work. Creating a strong safety culture while simultaneously eliminating risks are the preconditions for achieving this goal. Doing so demands stringent safety requirements and that every individual employee must accept personal responsibility for behaving safely and correctly. But even though a safe work environment is a given, accidents do happen, and a continuous ongoing dialogue on the subjects of health, safety, routines, attitudes and behaviour is vital.

Boliden's positive accident downward trend which had lasted since 2005 was reversed in early 2012. The accident frequency<sup>1)</sup> in 2013 was 8.9 (9.1), including contractors, and 7.0 (6.6) for Boliden's own employees. Safety-related efforts focusing on contractors have been intensified since 2012 within the overall framework of Boliden's safety work, and is reported in Boliden's safety statistics.

Fires occurred in four of Boliden's mines – Garpenberg, Kristineberg, Renström and Tara – during the year. Fortunately, however, no one was seriously hurt. Fire is a serious risk in a mine and safety systems and safety exercises are being reviewed and are conducted on a regular basis. The fire at Kristineberg exposed three people to severe danger, but refuge chambers and individual creativity in an extremely hazardous situation meant that none of those involved suffered any serious physical injuries, although mental stress is obviously unavoidable in such situations. Accident investigations and analyses have been carried out and preventative work will be strengthened.

A total of 112 (106) accidents that resulted in personal injuries and consequent lost time occurred during the year. Six of these accidents constituted serious workplace accidents. No accident has resulted in a fatality in the past five years.

#### Activities for a safer Boliden

Boliden conducts risk and causal analyses throughout the Group in order to learn more about the risk of injury and to conduct more effective and proactive work in the safety sphere. Most accidents involve cuts, sprains or fractures, and occur when employees slip, stumble or fall. Boliden's performance in relation to the organisation's zero accident goal is followed up monthly at management meetings at both Group and unit level, and the findings are reported to the Board. All operating units work with management systems based on the OHSAS 18001 work environment standard. It is difficult to identify any single factor that contributes to an accident occurring, but a mapping carried out during the year showed that Boliden has scope for improvement both in terms of controls and follow-up work. In 2013, an action programme with three main component parts was launched:

- 1. Increased rate and quality, which primarily involves, traffic, admission, visitor routines and signage.
- 2. Skill inventory with the aim of raising awareness of health and safety issues within the organisation.
- Organisational change to bring about a clearer focus on work environment activities.

Clear leadership and good role models are important in the creation and maintenance of the safety culture and high awareness that we aim to achieve. In 2013, all of Boliden's units mapped the 3–5 biggest process risks and the way in which they are handled, or should be handled. Health and safety inspections that include members of the Group management team have been carried out with increased frequency during the year at all units, and Boliden's CEO, or another member of the Group management team, have participated together with unit managers in nine such inspections. Not only does this tactic involve everyone in Boliden's health and safety work and concretise the concept of visible leadership, the health and safety inspections also provide an important forum for knowledge transfer within the senior management. These health and safety inspections will continue in 2014.



BSafe – a concept designed to enhance awareness of safety issues and work in connection therewith – was launched in 2013.

BSafe is part of Boliden's work with visual, clear and standardised information on safety measures, correct behaviour, and correct equipment in all workplaces. In concrete terms, this means, among other things, that

all employees have a duty to draw attention to any breaches by their colleagues of safety routines and to halt production if this is required in order to improve safety. The implementation of the New Boliden Way continued during the year and also includes methods of ensuring a clean and tidy workplace. Consistent and

<sup>1)</sup> The number of Lost Time Incidents (LTI)/Total number of hours worked x 1,000,000. An accident that occurs at work and which results in absence from work on the following day or for an extended period of time.

committed leadership at all levels, committed employees, and strong peer pressure to eliminate tolerance of risky behaviour are all important cornerstones of this work.

#### **Healthy employees**

Being healthy is not just good for the individual in question, it also promotes Boliden's success. Boliden has established a proactive programme of health work and has seen a pleasing trend in health-related statistics over an extended period of time. In 2013, Boliden's sick leave rate was 3.9 per cent (3.7%).

Boliden offers a wide range of activities, such as recurring "back schools", exercise tips, free 24/7 access to the company gym, staff canteens that specialise in healthy foods, and our recurring "Stub it out" campaigns.

Well-being also requires effective rehabilitation activities – something that is particularly important when it comes to reducing long-term sick leave. The goal of our rehabilitation work is to ensure that employees are able to return to their previous positions, but where this is not possible, Boliden strives to offer a position elsewhere within the operations.

#### Securing tomorrow's talent pool

Boliden's ability to attract, develop and retain employees with the right skill sets and commitment levels are vital for our competitiveness and a top priority. In a time when many of our employees are reaching retirement age, coupled with the fact that fewer and fewer students are studying scientific subjects, the competition for skilled employees is high.

Boliden shall provide a safe work environment that is characterised by professionalism, good developmental opportunities, good leadership and management, and a long-term sustainable approach. Our skill development and recruitment work is based on Boliden's needs and strategic goals, such as the creation of a diverse workforce, an increase in the number of women working for the Group, and the need to manage the generation shift.

#### Talent pools

Boliden, in common with the rest of the sector and much of heavy industry as a whole, is facing a generation shift. This, coupled with the fact that the Group's operations are often conducted in regions with a limited population base, demands that Boliden increases its exposure to the next generation of employees. The competition for certain occupational categories, such as mining engineers, geologists, geophysicists, process engineers and experienced miners, is particularly tough. Boliden's operational bases all have their own recruitment plans and are responsible for ensuring their respective talent pools are filled.

Interesting career opportunities are created by encouraging mobility within the Group and prioritising internal recruitment in the talent and managerial pool.

#### Employee development

Boliden offers massive potential for an individual to grow while remaining within the Group and has several skill development programmes designed to generate the preconditions and structures needed for career and skill planning. Talent pools, leadership development programmes and managerial evaluation programmes are all key components of this work. A system for evaluating and

#### Social goals and results for 2013

AREA	GOAL	RESULTS, 2013	COMMENTS ON RESULTS
Number of accidents every month at all units	Zero accidents	The number of accidents (accident frequency¹), including contractors, fell slightly in 2013 from 9.1 to 8.9. The accident frequency for own employees was 7.0 (6.6). Boliden's units had an average of 6 (8) accident-free months during the year.	Accidents have increased over the past two years in spite of Boliden's systematic elimination of dangerous aspects of the operations, the safe behaviour training it has organised for its employees, and the protective equipment it has provided. Mapping of the causes of accidents has failed to yield an unambiguous answer and Boliden will, therefore, in order to break the negative trend, strengthen its leadership and expertise in the work environment sphere. Work in this area includes appointing a safety officer for health and safety as of 2014. Our goal of zero accidents remains in force.
Sick leave	<4.0 per cent	The sick leave rate in 2013 was 3.9 per cent (3.7%). Four production units, however, have failed to achieve the goal of <4.0 per cent.	Boliden has achieved its Group goal of a sick leave rate of below 4 per cent. Boliden's systematic and preventative health work, coupled with effective rehabilitation, has yielded positive results. Efforts to ensure that all units achieve levels on a par with or below the target level are continuing and the sick leave rate goal has been tightened up for 2018.
Number of female employees <sup>2</sup>	>20 per cent	At the end of 2013, 17.1 per cent (16.9%) of the work- force was female.	Boliden is moving in the right direction. The number of women working within Boliden increased by 0.2 per cent in comparison with 2012, and the number of women among Boliden's 100 most senior managers is 27 per cent. The figures do, however, differ from one area of the operations to another: 35 per cent of all truck drivers at the Aitik mine, 23 per cent of the staff at Boliden's mine engineering function and 33 per cent of Boliden's exploration department are women (refers to the average number of employees). Efforts to increase the number of women have, among other things, involved all units working to individual gender equality plans and holding recurring training days.

<sup>1)</sup> Accident frequency – the number of accidents leading to lost time per 1 million hours worked

<sup>&</sup>lt;sup>2)</sup> Refers to full-time employees



developing employees was introduced in 2013 and is intended to result in improvements in the talent management sphere and in the ongoing improvement work carried out within the framework of the New Boliden Way.

For further information, please see Boliden's website at www.boliden.com

#### Securing tomorrow's talent pool

Efforts to improve awareness of Boliden among students at universities and colleges of further education continued during the year and will, in the long term, help grow the recruitment base. One example of these efforts is Boliden's partnership with the Luleå University of Technology. A systematic programme of work, with well-defined messages and clear priorities in terms of the activities to be carried out and the fora to be visited, are the cornerstones of this work. Measurements and rankings among students and "young professionals" provide relevant information, enabling Boliden to track the way in which it is perceived and what these groups are looking for in a future employer. Surveys have shown that areas linked to sustainable development are valued highly in these groups, as are a work-life balance, an equal opportunities workplace, and personal development — all opportunities offered by Boliden.

#### Diversity and equal opportunities

Diversity leads to dynamism, creativity and, ultimately, to greater profitability. Boliden endeavours to ensure its workforce is made up of people with different backgrounds, of different ages, and with different experiences.

The metals industry is traditionally male-dominated and although the industry has progressed, e.g. through technological development that has reduced the heavy, manual aspects of the job, Boliden still faces a challenge when it comes to attracting women. Boliden's goal is for at least 20 per cent of its workforce to be made up of

women by the end of 2018 and if we are to achieve this goal, one in every three recruits must be female. At present, some 17 per cent (17%) of Boliden's employees are women.

Deliberate investments include equal opportunities plans at all units, recurrent training days, and female networks within the Group.

#### Work-life balance

Boliden regards a work environment that offers work-life balance as a prerequisite for successfully attracting and retaining talented employees. This is an important component of ensuring our employees' well-being and their ability to perform.

Some of the countries in which Boliden conducts operations offer economic compensation to employees on parental leave, and employees on parental leave are also kept informed of what is going on and how things are developing at their workplace.

Boliden has received external acknowledgement of its efforts to create a balance between employees' work and private lives and in 2012, the Unionen trade union declared Boliden to be a parent-friendly workplace.

#### **Boliden wins the Swedish Industry Equality Prize**

In 2013, Boliden was awarded the Swedish Industry Equality Prize. The prize was launched in 2012 by the labour market parties that make up the Swedish Industry Council. The jury's citation explaining why they awarded the 2013 prize to Boliden reads as follows:

"A company within one of our most important basic industries has, through deliberate efforts, persuaded women to become miners and has a smelter where the majority of the management team are female. This is a company that promotes members of staff who are on parental leave and was a pioneer in emphasising the importance of paternity leave. The company thus not only blasts rock, it blasts a great many prejudices about the mining industry."

# Boliden's environmental work

Boliden operates a systematic programme of environmental work and its ambition is to exceed legislative and regulatory requirements. Boliden shall live up to the outside world's expectations and boost its competitiveness by developing new methods and making investments that reduce its environmental impact.

Based on the operations' environmental impact, Boliden identified the following environmental issues as priority areas during the period from 2009 to 2013:

- · Minimising emissions and discharges to air and water
- · Limiting our impact on the physical environment
- · Handling waste in a responsible manner

#### Boliden shall have zero environmental accidents

Boliden's goal is zero environmental accidents<sup>1)</sup>. Achieving our goal of zero environmental accidents demands efficient systems and stable processes at every stage of the value chain. Boliden also carries out a continuous programme of risk assessments, remedial action plans, improved routines, and the introduction of new and improved technologies. Ultimately, it is the combination of a sound structural basis and the individual employee's attitude and behaviour that will determine how well Boliden succeeds in realising this ambition, which means that our work with attitudes and behaviour is key.

There were 13 (9) environmental accidents in 2013, of which three involved incidents where limit values were exceeded. The environmental accidents during the year otherwise entailed spillages within Boliden's facilities that were immediately cleaned up. None of the accidents will cause lasting damage or have a significant environmental impact.

Environmental reporting was extended during the year to bring about increased incident reporting with causal analyses, which is a prerequisite for efficient maintenance work. All environmental goals are followed up monthly, with the exception of the carbon dioxide goal, which is followed up quarterly. Follow-up work is conducted at the Group's management group meetings and the results are presented in the Group's quarterly reports.

#### Environmental impact throughout the value chain

The scale of the operations' environmental impact varies along the length of the value chain (see illustration on the following pages

#### Environmental goals and results for 2013

AREA	GOAL	RESULTS, 2013	COMMENTS ON RESULTS		
Metals to water <sup>2)</sup>	Reduce by 25 per cent.	Discharges of metals to water have been reduced by 58 per cent (53%) since 2007.	Discharges of metals and nitrogen to water have fallen to well below target levels. Considerable efforts have been		
Nitrogen to water	Reduce by 20 per cent.	Discharges of nitrogen to water have been reduced by 26 per cent (14%) since 2007.	made during the goal period to increase the capacity of the water treatment plants and to process large amounts of precipitation. A great deal of work has also been done internally on optimising the treatment processes and reducing disruptions.		
Metals to air <sup>3)</sup>	Reduce by 25 per cent.	Emissions of metals to air have been reduced by 45 per cent (43%) since 2007.			
Sulphur dioxide to air <sup>4</sup>	Reduce by 10 per cent.	Emissions of sulphur dioxide to air have been reduced by 27 per cent (5%) since 2007.	Emissions of metals and sulphur dioxide to air have declined to well below the target level. Substantial improvements have been made with regard to planning maintenance work in a way that reduces unplanned stoppages and breakdowns, and on attention to detail in the way the processes are run in order to optimise the gas purification.		
Carbon dioxide emissions <sup>5)</sup>	Increase by a maximum of 3 per cent (taking into account planned production increases).	Carbon dioxide emissions have increased by 4 per cent (4%) since 2007 using the 2007/2008 calculation methods. The reported figure indicates a total increase of 22 per cent, but the calculation method has changed and the figures are not comparable with those at the beginning of the period.	The goal was to ensure that absolute emissions did not increase by more than 3 per cent. This target figure was exceeded slightly when the comparable emissions increased by a further 1 per cent. The emissions volumes are affected by production levels and changes in the product mix.		

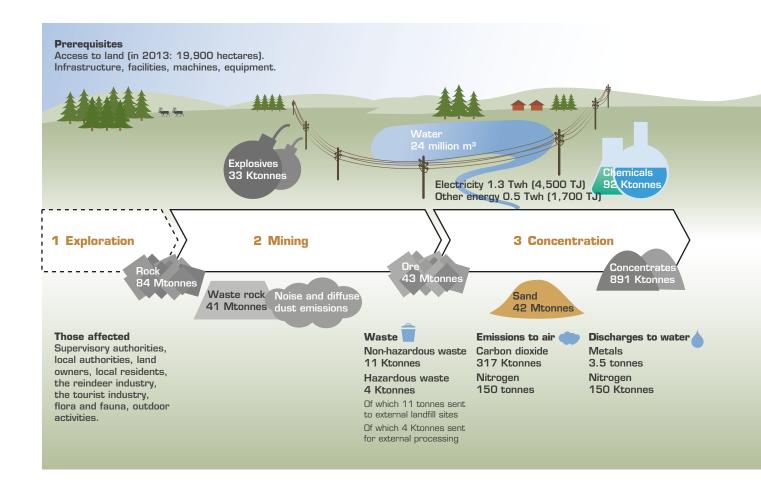
The environmental goals are given in absolute figures (kilos or tonnes). Base year, 2007. The goals have been broken down by the respective operating units in order to facilitate follow-up work. They are also, in order to increase transparency, reported internally every month with the exception of carbon dioxide, which is reported quarterly.

- 2) Copper, zinc, lead, nickel, cadmium and mercury.
- 3) Copper, zinc, lead, nickel, cadmium and arsenic.
- 4) The figures for the base year 2007 have been adjusted by 630 tonnes due to the acquisition of a sulphuric acid plant.
- 5) The calculation method has changed. The original calculation was based primarily on consumption of fuels and reducing agents in production and on

indirect emissions from electricity purchased. The implementation of ETS at the smelters entailed the introduction of a more complete presentation of emission and discharge sources that takes into account the input coal for raw materials, for example. There is no source data (in the form of reliable carbon content provisions for all materials) that would enable a thorough calculation of these emissions retroactively from the beginning of the period

For details of Boliden's new environmental goals for 2018, see page 64.

<sup>1)</sup> A serious accident that causes serious harm and/or results in breaches of legislative requirements or licences



60–61). Exploration has no truly significant environmental impact itself, while mining brings about changes in the landscape and causes noise and vibration. Mines and smelters give rise to waste, dust and emissions and discharges of metals to air and water. The operations require large amounts of energy which, in itself, gives rise to carbon dioxide emissions. The environmental impact is minimised through the use of the best available technology and methodologies.

All of Boliden's mines and smelters work with ISO 14001 certified environmental management systems. The Group's energy management system is currently being updated and all of Boliden's units are working towards ISO 50001 certification. Boliden Tara and Boliden Harjavalta have already achieved this certification. The Group's smelters are also ISO 9001 (quality) certified.

#### Emissions and discharges to air and water

The process of extracting metals generates emissions and discharges, and Boliden is responsible for continuously managing and minimising these emissions and discharges and their negative effects. Stable processes that can be run with the fewest possible maintenance shutdowns are important in reducing these emissions and discharges and Boliden is, to this end, continuously investing in process improvements and new technologies. A number of renovation work programmes were carried out during the year in order to upgrade existing equipment and implement new technologies. Aitik had the longest repair shutdown in history.

Reducing emissions and discharges of metals, nitrogen, sulphur dioxide and carbon dioxide, and reducing diffuse dust emissions to

the air in order to maintain good water quality have always been high priority areas for Boliden's environmental work, and will continue to be so.

#### Discharges to water

The primary environmental impact of discharges to water lies in the risk that the affected bodies of water and their beds are contaminated by foreign substances that may disturb their natural balance.

Boliden's operations use large amounts of water, and reusing the water and returning it to the processes enables Boliden to reduce both its water withdrawal and its discharges.

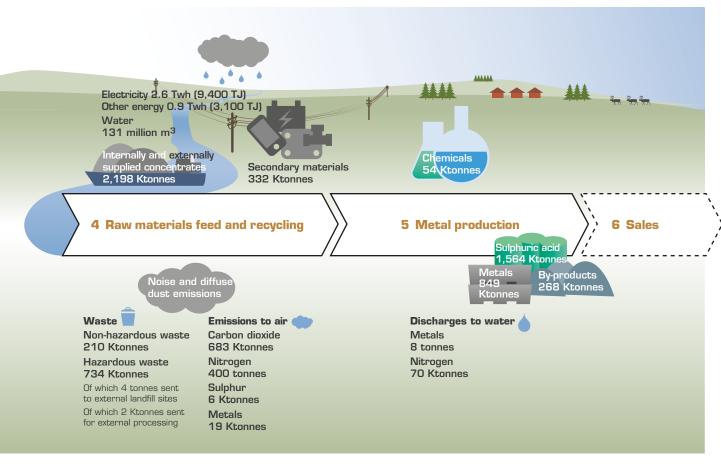
Boliden's discharges to water nowadays mainly comprise metals and nitrogen.

70 per cent (65%) of the metal discharges come from the smelters' water treatment plants that also treat the rainwater that falls on the industrial park area. Boliden's mines account for the remaining 30 per cent (35%) in the form of discharges from tailings ponds at the mines' concentrators and water treatment plants.

The mining operations account for 70 per cent (80%) of Boliden's nitrogen discharges, which result mainly from the use of explosives. The other 30 per cent (20%) come from the sedimentation tank at the Kokkola zinc smelter.

Reducing nitrogen discharges was a focus area for Boliden in 2013. Nitrogen discharges decreased by 13 per cent year on year, with Tara accounting for the biggest reduction.

Water management is critical in maintaining the quality in the water that is discharged into recipients to the standard mandated in the EU's Water Directive. Heavy precipitation is one of the main



The scale of the operations' environmental impact varies along the entire length of the value chain. Large amounts of rock are mined and successively refined through the addition of different input goods, such as explosives and chemicals, and are turned into finished metals and by-products. Emissions to air, discharges to water and waste are created throughout the process chain.

risks to Boliden's ability to meet applicable limit levels as the water treatment capacity is not always sufficient to handle the occasional sharp rise in water levels.

The water treatment processes are constantly being reviewed and in 2014, Boliden's operations will implement water management plans to ensure better control over and following up on the Group's water management.

#### Emissions to air

Boliden's most significant emissions to air comprise both the metal and sulphur dioxide emissions formed by the smelters' process gases and the direct emissions of carbon dioxide from incineration processes and transportation. The indirect carbon dioxide emissions from the electricity consumed by the Group account for just under half of the total carbon dioxide emissions, based on Boliden's chosen calculation method.

Boliden's direct carbon dioxide emissions are closely connected to production volumes in that the higher the production level, the higher the energy consumption and, hence, the greater the carbon dioxide emissions. One industrial phenomenon that has impacted Boliden is the fall in the metal grades of the ore extracted, which means that the ore requires additional processing and has consequently resulted in increased energy consumption per tonne of metal produced. Deteriorations in the quality of the smelters' input raw materials has resulted in reduced recovery and, hence, in emission increases per tonne of metal produced.

As part of its efforts to reduce its carbon dioxide emissions, Boliden exploits the surplus heat generated at the smelters. It is estimated

that approximately 602 GWh (568 GWh) was used internally in 2013 and that 775 GWh (844 GWh) was supplied to external providers.

The mode of transport used also affects Boliden's carbon dioxide emissions. Most of the transportation within the mine areas uses diesel vehicles, although recent investments in electrified conveyor belts, for example, have reduced the relative diesel consumption. Approximately 70 per cent of the transportation of metal concentrates and other smelting materials is done by ship or rail. The transport of finished metals from the smelters is primarily by ship or rail within Europe, and often involves reloading on to trucks for the final stretch of the journey to the customer.

The EU's Emissions Trading Scheme (ETS) is an important issue for Boliden involving both ways of reducing emissions – given planned production levels and available technology – and predicting the costs of Boliden's future purchases of emission rights.

All of Boliden's smelters are subject to ETS for the period from 2013–2020. The smelters were collectively allocated preliminary emission rights for 3.87 million tonnes of carbon dioxide, corresponding to 99 per cent of the forecast emissions for that period.

#### Energy supply

Energy consumption and carbon dioxide emissions have increased in recent years, primarily as a result of increased production. Boliden intends to break this trend, increased production notwithstanding.

Mapping work was carried out in 2013 in order to identify Boliden's carbon dioxide footprint. The information obtained has,

among other things, formed the basis for setting Boliden's new carbon dioxide emission goals and for identifying the ways in which Boliden shall conduct its energy and climate control work.

Boliden engages with the issue of long-term energy supply on several levels, and is a joint-owner of BasEl and Industrikraft AB – trade associations for energy-intensive industrial consumers – through which Boliden is working to secure more sustainable and efficient energy supplies and to develop energy production in Sweden.

The origins of the electricity Boliden uses is determined by the energy mix provided by the different countries in which the Group operates. Hydroelectricity predominates in Norway, while hydroelectricity and nuclear power are the main sources used in Sweden, and in Finland, a combination of different sources are employed. In Ireland, a higher percentage of the energy used is derived from fossil fuels.

#### Impact on the physical environment

Boliden's operations utilise large areas of land for exploration activities, mining operations, tailings ponds and clarification ponds. A mine's environmental performance throughout its lifespan can be substantially improved by identifying and planning for environmental consequences before mining commences. Reclamation is one of Boliden's most important sustainability issues and the Group's reclamation programmes shall, as far as possible, restore utilised areas of land to their original condition and make a positive contribution to biological diversity.

Boliden has a direct reclamation responsibility for 30 or so mining areas and works systematically with risk analyses for and supervision of every area. A total of SEK 1,651 million (SEK 1,618 m) had been allocated for the reclamation of mining areas and smelters by the end of 2013.

#### Dams

Boliden is currently responsible for around 40 dam facilities which have been used, or are being used, to deposit tailings sand or other waste and for water management. Boliden endeavours to minimise its impact on the surrounding area, both during construction and use and after the dams' operating lifespans. Boliden complies with the mining industry's guidelines for dam safety (GruvRIDAS) and supports the dam safety policy of the Swedish trade association, SveMin.

See Boliden's website for further information (http://www.boliden.com/Sustainability/Environmental-responsibility/Land/Reclamation/).

#### Forestry and land management

Boliden owns approximately 19,900 hectares of land. Boliden needs the land to carry out its exploration work and thereby expand its operations. Boliden's forestry is conducted in accordance with the principles of the FSC (Forest Stewardship Council) certifica-

tion. See Boliden's website for further information about the Group's forestry and land management (http://www.boliden.com/Sustainability/Environmental-responsibility/Land/Forest/).

#### Waste management

Boliden's mines and smelters generate waste comprising waste rock, tailings sand, slag, sludge and dust. Some of the waste generated can be used as a raw material in another process. Boliden's waste management is, therefore, not just about minimising and processing end waste, it is also about converting waste into raw materials. The Group's waste products are sent to other companies for extraction in the same way as Boliden receives other companies' waste products for metal extraction, thereby enabling the amount of end waste that has to be sent to landfill to be minimised.

Boliden always attempts to identify internal solutions for recycling waste products or sending them to landfill. Waste products sent to other countries are subject to the legislation governing the export of waste to landfill sites or for recycling. Boliden also has its own routines for ensuring that waste is handled correctly and safely, such as compliance with guidelines for evaluation of business partners and, when necessary, carrying out external audits at the waste recipient sites. Remuneration for processing waste is not paid until the work is completed. Process waste with a certain mercury content must, as a result of EU legislation, be permanently stored underground in future.

Boliden generates mercury-bearing waste, and the Kokkola and Odda smelters use underground permanent storage facilities for this type of waste. The Rönnskär smelter is working to identify a suitable location for permanent storage of mercury-bearing waste.

Boliden's operations are expanding and new materials are being introduced into the processes. Boliden completed mapping work on the operations' process waste in 2013 in order to increase controls and generate the potential for optimum waste management.

#### Recycling

Metals can be recycled endlessly without any deterioration in their quality. It is important, therefore, that electronic materials and scrap, such as telephone cables, copper roofs and copper pipes, from the demolition or construction of buildings and infrastructure is reutilised. The Rönnskär smelter is the world's biggest recycler of electronic material, and an estimated 50 per cent (65%) of the gold, 30 per cent (30%) of the copper, 30 per cent (40%) of the silver, and 70 per cent (80%) of the zinc produced there comes from recycled materials.

Boliden Bergsöe – the only smelter in the Nordic region that recycles lead – is another shining example, producing approximately 50,000 tonnes of lead each year, 100 per cent of which comes from scrap car batteries and lead scrap.

# Evaluation of business partners

Boliden can, together with its business partners, be the first sustainable link in the metals' value chain. Being a responsible partner means Boliden is able to help improve sustainability within the mining and metals industry.

#### **Business partners**

The choice of business partner has a significant impact on Boliden's profitability and sustainability performance and it is important, therefore, that Boliden makes informed choices and endeavours to work with operators who, in partnership with Boliden, maintain high standards of sustainability in their operations. Boliden has instituted a process for evaluating its business partners with regard to their approach to business and sustainability.

In November 2013, Boliden hosted the 2013 Boliden Supplier Summit – a conference at which Boliden brought together its suppliers for a presentation of Boliden's operations and orientation. Twenty or so talks were given and the subjects addressed included safety, sustainability and evaluation of business partners.

#### Boliden's suppliers and customers

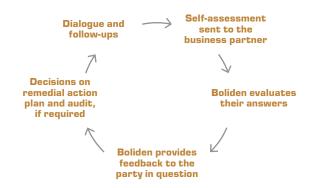
Boliden's suppliers can be divided into those from whom Boliden buys metal concentrates and secondary raw materials, and those from whom Boliden buys in all of its other input goods and services.

Boliden's copper customers mainly comprise manufacturers of wire rod, copper rod and copper alloys who, in turn, sell their products on to the construction, electronics and automotive industries. Approximately one third of Boliden's zinc sales are made to large steelworks.

#### **Evaluation of business partners**

Boliden has evaluated its business partners since 2010 in accordance with its Evaluation of Business Partners (EBP) programme. Partners are evaluated not only with regard to commercial aspects, but from a sustainability viewpoint that is based on the 10 principles of the UN Global Compact and on ILO and ISO standards. The areas addressed include human rights, working conditions, environmental responsibility and systematic environmental work, anti-corruption, and the way in which the business partners follow up on and evaluate their own sustainability work.

#### Boliden's process for evaluating business partners



In 2013, around 60 business partners have completed the initial self-assessment process, which is a tool designed to identify the areas that Boliden will then address more closely. Improvement work by the supplier is a precondition of a continued partnership. The companies are audited in special cases and these audits are followed up in the form of reports on remedial measures implemented.

#### Division of responsibility

Every departmental manager is responsible for ensuring that his or her department's business partners undergo the evaluation process. Feedback on business partners who have completed the self-assessment process shall be submitted every quarter. The departmental manager is also responsible for deciding on remedial measures in relation to the business partner. If a business partner is underperforming to such an extent that the departmental manager wishes to take a decision that poses a risk of substantial economic impact, the support of the Business Area Manager must be obtained before any such decision is taken. In 2013, Boliden drew up a manual designed to aid in interpreting the responses provided in the self-assessments.

#### **Conflict** minerals

Boliden produces around 15 tonnes of gold every year. Half of the raw materials for this production come from recycling and the other half from mined concentrate, largely from our own mines. Boliden can guarantee that concentrate currently acquired from other mines does not come from conflict zones as Boliden has no suppliers in high risk areas. The secondary raw material may, however, have passed through several links in the supply chain before the material reaches Boliden.

An external audit, based on the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas<sup>1)</sup>, was carried out at Boliden during the year to ensure our continued inclusion in the London Bullion Market Association (LBMA) list of recommended gold producers. Companies included in the list undertake to ensure that their raw materials chain complies with a number of ethical criteria.

#### Trading in materials and waste

Boliden complies with national legislation and international guidelines such as the OECD guidelines for trade in materials, waste and hazardous waste, and for some years now, Boliden has been implementing gate fees to the processing of such materials. This means that the operator who handles material received from Boliden for processing or permanent storage does not receive payment in full until they can demonstrate that the material has been processed. This clause is included in all of Boliden's agreements.

 DECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, second edition 2013.

# New sustainability goals

Identifying and selecting the most important and relevant challenges within the context of our sustainability work is an ongoing process. The key factor shared by all of the areas that Boliden prioritises is that they have a direct impact on our stakeholders.

The sustainability issues that Boliden prioritises are those over which the company can exert control and which further Boliden's ambition to be the first sustainable stage in the metals' value chain. The following areas have, starting in 2014, been identified as priority areas for Boliden's ongoing sustainability work:

- Create a safe work environment
- Secure the future talent pool
- · Achieve diversity and a better gender balance
- Minimise our impact on soil, air and water
- Make efficient use of resources
- · Reclamation work and protecting natural values

#### Measures to reduce accidents and cut the sick leave rate

Work with training, information, health and safety inspections, visible leadership, and the elimination of hazardous elements is continuing with increased vigour in order to strengthen our safety culture and reduce the number of accidents. The safety work action programme launched during 2013 (see section under Boliden's employees Working towards a safer Boliden) will continue in 2014. Boliden will, as of 2014, establish a new sustainability organisation within which the company will appoint a person at Group level with special responsibility for safety.

Boliden is also streamlining its health-related work in order to ensure we have an efficient company health scheme and to achieve our new goal of a sick leave rate of less than 3 per cent. The work will promote health, be preventative and rehabilitative and address issues relating to the importance of work in the context of health and well-being. The work will be team-based and the teams will include doctors, nurses, physiotherapists and psychologists.

A Group-wide occupational hygiene project has also been running since 2013 and the work includes an in-depth mapping of standards and quality at the units' control programmes that monitor exposure to particles, noise, vibrations and chemicals.

#### Measures to achieve our gender balance goal

Boliden's goal is for at least 20 per cent of our workforce to be made up of women by 2018, which means that one in every three new recruits must be female. Important tools in enabling us to achieve this goal include all units working in line with individual equal opportunity plans and holding recurring training days for female networks within the Group.

#### Measures to reduce emissions and discharges

The task of stabilising its carbon dioxide emissions while simultaneously increasing production poses a very real challenge for Boliden. All of our operations have mapped their carbon dioxide emissions and identified the places within the respective processes where the

biggest footprints exist. The results will form the basis for a new climate strategy that will include action plans designed to stabilise our carbon dioxide emissions.

The application of best available technology, the efficient use of resources, and the replacement of fossil fuels with renewable fuels will all be important components of this work.

Another important focus area entails handling our nitrogen discharges to water. The ongoing mine expansions will generate increased nitrogen discharges and an action plan designed to limit this increase will be drawn up. The management and monitoring of water consumption will, at the same time, be improved by means of Water management plans, which will be drawn up for all of Boliden's operations.

All operations will analyse emission sources and dispersal patterns, in order to reduce Boliden's diffuse emissions, such as dust or process gases that do not pass through a gas treatment system.

Boliden's reclamation work on mining areas is another priority issue. Boliden has direct responsibility for some 30 areas and its goal is to complete the planned measures at a minimum of five such areas by 2018.

#### Measures to ensure zero environmental accidents

The "zero environmental accidents every month" goal will be achieved by means of stable and upgraded processes, more complete reporting – including incident reporting and follow-up work – and ongoing efforts on changing attitudes.

#### Sustainability goals

AREA	GOALS FOR 2018
The number of accidents each month at all units	O accidents
Sick leave rate	Less than 3.0 per cent
Percentage of female employees	At least 20 per cent women
Metal discharges to water <sup>1)</sup>	Reduce by 25 per cent
Metal emissions to air1)	Reduce by 10 per cent
Sulphur dioxide emissions to air <sup>1</sup> ]	Reduce by 10 per cent
Carbon dioxide intensity for CO <sub>2</sub> per tonne of metal produced	≤ 0.77
Number of environmental accidents per month (class A accidents <sup>2)</sup> ).	0

<sup>1)</sup> Base year: 2012

<sup>2)</sup> A serious accident that causes significant environmental harm and/or results in the limit values prescribed in permits being exceeded.

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

#### To the readers of Boliden AB's Sustainability Report

#### Introduction

We have been engaged by the Board of Directors of Boliden AB to undertake a limited assurance engagement of the Boliden AB's Sustainability Report for the year 2013. Our review has been limited to the sustainability information for the year ended December 31, 2013 and does therefore not include comparable data for previous years. The Company has defined the scope of the Sustainability Report in the GRI index on pages 121–123 in the Annual Report.

### Responsibilities of the Board of Directors and the Executive Management for the Sustainability Report

The Board of Directors and the Executive Management are responsible for ongoing activities regarding the environment, health & safety, quality, social responsibility and sustainable development, and for the preparation and presentation of the Sustainability Report in accordance with the applicable criteria, as explained on pages 8–9 in the GRI Report, and are the parts of the Sustainability Reporting Guidelines G3, published by The Global Reporting Initiative (GRI), which are applicable to the Sustainability Report, as well as the accounting and calculation principles that the Company has developed and disclosed.

#### Responsibilities of the auditor

Our responsibility is to express a limited assurance conclusion on the Sustainability Report based on the procedures we have performed.

We conducted our limited assurance engagement in accordance with RevR 6 Assurance of Sustainability Reports issued by FAR. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the Sustainability Report, and applying analytical and other limited assurance procedures. The procedures performed in a limited assurance engagement vary in nature from, and are less in extent than for, a reasonable assurance engagement conducted in accordance with IAASB's Standards on Auditing and Quality Control and other generally accepted auditing standards in Sweden. The procedures performed consequently do not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express a reasonable assurance opinion.

The criteria on which our procedures are based are the parts of the Sustainability Reporting Guidelines G3, published by The Global Reporting Initiative (GRI), which are applicable to the Sustainability Report, as well as the accounting and calculation principles that the Company has developed and disclosed. These criteria are presented on pages 8–9 in the GRI Report. We consider these criteria suitable for the preparation of the Sustainability Report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions below.

#### **Limited Assurance Conclusion**

Based on the limited assurance procedures we have performed, nothing has come to our attention that causes us to believe that the Sustainability Report is not prepared, in all material respects, in accordance with the above stated criteria.

Stockholm March 7th, 2014 Ernst & Young AB

Lars Träff

Authorized Public Accountant

Håkan Ulrichs Partner, Climate Change & Sustainability Services





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# Consolidated Income Statements – the Group

			Restated
Amounts in SEK million	Note	2013	2012
Revenues	2	34,409	40,001
Cost of goods sold	5	-31,419	-34,559
Gross profit		2,989	5,442
Selling expenses	5	-340	-385
Administrative expenses	4, 5	-525	-535
Research and development costs	5	-405	-429
Other operating income	6	102	80
Other operating expenses		-18	-3
Results from participations in associated companies	15	2	1
Operating profit	2–6, 9,11–13	1,803	4,171
Interest income and other similar items	7	31	87
Interest expenses and other similar items	8	-253	-265
Profit after financial items		1,581	3,992
Taxes	16	-288	-651
Net profit for the year		1,294	3,341
Net profit for the year attributable to:			
The Parent Company's shareholders		1,291	3,339
Minority holdings		3	2
Earnings per share, SEK	21	4.72	12.21
There are no potential shares and hence no dilution effect			
Average number of shares, basic and diluted		273,511,169	273,511,169

#### The Group's consolidated statement of comprehensive income

The of oup's consolidated statement of compr	CHCHSIVE IIII	Restated
Amounts in SEK million Note	2013	2012
Net profit for the year	1,294	3,341
Other comprehensive income		
Items that will be reclassified to the profit or loss		
Cash flow hedging		
Change in market value of derivative instruments	728	-147
Fiscal effect on derivative instruments	-160	39
Transfers to the Income Statement	-200	-201
Tax on transfers to the Income Statement	44	53
Effect of change in tax rate on the market value of derivative instruments	-	-8
	412	-265
Year's translation difference when converting overseas operations	168	-159
Result of hedging net investments in overseas operations	-212	219
Tax on the net profit for the year from hedging instruments	47	-48
	3	12
Total items that will be reclassified to the profit/loss	415	-254
Items that will not be reclassified to the profit/loss		
Revaluation of defined benefit pension plans	142	-126
Tax attributable to items not reversed to the profit/loss for the period	-35	29
Total items that will not be reclassified to the profit/loss	107	-97
Total other comprehensive income	522	-351
Comprehensive income for the year	1,816	2,990
Comprehensive income for the year attributable to:		
The Parent Company's shareholders	1,813	2,988
Minority holdings	3	2

# Consolidated Balance Sheets – the Group

-			Restated	Restated
Amounts in SEK million	Note	31-12-2013	31-12-2012	01-01-2012
ASSETS				
Fixed assets				
Intangible fixed assets	11	3,130	3,160	3,184
Tangible fixed assets	12–13			
Buildings and land		4,626	4,317	3,711
Deferred mining costs		5,132	4,629	3,913
Machinery and other technical facilities		16,768	15,552	14,263
Equipment, tools, fixtures and fittings  New construction work in progress		183 638	217 424	237 621
New Corrsu dedon work in progress		27,348	25,138	22,745
Other fixed assets		27,010	20,100	22,710
Participations in associated companies	15	9	8	7
Other shares and participations		24	24	55
Deferred tax receivables	16	68	247	220
Long-term receivables		98	104	109
		199	383	391
Total fixed assets		30,677	28,681	26,320
Current assets	17	0.004	0.044	7 707
Inventories Accounts receivable	18	8,031 1,048	8,244 1,016	7,737 1,014
Tax receivables	10	94	12	30
Interest-bearing receivables		3	3	3
Derivative instruments	26	500	322	1,257
Other current receivables	19	877	791	880
Liquid assets	10	611	1,011	355
Total current assets		11,164	11,399	11,277
TOTAL ASSETS		41,841	40,080	37,597
SHAREHOLDERS' EQUITY AND LIABILITIES				
Shareholders' equity	21			
Share capital		579	579	579
Other capital contributed		5,941	5,941	5,944
Translation reserve		-74	-77	-88
Hedging reserve		267	-145 540	120 -452
Defined benefit pension plans Profit carried forward		-442 16,788	–549 16,591	-452 14,342
Shareholders' equity attributable		10,700	10,001	14,042
to the Parent Company's shareholders		23,059	22,340	20,446
Minority holdings		16	14	12
Total shareholders' equity		23,075	22,354	20,458
Long-term liabilities				
Provisions for pensions	22	1,047	1,382	1,266
Other provisions	23	1,512	1,511	1,011
Deferred tax liabilities	16	2,852	2,760	2,977
Liabilities to credit institutions	25	4,346	4,310	4,957
Other interest-bearing liabilities	25	4	5	10
Total long-term liabilities		9,761	9,967	10,222
Current liabilities	0.5	0.040	4.000	201
Liabilities to credit institutions	25 25	3,948	1,666	801
Other interest-bearing liabilities	25 25	9 3,636	0 4,192	0 3,551
Accounts payable Other provisions	23	169	139	123
Current tax liabilities	20	13	105	450
Derivative instruments	26	36	394	810
Other current liabilities	28	1,194	1,263	1,183
Total current liabilities		9,005	7,759	6,918
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES		41,841	40,080	37,597
Pledged assets	29	None	None	None
Contingent liabilities	29	1,608	682	682
<u> </u>	<del></del>	.,230		

# Changes in shareholders' equity – the Group

Amounts in SEKmillion Not	:e								
	Share	holders' equ	uity attribu	table to the	Parent Con	npany's shar	eholders		
	Share capital	Other capital contrib- uted	Trans- lation reserve	Hedging reserve	Defined benefit pension plans	Profit carried forward	Total - Boliden's share- holders	Minority holdings	Total share- holders' equity
21									
Balance Sheet, 31-12-2011	579	5,944	-91	120	_	14,467	21,020	12	21,032
Restatement, IAS 191)	_	_	3	_	-452	9	-440	_	-440
Restatement, IFRIC 201)	_	_	_	_	_	-134	-134	_	-134
Balance Sheet, 01-01-2012, restated <sup>1)</sup>	579	5,944	-88	120	-452	14,342	20,446	12	20,458
Net profit for the year <sup>1)</sup>	-	-	-	-	-	3,339	3,339	2	3,341
Other comprehensive income <sup>1)</sup>	_	_	12	-265	-97	_	-351	_	-351
Comprehensive income for the year <sup>1)</sup>	_	_	12	-265	-97	3,339	2,987	2	2,990
Reclassification	-	-4	-	-	-	4	0	_	0
Dividend to Boliden AB's shareholders	_	_	_	-	_	-1,094	-1,094	_	-1,094
Dividend to minorities	-	-	-	_	-	-	_	0	0
Balance Sheet, 31-12-2012, restated <sup>1)</sup>	579	5,941	-77	-145	-549	16,591	22,340	14	22,354
Net profit for the year	_	_	_	_		1,291	1,291	3	1,294
Other comprehensive income	_	_	3	412	107	_	522	_	522
Comprehensive income for the year	_	_	3	412	107	1,291	1,813	3	1,816
Minority holding in conjunction with acquisition									
Dividend to Boliden AB's shareholders	_	_	_	_	_	-1,094	-1,094	_	-1,094
Dividend to minority interests	-	-	-	-	-	_	-	-1	-1

<sup>1)</sup> Figures restated by reason of alterations to accounting standards, see also Note 1 Significant accounting and valuation principles and Note 30 Restatement of financial reports.

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-74

#### Other capital contributed

Closing balance on Balance Sheet, 31-12-2013

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

579

5,941

#### Translation reserve

The current method is applied to convert the Income Statements and Balance Sheets of overseas subsidiaries. Any exchange rate differences arising are reported under Other comprehensive income. Boliden currency hedges net investments in overseas subsidiaries by adopting the opposite position in the relevant foreign currency. The exchange rate difference on hedging instruments is, after the fiscal effect, reported under other comprehensive income.

Net debt, SEK m	31-12-2013	31-12-2012
Liabilities to credit institutions	8,294	5,976
Other interest-bearing liabilities	13	5
Pension liabilities	980	1,310
Short-term interest-bearing assets	-3	-3
Short-term investments	0	0
Cash and bank balances	-611	-1,011
	8,673	6,276

#### **Hedging reserve**

-442

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

23.059

16

23.075

#### Defined benefit pension plans

16,788

Revaluations of pension undertakings have been reported under Other comprehensive income since 2013. A restatement has been made for the 2012 comparison year.

#### **Profit carried forward**

Refers to profit earned.

Capital employed, SEK m	31-12-2013	31-12-2012
Intangible assets	3,130	3,160
Tangible assets	27,348	25,138
Participations in assoc. companies	9	8
Other shares and participations	24	24
Inventories	8,031	8,244
Accounts receivable	1,048	1,016
Other receivables	1,475	1,217
Provisions, other than for pensions		
and tax	-1,681	-1,650
Accounts payable	-3,636	-4,192
Other non-interest-bearing liabilities	-1,296	-1,728
	34,451	31,236

# Consolidated statements of cash flow – the Group

Amounts in SEK million	Note	2013	2012
	10		
Operating activities			
Profit after financial items		1,581	3,992
Adjustments for items not included in the cash flow:			
Depreciation, amortisation and write-down of assets	11, 12	2,832	2,561
Provisions		-200	132
Other and translation differences		141	-342
Tax paid		-303	-1,145
Cash flow from operating activities before changes in working capital		4,052	5,198
Cash flow from changes in working capital			
Increase (-)/Decrease (+) in inventories		216	-534
Increase (-)/Decrease (+) in operating receivables		-177	234
Increase (+)/Decrease (-) in operating liabilities		-580	615
Other		-5	5
Cash flow from operating activities		3,505	5,518
Investment activities			
Acquisition(-)/Sale (+) of intangible fixed assets		-16	-24
Acquisition (-)/Sale (+) of tangible fixed assets	12	-4,954	-4,151
Acquisition (-)/Sale (+) of financial fixed assets		-3	29
Other		2	17
Cash flow from investment activities		-4,971	-4,129
Free cash flow		-1,465	1,389
Financing activities			
Dividend		-1,095	-1,094
Loans raised		12,101	2,280
Amortisation of loans		-9,946	-1,916
Cash flow from financing activities		1,060	-730
Cash flow for the year		-406	659
Opening liquid assets		1,011	355
Exchange rate difference on liquid assets		6	-3
Closing liquid assets	10	611	1,011

# The Parent Company

#### Income Statements

Amounts in SEK million	Note	2013	2012
Dividends from subsidiaries	14	2,442	2,607
Write-down of participations in Group companies		_	-17
Profit after financial items		2,442	2,590
Profit after financial items Profit before tax		2,442 2,442	2,590 2,590
		-	

The operations of Boliden AB are limited in scale and are conducted on its behalf by Boliden Mineral AB, which means that the profit is reported as part of Boliden Mineral AB.

Boliden AB has no sums to report under Other comprehensive income.

#### **Balance Sheets**

Amounts in SEK million	Note	31-12-2013	31-12-2012
ASSETS			
Fixed assets			
Financial fixed assets			
Participations in			
Group companies	14	3,911	3,911
Participations in other companies		5	5
Other long-term receivables from Group companies		8,365	7,017
Total fixed assets		12,282	10,934
Current receivables			
Current receivables			
from Group companies		3,641	1,266
Total current assets		3,641	1,266
TOTAL ASSETS		15,923	12,200
SHAREHOLDERS' EQUITY AND LIABILITIES			
Shareholders' equity	21		
Restricted equity			
Share capital		579	579
Statutory reserve		5,252	5,252
		5,831	5,831
Non-restricted equity			
Profit carried forward		4,009	2,513
Net profit for the year		2,442	2,590
		6,451	5,103
Total shareholders' equity		12,282	10,934
Current liabilities			
Liabilities to	O.E.	0.044	4.000
credit institutions	25	3,641	1,266
TOTAL SHAREHOLDERS'		3,641	1,266
EQUITY AND LIABILITIES		15,923	12,200
Pledged assets		None	None
Contingent liabilities	29	8,767	7,125

### Changes in shareholders' equity

Amounts in SEK million							
	Share capital	Statu- tory reserve	Non- restricted share- holders' equity	Total share- holders' equity			
Closing balance on Balance Sheet, 31-12-2011	579	5.252	3,607	9,438			
	3/3	3,232	•	•			
Dividend	-	-	-1,094	-1,094			
Net profit for the year	-	-	2,590	2,590			
Closing balance on Balance Sheet, 31-12-2012	579	5,252	5,103	10,934			
Dividend	_	-	-1,094	-1,094			
Net profit for the year	-	-	2,442	2,442			
Closing balance on Balance Sheet, 31-12-2013	579	5,252	6,451	12,282			

The statutory reserve includes amounts which, prior to 1st January 2006, were transferred to the share premium reserve. The profit carried forward comprises, together with the net profit for the year, the total non-restricted equity. The non-restricted shareholders' equity in the Parent Company is available for distribution to the shareholders.

#### Statements of cash flow

Amounts in SEK million	2013	2012
Operating activities		
Profit after financial items	2,442	2,590
Adjustments for items not included in the cash flow:		
Write-down of participations in Group companies	_	17
Cash flow from operating activities	2,442	2,607
Financing activities		
Loans raised	11,920	2,616
Amortisation of loans	-9,546	-1,516
Dividend	-1,094	-1,094
Loans to Group companies	-3,722	-2,613
Cash flow from		
financing activities	-2,442	-2,607
Cash flow for the year	-	-
Opening liquid assets	_	_
Closing liquid assets	-	_

# Notes

All amounts are in SEK million unless otherwise stated. All notes refer to the Group unless otherwise stated.

**Note 01** Significant accounting and valuation principles

#### **General Accounting Principles**

Boliden AB (publ.) Swedish corporate ID no. 556051-4142, is a limited liability company registered in Sweden. The company's registered office is in Stockholm at the address: Klarabergsviadukten 90, SE-101 20 Stockholm. The Boliden share is listed on NASDAQ OMX Stockholm's Large Cap list. On 3rd April 2013, the Boliden share was voluntarily delisted from the Toronto Stock Exchange (TSX) in Canada where the Boliden share previously had a secondary listing. The final trading day for the Boliden share on TSX was 23rd April 2013.

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

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

The Parent Company's functional currency is the Swedish krona (SEK) and this is also the reporting currency for both the Group and the Parent Company. All amounts in the financial reports are stated in millions of Swedish kronor (SEK m) unless otherwise specified.

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

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

The most important accounting principles that have been applied are described below. These principles have been applied consistently for all years presented, unless otherwise specified.

The 2012 comparison figures have been restated in the annual accounts in accordance with the changes to the IAS 19 and IFRIC 20 accounting principles.

The Annual Report was approved for publication by the Board of Directors on 12th February 2014. The Balance Sheets and Income Statements are subject to approval by the Annual General Meeting on 6th May 2014.

# New or amended standards and interpretations from IASB and IFRIC pronouncements that came into force in the 2013 calendar year

IAS 1 Presentation of financial reports (revised): Presentation of Items of Other Comprehensive Income. This standard prescribes a new categorisation of Other comprehensive income that differentiates between items that will, in future, be reclassified into profit or loss and items that will never be reclassified into profit or loss. Boliden's items that will be reclassified into profit or loss are cash flow hedging, translation differences from overseas operations, and the profit or loss from the hedging of net investments in overseas operations. Items that will never be reclassified into profit or loss are the revaluation of defined benefit pension plans. See Other comprehensive income report on page 68.

IAS 19 Employee benefits (revised): the revision means that revaluations of the defined benefit net pension liability must be reported immediately, which means that previously used equalisation mechanisms, such as the corridor method, disappear. Actuarial profits and losses are reported directly under Other comprehensive income. The financing cost of the net pension liability shall, furthermore, be calculated with the help of the discount rate for the pension liability. The cost of service, financing costs and special payroll tax shall be reported in the Income

Statement, while the effects of revaluations shall be reported under Other comprehensive income. Special payroll tax shall, furthermore, be included in the pension liability. The effects of this change on Boliden have primarily been an increase in the pension liability and a reduction in shareholders' equity at the beginning of 2013 and in the 2012 comparison year. Increased disclosure requirements have entailed a presentation of a sensitivity analysis based on the assumptions of importance to Boliden when calculating the defined benefit pension liability, namely the discount interest rate, salaries, and life expectancy. See Note 22 on pages 89-92 and Note 30 on page 97.

IFRS 7 Financial Instruments: Disclosures (revised): this revision refers to the requirement for disclosure of rights to net report payments of financial assets and liabilities. The aim is to clarify the importance of the financial instruments for the company's financial position and results and to illustrate the company's exposure to associated risks entailed by these financial instruments. The revised standard provides additional information by gross reporting the asset and the liability and the effects of offsetting under specific circumstances, such as breach of contract or insolvency. See table in Note 26 on page 94.

IFRS 13 Fair Value Measurement (new): the standard provides a unified framework for the valuation of assets and liabilities at fair value. The standard defines fair value and provides instructions on how to determine fair value, but does not change the requirements with regard to which items shall be valued at fair value. The aim of a valuation at fair value is to estimate the price on the valuation date for the sale of the asset or the transfer of the liability under current market conditions, including risk assumptions. IFRS 13 also states that all of Boliden's financial assets and liabilities reported at fair value in the Balance Sheet, and the financial assets and liabilities not reported at fair value in the Balance Sheet but for which fair value data is presented, shall be classified on the basis of a three-level fair value hierarchy. The new standard has no significant effect on the valuation of financial assets and liabilities, but has entailed the disclosure of supplementary information. See Note 27 on page 95.

IFRIC 20 Stripping Costs in the Production Phase of a Surface Mine: this interpretation addresses the accounting of costs for waste rock stripping during the production phase of an open pit mine. Waste rock, which is stripped in order to release the ore, and the costs of waste rock stripping, shall be carried forward as part of an asset when it is possible to identify that part of an ore body where access is improved. For Boliden, this means that waste rock stripping costs in open pit mines, which were formerly calculated using an average value for the entire open pit mine, are now calculated per individual push-back, which has resulted in higher capitalisation and higher depreciation. Fixed assets at the beginning of 2013 and in the 2012 comparison year have been revalued – see Note 12 on page 84 and Note 30 on page 97.

IAS 36 Impairment of Assets: IAS 36 was revised in conjunction with changes arising as a result of the revision of IFRS 13, and now requires disclosure of the recovery value per cash-generating unit in the 2013 annual accounts. In May 2013, however, IASB issued a revision that eliminates this requirement, and as the revision may be implemented in advance, Boliden has elected to do so.

Other revisions to standards and interpretations that have come into force in the 2013 calendar year are not adjudged to have had any effect on Boliden's financial reporting or accounting.

# New standards and interpretations that come into force in the 2014 calendar year or thereafter

The standards and interpretations presented are those that may, in the opinion of the Group, have an effect in future. The Group intends to implement these standards when they become applicable.

IAS 32, Financial instruments: Presentation (revised). The revision of the standard provides a clarifying guideline stating that financial assets and liabilities shall be offset against one another when this reflects the company's antic-

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Note 01

Significant accounting and valuation principles, cont.

ipated cash flows when settling two or more financial instruments. Boliden

agreements that regulate offsetting between contracted counterparties during

operating activities and in conjunction with circumstances relating to breach

of contract or early termination for all of its financial instruments. The revised

standard will not, in Boliden's opinion, have any significant effect on Boliden's

future financial reporting. The standard will apply as of 1st January 2014.

- IFRS 9, Financial instruments, recognition and measurement. The revi-

sion is part of a complete revision of the existing standard, IAS 39. The

standard entails a reduction in the number of valuation categories for

financial assets and means that the main categories for reporting are at

potential exists, for certain investments in shareholders' equity instru-

accrued acquisition value and fair value, via the Income Statement. The

ments, to report at fair value in the Balance Sheet with the change in value reported directly under Other comprehensive income, where no transfer to

the profit/loss for the period occurs in conjunction with disposal. The stan-

dard has been complemented with regulations regarding write-downs in

the Balance Sheet. A combined view on the way in which Boliden's finan-

cial reporting will be affected will be taken in conjunction with the publi-

cation of the final version of all elements of the project. The EU has post-

- IFRS 10 Consolidated Financial Statements. Entails the introduction of

a single model for determining whether a controlling influence exists for

all of a company's investments. This will result in uniform regulations for

consolidation. A controlling influence exists if the investor 1) is exposed

to or is entitled to variable returns from the investment, 2) has the ability

to affect the return through its power over the investee, and/or 3) there is

a link between the return received and the power over the investee. Boliden

is not of the opinion that the new standard will result in changes in terms

-IFRS 11 Joint arrangements. Divides existing joint ventures into joint oper-

ations – the owners are entitled to assets and undertakings for liabilities in

the investment - or joint ventures - the owners are entitled to the net assets

of the investment. The proportional method shall be used for joint opera-

tions while, for joint ventures, the equity method shall be used. Boliden is

reporting, based on a review conducted of the Group's associated compa-

- IFRS 12 Disclosures of Interest in Other Entities. This standard brings

In order to compile the Financial Statements in accordance with IFRS

accounting principles, assessments and assumptions must be made that

expense amounts, as well as other information provided in the Financial

Statements. The estimates and assessments of the Board of Directors and

future trends. The actual outcome may differ from these assessments.

It is not easy, in the smelters' process inventories and stocks of finished

metals, to differentiate between externally purchased material and mined

nally supplied percentage of process inventories and the stocks of finished

concentrate from the Group's own operations. Assessments of the inter-

metals are, therefore, carried out with the aid of an historically based

the company's management are based on historical experience and forecast

impact the reported asset and liability amounts and the income and

together disclosure requirements regarding subsidiary companies, joint

arrangements and associated companies in a single standard. A number of new disclosure requirements are included. The standard will apply as

not of the opinion that the new standard will have any effect on its financial

poned approval of the standard to an unspecified later date.

of the companies to be consolidated within the company.

nies. The standard will apply as of 1st January 2014.

of 1st January 2014.

**Estimates and assessments** 

Valuation of inventories

breakdown of the raw materials feed.

has entered into ISDA (International Swaps and Derivatives Association)

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

#### Legal disputes

Boliden regularly reviews outstanding legal disputes using internal company legal counsel and, when necessary, with the help of external advisors, in order to assess the need for provisions to be made. See Note 29, Pledged assets and contingent liabilities on page 96.

#### Reclamation costs

Provisions for reclamations are made on the basis of an assessment of future costs based on current conditions. Provisions are reviewed regularly by internal or external specialists and updates made when necessary when the estimated useful lives, costs, technical preconditions, regulations or other conditions of mine and smelter assets change. Boliden also continuously reviews requirements with regard to closed down mines. See Note 12, Tangible fixed assets on page 84 and Note 23, Other provisions, on page 92.

#### Valuation of fixed assets

Impairment tests for tangible and intangible assets are based on the company's internal business plan and on assumptions with regard to future trends in metal prices, treatment and refining charges, and exchange rates, among other things. Changes in market prices of metals, treatment and refining charges and currencies have a substantial effect on the company's future cash flows and hence on the estimated write-down requirement. Assumptions with regard to price trends for metals, treatment and refining charges and currencies are made by the company management with the help of external experts. The assumptions are reviewed on an annual basis and adjusted when necessary. For further information, see Note 12 Tangible fixed assets on page 84.

The depreciation period for deferred mining costs, installations and equipment in mines depend on future ore extraction and the lifespan of the mine. The assessment of these aspects is, in turn, heavily dependent on mineral reserves and, consequently, on anticipated future metal prices. Changes to conditions may entail changes to the rate of depreciation applied in future. Business Area Mines draws up annual production plans for the mines' lifespans.

#### **Consolidated Statements**

The Consolidated Statements cover the Parent Company and all companies over which the Parent Company through ownership, directly or indirectly, exercises a controlling influence. The term "controlling influence" refers to companies in which Boliden has the right to formulate financial and operational strategies. This is generally achieved by ensuring that its ownership share, and the share of votes, exceeds 50 per cent. The existence and effect of potential voting rights that can currently be utilised or converted are taken into account when assessing whether the Group is capable of exercising a controlling influence over another company. Subsidiaries are included in the Consolidated Statements as of the point in time at which a controlling influence was attained, while companies that have been sold are included in the Consolidated Statements up to the time when the sale occurred, i.e. up to the point in time when controlling influence ceased to be exercised.

The Consolidated Statements have been compiled in accordance with the acquisition accounting method, which means that the acquisition value of a company comprises the fair value of the payment made (including the fair value of any assets, liabilities and own equity instruments issued). The identifiable assets, liabilities and contingent liabilities acquired are reported at their fair value on the acquisition date. A determination of whether a holding without a controlling influence shall be reported at fair value or at the holding's proportional share of the acquired company's net assets is conducted in conjunction with every acquisition. When required, the subsidiaries' accounts are adjusted to ensure that they follow the same principles applied by other Group companies. All internal transactions between Group companies and intra-Group transactions are eliminated when the Consolidated Statements are compiled. Unrealised losses are also eliminated unless the transaction constitutes proof of the existence of a write-down requirement.

#### Associated companies

Shareholdings in associated companies, in which the Group has a minimum of 20 per cent and a maximum of 50 per cent of the votes, or otherwise has a significant influence over operational and financial management, are reported in accordance with the equity method. Under the equity method, the consolidated book value of the shares in the associated companies corresponds to the Group's share of the associated companies' shareholders' equity

analyses are presented in Note 22 on pages 89–92.

and any residual value from the consolidated surplus values. Shares in associated companies' profits/losses are reported in the Consolidated Income Statement as part of the operating profit and comprise the Group's share in the associated companies' net profits/losses. Shares in profits accumulated after the acquisition of associated companies but not yet realised through dividends constitute part of the Group's equity.

# Conversion of foreign subsidiaries and other overseas operations

The currency in the primary economic environments in which the subsidiary companies operate is the functional currency. The current method is applied in the conversion of Income Statements and Balance Sheets to the Group's reporting currency. Under the current method, all assets, provisions and liabilities are converted at the rate of exchange applying on the closing day, while all items in the Income Statement are converted at the average exchange rate. Any exchange rate differences arising are reported as Other comprehensive income. Accumulated translation differences in respect of the conversion of subsidiaries are reported as Other comprehensive income.

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

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

#### Financial instruments

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

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

Financial instruments are reported at the fair value or accrued acquisition value, depending on the initial categorisation under IAS 39. On each reporting occasion, the Group performs an impairment test to determine whether objective indications exist of the need to write down a financial asset or group of assets.

#### Valuation principles

#### Fair value

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

When presenting the fair value of liabilities to credit institutions, the fair value is calculated as discounted agreed amortisations and interest payments at estimated market interest rate levels. The fair value of accounts receivable and accounts payable is deemed to be the same as the reported value due to the short term to maturity, to the fact that provisions are made for bad debts, and to the fact that any penalty interest incurred will be debited.

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

Boliden provides information on all financial assets and liabilities reported at fair value in the Balance Sheet on the basis of a three-level fair value hierarchy. Level one comprises instruments that are listed and traded on an active market where identical instruments are traded. Level two comprises instruments that are not traded on an active market, but where observable market data is used for valuation of the instrument (either directly or indirectly). Level three comprises instruments where the valuation is, to a considerable extent, based on unobservable market data.

The assessments have been conducted on the basis of the circumstances and factors obtaining with regard to the various instruments. Metal futures are classified as level two, in that the discounted prices are based on listed daily prices from the exchanges. Currency futures and interest swaps have also been classified as level two, with reference to the fact that the valuation is based on observable market data. The fair value of liabilities to credit institutions has been classified as level two. Shares and participations that are not listed have been classified as level three. Exceptions to classification on the basis of the fair value hierarchy are made for accounts receivable, liquid assets and accounts payable where the reported value is deemed to constitute a reasonable estimation of the fair value.

#### Accrued acquisition value

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

#### Valuation category

Boliden divides financial instruments into the following valuation categories. See also Note 27 on page 95.

#### Holdings valued at fair value

Derivatives valued at fair value and for which changes in value are reported under net financial items. The derivatives comprise currency futures and are not included in hedge accounting.

#### Loans and accounts receivable

This category includes financial investments, receivables not listed on an active market, and liquid assets. Liquid assets are defined as, in addition to cash and bank balances, short-term investments with a maximum term of three months at the time of acquisition and which can easily be converted to cash. Liquid assets are only exposed to an insignificant risk of fluctuations in value and are reported at the accrued acquisition value. Receivables are defined as accounts receivable and interest-bearing short-term holdings of securities or other investments which are not classified as fixed assets and which are not attributable to liquid assets. Receivables are reported in the anticipated recoverable amount, i.e. after deductions for bad debts, which are assessed on an individual basis. The anticipated term of accounts receivable and other current receivables is short and the value is, therefore, reported at the nominal amount without discounting in accordance with the accrued acquisition value method.

#### Financial assets available for sale

Assets in this category comprise shares valued at fair value with changes in value recognised under Other comprehensive income. If it is not possible to establish the fair value of such shares, they are reported at their acquisition value, taking into account accumulated write-downs.

#### Derivatives used in hedge accounting

This category comprises derivatives valued at fair value and which form part of fair value hedging, cash flow hedging, and the hedging of net investments in overseas operations. The derivatives comprise metals futures, currency futures, and interest derivatives. See Note 26 on pages 93–94 for details of derivatives used for hedging purposes.

#### Other financial liabilities

Financial liabilities primarily comprise liabilities to credit institutions and accounts payable. The anticipated term of accounts payable is short and the value is, consequently, reported at a nominal amount in accordance with the accrued acquisition value method. Liabilities to credit institutions are initially valued at amounts received, less any set-up fees, and are then valued at the accrued acquisition value. Interest expenses are reported on a rolling basis in the Income Statement with the exception of the part included in the acquisition value for tangible fixed assets. Capitalised set-up fees are reported directly against the loan liability to the extent that the loan agreement's underlying loan guarantee has been utilised, and are periodised in the Income Statement under Other financial expenses over the contractual term of the loan. If a loan agreement is terminated or otherwise ceases to obtain at a point in time prior to the end of the original contractual term, capitalised  $\,$ set-up fees are taken up as income. If a current agreement is renegotiated during the contractual term, any additional fees in connection with the renegotiation are periodised over the remaining contractual term of the loans.

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Note C

Significant accounting and valuation principles, cont

#### Assets and liabilities in foreign currencies

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

# Classification and reporting of derivatives used for hedging purposes

See also "Risk management" in the Directors' Report on pages 51–53.

#### Fair value hedging (binding undertaking)

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

#### Cash flow hedging (forecast flows)

Hedge accounting is applied to financial derivatives that refer to the hedging of forecast flows, which means that the effective share of the unrealised market values is reported under Other comprehensive income up to the point in time when the hedged item, such as forecast metal sales, US dollar income, and interest expenses, is realised and thus reported in the Income Statement. Realised profits/losses attributable to metal and currency derivatives are reported under net sales, while the profit/loss on interest derivatives is reported under net financial items. Individual interest swaps and multiple interest swaps – known as portfolio hedging – are both used to hedge future interest payments. The ineffective part of cash flow hedging is reported under net financial items.

#### Hedging of net investments

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

#### Offsetting financial assets against liabilities

The offsetting of financial assets and liabilities is regulated by ISDA (International Swaps and Derivatives Association) agreements, which regulate both offsetting between contracted counterparties as part of operating activities and in conjunction with circumstances relating to breach of contract or early termination. In its operating activities, Boliden offsets payments on undertakings with the same maturity date, which are in the same currency, which have the same counterparty, and for the same type of instrument. Only surplus amounts per instrument and currency are paid by the party with the biggest outstanding liability. All terminated undertakings comprised by ISDA agreements are, in conjunction with breach of contract or early termination, which may be caused by circumstances not directly linked to neglect by any party, in a sum that is paid by the party with the biggest outstanding liability.

#### State contributions and support

State support refers to subsidies, grants or premiums designed to provide an economic benefit, or state support in the form of transfers of resources to the company that may be applied to an undertaking. State support attributable to assets is reported either by recognising the support as a prepaid income or by reducing the reported value of the asset.

#### Revenue recognition

Sales of metal concentrates, metals and by-products are reported at the time of delivery to the customer in accordance with the terms and conditions of sale, that is to say revenue is recognised whenever significant rights and obligations associated with the title transfer to the purchaser.

These sales are reported net after VAT, discounts and exchange rate differences when sales are made in foreign currencies.

Preliminary invoices are issued for the Group's metal concentrate at the time of delivery. Definitive invoices are issued when all component parameters (concentrate quantity, metal content, impurity content, and the metal price for the agreed pricing period – normally the average price on the LME in the month after delivery) have been established.

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

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

#### Exploration, research and development

Boliden's R&D primarily comprises exploration. Boliden is also involved, to a limited extent, in developing mining and smelting processes. Expenses associated with research and development are primarily booked as costs when they arise. When the financial potential for the exploitation of a mine deposit has been confirmed, the expenses are booked as costs up to that date. After that date, the expenses are capitalised as deferred mining costs, the governing principles of which are described under the Tangible fixed assets heading.

#### Intangible fixed assets

Intangible fixed assets include patents, licenses, similar rights, emission rights and goodwill, which are booked at their acquisition value less amortisation and any write-downs. Goodwill comprises the amount by which the acquisition value exceeds the fair value of the Group's share of the identifiable net assets of the subsidiary company acquired as well as any contingent liabilities at the time of acquisition. Goodwill is reported in the Balance Sheet at the value given in conjunction with the acquisition, converted, where relevant, at the closing day rate, after deduction for accumulated write-downs. Calculations of the profit or loss on the sale of a unit include any remaining reported goodwill value ascribed to the operations sold.

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

Other intangible fixed assets, with the exception of emission rights, are amortised over their anticipated useful lives.

#### **Emission rights**

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

#### Tangible fixed assets

Land, plants and equipment, and capitalised costs associated therewith for development, pre-production measures and future reclamation costs, are booked at the acquisition value less depreciations and any write-downs. Interest expenses attributable to financing development and completion of significant tangible fixed assets are included in the acquisition value. Repair and maintenance expenses are booked as costs, while substantial improvements and replacements are capitalised. Estimated future expenses for the dismantling and removal of a tangible asset and the restoration of a site or area where the tangible asset is located (reclamation costs) are capitalised.

Capitalised amounts comprise estimated expenses, calculated at current value, which are simultaneously reported as provisions. Effects of subsequent events that result in costs that exceed the provision are discounted, capitalised as a fixed asset, and increase the provisions, and are written off over the remaining life of the asset.

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

#### Depreciation principles for tangible fixed assets

Depreciation according to plan is based on the original capitalised values and the estimated economic lifespan. The Group normally depreciates tangible fixed assets and equipment used in the mining operations linearly over whichever is the lower of their anticipated useful life and the useful life of the mine to which they relate. Depreciation is effected to the estimated residual value. Estimated residual values and estimated lifespans are subject to ongoing review. Smelters and production plants are depreciated linearly over their anticipated useful lives. The following depreciation periods are applied to tangible fixed assets including future reclamation costs:

Buildings	20–50 years
Land improvements	20 years
Deferred mining costs and waste rock of	capitalisation Concurrently
	with ore depletion
Capitalised restoration costs	Linearly over the
	anticipated lifespa
Machinery	3–10 years
Processing facilities	10–25 years
Equipment, tools, fixtures and fittings	3–10 years

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

#### Write-downs

On each reporting occasion, an assessment is performed to determine whether there is any indication that the value of the Group's assets has depreciated or been impaired. Should this be the case, a calculation is performed of the recovery value of the asset in question. Goodwill is, together with any intangible assets with an indefinable useful life, subject to annual impairment tests even if there are no indications of a reduction in its value. Impairment tests are, however, performed more frequently if indications exist of a decline in value. The recovery value comprises whichever is the higher of the value in use of the asset in the operations and the value that would result if the asset were sold to an independent party, fair value minus selling expenses. The value in use comprises the present value of all incoming and outgoing payments attributable to the asset for the duration of its expected use in the operations, plus the present value of the net sales value at the end of the asset's useful life. If the estimated recovery value is lower than the book value, the latter is written down to the former.

Write-downs are reported in the Income Statement. Any write-downs are reversed if changes in the assumptions leading to the original write-down mean that the write-down is no longer warranted. Write-downs that have been performed are not reversed in such a way that the reported value exceeds the amount that would, following deductions for amortisation according to plan, have been reported if no-write down had been performed. Reversals of write-downs performed are reported in the Income Statement. Goodwill write-downs are not reversed. See also the section on Valuation of fixed assets.

#### Leasing

A financial leasing agreement is an agreement whereby the financial risks and benefits associated with a title are, in all significant respects, transferred from the lessor to the lessee. Leasing agreements that are not classified as financial leasing agreements are classified as operational leasing agreements.

Assets held in accordance with financial leasing agreements are

reported initially as fixed assets in the Consolidated Balance Sheet at whichever is the lower of the market value of the assets or the present value of the future lease payments. The Group's liability in relation to the lessor is reported in the Balance Sheet under the heading of Liabilities to credit institutions, broken down into current and long-term components.

Lease payments are broken down into interest and amortisation of the liability. The interest is distributed over the leasing period so that an amount corresponding to the fixed interest amount payable on the liability reported in each period is charged to each reporting period. The leased asset is depreciated according to the same principles as those that apply to other assets of the same type.

The leasing charges for operational leasing agreements are booked as costs on a linear basis over the leasing period.

#### Inventories

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

#### Taxes

The tax expense for the period (income) comprises current tax and deferred tax. Taxes are reported in the Income Statement under Other comprehensive income and in shareholders' equity.

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

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

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

#### **Provisions**

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

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

Boliden's provisions primarily, with the exception of pensions (see separate section), refer to reclamation costs that are expected to arise when operations are decommissioned. Emission rights are reported here, as are

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1 Note 0

**Note 01** Significant accounting and valuation principles, cont.

03

remunerations in conjunction with termination of employment that may be payable to employees to whom a commitment of termination has been given and remuneration to employees who accept voluntary redundancy. The Group reports a provision and a cost in conjunction with termination when Boliden is obligated either to give the employee notice prior to the normal point in time for employment cessation, or to provide remuneration with a view to encouraging early retirement.

**Contingent liabilities** 

A contingent liability is a potential undertaking that derives from events which have occurred and whose incidence is only confirmed by one or more uncertain future events. A contingent liability can also be an existing undertaking that has not been reported in the Balance Sheet because it is unlikely that an outflow of resources will be required or because the size of the undertaking cannot be calculated. See Note 29 on page 96.

#### **Employee benefits**

#### Pension undertakings

The Group's companies 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 the company's own provisions which are determined through periodic actuarial calculations. The Group's provisions for pension undertakings are calculated in accordance with IAS 19, Employee benefits.

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

The undertaking does not cease for pension systems where a defined benefit pension has been contractually agreed, until the agreed pensions have been paid out. Boliden commissions independent actuaries to calculate pension undertakings relating to the defined benefit pension plan arrangements in each country. These calculations take account of the discount rate, future salary increases, mortality rates, inflation and other actuarial assumptions (see Boliden's assumptions in Note 22). A sensitivity analysis for any changes in the assumptions is also presented (see Note 22) on the basis of the parameters determined by Boliden to be of significance in terms of their effect on the net pension liability, namely the discount rate, salary increases and mortality rates. Revaluations of the defined benefit net pension liability, such as actuarial profits and/or losses and the difference between the return on plan assets and the discount rate, are reported immediately under Other comprehensive income. The financing cost, the cost of the net pension liability is calculated using the discount rate for the pension liability. The financing cost of service during the current period and any previous periods, losses from settlements and costs in connection with special payroll tax are all reported in the Income Statement. Special payroll tax is regarded as part of the total net pension liability.

#### Share capital

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

#### Buy-back of own shares

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

#### **Dividend**

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

#### Information per segment and geographical market

Boliden's operations are organised into two segments: Business Area Smelters and Business Area Mines. The Business Areas correspond to Boliden's operating segments in that 1) the Business Area Managers are directly responsible to the CEO, 2) the CEO controls the Group's component parts via two "Business Area Boards", one for each Business Area, through which the financial results in relation to financial goals are evaluated, 3) financial goals and investment plans and overhead budgets for the respective Business Areas are set in the business plan and budget process, 4) decisions on goals and resource allocation for units within the respective Business Areas are made within the respective Business Areas' man-

agement groups, and 5) heads of operating units report not to the CEO but to the Business Area Managers.

Business Area Mines comprises the operations of the Swedish mines, Aitik, the Boliden Area and Garpenberg, and the Tara mine in Ireland. Aitik produces copper concentrate with some gold and silver content. The other Swedish mines produce zinc, copper and lead concentrates with variable gold and silver content. Tara produces zinc and lead concentrates. Business Area Mines is also responsible for sales of mined concentrates.

Business Area Smelters comprises the Kokkola and Odda zinc smelters, the Rönnskär and Harjavalta copper smelters, and the Bergsöe lead smelter. The Business Area is responsible for all sales of the smelters' products and handles all raw material flows between the Group's mines, smelters and customers. This includes responsibility for purchases of metal concentrates and recycling materials from external suppliers. The zinc smelters' production primarily comprises zinc metal, but also includes aluminium fluoride and sulphuric acid. The copper smelters' production primarily comprises copper, gold, silver, lead and sulphuric acid. The copper smelters also recycle metal and electronic scrap and smelt nickel. The Bergsöe lead smelter recycles lead metal, mainly from scrap car batteries.

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

Group staff functions and Group-wide functions that are not assigned to Smelters or Mines are reported under the heading Other . Items where the accounting method differs between the Business Areas and the Group are reported under the heading Accounting principles. The market valuation of financial derivative instruments used to manage currency risks, metal price risks and interest risks are, for example, reported under Accounting principles until such time as the underlying flows are reflected in the Income Statement and distributed between the respective segments.

Note 2 contains details of revenues per segment and geographical market, showing the location of external customers, and providing information on major customers. Assets and investments per geographical market are also reported there.

#### The Parent Company's accounting principles

The Parent Company's annual accounts are compiled in accordance with the Swedish Annual Accounts Act, the Swedish Financial Reporting Board's recommendation, RFR2, Accounting for legal entities, and the statements issued by the Swedish Financial Reporting Board. Under RFR2, the Parent Company shall, in the accounts for the legal entity, apply all EU-approved International Financial Reporting Standards (IFRS) and statements to the extent that this is possible within the framework of the Swedish Annual Accounts Act and while taking into account the connection between reporting and taxation. The recommendation specifies the exceptions and additions to be made in relation to IFRS. The differences between the Group's and the Parent Company's accounting principles are described below.

### Reporting Group contributions and shareholders' contributions

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

#### Anticipated dividends

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

#### Financial instruments

Financial instruments are not valued in the Parent Company in accordance with IAS 39. The valuation is conducted on the basis of the acquisition value (see the Group's accounting principles).

#### Subsidiaries

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

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

#### **Note 02** Information per segment and geographical market

For additional information, please refer to "General accounting principles" for segment reporting on page 78.

#### Segment - Business Areas

31-12-2013	Mines	Smelters	Other	Accounting principles <sup>2)</sup>	Eliminations	The Group
External revenues	834	33,347	0	_	_	34,181
Effect on profit of metal price and currency hedging	184	43	_	_	_	227
Internal revenues	7,286	20	-73	_	-7,232	0
Revenues	8,303	33,410	-73	_	-7,232	34,409
Results from participations in associated companies	2	_	_	_	_	2
Operating profit	1,598	210	-140	25	110	1,803
Net financial items						-222
Profit after financial items						1,581
Taxes						-288
Net profit for the year						1,294
Intangible fixed assets	88	3,042	0	_	-	3,130
Tangible fixed assets	18,883	8,372	93	-	-	27,348
Equity shares and other financial fixed assets	4	1	29	_	_	33
Inventories	941	7,192	-		-102	8,031
Other receivables	842	1,636	492	329	-777	2,523
Assets in capital employed	20,758	20,242	614	329	-879	41,064
Provisions, other than for pensions and tax	1,212	437	31		_	1,681
Other liabilities	1,257	4,014	367	72	-777	4,932
Liabilities in capital employed	2,469	4,451	398	72	-777	6,612
Total capital employed	18,288	15,791	216	257	-102	34,451
Depreciation	1,917	913	-	_	_	2,829
Investments <sup>1)</sup>	3,763	1,200	12	_	-	4,974

				Accounting		
31-12-2012	Mines	Smelters	Other	principles <sup>2)</sup>	Eliminations	The Group
External revenues	1,088	38,671	_	-	_	39,759
Effect on profit of metal price and currency hedging	184	58	_	-	-	242
Internal revenues	8,237	25	-48	_	-8,213	0
Revenues	9,509	38,753	-48	_	-8,213	40,001
Results from participations in associated companies	1	-	-	_	-	1
Operating profit	2,974	1,224	-167	29	111	4,171
Net financial items						-178
Profit after financial items						3,992
Taxes						-651
Net profit for the year						3,341
Intangible fixed assets	85	3,075	0	_	_	3,160
Tangible fixed assets	16,952	8,102	84	-	-	25,138
Equity shares and other financial fixed assets	2	2	28	_	-	32
Inventories	712	7,744	-	-	-212	8,244
Other receivables	971	1,593	340	162	-831	2,234
Assets in capital employed	18,722	20,516	452	162	-1,043	38,808
Provisions, other than for pensions and tax	1,172	440	38	-	-	1,650
Other liabilities	1,424	4,507	371	450	-831	5,921
Liabilities in capital employed	2,596	4,947	409	450	-831	7,572
Total capital employed	16,125	15,569	43	-288	-212	31,236
Depreciation	1,669	891	0	_	-	2,560
Investments <sup>1]</sup>	3,570	993	6	_	_	4,569

<sup>1)</sup> Excluding capitalised restoration costs and financial leasing.

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<sup>&</sup>lt;sup>2)</sup> Comprises unrealised market values attributable to cash flow hedging and minor adjustments for other accounting principles only followed up at Group level.

The market values of the cash flow hedges are, when realised, reported in the respective segments.

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#### Note 02 | cont. Information per segment and geographical market

Boliden has three customers within Segment Smelters who account for 16 per cent (16%), 12 per cent (12%) and 10 per cent (11%), respectively, of Boliden's external income. Other customers each represent less than 5 per cent (5%) of Boliden's total external income. Boliden's metals are sold primarily to industrial customers, but are also sold to base metal dealers and international metal stocks, such as the LME.

#### Geographical areas

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

Revenues	2013	2012
Sweden	6,161	6,722
Rest of the Nordic region	4,262	4,554
Germany	11,770	13,954
UK	6,918	8,440
Rest of Europe	5,122	6,169
North America	5	6
Other markets	171	156
	34,409	40,001

Assets in capital employed	31-12-2013	31-12-2012
Sweden	33,635	31,591
Finland	3,729	3,384
Norway	1,504	1,539
Ireland	2,176	2,273
Other countries	21	20
	41,064	38,808
Investments in fixed assets <sup>1)</sup>	31-12-2013	31-12-2012
Investments in fixed assets <sup>1]</sup> Sweden <sup>2]</sup>	<b>31-12-2013</b> 3,939	<b>31-12-2012</b> 3,813
Sweden <sup>2)</sup>	3,939	3,813
Sweden <sup>2)</sup> Finland	3,939 564	3,813 426
Sweden <sup>2)</sup> Finland Norway	3,939 564 269	3,813 426 61

<sup>1)</sup> Excluding capitalised restoration costs and financial leasing.

Sales of metals, sales of concentrates and other sales accounted for SEK 30,380 million (SEK 35,467 m), SEK 1,406 million (SEK 1,490 m) and SEK 2,623 million (SEK 3,044 m), respectively, of Boliden's total revenues of SEK 34,409 million (SEK 40,001 m).

#### Note 03 Employees and personnel costs

The Parent Company has no employees. The Group management is employed by Boliden Mineral AB.

Average number of employees <sup>1)</sup>	2013 of v	whom, women	of whom, men	2012	of whom, women	of whom, men
Subsidiaries						
Sweden	2,888	597	2,291	2,814	582	2,232
Finland	936	145	791	949	143	806
Norway	295	48	247	297	46	251
Ireland	678	31	647	718	35	683
Other	18	3	15	17	7	10
Total in subsidiaries/Group	4,815	824	3,991	4,795	813	3,982

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

Percentage of women at Board and Group		
management level	2013	2012
Board of Directors	27 %	27 %
Group management	20 %	17 %

Salaries, other remuneration and social security expenses		2013	2	2012	
	Salaries and remuneration	Social security expenses	Salaries and remuneration	Social security expenses	
Subsidiaries	2,451	623	2,437	872	
of which, pension expenses		-255		-518	
Group, total	2,451	623	2,437	872	
of which, pension expenses		-255		-518	

		2013		2012		
Salaries and other remuneration broken down by country and between Board Members etc. and other employees	Board of Directors, President & other senior executives Other employees		Board of Directors, President & other senior executives	Other employees		
Subsidiaries in Sweden	23	1,382	24	1,308		
Subsidiaries abroad						
Finland	4	400	3	403		
Norway	3	169	2	172		
Ireland	4	456	4	510		
Other	1	9	1	10		
Group, total	35	2,416	34	2,403		

 $<sup>^{\</sup>rm 2)}$  Of which SEK 383 million for 2012 attributable to restatement in line with IFRIC 20.

#### Profit sharing system

A profit-sharing system was introduced for all employees of the Boliden Group in 2007. A profit share is payable when the return on capital employed reaches 10 per cent, and the maximum profit share (SEK 25,000/full-time employee) is payable when the return on capital employed reaches 20 per cent. The annual maximum allocation must never, however, exceed one third of the dividend paid to shareholders. The funds cannot be disbursed to employees for 3 years. An allocation of SEK 0 (SEK 8,575) per full-time employee has been made for 2013 as the return on capital employed was 5 per cent (13%). The allocation for each year is invested in liquid interest-bearing assets and shares in Boliden.

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

Fees as approved by the Annual General Meeting are payable to the Chairman of the Board and to Members of the Board. The President and Employee representatives receive no Directors' fees.

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

The breakdown between basic salary and variable remuneration shall be in proportion to the executive's responsibilities and authority. The variable remuneration is maximised to 60 per cent of the basic salary for the President, while for other senior executives, it is maximised to 40–50 per cent of the basic salary. 10 percentage points of this is conditional on the purchase of Boliden shares for the gross sum before tax.

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

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

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

SEK	Directors' fees/	Basic salary	Variable r	emuneration	Other	benefits	Pensio	n benefits
<del></del>	2013	2012	2013	2012	2013	2012	2013	2012
Board of Directors								
Anders Ullberg, Chairman	1,200,000	1,160,000						
Marie Berglund	430,000	415,000						
Staffan Bohman <sup>1)</sup>	480,000	465,000						
Ulla Litzén <sup>1)</sup>	580,000	565,000						
Michael G:son Löw	430,000	415,000						
Leif Rönnbäck	505,000	490,000						
Matti Sundberg		415,000						
Tom Erixon	430,000	-						
Group management								
Lennart Evrell, President	6,690,057	6,486,572	646,2723)	1,170,4324)	178,309	191,848	2,102,250	2,158,989
Other members of the Group management <sup>2)</sup>	9,404,715	9,005,544	620,293 <sup>3)</sup>	1,887,909 <sup>4)</sup>	426,212	318,331	3,371,356	3,504,688

<sup>1)</sup> These Directors invoice their fees, either wholly or in part, through their own companies, at which point social security contributions are payable.

This is cost-neutral for Boliden.

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

#### Variable remuneration

The variable remuneration paid to the President in 2013 was based on the Group's return on shareholders' equity and the Group's cost trend.

For other members of the Group management, 20–60 per cent of the variable remuneration for 2013 was based on the Group's financial goals and 40–80 per cent on their personal spheres of responsibility and individual targets. Other benefits refer primarily to company cars.

#### Pensions

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

All of the other members of the Group management have defined contribution pension plans to which the company allocates 25-50 per cent of the fixed monthly salary. Extra allocations comprising 20 per cent of the fixed basic salary at 2009 level are made for one of the members of the Group management up to and including 2015. The retirement age is 65.

#### Severance pay

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

Other members of the Group management have notice periods of between three and six months if they give notice themselves. If notice of termination is given by the company, the period of notice is between six and twelve months. In addition, severance pay corresponding to a maximum of twelve months' salary shall be payable. Other income shall be offset against the severance pay. No severance pay is payable in the event of notice being given by the member of the Group management.

#### Preparation and decision-making process

See pages 102–107 of the 2013 Corporate Governance Report for information.

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 $<sup>^{2)}\,</sup>$  A total of 4 people in 2013 and 5 people in 2012.

<sup>3)</sup> The amounts are attributable to 2013 but will be disbursed in 2014.

<sup>4)</sup> The amounts are attributable to 2012 but were disbursed in 2013.

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Note 04 Auditors' fees and reimbursement of expenses

	2013	2012
Ernst & Young AB		
Audit engagements	5	5
Auditing assignments over and above audit engagements	1	1
Tax consultancy	-	0
Other services	1	1
	7	7

Note 05   Key expense item	S	
	2013	2012
Raw material costs, incl. inventory changes	19,557	22,950
Personnel costs	3,207	3,422
Energy costs	2,348	2,269
Other external costs	4,749	4,707
Depreciation and amortisation according to plan	2,829	2,560
	32,689	35,908

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

Depreciation and amortisation are reported under the following		
Income Statement items	2013	2012
Cost of goods sold	2,812	2,549
Selling expenses	1	1
Administrative expenses	14	8
Research and development costs	2	2
	2.829	2.560

Note 06 Other operating income					
	2013	2012			
Payment for sludge deliveries	19	15			
Rental income, industrial properties	19	17			
Insurance payments	20	-			
Other	44	48			
	102	80			

Note 07 Interest income and other similar items					
	2013	2012			
Interest income on liquid assets	5	4			
Interest on currency futures	25	82			
Other	1	2			
	31	87			

#### Note 08 Interest expenses and other similar items

	2013	2012
Interest on loans at accrued acquisition value	105	160
Interest on pension provisions	47	15
Ineffectiveness of hedging of net investments	_	-4
Ineffectiveness of cash flow hedging	-1	-
Interest on reclamation reserve	29	19
Other financial items	72	76
	253	265

Deductions have been made from interest payments on loans at the accrued acquisition value for interest capitalisation attributable to the Garpenberg expansion in the sum of SEK 51 million (SEK 30 m) for 2013. Interest expenses on loans, before deductions for interest capitalisation, have been positively affected by lower interest rates in 2013 but this was counteracted by increased loans. Boliden's average interest rate in 2013 totalled 2.04 per cent (3.28%), weighted against rolling debt.

#### Note 09 Government subsidies

Government subsidies totalling SEK 20 million (SEK 5 m) were received in 2013 and SEK 16 million (SEK 4 m) was reported in the Income Statement. The majority of the subsidies were received in Norway under a  $CO_2$  compensation scheme.

# Note 10 Supplementary information to the Statements of Cash Flow

The Statements of Cash Flow are drawn up in accordance with the indirect method.

2013	2012
121	200
0	0
121	200
-214	-176
-214	-176
uid assets	
611	1,011
0	0
611	1,011
	121 0 121 -214 -214 uid assets 611

There is, with regard to the cash flow for the 2012 comparison year, an unadjusted reclassification of SEK 383 million from the operating activities and the cash flow from investing activities.

The short-term investments included in liquid assets comprise investments with a term of three months or less at the point of acquisition and which can be easily converted into liquid assets. Liquid assets are only exposed to an insignificant risk of value fluctuation.

#### Note 11 Intangible fixed assets

	Capitalised develop- ment expenses	Patents, licences and similar rights	Emission rights	Goodwill	Total intangible fixed assets
Acquisition values	•	-			
Closing balance on Balance sheet, 31 December 2011					
Beginning of the year	18	143	0	3,075	3,236
Investments	16	8	_	_	24
Sales and retirements	_	0	_	_	0
Reclassifications	_	-4	_	_	-4
Year's translation differences	_	-6	_	-31	-38
Closing balance on Balance Sheet, 31 December 2012	34	141	0	3,044	3,219
Beginning of the year	34	141	0	3,044	3,219
Investments	9	7	_	_	16
Sales and retirements	_	-3	_	_	-3
Reclassifications	_	4	_	_	4
Year's translation differences	_	6	_	-36	-30
Closing balance on Balance Sheet, 31 December 2013	43	155	0	3,008	3,206
Amortisation					
Closing balance on Balance Sheet, 31 December 2011					
Beginning of the year	0	-53	0	-	-53
Year's amortisation	0	-12	_	-	-12
Reclassifications	-	3	_	_	3
Year's translation differences	_	3	_	_	3
Closing balance on Balance Sheet, 31 December 2012	0	-59	0	-	-59
Beginning of the year	0	-59	0	_	-59
Year's amortisation	-6	-10	_	_	-16
Sales and retirements	_	3	_	_	3
Year's translation differences	_	-3	_	_	-3
Closing balance on Balance sheet, 31 December 2013	-6	-70	0	_	-76
Closing balance, 2012	34	82	0	3,044	3,160
Closing balance, 2013	37	85	0	3,008	3,130
Amortisation according to plan, included in the operating profit					
2012	0	-12	_	-	-12
2013	-6	-10	_	_	-16

The Group's goodwill item arose primarily in conjunction with the acquisition of the operations from Outokumpu at the end of December 2003. The goodwill from the 2003 acquisition has been allocated in its entirety to the Group's melter segment.

Impairment tests have been carried out in the value of goodwill in the manner described in Note 12 under Impairment tests

- Intangible and tangible fixed assets.

#### **Emission rights**

The Boliden Group reported a surplus of emission rights in 2013 and there was consequently no effect on the Group's financial reports. See Note 1 Significant accounting and valuation principles on page 76 for details of emission rights reporting.

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Tangible fixed assets

	Buildings and land	Deferred mining costs	Machinery and other technical facilities	Equipment, tools, fixtures and fittings	New construction & advances on fixed assets	Total tangible fixed assets
Acquisition values						
Closing balance on Balance Sheet, 31 December 2011	7,021	6,029	29,280	1,457	621	44,409
Revaluation in line with IFRIC 20	_	459	_	-	_	459
Opening balance on Balance sheet,						
1 January 2012, restated	7,021	6,488	29,280	1,457	621	44,868
nvestments	221	968	3,143	17	192	4,542
Capitalised reclamation costs	_	_	538	_	_	538
Sales and retirements	-11	_	-448	-3	_	-461
Reclassifications	673	412	-699	1	-384	4
Year's translation differences	-58	-46	-276	18	-6	-368
Closing balance on Balance Sheet, 31 December 2012	7,846	7,823	31,539	1,490	424	49,122
Opening balance on Balance sheet, 1 January 2013	7,846	7,823	31,539	1,490	424	49,122
nvestments	131	1,244	3,183	. 22	374	4,954
Capitalised reclamation costs	_	_	23	_	_	23
Sales and retirements	-50	_	-619	-10	_	-679
Reclassifications	444	17	-295	-2	-168	-5
ear's translation differences	-12	48	140	-125	9	59
Closing balance on Balance sheet, 31 December 2013	8,359	9,132	33,970	1,375	638	53,474
Depreciation						
Closing balance on Balance sheet,			45.645			64.466
31 December 2011	-3,310	-1,935	-15,017	-1,220		-21,483
Revaluation in line with IFRIC 20		-641				-641
Opening balance on Balance sheet,						
1 January 2012, restated	-3,310	-2,576	-15,017	-1,220	-	-22,123
ear's depreciation	-259	-633	-1,528	-41	-	-2,462
Sales and retirements	6	-	365	3	_	374
Reclassifications	-	-	-3	-	_	-3
Year's translation differences	34	14	196	-16	_	229
Closing balance on Balance Sheet, 31 December 2012	-3,529	-3,195	-15,988	-1,273	-	-23,984
Opening balance on Balance Sheet, 1 January 2013	-3,529	-3,195	-15.988	-1,273		-23,984
Year's depreciation	-263	-5, 195 -778	-1,726	-1,273 -40	_	-2,809
Sales and retirements	50	-//6	612	10	_	- <u>2</u> ,603
Reclassifications	-	_	-1	1	_	0
/ear's translation differences	10	-26	-98	111	_	-4
Closing balance on Balance Sheet, 31 December 2013	-3,733	-3,999	-17,202	-1,192	_	
Closing balance, 2012	4,317	4,629	15,552	217	424	25,138
Closing balance, 2013	4,626	5,132	16,768	183	638	27,348
Depreciation according to plan, ncluded in the operating profit	-,	-, <del>-</del>	,	. 30	2	
2012	-259	-633	-1,528	-41	_	-2,462
2013	-263	-778	-1,726	-40	_	-2,809

The figures for 2012 attributable to deferred mining costs have been adjusted (see also Note 1 Significant accounting and valuation principles, and Note 29 Restatement of financial reports) in response to the new accounting standard, IFRIC 20, in which the cost of waste rock removal in open-pit mines – which was previously calculated using an average value for the entire open-pit mine – is now calculated per individual push-back.

Capitalised reclamation costs include expenses in relation to the dismantling and removal of assets and the restoration of the sites where the assets are located. Accumulated capitalised reclamation costs total SEK 787 million (SEK 765 m). Accumulated depreciation totals SEK  $\!-\!139$  million (SEK  $\!-\!33$  m). The year's capitalised reclamation costs total SEK 23 million (SEK 538 m), which is a consequence of the fact that subsequent activities in relation to the Swedish mines

currently in operation are expected to exceed previous estimates. The change is reported in accordance with IFRIC 1, Changes in Existing Decommissioning, Restoration and Similar Liabilities. The year's reclamation costs are not included in the consolidated key ratios for the year's investments, and have no liquid effect on the Group's cash flow.

Investments in tangible fixed assets include financial leasing in the sum of SEK O million (SEK 8 m), see also Note 13 where financial leasing assets are rolled forward. The same principle applies to financial leasing as to the year's capitalised reclamation costs with regard to key ratios and cash flow.

The Group's remaining contractual undertakings to acquire tangible fixed assets totalled SEK 564 million at the year-end. Boliden expects to regulate these undertakings in 2014.

#### Interest expenses carried forward included in the residual value according to plan

	31-12-20	13	31-12-2012		
	Reported value, SEK m	Interest rate, %	Reported value, SEK m	Interest rate, %	
Rönnskär's expansion, completed 2000	40	6.8	43	6.8	
Odda's expansion, completed 2004	8	4	10	4	
Aitik's expansion, completed 2011	208	2.5	221	2.5	
Rönnskär, electronic scrap recycling, completed 2012	13	3.15	14	3.15	
Garpenberg's expansion, ongoing project	87	2.07	36	3.32	

#### Impairment tests - Intangible and tangible fixed assets

Impairment tests are carried out yearly, or throughout the year if an event occurs that may result in an impairment requirement, and are based on the Group's annual budget and strategic planning work. The planning horizon is the estimated lifespan of each mine and 10 years for smelters. Boliden's operations are characterised by long-term production plans in which every mine has set production plans for the entire estimated lifespan of the mine in question, while a substantial part of the smelters' concentrate supply is regulated by means of long-term delivery agreements. This long-term production planning also enables the use of long-term cash flow forecasts. Additional growth assumptions are not included in extrapolated cash flow forecasts beyond the planning horizon. Any residual value of fixed assets at the end of a mine's lifespan is not taken into account in the discounted cash flow.

The value of discounted cash flows is highly sensitive to metal prices, treatment and refining charges (TC/RC), and exchange rates (see

sensitivity table on page 51 of the Risk management section of the Directors' Report). The present value of estimated future cash flows is based on the budget and planning prices adopted by the Board of Directors. Planning prices for the first year comprise the relevant futures prices on metals and currency markets. The long-term planning prices used in year two and thereafter consist of an anticipated average price over a single business cycle, generally ten years. The long-term planning prices are based on internal and external analyses, primarily with regard to anticipated demand for metals and margin costs for metal producers. The long-term planning prices are compared with average long-term prices from different market players, such as industry analysts and other mining and smelting companies. The Group does not believe that futures prices from base metals markets are good indicators of long-term price trends, in that they are heavily dependent on spot prices.

The long-term real planning prices are currently as listed in the table below.

	2013			2012			
	Metal prices	Treatment/refining charges	Exchange rates	Metal prices	Treatment/refining charges	Exchange rates	
Copper	USD/t 6,600	USD 70/tonne Usc 7.0/lb.	USD/SEK 6.70	USD 6,300/t	USD 65/tonne Usc 6.5/lb.	USD/SEK 7.00	
Zinc	USD/t 2,300	USD 250 base USD 2,300	USD/NOK 5.98	USD 2,300/t	USD 235 base USD 2,300	USD/NOK 6.12	
Lead	USD/t 2,300	USD 225	EUR/USD 1.27	USD 2,300/t	USD 225	EUR/USD 1.27	
Gold	USD 1,200/tr.oz			USD 1,200/tr.oz			
Silver	USD 20.0/tr.oz			USD 20.0/tr.oz			

Individual mines or mining areas with centralised concentrating facilities, copper smelters, zinc smelters, Boliden Bergsöe AB and Boliden Commercial AB are classified as cash-generating units. The discounted real cash flows before tax for the respective cash-generating units are compared with the book value of capital employed. The cash flows are discounted with a real discount rate before tax of 10 per cent (10%), which corresponds to the weighted capital cost. The Group's goodwill is allocated to Segment Smelters. The value in use of the Group's assets is held to exceed the reported values and no impairment requirement is consequently deemed to exist.

An increase in the discount rate of one percentage point would not give rise to any write-downs. A lowering of all long-term planning prices for metals by 10 per cent would not result in a write-down

requirement for Segment Smelters. For Segment Mines, however, a fall of this kind would mean that the book values exceed the discounted cash flows. If the long-term planning prices for metals remain unchanged, a 10 per cent weakening of the US dollar against all other currencies would not occasion a write-down requirement for Segment Smelters. Here too, however, the book value for Segment Mines would exceed the discounted cash flow. This presupposes, however, no compensatory movements in metal prices, TC/RC, or the prices of by-products or input goods, which has historically often been the case. A 10 per cent fall in TC/RC for all metals would not result in a write-down requirement in Segment Smelters. For Segment Mines, the same fall would have a positive effect.

#### Note 13 Leasing charges

	2013	2012
The Group		
Assets held via operational leasing agreements		
Leasing charges paid during the financial year	22	32
Contracted future leasing charges		
Maturity within one year	12	21
Maturity later than one year, but within five years	13	20
Maturity later than five years	1	1
Assets held via financial leasing agreements	2013	2012
Machinery and other equipment		
Acquisition value	15	15
Accumulated depreciation	-10	-5
Value, as per Balance Sheet on 31st December	5	10

KIP Service Oy has two rental contracts that are reported as financial leasing. One of these is a contract to rent and renovate a water treatment plant's automation system. The lessor is Fortum Power and Heat Oy and the contract has a remaining term of two years. The lessee can redeem the automation system once the contract term has expired. The other is a rental contract in respect of usufruct for active carbon filters for ionized water replacement systems and domestic water supply. The lessor is Freeport Cobalt Oy and the contract has a remaining term of two years. Freeport Cobalt Oy has invested in the water treatment plant owned by KIP Service Oy and when the rental term expires, the assets transfer to the lessee for EUR 1.

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#### Note 14 Participations in Group companies

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

	31-12-2013					
Subsidiary/Co. reg. no./Registered office	Shares/participations	Percentage share	Book value			
Boliden Limited, 3977366, Toronto, Canada	85,811,638	100	_			
Boliden Power Ltd, 700245, Toronto, Canada			-			
Ontario Inc, 1393512, Toronto, Canada			_			
Boliden BV, 18048775, Drunen, Netherlands			-			
Boliden Apirsa S.L under liquidation, ESB-41518028, Aznalcóllar (Seville), Spain						
Boliden Mineral AB, 556231-6850, Skellefteå	1,650,000	100	3,911			
Mineral Holding Sweden AB, 556610-2918, Skellefteå			-			
Boliden Harjavalta Oy, 1591739-9, Harjavalta, Finland			_			
Boliden Kokkola Oy, 0772004-3, Kokkola, Finland			-			
KIP Service Oy, 2240650-3, Kokkola, Finland			-			
Kokkolan Teollisuusvesi Oy, 2558533-2, Kokkola, Finland			-			
Boliden Commercial AB, 556158-2205, Stockholm			-			
Boliden Commercial UK Ltd, 5723781, Warwickshire, UK			-			
Boliden Commercial Deutschland GmbH, 165903, Neuss, Germany			-			
Tara Mines Holding Ltd, 60135, Navan, Ireland			-			
Boliden Tara Mines Ltd, 33148, Navan, Ireland			-			
APC Properties Ltd, 361022, Navan, Ireland			-			
Irish Mine Development Ltd, 174811, Navan, Ireland			-			
Tara Prospecting Ltd, 34434, Navan, Ireland			-			
Tara Exploration and Development Company Ltd, E1292, Navan, Ireland	d		-			
Dowth Investment Holdings Ltd, 338698, Toronto, Canada			-			
Motet Investments Ltd, E3093, Navan, Ireland			-			
Mineral Holding Norway A/S, 986009183, Odda, Norway			-			
Boliden Odda AS, 911177870, Odda, Norway			-			
Boliden Bergsöe AB, 556041-8823, Landskrona			-			
Boliden Bergsoe AS, A/S244629, Glostrup, Denmark			-			
Boliden International AB, 556040-1399, Skellefteå			-			
Boliden France Sarl, B 612 050 13800082, Boutervilliers, France			-			
Other subsidiaries, dormant or of lesser significance			-			

A new service-driven collaboration company by the name of Kokkolan Teollisuusvesi Oy was formed on 31st December 2013 in which Boliden Kokkola holds a 65% proprietary share. Boliden Kokkola will, during the course of 2014, transfer balance sheet values to this new company from KIP Oy and thereby reduce its holding in KIP Oy. The formation of Kokkolan Teollisuusvesi has no effect on the Income Statement or Balance Sheet in 2013. The Parent Company, Boliden AB, has received a dividend totalling SEK 2,442 million (SEK 2,607 m) from Boliden Mineral AB during the year.

Note 15	Partici	nations i	in associater	companies
12000 10	I GI GIGI	Daniel IS	iii associatee	e oompamoo

	31-12-2013	31-12-2012
Book value at beginning of year	8	7
Share in associated companies' profits for the year	2	1
Book value at year-end	9	8

	Co. reg. no.	Registered office	Number of participations	Percentage share	Value of equity share in the Group
Indirectly owned					
Aitik EcoBallast AB	556726-2299	Gällivare	500	50	4
KB Aitik EcoBallast	969731-9748	Gällivare	1,000	50	-
Industrikraft i Sverige AB	556761-5371	Stockholm	20,000	20	5
					_

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Note 16 Taxes		
Current tax expenses	2013	2012
Tax expenses for the period	-170	-826
Adjustment of tax attributable to previous years	22	1
	-148	-825
Deferred tax expenses (-) /tax income (+)		
Deferred tax income/tax expenses in respect of temporary differences	-166	159
Deferred tax revenue in capitalised loss carrying forwards for tax purposes during the year	26	14
	-140	173
Total reported tax expenses (-)/tax income (+)	-287	-651
Reconciliation of effective tax		
Reported profit before tax	1,581	3,992
Tax according to current taxation rate	-359	-1,038
Fiscal effect of non-deductible expenses	-6	-22
Fiscal effect of non-taxable income	10	1
Market valuation of deferred tax receivables	1	0
Amended tax rate in Finland	48	-
Amended tax rate in Norway	1	-
Amended tax rate in Sweden	_	407
Adjustment of tax attributable to previous years	17	0
Total reported tax expenses	-288	-651

Tax expenses comprise 18.2 per cent (15.9%) of the Group's pre-tax profit. The anticipated tax expense for 2013 of 22.7 per cent (26.0%) has been calculated given the current Group structure and applicable taxation rates in the respective countries.

#### Deferred tax receivable/tax liability

The receivable reported in the Balance Sheet and the provision for deferred tax come from the following assets and liabilities.

		31-12-2013			31-12-2012			
The Group	Deferred tax receivable	Deferred tax liability	Net	Deferred tax receivable	Deferred tax liability	Net		
Intangible assets	1	-4	-3	1	-4	-3		
Buildings and land	32	-106	-74	67	-114	-47		
Machinery and fixtures and fittings	_	-2,413	-2,413	1	-2,246	-2,245		
Deferred mining costs	_	-173	-173	_	-172	-172		
Other tangible fixed assets	_	-5	-5	_	-6	-6		
Inventories	_	-356	-356	_	-463	-463		
Long-term liabilities	235	_	235	326	-3	323		
Current liabilities	_	-76	-76	41	-1	40		
Tax losses carried forward	81	_	81	60	_	60		
Total	349	-3,133	-2,784	496	-3,009	-2,513		
Offset within companies	-281	281	_	-249	249	-		
Total deferred tax receivable/tax liability	68	-2,852	-2,784	247	-2,760	-2,513		

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

The Group, 2013	Amount at the beginning of the year	Reported in the Income Statement	Reported under Other comprehensive income	Translation difference	Amount at year-end
Intangible assets	-3	-	-	_	-3
Buildings and land	-47	-24	-	-3	-74
Machinery and fixtures and fittings	-2,245	-166	-	-2	-2,413
Deferred mining costs	-172	5	-	-6	-173
Other tangible fixed assets	-6	1	-	-	-5
Inventories	-463	107	_	_	-356
Long-term liabilities	323	-90	1	1	235
Current liabilities	40	_	-116	_	-76
Tax losses carried forward	60	27	-	-6	81
Total	-2,513	-140	-115	-16	-2,784

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#### Note 16 Taxes, cont.

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

The Group, 2012	Amount at the beginning of the year	Reported in the Income Statement	Reported under Other comprehensive income	Translation difference	Amount at year-end
Intangible assets	-3	-	-	_	-3
Buildings and land	-71	23	_	1	-47
Machinery and fixtures and fittings	-2,332	75	-	12	-2,245
Deferred mining costs	-180	-1	-	9	-172
Other tangible fixed assets	-7	1	_	_	-6
Inventories	-465	2	_	_	-463
Long-term liabilities	299	60	-33	-3	323
Current liabilities	-44	_	84	_	40
Tax losses carried forward	46	13	_	1	60
Total	-2,757	173	51	20	-2,513

#### Tax losses carried forward

Deferred tax receivables in respect of tax losses carried forward in Norway have been taken into account in full as the company is of the opinion that Boliden will be able to generate sufficient taxable income in the future to exploit these tax losses carried forward. Unutilised tax losses carried forward for which a deferred tax receivable has

not been reported totalled SEK 91 million (SEK 91 m) in Canada on 31st December 2013, of which SEK 13 million matures in 2014, SEK 1 million in 2015, and the remaining SEK 77 million between 2026 and 2033.

Note 17 Inventories		
·		
	31-12-2013	31-12-2012
Raw materials and consumables	3,480	3,548
Goods under manufacture	3,039	3,367
Finished goods and tradable goods	1,512	1,330
	8.031	8.244

Note 19 Other current receivables						
	31-12-2013	31-12-2012				
Other prepaid expenses and accrued income	136	172				
VAT recoverable	435	480				
Other current receivables	306	139				
	877	791				

#### Note 18 | Accounts receivable

On 31st December 2013, accounts receivable to a total value of SEK 45 million (SEK 27 m) were due for payment after more than 30 days, corresponding to 4.3 per cent (2.7%) of the total accounts receivable. The maturity structure is shown in the following table:

	31-12-2013	31-12-2012
Accounts receivable, not due	733	797
Due: 0-30 days	270	192
Due: 31-60 days	28	14
Due: 61-90 days	1	1
Due: >90 days	16	12
	1,048	1,016

The majority of the Group's accounts receivable relate to European customers. Accounts receivable in foreign currencies have been valued at the closing day rate. Note 2 Information per business segment and geographical market on page 80 shows the breakdown of revenues by geographical area.

Accounts receivable are only written down to a minor extent and doubtful receivables total only small amounts. Confirmed bad debt losses are insignificant.

Only a small percentage of Boliden's customers, 2.0 per cent (1.0%), are located in Greece, Italy, Spain and Portugal. The risk management of these customers is handled by means of a requirement for payment in advance.

For information on the management of credit risks, see the section entitled Credit risks in accounts receivable that forms part of the Risk management section of the Directors' Report on page 53.

#### Note 20 Affiliates

#### Relationships

The Parent Company's directly owned subsidiaries are reported in Note 14 on page 86, Participations in Group companies, while its participations in associated companies are reported in Note 15 Participations in Associated companies on page 86. Information regarding the Members of the Board and Group management, and the remuneration paid to the same, is presented in Note 3 Employees and personnel costs on pages 80–81, and in the Corporate Governance Report on pages 102–107.

#### **Transactions**

No Member of the Board or senior executive in the Group participates or has participated, directly or indirectly, in any business transactions during the current or previous financial year between themselves and the Group which are or were unusual in nature with regard to their terms. Nor has the Group granted loans, issued guarantees or provided sureties to any of the Members of the Board or senior executives of the company.

#### Note 21 | Shareholders' equity

	31-12-	2013	31-12-201	31-12-2012		
Share capital	Number of shares	Nominal value, SEK	Number of shares	Nominal value, SEK		
Opening balance	273,511,169	578,914,338	273,511,169	578,914,338		
Share cancellation	-	-	-	-		
Bonus issue	-	_	_	-		
Closing balance	273.511.169	578.914.338	273.511.169	578.914.338		

The Articles of Association for Boliden AB state that the share capital shall comprise a minimum of SEK 150,000,000 and a maximum of SEK 600,000,000. The nominal value is SEK 2.12 per share. The share capital comprises a single class of share.

The Annual General Meeting of the Company's shareholders held on 3rd May 2013 resolved to pay a dividend of SEK 4 (SEK 4) per share, equivalent to a total payment of SEK 1,094,044,676.

Shareholders' equity, SEK m	31-12-2013	31-12-2012
Share capital	579	579
Other reserves	6,139	5,719
Profit carried forward, including profit for the year	16,342	16,042
Minority holdings	16	14
Total shareholders' equity	23,075	22,354
Shareholders' equity per share, SEK	84.31	81.68

Boliden's Board of Directors will propose to the Annual General Meeting that a dividend of SEK 1.75 (SEK 4.00) per share be paid, equivalent to a total of SEK 478,644,546. Boliden's dividend policy stipulates that approximately one third of the net profit after tax shall be disbursed in the form of dividends.

Earnings per share	2013	2012
Profit for the year, SEK m	1,294	3,341
There are no potential shares and hence no dilution effect		
Number of shares		
Opening number of shares	273,511,169	273,511,169
Buy-back of own shares	_	_

273,511,169	273,511,169
-	_
273,511,169	273,511,169
273,511,169	273,511,169
-	-
_	_
_	_
4.72	12.21
	273,511,169 273,511,169 - - -

Earnings per share are calculated by dividing the profit for the period by the average number of shares.

No instruments exist that could give rise to a dilution effect, and the calculation is, therefore, the same for basic and diluted earnings per share.

Boliden monitors its capital structure with the aid of the net debt/equity ratio, among other things. The net debt/equity ratio is calculated as the net of interest-bearing provisions and liabilities minus financial assets including liquid assets divided by shareholders' equity.

#### Note 22 Provisions for pensions and similar undertakings

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

#### Sweden

Boliden's pension undertakings in Sweden are not invested in funds. The pension undertakings are secured through the Swedish PRI/ FPG system and through insurance companies. The majority of the pension undertakings for salaried employees are secured through insurances with Alecta and are lifelong retirement pensions. The benefits offered by the lifelong pensions are determined using different percentages for different salary intervals. Alecta has not provided sufficient information for 2013 for the ITP plan (supplementary pensions for salaried employees) to be reported as a defined benefit plan, and it is consequently reported in accordance with UFR 6 as a defined contribution plan. A surplus in Alecta can be allocated to the policyholders and/or those insured. At the end of the year, Alecta's collective consolidation level was 148 per cent (130%). The collective consolidation level comprises the market value of Alecta's assets as a percentage of the insurance undertakings calculated in accordance with Alecta's actuarial calculation assumptions, which do not correspond with those of IAS 19. Boliden's pension undertakings account for only a very small percentage of Alecta's insurance undertakings. There are, in addition to the ITP plan, a few previously earned temporary retirement pensions within Boliden.

"Gruvplanen" (GP) is a pension agreement for underground workers. The plan grants underground workers entitlement to receive a pension between the ages of 60 and 65 and between 65 and 70 under certain preconditions based on an average income. The "Gruvplanen" plan was closed to new earners in 2011 and replaced by a

defined premium pension plan (GLP). The commitments change from vesting to non-vesting in conjunction with retirement.

#### Ireland

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

The financial position of the pension plans is reviewed every three years by an actuary in order to determine the requisite financing level. When a pension plan is deemed to be in deficit, which is currently the case for the four defined benefit plans, a financing proposal must be submitted to the Irish Pension Board in order to demonstrate how the deficit will be cleared. The actuary also ensures that Boliden receives annual reports on the financial position in accordance with accounting requirements. Payments are made to all five plans through a combination of contributions from both Boliden and employees in accordance with employment contracts. No other deposits are made.

The Board of the pension undertakings is responsible for investments in plan assets. The majority of the shares are invested in companies operating in the health care, financial services and raw materials sectors that are based in North America and Europe, and which are measured against sector indices. Some of the shares are invested in index funds. All interest-bearing securities entail investments in government bonds and investments of this kind were made in 2013 in order to reduce the risk and secure the pension liability. Liquid assets are held in order to facilitate pension disbursements. Investments in real estate are no longer part of the investment strategy and are in the process of being wound up.

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#### Note 22 Provisions for pensions and similar undertakings, cont.

#### Norway

The pension undertaking is primarily secured by means of defined contribution pension plans in that Boliden wound up the majority of the defined benefit plans in 2012. In 2013, the defined benefit plan only comprised the operations manager. Other employees in Norway are covered by a defined contribution plan that covers all employees and a contractual early retirement pension (AFP) with supplementary benefits from the ages of 62 to 67.

#### Events during the year

Boliden has implemented the change in IAS 19 for the reporting of defined benefit pension plans. The change removes the option of applying the corridor approach and periodisation of actuarial gains and losses for defined benefit pension plans. The standard also prescribes that the financing cost for the net pension liability shall be calculated with the aid of the discount rate for the pension liability. Revaluations of pension undertakings and assets are reported under Other comprehensive income. The figures for 2012 have also been restated.

The present value of Boliden's pension undertakings is close to the level last year (restated) while the market value of the Group's plan assets has increased by 21 per cent. The pension undertaking

in Ireland reported on 31st December 2013 comprises pension undertakings after the implementation of one of the three reductions in the pension undertaking in Ireland agreed between the employer, the Board of Directors and members, which saw the pensionable age increase from 62 to 65.

The Group's reported pension liability totals SEK 1,047 million (SEK 1,382 m), which sum includes endowment insurance and similar undertakings totalling SEK 66 million (SEK 64 m) in respect of defined premium pension plans in Sweden.

#### Assumptions during the year

Costs, undertakings and other factors in pension plans are calculated by means of the Projected Unit Credit Method, using the assumptions shown in the table below.

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

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

	Swed	den	Irela	nd	Oth	er
Actuarial assumptions (weighted averages)	2013	2012	2013	2012	2013	2012
Discount rate, %	3.75	3.50	3.75	3.70	3.90	3.80
Future pay increases, %	3.00	3.00	0.00	0.00	3.50	3.50
Future pension increases, %	1.75	1.80	0.00	0.00	0.00	0.00
Life expectancy						
women	90	90	88	88		
men	88	88	90	90		

	Swe	eden	Irela	and	Oth	er	Tot	tal
Specification of provisions for pensions	2013	2012	2013	2012	2013	2012	2013	2012
Pension undertaking at the beginning of the year	638	362	668	230	10	-10	1,317	581
Restatement, IAS 19	_	217	_	338	_	68	_	622
Pension undertaking at the beginning of the year,								
restated	638	580	668	568	10	57	1,317	1,203
Defined benefit plan costs	35	44	-154	54	9	1	-110	99
Revaluations for Other comprehensive income	-8	46	-135	127	-	-47	-143	126
Payments and disbursements	-35	-30	-59	<b>-</b> 57	-8	-	-103	-87
Translation differences	_	_	18	-23	0	-1	18	-24
Pension undertaking at the end of the year <sup>1)</sup>	631	638	339	668	11	10	981	1,317
Endowment insurance and similar undertakings	66	64	-	-	-	-	66	64
Net debt, as per Balance Sheet <sup>2)</sup>	697	703	339	668	11	10	1,047	1,382
Specification of provisions for pensions, as per 31st December								
Pension undertakings invested in funds	-	_	1,900	1,953	1	1	1,901	1,954
Pension undertakings not invested in funds	631	638	_	_	11	9	642	647
of which, special payroll tax	67	72	_	-	-	-	67	72
Fair value of plan assets	-	_	-1,561	-1,285	0	0	-1,561	-1,285
Pension undertakings	631	638	339	668	11	10	981	1,317
Endowment insurance and similar undertakings	66	64	-	-	-	-	66	64
Net debt, as per Balance Sheet	697	703	339	668	11	10	1,047	1,382
Specification of costs								
Cost of defined benefit plans								
Costs in respect of service during the period	19	29	34	27	9	1	62	57
Interest expense on undertaking	19	19	73	83	-	-	93	103
Interest income from plan assets	-	-	-48	-75	-	-	-48	-75
Special payroll tax and other taxes	-5	5	_	-	-	-	-5	5
Administrative costs and premiums paid	-	-	3	0	_	_	3	C
Settlements/reductions of pension plans	1	-9	-217	19	0	_	-216	10
Total cost of defined benefit plans	35	44	-154	54	9	1	-110	99
Cost of defined contribution plans	310	324	2	10	99	105	410	439
Total pension costs	345	368	-153	64	108	106	300	537

<sup>1)</sup> Undertakings in Sweden include undertakings in accordance with PRI/FGI totalling SEK 281 million (SEK 260 m), undertakings for underground workers totalling SEK 284 million (SEK 307 m), and other undertakings totalling SEK 3 million (SEK 3 m).

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

Reconciliation of pension undertaking								
	2013	2012	2013	2012	2013	2012	2013	2012
Present value of undertakings at the beginning of the year	638	580	1,953	1,703	10	375	2,602	2,657
Cost in respect of service during the current period	19	29	34	27	9	1	62	56
Interest expense on undertaking	19	19	73	83	_	_	93	103
Special payroll tax	-5	5	_	_	_	_	-5	5
Fees from plan participants	_	_	16	16	_	_	16	16
Revaluation of defined benefit pension liability	-8	46	26	256	_	-47	18	255
of which profit/loss as a result of financial assumptions	-18	9	-7	279	_	-47	-25	241
of which profit/loss as a result of experience-based assumptions	10	<i>37</i>	33	-23	_	_	43	14
Disbursements made	-35	-30	-58	-61	-8	-312	-103	-403
Disbursements in conjunction with terminations	-00	-00	-50	-01	_0	-012	-100	-400
Reductions and settlements	1	-9	-217	-5	_	-7	-216	-21
Translation differences	ı	-5	73	-67	0	-7 -1	-210 72	-67
			/3	-07	<u> </u>	-1	/ _	-07
Present value of undertakings at the end of the year	631	638	1,900	1,953	11	10	2,541	2,601
Endowment insurance and similar undertakings	66	64	_	_	_	_	66	64
of which amounts attributable to active employees	348	355	1.027	1,318	4	3	1,378	1.676
of which amounts attributable to holders of paid up policies	138	153	120	125	_	_	258	278
of which amounts attributable to retired	, 55	, 55	,	0				_, _
employees	211	195	752	511	7	7	970	713
Reconciliation of plan assets								
Fair value of plan assets at the beginning of the year	-	_	1,285	1,135	0	262	1,285	1,398
Interest income on plan assets	-	-	48	75	-	-	48	75
Return on plan assets excluding amounts included in net interest items	_	_	163	132	_	_	163	132
Fees from the employer excluding disburse-								
ments in conjunction with terminations	-	_	61	57	-	_	61	57
Fees from plan participants	-	-	16	16	-	-	16	16
Disbursements made	-	-	-60	-61	-	-262	-60	-323
Administrative costs, taxes and premiums paid	-	-	-3	-24	_	-	-5	-24
Exchange rate fluctuations	-	-	50	-46	-	-	53	-46
Fair value of plan assets at the end of the year	-	-	1,561	1,285	0	0	1,561	1,285
Net debt, as per Balance Sheet							1,047	1,382
Charification of plan accepts								
Specification of plan assets			000	705			000	705
Listed shares and participations	_	_	833	725 24.4	0	0	833	725
Interest-bearing securities	_	_	690	314	_	_	690	314
Liquid assets	_	_	35	242	_	_	35	242
Real estate	-	_	3	3	_	-	3	3
Other			 1,561	1,285			 1,561	1,285

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#### Note 22 Provisions for pensions and similar undertakings, cont.

Sensitivity analysis of the effect on the defined pension liability (+increase/-decrease in pension liability)			Sweden	Ireland	Total
Significant actuarial assumptions			2013	2013	2013
Discount rate, %		+0.5	-32	-131	-163
		-0.5	36	137	173
Pay increases, %		+0.5	15	29	44
		-0.5	-14	-	-14
Increased life expectancy, years	Man	+ 1	10	41	51
	Woman	+ 1	9	3	12

The sensitivity analysis has been conducted on the basis of the above-mentioned actuarial changes as Boliden is of the opinion that they can have a substantial impact on the pension liability. It is also likely that changes to these assumptions will be made. The calculations have been performed by means of the analysis of each change individually and the calculations have not taken into account any interdependence between the assumptions. No sensitivity analysis has been conducted for Norway as the amounts in question are insignificant. Other countries do not have any defined benefit pension liabilities.

Defined benefit pension liability terms	Sweden	Ireland	Other	Total
Benefits scheduled for disbursement within 12 months	46	54	0	100
Benefits scheduled for disbursement within 1-5 years	183	216	2	401
Benefits scheduled for disbursement after 5 years or more	401	69	9	479

The maturity of plan assets in Ireland have reduced anticipated payments after 5 years or more. The weighted average duration of the defined benefit pension liability is 17 years for Sweden and 15 years for Ireland.

#### Note 23 Other provisions

	31-12-2013	31-12-2012
Reclamation costs	1,651	1,618
Other	30	32
	1,681	1,650
Of which:		
Long-term	1,512	1,511
Short-term	169	139
	1,681	1,650

#### **Reclamation costs**

Provisions for reclamation costs are made on the basis of an assessment of future costs based on current technology and other conditions. Provision has been made for the current value of estimated undertakings in accordance with IAS 37 and IFRIC 1. Gradual reclamation is preferable, although most of the reclamation work is carried out after a decision to decommission. In historical terms, Boliden has succeeded in extending the useful life of its mining assets compared with the original plans. Reclamation provisions are reviewed on an ongoing basis.

	20	13		2	012	
The Group, 2013	Reclamation costs	Other	Total	Reclamation costs	Other	Total
Book value at beginning of year	1,618	32	1,650	1,110	54	1,164
Additions to existing provisions	68	6	74	548	8	556
Reversal of existing provisions	-7	-7	-14	-6	-30	-36
Payments	-70	-1	-71	-45	0	-45
Discount effect for the period	29	_	29	19	0	19
Translation difference	13	0	13	-8	0	-8
Book value at year-end	1,651	30	1,681	1,618	32	1,650
Anticipated date of outflow of resources:						
Within one year	164	5	169	130	9	139
Between one and two years	156	1	157	151	3	154
Between three and five years	182	0	182	155	0	155
More than five years	1,148	24	1,172	1,182	20	1,202
	1,651	30	1,681	1,618	32	1,650

#### Note 24 Risk information

See the section entitled "Risk management" in the Directors' Report on pages 51-53 for a description of Boliden's financial risks. The amounts reported refer to the Group.

Note 25   Financial liabilities and matur	ibir obuitobiiuo
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31-12-2013	Fi	Financial liabilities Maturity st			Maturity structure <sup>2)</sup>				
SEK m	Currency	Interest <sup>1)</sup> , %	Nominal amounts	2014	2015	2016	2017	2018	2019+
Syndicated credit facility	EUR	1.31	1,431	19	1,440				
Syndicated credit facility	SEK	2.10	222	5	225				
Credit facility	EUR	1.67	760	97	96	94	93	92	352
Debenture loan	EUR	1.91	2,010	259	256	695	123	655	157
Debenture loan	SEK	2.16	230	5	5	231			
Commercial papers 3)	SEK	1.80	3,641	3,657					
Leasing, other			13	5	8	2			
Accounts payable			3,636	3,636					
Total			11,943	7,683	2,030	1,022	216	747	509

31-12-2012	Fi	nancial liabilit	ies			Maturity st	ructure <sup>2)</sup>		
SEK m	Currency	Interest <sup>1)</sup> , %	Nominal amounts	2013	2014	2015	2016	2017	2018+
Syndicated credit facility	EUR	3.42	603	21	21	613			
Syndicated credit facility	SEK	3.47	808	29	29	854			
Credit facility	EUR	1.68	732	12	94	92	91	90	427
Debenture Ioan	EUR	3.40	1,937	66	281	272	686	126	789
Debenture Ioan	SEK	3.72	630	417	9	9	232		
Commercial papers 3)	SEK	2.79	1,266	1,301					
Other		4.00	5	5					
Accounts payable			4,192	4,192					
Total			10,173	6,043	434	1,840	1,009	216	1,216

<sup>1)</sup> Weighted interest including interest swaps.

#### Loan portfolio

Boliden has syndicated credit facilities totalling SEK 5,800 million and EUR 400 million. The SEK 5,800 million facility matures in 2015, while the EUR 400 million facility expires in 2017. In addition, Boliden has an EUR 85 million credit facility from the European Investment Bank (EIB) which will be amortised between 2014 and 2022. Boliden also has unutilised Swedish Export Credits Guarantee Board (EKN) credit facilities totalling SEK 2,000 million, which expire in 2017. The utilised component of the credit facilities totalled SEK 2,431 million (SEK 2,175 m) on 31st December 2013. Boliden also has a number of directed bonds issued to Swedish and Nordic institutions which, on 31st December 2013, totalled SEK 2,240 million (SEK 2,567 m) and which fall due for payment between 2014 and 2018. The framework amount for Boliden's commercial papers programme was increased to SEK 4,000 million (SEK 2,500 m) during the year and on 31st December 2013, SEK 3,641 million (SEK 1,266 m)

remained outstanding. The average term of the loan facilities on 31st December 2013 was 2.6 years (3.5 yrs.) and the debt portfolio's average interest rate was 1.76 per cent (3.12%). The fixed interest term of outstanding loans, including interest swaps entered into, totalled 0.7 years (0.9 yrs.) on 31st December 2013. The above maturity analysis includes interest flows from interest swaps.

Boliden's current liquidity in the form of liquid assets and unutilised credit facilities with a term in excess of one year, less credit utilised and which shall be amortised within one year, totalled SEK 6,356 million (SEK 9,150 m) on 31st December 2013.

The above maturity structure for the financial liabilities, including interest payments, includes the undiscounted cash flows that derive from the Group's liabilities, based on the contracted remaining durations. Interest maturity, including interest swaps, has been calculated on the basis of the applicable closing interest rates.

#### Note 26 | Financial derivative instruments

Boliden uses financial derivative instruments to manage currency rate risks, raw material price risks, and interest rate risks arising within its operations.

	31-12-2	013	31-12-8	2012
Outstanding financial derivative instruments, SEK m	Nominal amount	Fair value	Nominal amount	Fair value
Transaction exposure (binding undertakings)				
Currency futures	-5,295	34	-4,818	29
Raw material derivatives	121	93	1,109	66
Transaction exposure (forecast cash flows)				
Currency futures	-1,533	52	-2,978	100
Raw material derivatives	-1,277	292	-4,462	-262
Interest derivatives	-5,380	-2	-6,247	-22
Translation exposure				
Currency futures	-1,657	-5	-2,925	17
Total		464		-72

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<sup>2)</sup> The duration analysis includes gross flows of loans and interest, including flows from interest swaps.

<sup>3)</sup> Outstanding commercial papers are reported, by law, under the Group's Parent Company, Boliden AB.

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#### Note 26 Financial derivative instruments, cont.

Nominal amounts comprise the net volume of the derivatives bought and sold. Derivatives for forecast cash flows exclusively comprise derivatives sold. Nominal amounts for interest swaps also include contracted derivatives commencing in 2013.

		31-12-201	3	3	31-12-201	2	
Maturity structure, derivative instruments, nominal amounts, SEK m	2014	2015	2016	2013	2014	2015	
Currency futures	-7,267	-1,218		-9,149	-362	-1,209	
Raw materials derivatives	-537	-619		-1,576	-455	-1,323	
Interest derivatives	-3,038	-1,358	-984	-3,492	-2,755		
Hedge accounting, SEK m				2013			2012
Hedging of fair value							
- Changes in value of hedging instruments in	respect of bindir	ıg undertakir	ngs	-564			-1,186
– Change in value of hedged item				564			1,186
Ineffectiveness of fair value hedging				0			0
Ineffectiveness of cash flow hedging				1			-
Ineffectiveness of hedging of net investment	ts in overseas o	perations		_			4
Total ineffectiveness				1			4

The effect of effective cash flow hedging with regard to Transaction exposure on the result for 2013 totals SEK 200 million (SEK 201 m), of which SEK 227 million (SEK 242 m) refers to exchange rate and metal price hedging and SEK –27 million (SEK –41 m) to interest swaps.

### Currency derivatives in respect of forecast exposure - Cash flow hedging

A summary of Boliden's outstanding currency hedging for currency exposure in USD/SEK on 31st December 2013 is shown below. Hedges that refer to forecast exposure between 2016 and 2017

mature in 2015, but the intention is to extend them. Boliden's other currency risks in respect of forecast exposure are, in every significant respect, unhedged. For further information about the Group's transaction exposure, see Risk management on page 51.

Currencies	2014	2015	2016	2017	
USD/SEK					
Hedged volume (USD m)	56	72	70	43	
Forward rate, USD/SEK	6.83	6.78	6.77	6.77	
Market value, SEK m	16	14	13	8	
Total market value, SEK m					52

### Raw materials derivatives in respect of forecast exposure - Cash flow hedging

The table below provides a summary of Boliden's outstanding price hedges for gold on 31st December 2013. The hedges that refer to forecast exposure between 2016 and 2017 mature in 2015, but the

intention is to extend them. Boliden's other metal price risks in respect of forecast exposure are, in every significant respect, unhedged. For further information about the Group's transaction exposure, see Risk management on page 51.

Metals	2014	2015	2016	2017	
Gold					
Hedged volume (tr. oz.)	38,400	48,600	47,000	29,000	
Forward rate, USD/tr. oz.	1,455	1,491	1,487	1,490	
Market value, SEK m	63	90	86	53	
Total market value, SEK m					292

#### Offsetting of financial assets and liabilities

	31-12-2013	31-12-2012		31-12-2013	31-12-2012
Gross amount for financial assets	526	361	Gross amount for financial liabilities	62	432
Amount offset in Balance Sheet	-26	-39	Amount offset in Balance Sheet	-26	-39
Net asset reported in Balance Sheet	500	322	Net liability reported in Balance Sheet	36	394
Amount comprised by offsetting			Amount comprised by offsetting in		
in conjunction with insolvency, etc.	-33	-85	conjunction with insolvency, etc.	-33	-85
Net asset	466	237	Net liability	2	309

#### Note 27 | Financial assets and liabilities by valuation category

31-12-2013	Valuation classification	Holdings valued at fair value	Loan receiv- ables and accounts receivable	Financial assets avail- able for sale	Derivatives used in hedge accounting	Financial liabili- ties valued at accrued acquisi- tion value	Total reported value	Total fair value
ASSETS								
Financial fixed assets								
Other shares and participations	3			24			24	24
Current assets								
Current receivables								
Accounts receivable			1,048				1,048	1,048
Interest-bearing receivables			3				3	3
Derivative instruments	2	49			451		500	500
Liquid assets			611				611	611
Total financial assets		49	1,662	24	451	-	2,186	2,186
LIABILITIES								
Long-term liabilities								
Liabilities to credit institutions	2					4,346	4,346	4,364
Other interest-bearing liabilities	2					4	4	4
Current liabilities								
Liabilities to credit institutions	2					3,948	3,948	3,948
Other interest-bearing liabilities	2					9	9	9
Accounts payable						3,636	3,636	3,636
Derivative instruments	2	8			28		36	36
Total financial liabilities		8	-	_	28	11,943	11,979	11,997

Boliden's entire holding of financial instruments reported at fair value in the Balance Sheet is classified as level two in the Fair value hierarchy (see Accounting principles), with the exception of a small amount in other shares and participations that is classified as level three. The fair value of liabilities to credit institutions is calculated as discounted contractually agreed amortisations and interest payments at estimated market interest rates. The interest covenants of existing loan

agreements were, on 31st December 2013, adjudged to be on a par with credit market interest rates, and the fair value therefore corresponds, in every significant respect, with the reported value.

The reported value of accounts receivable and accounts payable is held to be the same as the fair value due to the short term to maturity, to the fact that provision has been made for bad debts, and to the fact that any penalty interest will be debited.

		11-1-6	Loan receiv-	Fiil	Derivatives	Financial liabili- ties valued at	Total	Total
31-12-2012	Valuation classification	Holdings valued at fair value	ables and accounts receivable	Financial assets avail- able for sale		accrued acquisi-	reported value	fair value
ASSETS								
Financial fixed assets								
Other shares and participations				24			24	24
Current assets								
Current receivables								
Accounts receivable			1,016				1,016	1,016
Interest-bearing receivables			3				3	3
Derivative instruments	2	36			286		322	322
Liquid assets			1,011				1,011	1,011
Total financial assets		36	2,030	24	286	_	2,376	2,376
LIABILITIES								
Long-term liabilities								
Liabilities to credit institutions						4,310	4,310	4,310
						5	5	5
Current liabilities								
Liabilities to credit institutions						1,666	1,666	1,666
Accounts payable						4,192	4,192	4,192
Derivative instruments	2	4			390		394	394
Total financial liabilities		4	-	-	390	10,173	10,567	10,567

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Note 28 Other current liabilities

	31-12-2013	31-12-2012
Accrued salaries and social security expenses	333	323
Accrued interest expenses	22	95
Other accrued costs and prepaid income	608	669
Other operating liabilities	231	175
	1,194	1,263

#### Note 29 Pledged assets and contingent liabilities

	The G	roup	Parent Company		
	2013	2012	2013	2012	
Pledged assets					
For own liabilities and provisions	None	None	None	None	
Contingent liabilities					
Parent Company sureties	-	-	8,608	6,971	
Other sureties and guarantees	1,579	632	158	154	
Pension liabilities	3	3	_	_	
Agreed residual values according to leasing					
contracts	26	47	_		
	1,608	682	8,767	7,125	

The Parent Company sureties refer to guarantees issued for subsidiary companies. SEK 8,767 million (SEK 7,125 m) refer to Parent Company sureties for external financial borrowing. Parent Company sureties in the above table have been booked in the amount utilised. Guarantees in respect of unutilised credits total SEK 9,706 million (SEK 11,039 m).

The possibility exists, in addition to the above specifications under the heading of contingent liabilities and the items included in the financial information, that the Group may incur environmentally-related contingent liabilities or contingent liabilities attributable to legal proceedings and claims which cannot be currently calculated but which may, in future, entail costs or investments.

#### Legal proceedings

#### **Overview**

Boliden conducts extensive domestic and international operations and is occasionally involved in disputes and legal proceedings arising in the course of these operations. These disputes and legal proceedings are not expected, either individually or collectively, to have any significant negative impact on Boliden's operating profits, profitability or financial position, over and above that detailed below.

#### Disputes

Disputes arising from the dam breach accident in Spain In April 1998, a dam breach occurred in a tailings pond at the Los Frailes mine in Spain, which was then owned by Boliden's subsidiary, Boliden Apirsa S.L. ("Apirsa").

Following the dam breach, criminal proceedings were initiated against Apirsa and its representatives. In December 2000, the prosecutor withdrew the proceedings. The ruling was appealed but finally ratified in November 2001. The criminal proceedings determined that the accident was caused by design and construction errors in the dam, not by Apirsa's operations at the mine.

The outcome of the criminal proceedings notwithstanding, the Spanish Ministry of the Environment declared Apirsa liable to pay an amount corresponding to approximately EUR 45 million in clean-up costs, damages and fines. This resulted, in January 2005, in Apirsa initiating so-called insolvency proceedings in order to ensure a coordinated and orderly closure of the company. The receivers in bankruptcy have, within the framework of the insolvency proceedings, requested that Apirsa's parent company, Boliden BV, together with Boliden Mineral AB and Boliden AB, be held liable for Apirsa's shortfall in an amount which, according to the receivers in bankruptcy, totals approximately EUR 141 million, including a claim of approximately EUR 89 million which the local government (Junta de Andalucía) believes it is owed, as described in greater detail below.

As a result of the dam breach, the local government sued Apirsa, Boliden BV and Boliden AB in a civil court for damages totalling approximately EUR 89 million. The suit was dismissed on formal legal grounds. The ruling was appealed, but the appeal was rejected by a higher court in the

autumn of 2003. Since the dismissal of the suit in the civil court, the local government in Andalucía has initiated administrative proceedings against Apirsa, Boliden BV and Boliden AB in respect of the same claim. In these proceedings, the local government has itself enjoined the three companies to pay the amount claimed. Apirsa, Boliden BV and Boliden AB appealed the decision to the Administrative Court and in late 2011, the Supreme Administrative Court ruled that the local government's rulings against and claims against all three of the Boliden companies affected were invalid on formal grounds. The rulings are final and cannot be appealed. In light of the fact that the local government's claims have hence been ruled inadmissible in both civil and administrative courts, the local government has requested a ruling by the Supreme Administrative Court on the correct body in which the matter may be heard. The Supreme Administrative Court has, in accordance with this request, ruled that the matter can be heard in a civil court of law. The local government's suit against the above-mentioned companies will, therefore, be reopened in the court of the first instance in Seville.

The companies that were responsible for the design and construction of the dams and against which Apirsa had previously brought suit and lost have now submitted claims against Apirsa, seeking compensation for their legal costs. Final rulings on these compensation claims will be made by the respective courts of instance. It is currently not possible to assess with any reasonable degree of certainty whether the legal cost claims can be brought against any Boliden company other than Apirsa.

Based on the legal advice and opinions given by the company's Spanish legal counsel, Boliden's overall view is that the company will not suffer any substantial financial damage as a result of the legal proceedings described. The company has made no provision, pending a final ruling.

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. Boliden paid the fine and interest on the same, a sum totalling SEK 367 million, in 2010. Boliden has contested the demand from Travis Perkins and has, to ensure that all parties involved are included, also brought 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.

Summons arising from the export of metallic residues to Chile in the 1980s

In October 2013, suit was brought against Boliden, claiming damages of just over SEK 90 million and interest. The claim refers to the arsenic poisoning suffered by just over 700 people in the Chilean town of Arica to which Boliden exported metallic residues from the Rönnskär smelter between 1984 and 1985 for processing by a Chilean company, Promel. The suit was brought by a Swedish limited partnership, Arica Victims KB. Boliden has contested the claim in its statement of defence submitted to the Skellefteå District Court. Boliden's general opinion is that the company will not suffer any substantial financial loss as a result of the legal process described. The company has made no provision, pending a ruling by the court.

#### Diesel tax at Aitik

During the period from April 2009 to October 2012, dyed diesel was incorrectly used at Aitik instead of undyed diesel. The two versions carry different tax rates. When the mistake was discovered in October 2012, Boliden immediately contacted both the supplier, in order to switch to undyed diesel, and the Swedish Tax Agency, in order to inform them of what had happened. Boliden has, throughout the period, paid the tax that would have been applicable if the correct diesel had been used and the company has not benefitted financially from the mistake. In May 2013, the Swedish Tax Agency decided to impose an energy tax liability totalling SEK 212 million, plus interest, on Boliden. After a review of the company's income tax liability, the amount, excluding interest, totals SEK 156 million and has been paid. Boliden has appealed the Swedish Tax Agency's ruling to the Administrative Court in Falun and no provision has consequently been made in the 2013 accounts.

#### Note 30 Restatement of financial reports

Below are the amendments to the financial reports for 2012 attributable to the revisions to the IAS 19 and IFRIC 20 accounting standards that came into force on 1st January 2013. The presentation

in the table below is at primary consolidation level and is hence not a comprehensive account of all items in the financial reports.

Consolidated Income Statements, SEK m	2012	IAS 19	IFRIC 20	2012, restated
Revenues	40,001			40,001
Significant cost types	-36,008	60	40	-35,908
of which, raw material costs, incl. inventory changes	-22,950	_	_	-22,950
of which, personnel costs	-3,482	60	_	-3,422
of which, energy costs	-2,269	_	_	-2,269
of which, other external costs	-5,089	_	383	-4,707
of which, depreciation according to plan	-2,218	_	-343	-2,560
Other profit/loss items	78	_	_	78
Operating profit	4,071	60	40	4,171
Financial items	-179			-179
Taxes	-618	-23	-11	-651
Net profit for the year	3,274	37	29	3,341
Earnings per share	11.96			12.21
Consolidated Statements of Comprehensive Income, SEK m	2012	IAS 19	IFRIC 20	2012, restated
Net profit for the year	3,274	37	29	3,341
Items that will be reclassified under the profit/loss	-,			-,-
Hedging reserve, incl. tax	-265	0	_	-265
Translation difference on overseas operations	-169	10	_	-159
Hedging of net investments in overseas operations, incl. tax	171	_	_	171
Items that will not be reclassified under the profit/loss				.,.
Revaluation of defined benefit pension plans	0	-126	_	-126
Tax attributable to defined benefit pension plans	0	29	_	29
Total comprehensive income	3,011		29	2,990
Consolidated Balance Sheets, SEK m	31-12-2012	IAS 19	IFRIC 20	31-12-2012, restated
Tangible fixed assets, total	25,279		-141	25,138
of which, deferred mining costs	4,770		-141	4,629
Deferred tax receivables	61	187	-141	247
Total assets	40,035	187	-141	40,080
Total shareholders' equity	22,949	-492	-103	22,354
Pension provisions	735	647		1,382
Deferred tax liability	2,766	31	-37	2,760
Total shareholders' equity and liabilities	40,035	187	-140	40,080
Consolidated Balance Sheets, SEK m	31-12-2011	IAS 19	IFRIC 20	01-01-2012, restated
Tangible fixed assets, total	22,927		-182	22,745
of which, deferred mining costs	4,094		-182	3,913
Deferred tax receivables	46	174		220
Other long-term receivables	120	-10		109
Total assets	37,615	164	-182	37,597
Total shareholders' equity	21,032	-440	-134	20,458
Pension provisions	653	613		1,266
Other provisions	1,041	-30		1,011
Deferred tax liability	3,004	21	-48	2,977
Total shareholders' equity and liabilities	37,615	164	-182	37,597

#### Note 31 Events after 31st December 2013

#### Statement of defence submitted in the dispute arising from the export of metallic residues between 1984 and 1985

As previously announced, suit was brought against Boliden in October 2013 for damages totalling just over SEK 90 million plus interest. The claim relates to the arsenic poisoning suffered by just over 700 victims in Arica, Chile – a town to which Boliden exported metallic

residues from the Rönnskär smelter between 1984 and 1985 for processing by a Chilean company, Promel. Boliden has, in its statement of defence, of 20th January 2014, contested the claim and developed its grounds for so doing. For further information, please see the Group's website, www.boliden.com.

# Proposed allocation of profits

# The Board's proposed allocation of profits for 2013 and statement in accordance with the Swedish Companies Act, 18:4

Boliden has a dividend policy whereby approximately one third of the profit after tax is to be distributed. The Board of Directors proposes that the Annual General Meeting approve payment of a dividend of SEK 1.75 (SEK 4) per share, or a total of SEK 479 million (SEK 1,094 m), corresponding to 37.0 per cent of the profit after tax for 2013. The Parent Company's non-restricted shareholders' equity totals SEK 6,451 million and the Group's total shareholders' equity is SEK 23,075 million. The non-restricted shareholders' equity in the Parent Company and the Group will total SEK 5,972 million and SEK 22,596 million, respectively, after payment of the proposed dividend to the shareholders. The Board has taken the cyclic nature

of the industry and the risks associated with the operations into account in its dividend proposal.

The Annual Accounts have been prepared in accordance with generally accepted accounting principles in Sweden and the Consolidated Accounts have been prepared in accordance with EU-approved International Financial Reporting Standards, IFRS.

The Annual Accounts and the Consolidated Accounts give a true and fair view of the Parent Company's and the Group's financial position and results of operations.

The Directors' Report for the Group and the Parent Company give a true and fair overview of the Group's and the Parent Company's operations, position and results and describes the material risks and uncertainties faced by the Parent Company and the companies that make up the Group.

Stockholm, 12th February 2014

Anders Ullberg Chairman

Marie Berglund Member of the Board Staffan Bohman Member of the Board Lennart Evrell
President and CEO

Michael G:son Löw Member of the Board

Ulla Litzén *Member of the Board*  Leif Rönnbäck Member of the Board

Tom Erixon Member of the Board Roland Antonsson Employee Representative

Marie Holmberg Employee Representative

Hans-Göran Ölvebo Employee Representative

Our Audit Report was submitted on 12th February 2014

Ernst & Young AB

Lars Träff Authorised Public Accountant

# Auditor's report

To the Annual General Meeting of the shareholders of Boliden AB (publ.), corporate identity number: 556051-4142

### Report on the annual accounts and consolidated accounts

We have audited the annual accounts and consolidated accounts of Boliden AB (publ.) for 2013. The annual accounts and consolidated accounts of the company are included in the printed version of this document on pages 8–20, 22–53 and 66–98.

#### Responsibilities of the Board of Directors and the Managing Director for the annual accounts and consolidated accounts

The Board of Directors and the Managing Director are responsible for the preparation and fair presentation of the annual accounts in accordance with the Annual Accounts Act and of the consolidated accounts in accordance with International Financial Reporting Standards, as adopted by the EU, and the Annual Accounts Act, and for such internal control as the Board of Directors and the Managing Director determine is necessary to enable the preparation of the annual accounts and consolidated accounts that are free from material misstatement, whether due to fraud or error.

#### Auditor's responsibility

Our responsibility is to express an opinion on the annual accounts and consolidated accounts based on our audit. We conducted our audit in accordance with the International Standards on Auditing and generally accepted auditing standards in Sweden. These standards require that we comply with professional ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the annual accounts and consolidated accounts are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the annual accounts and consolidated accounts. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the annual accounts and consolidated accounts, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the company's preparation and fair presentation of the annual accounts and consolidated accounts in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made by the Board of Directors and the Managing Director, as well as evaluating the overall presentation of the annual accounts and consolidated accounts.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### **Opinions**

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the parent company as of 31st December 2013

and of its financial performance and its cash flows for the year then ended in accordance with the Annual Accounts Act. The consolidated accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the Group as of 31st December 2013 and of their financial performance and cash flows for the year then ended in accordance with International Financial Reporting Standards, as adopted by the EU, and the Annual Accounts Act. The statutory administration report is consistent with the other parts of the annual accounts and consolidated accounts.

We therefore recommend that the annual meeting of the shareholders adopt the income statement and balance sheet for the parent company and the group.

#### Report on other legal and regulatory requirements

In addition to our audit of the annual accounts and consolidated accounts, we have examined the proposed appropriations of the company's profit or loss and the administration of the Board of Directors and the Managing Director of Boliden AB (publ.) for 2013.

# Responsibilities of the Board of Directors and the Managing Director

The Board of Directors is responsible for the proposal for appropriations of the company's profit or loss, and the Board of Directors and the Managing Director are responsible for administration under the Companies Act.

#### Auditor's responsibility

Our responsibility is to express an opinion with reasonable assurance on the proposed appropriations of the company's profit or loss and on the administration, based on our audit. We conducted the audit in accordance with generally accepted auditing standards in Sweden.

As a basis for our opinion on the Board of Directors' proposed appropriations of the company's profit or loss, we examined the Board of Directors' reasoned statement and a selection of supporting evidence in order to be able to assess whether the proposal is in accordance with the Companies Act.

As a basis for our opinion concerning discharge from liability, in addition to our audit of the annual accounts and consolidated accounts, we examined significant decisions, actions taken and circumstances of the company in order to determine whether any member of the Board of Directors or the Managing Director is liable to the company. We also examined whether any member of the Board of Directors or the Managing Director has, in any other way, acted in contravention of the Companies Act, the Annual Accounts Act, or the Articles of Association.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

#### **Opinions**

We recommend to the annual meeting of the shareholders that the profit be appropriated in accordance with the proposal in the statutory administration report and that the members of the Board of Directors and the Managing Director be discharged from liability for the financial year.

Stockholm, 12th February 2014

Ernst & Young AB

Lars Träff Authorised Public Accountant





# Corporate Governance Report

Efficient corporate governance is a prerequisite for generating added value for our shareholders and maintaining confidence among our stakeholders at large.

A group, essentially comprising Swedish institutional investors, have held their shareholding and been long-term owners in Boliden since we were relisted in Sweden almost 15 years ago, but there is no clear principal owner. This places special demands on the Board as the owners' ambitions must be "interpreted".

We work in an industry that is characterised by high volatility, i.e. rapid and vigorous fluctuations – both up and down – in profits, and this is something that our shareholders must understand. This is why, in our Annual Report, we have placed great emphasis on presenting our operations and their sensitivity to changes. The volatility also makes significant demands on the company's management and Board in terms of their ability to handle these rapid changes without suffering either from hubris when the trend is upwards or dejection when the trend is downwards.

One of the prerequisites for value-generating work by the Board is that the Board has a firm grasp on the operations and on events in the outside world. We achieve this by, among other things, monthly reports and a well-structured body of material for the Board. We also usually visit two of Boliden's operating facilities each year in order to learn about those operations in real depth and to meet with the local management and employees.

In addition, in order to ensure that we spend sufficient time on the more forward-looking issues, we agree every year on a number of themes that we incorporate into our Board agenda. The Corporate Governance Report details the themes we have addressed during the past year. Some of them are recurring themes, e.g. CSR issues, which we address specifically at our October meeting, and leadership development, which is the focus of our December meeting.

The evaluation of the Board's work that we carried out in 2013 shows that the Board is functioning efficiently. This evaluation forms the basis for the work of the Nomination Committee and for the Board, it is an important tool in our efforts to ensure continuous improvement in our work.

Anders Ullberg Chairman of the Board

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#### Governance of the Boliden Group

Boliden is a Swedish limited company listed on the NASDAQ OMX Nordic Stockholm Stock Exchange (NASDAQ OMX). The Boliden Group has approximately 4,800 employees and runs mines and smelters in Sweden, Finland, Norway and Ireland. Boliden's sales offices in Sweden, Denmark, the UK and Germany handle sales and purchases of raw materials, metals and by-products. Boliden's corporate governance is based on the Swedish Annual Accounts Act, the Swedish Companies Act, the NASDAQ OMX Stockholm Stock Exchange's regulations for issuing parties, the Swedish Code of Corporate Governance, and other applicable legislation and regulations.

Over and above its compliance with various legislative and regulatory provisions, Boliden applies internal governance instruments, such as the Group's organisational and operational philosophy, the New Boliden Way, and Boliden's internal control tool, BICS, together with policies in a number of areas such as Boliden's Code of Conduct with which all employees must be familiar and in accordance with which they must conduct themselves. The Group's units also work in accordance with health & safety, environmental, energy, and quality management systems.

#### Some events in 2013

- Tom Erixon was elected as a new Member of the Board.
- · Delisting from the Toronto Stock Exchange, TSX.
- Decision to conduct a Limited Assurance Engagement of Boliden's GRI Index, together with associated information in the Annual Report and GRI Report.
- Establishment of a Health & Safety Director at Group level in order to improve the accident frequency trend.

#### **Shareholders**

Boliden's shareholders exercise their right of decision at the Annual General Meeting, which is held during the first half of the year, and at any Extraordinary General Meetings. There were a total of 90,963 shareholders at the end of 2013 and the biggest single shareholders were Norges Bank Investment Management, Blackrock Inc, SEB fonder, SHB fonder and AMF Försäkring och fonder. Approximately 41 per cent were held by foreign owners. For further information on the shareholder structure within Boliden, see pages 8–9 of the Annual Report.

#### **Annual General Meeting**

The Annual General Meeting is the company's supreme decision-making body. The duties of the Annual General Meeting include the election of Members of the Board and the Chairman of the Board and the Nomination Committee, the adoption of the Income Statement and Balance Sheet, resolutions on the appropriation of profits and discharge from liability for the Members of the Board and the President of the company, the determination of fees payable to the Members of the Board and to the auditors and the principles governing conditions of employment and remuneration for the President and senior executives, and, where relevant, the amending of Articles of Association and the election of auditors.

The 2013 Annual General Meeting was held on 3rd May in Stockholm. 96,630,630 shares were represented at the Meeting by 781 shareholders, either in person or through their proxies. The shares represented comprised approximately 35 per cent of the total number of shares. The Meeting resolved, among other things, to re-elect Board Members Marie Berglund, Staffan Bohman, Lennart Evrell, Michael G:son Löw, Ulla Litzén, Leif Rönnbäck and Anders Ullberg, and to elect Tom Erixon as a new Member of the Board. Anders Ullberg was re-elected as the Chairman of the Board.

The Meeting further resolved:

- to pay a dividend of SEK 4 per share, in accordance with the proposal by the Board of Directors;
- that the following persons shall be appointed as members of the Nomination Committee: Jan Andersson (Swedbank Robur fonder), Thomas Ehlin (Nordea Fonder), Lars-Erik Forsgårdh, Anders Oscarsson (AMF) and Anders Ullberg (Chairman of the Board);
- that Directors' fees payable shall comprise payments of SEK
  1,075,000 to the Chairman of the Board, and of SEK 430,000 to
  Members who are not Boliden employees, that the fees payable
  to the Chairman of the Audit Committee and to each of the two
  members of the Audit Committee shall be SEK 150,000 and
  SEK 75,000, respectively, and that the fees payable to each of the
  Remuneration Committee's two members shall be SEK 50,000;
- to re-elect Ernst & Young AB as the company's auditors for the period up to and including the next Annual General Meeting;
- that auditor's fees shall be payable in accordance with the approved invoices received;
- that remuneration payable to the members of the Group management shall comprise a fixed salary, any variable remuneration, other benefits and pensions. The variable remuneration shall be maximised at 60 per cent of the fixed salary for the President and maximised at 50 per cent of the fixed salary for other senior executives and shall be based on results in relation to targets set.

The variable remuneration shall not comprise pensionable income. The Minutes of the 2013 Annual General Meeting have been published on Boliden's website.

#### **Nomination Committee**

The Annual General Meeting passes resolutions on the principles governing the appointment and duties of the Nomination Committee. The Nomination Committee shall, in accordance with the Instructions for the Nomination Committee, comprise a minimum of five and a maximum of seven members. Five members shall be elected at the Annual General Meeting, of whom three shall represent the biggest shareholders and one the smaller shareholders, and one of whom shall be the Chairman of the Board. The Nomination Committee appoints its own Chairman and works in the best interests of all shareholders. The Nomination Committee may, in order better to reflect the shareholder structure in the event of changes in ownership, offer places on the Committee to other larger shareholders.

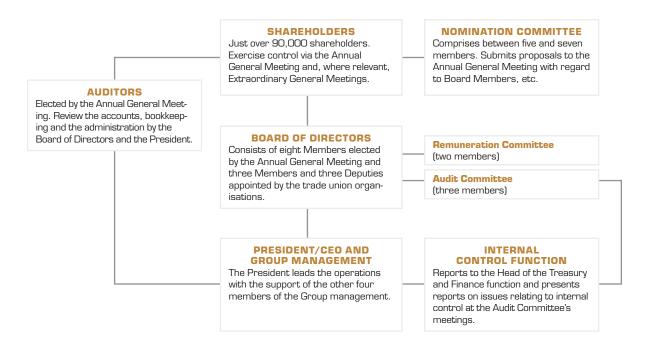
#### Composition of the Nomination Committee

Since Thomas Ehlin announced, after the Annual General Meeting, that he intended to resign his seat on the Committee, the Nomination Committee has accordingly exercised its mandate to invite two new members on to the Committee in order better to reflect Boliden's shareholder structure, namely Hans Ek (SEB fonder) and Frank Larsson (SHB fonder). In November, the Chairman of the Board convened the members of the Committee, at which time Jan Andersson (Swedbank Robur fonder) was appointed Chairman of the Nomination Committee.

#### **Duties of the Nomination Committee**

The Nomination Committee is tasked with drafting proposals for resolution by Boliden's Annual General Meeting. The proposals relate to, among other things, the number and the election of Members of the Board, the Chairman of the Board, fees payable to the Board and its committees, election of and fees payable to the company's auditors and

#### **Boliden's Corporate Governance Structure**



to the process and the criteria that shall govern the appointment of the members of the Nomination Committee ahead of the next Annual General Meeting.

The Nomination Committee has met a total of four times and has also had telephone contact and held a meeting with two Members of the Board. Information on the way in which shareholders can submit proposals to the Nomination Committee have been published on Boliden's website.

The focus of the Nomination Committee's work is on ensuring that the company's Board of Directors comprises Members who, collectively, possess the knowledge and experience that corresponds to the requirements made of the company's most senior governing body by the shareholders. The Chairman of the Board accordingly presents the Nomination Committee with the evaluation conducted of the work of the Board and the individual Members during the past year as part of the process of drafting proposals for Board Members. The Company President also presents Boliden's operations and future orientation. The Nomination Committee is also afforded the opportunity to meet the Members of the Board. The Nomination Committee also drafts proposals for the election of auditors.

#### The Board of Directors

Boliden's Board of Directors shall, under the provisions of the Articles of Association, comprise a minimum of three and a maximum of ten Members, without Deputy Members, elected by the Annual General Meeting. The company's employees have a statutory entitlement to appoint three Members and three Deputy Members to the Board.

#### The composition of the Board

The Board of Directors has comprised eight Members elected by the Annual General Meeting and three Members appointed by the trade union organisations since the 2013 Annual General Meeting. The Board Meetings are attended both by the ordinary Members and by the union's three Deputy Members. The Senior Vice President of Legal Affairs is the Board's Secretary.

Boliden's Chief Financial Officer (CFO) also usually attends the Meetings on behalf of the Group management. Other members of the Group management and other executives also attend and present reports on individual issues as required.

The Board Members elected by the Annual General Meeting are all to be regarded as independent in relation to major shareholders and all, with the exception of the President, are to be regarded as independent in relation to the company and the Group management.

The Members of the Board are presented on pages 108–109 and on Boliden's website. For more detailed information on attendance at Meetings and independence, among other things, see the table below.

### The responsibilities of the Board of Directors and the Chairman of the Board

The Board of Directors is appointed by Boliden's owners to bear ultimate responsibility for the company's organisation and the management of the company's affairs. The Board adopts a Formal Work Plan every year at the Board Meeting following election, held after the Annual General Meeting. The Formal Work Plan regulates the work and responsibilities of the Board in greater detail, together with the special duties with which the Chairman of the Board is tasked. The Chairman of the Board guides the work of the Board and monitors Boliden's operations through an ongoing dialogue with the President. The Board receives information on Boliden's commercial and financial position, together with details of Boliden's compliance with sustainability goals, through monthly reports and at Board Meetings. Prior to every Board Meeting, the Chairman and the President review the issues to be discussed at the Meeting. The source data for the Board's discussion of the issues is sent to the Members approximately one week before each Board Meeting. The division of labour between the Board of Directors and the President is clarified in the written "Instructions to the President" adopted by the Board at the Board Meeting following election.

In 2013, the Board has, as in previous years, established an Audit Committee and a Remuneration Committee.

#### Board of Directors, 2013

Board of Directors, as of the 2013 Annual General Meeting	Elected	Attendance, 2013	Committee work	Attendance, committee meetings 2013		Fee, Audit Committee, SEK	Fee, Remuneration Committee, SEK	ndependent of the company and the company managem.	Independent of major shareholders
Anders Ullberg, Chairman	2005	6 of 6	Audit Comm. Remunera- tion Comm.	5 of 5 2 of 2	1,075,000	75,000	50,000	Yes	Yes
Marie Berglund	2003	6 of 6			430,000			Yes	Yes
Staffan Bohman	2007	6 of 6	Remunera- tion Comm.	2 of 2	430,000		50,000	Yes	Yes
Tom Erixon	2013	4 of 4			430,000			Yes	Yes
Lennart Evrell, President	2008	6 of 6						No	Yes
Ulla Litzén	2005	6 of 6	Audit Comm.	5 of 5	430,000	150,000		Yes	Yes
Michael G:son Löw	2010	6 of 6			430,000			Yes	Yes
Leif Rönnbäck	2005	6 of 6	Audit Comm.	5 of 5	430,000	75,000		Yes	Yes
Roland Antonsson (ER)	2009	6 of 6							
Marie Holmberg (ER)	2008	6 of 6							
Hans-Göran Ölvebo (ER)	2001	3 of 6							
Ola Holmström (ER) Deputy	2012	6 of 6							
Ditte Kilsgaard Möller (ER) Deputy	2012	5 of 6							
Einar Mikkelsen (ER) Deputy	2012	3 of 6							

#### The Board of Directors' work in 2013

The Board of Directors held six Meetings in 2013, including the Meeting following election. A number of the Board Meetings are regularly held at the company's operating units in order to give the Members an increased insight into the operations. In 2013, the Board visited the ongoing expansion of the Garpenberg mine and concentrator, and the Harjavalta smelter.

At the beginning of every year, the Board sets a number of themes that it particularly wishes to address during the year. Some of the issues addressed during the year, in addition to the review of operational and safety issues conducted at every Board Meeting, were:

- February Year-end Report and Annual Report, Audit Report, matters to be discussed at the Annual General Meeting, and replacement- and capacity increase-related investments. Boliden's auditors presented reports detailing their observations from the audit of the company at the Board Meeting in February. The Board had, at this time, the opportunity to meet the auditors without the presence of the Group management.
- May Q1 Interim Report, work environment and safety issues, market trends with the emphasis on China, cost-cutting programmes within purchasing and the Group as a whole, etc., licence reviews, reviews of recent years' structural transactions in the mining industry, and Boliden's position.
- July Q2 Interim Report, Audit Report, review of action programme to combat accidents at work, strategic orientation, the visit to Garpenberg and a review of the ongoing expansion there, a review of the ongoing investment in silver extraction from concentrate at Kokkola, a pilot study for increasing Aitik's output from 36 to 45 million tonnes of ore/year, a concept study for Laver, electricity price hedging, and a general review of acquisition opportunities.
- October Q3 Interim Report, the issue of potential investments in energy production, the market and trends in electronic materials, the New Boliden Way follow-up work, Corporate Responsibility (CR), new sustainability goals, and a review of major disputes.
- December Strategy, budget and business plan, leadership development, trading companies and purchases, dam safety issues, developments at Tara, review of certain risks and risk factors, and ongoing replacement and bottleneck elimination investments.

Boliden's vision is of operations that are accident-free, but after a number of years with a positive trend in this respect, the accident frequency deteriorated in 2013. The Board takes this negative trend very seriously and has tasked the management with implementing additional measures to turn the trend around. These measures include the B-Safe project that has now been launched and which entails one-on-one discussions and follow-up discussions with all employees in order to raise awareness of the importance of safety and to build a safety culture. Another example is a closer partnership and dialogue with the contractors who carry out work within Boliden's operations. This work also forms part of the ongoing work within the framework of Boliden's organisational and operational philosophy, the New Boliden Way.

The Board has also discussed Boliden's position within the industry, the global trends in the metals market, and demand for Boliden's products on an ongoing basis throughout the year, together with Boliden's readiness for harsher market conditions and measures to counter cost increases.

The Board paid particular attention to ethical and moral considerations in response, in part, to the suit brought against the company in the autumn with reference to Boliden's deliveries of metallic smelter residues to Chile in the 1980s (see Note 29 on page 96 for further details), and to the attention to which the mining industry in general has been subjected in the mass media during the year.

Licensing processes that are efficient and fit for purpose is another area of considerable importance to Boliden's operations, and these issues too have been discussed on several occasions by the Board.

#### Evaluation of the Board's work

The Chairman ensures that the Board and its work are evaluated annually and that the results of the evaluation are conveyed to the Nomination Committee. The evaluation is carried out by the Board itself under the guidance of the Chairman or, occasionally, with the help of an independent consultant. The 2013 evaluation was a self-assessment during which the Members answered a number of questions in writing on a range of different subjects and held one-on-one discussions with the Chairman of the Board, followed by a joint discussion, during which the Board discussed the conclusions drawn from the evaluation.

#### **Audit Committee**

The Audit Committee meets before the publication of every financial report, and as necessary. The Committee prepares a number of issues for consideration by the Board and thereby supports the Board in its endeavours to fulfil its responsibilities within the areas of auditing and internal control and with assuring the quality of Boliden's financial reporting. This requires, among other things, that the company has a satisfactory organisation and appropriate processes to this end. Boliden has an internal control function whose work involves mapping risk areas and following up on work in identified areas, among other things. The Committee also works with the procurement of services from the company's auditors over and above the actual auditing services and, when so tasked by the Nomination Committee, with the procurement of auditing services.

The Audit Committee works on the basis of a set of "Instructions for the Audit Committee" adopted every year by the Board of Directors and reports back to the Board on the results of its work. Special attention was paid in 2013 to industry-related accounting issues and changes to IFRS and following up on internal controls. The decision was also taken during the year to allow Boliden's GRI Index, together with the associated information in the Annual Report and the GRI Report, to undergo a Limited Assurance Engagement, which was carried out by Boliden's auditors, Ernst & Young AB. The Audit Committee comprises Ulla Litzén (Chairwoman), Leif Rönnbäck and Anders Ullberg. The Committee members have specialist competence, experience of and interest in financial and accounting issues – see Directorships and previous positions, pages 108–109. The Committee's meetings are also attended by Boliden's CFO and the Director of Internal Controls and Risk Management.

The Committee met five times in 2013.

#### **Remuneration Committee**

The Remuneration Committee submits proposals for resolution by the Board regarding salary and other terms of employment for the President, and follows up on and evaluates programmes for variable remuneration for the management. The Committee also approves proposals regarding salaries and other terms of employment for the Group management, as proposed by the President. The Remuneration Committee is, furthermore, tasked with submitting proposals regarding remuneration principles for the President and Group management – proposals which are then submitted by the Board to the Annual General Meeting for resolution. The application of the guidelines and relevant remuneration structures and levels within the company is also followed up by the Committee and the results of this evaluation are published on the company's website.

The Remuneration Committee works on the basis of a set of "Instructions for the Remuneration Committee" adopted every year by the Board of Directors and reports back to the Board on the results of its work. The Committee has held two meetings during the year and had telephone contact on a number of occasions. The Remuneration Committee comprises Anders Ullberg (Chairman), and Staffan Bohman. See Note 3 on pages 80–81 for an account of the remuneration paid to the Group management.

#### The President and Group management

The President has ultimate responsibility for Boliden's strategic orientation and for ensuring the implementation and monitoring of the Board of Directors' other decisions, and for ensuring that risk management, steering, systems, organisation and processes are all of a satisfactory standard. The President is supported in his work by the Group's management group which, in addition to the President, comprises the SVPs for Boliden's two Business Areas, Mines and Smelters, the CFO, and the SVP Corporate Responsibility. The Group management meets regularly once a month to follow up on operations and to discuss Groupwide issues, and to draw up proposals for strategic plans, business plans, and budgets that the President submits to the Board of Directors for their consideration. The areas addressed by the Board have largely reflected the work of the Group management during the year. The Group management also holds two meetings every year, lasting at least two full days, in order to focus on strategy. The Group management, together with the management of the respective Business Areas, also meet six times a year to review Business Area-specific issues including a review of budgets and business transactions. For large scale projects, such as the Garpenberg expansion, relevant parts of the Group management form special steering groups, together with project managers and other stakeholders, and meet regularly. The Group management also meets with the company's employee representative Board Members and their deputies ahead of every Board Meeting, at which time the Board Meeting agenda is discussed.

The company's 150 or so senior managers and specialists meet at management meetings every year for discussions intended to build consensus and achieve widespread support on important issues.

See page 110 for a presentation of the Group management team.

#### **Business management**

Management by the Board goes through a chain of command from the President and the Group management to the operating units. Boliden has an organisation in which responsibilities and authority are delegated within clear frameworks. These frameworks are defined by an annual budget which is broken down by unit, a strategic plan, and Boliden's steering documents. The steering documents, which are available on the intranet and which comprise the internal framework required for effective management, include the Financial Policy, the Code of Conduct, the Anti-Corruption Policy, the Communications Policy, the Environmental Policy, and the Health & Safety Policy.

#### Sustainability governance in Boliden

Sustainability issues are an integral part of Boliden's operations and the work is conducted from the starting point of the most operationally critical issues. Sustainability issues are discussed at every management group and Board meeting, as is the case at the local management group meetings. The Board also dedicates one meeting every year to current Corporate Responsibility (CR) issues. One member of the Group management works exclusively, furthermore, with CR issues. The day-to-day responsibility is decentralised to the respective units. Central sustain-

ability, environmental, energy and HR functions follow up on the units' work and are responsible for creating a structure and orientation for the work. Networks have been established within the respective functions in order to promote knowledge exchange and development.

The sustainability issues identified by Boliden as being of the greatest significance and most highly prioritised are closely linked to Boliden's operations, strategy and vision. Factors that form the basis for the prioritisation include Boliden's own operations and their impact on people and the environment, the way in which work on these issues can support the operations, expectations of Boliden from internal and external stakeholders, risks and opportunities, external factors, and applicable regulations. The challenges that will be prioritised change over time and are, therefore, regularly reviewed – usually once every year. It is the responsibility of the various controlling parties within the Group to set local goals with regard to the overall issues. Boliden has set new goals in the sustainability sphere that will apply until 2018, inclusive, with regard to emissions and discharges to air and water, and carbon dioxide emissions – see page 64 of the Annual Report.

Action programmes have been drawn up with the aim of reversing the worrying accident frequency trend that both the Board of Directors and the Group management take extremely seriously. These measures include the appointment of a Health & Safety Officer at Group level, tasked with coordinating and further improving the company's health & safety work.

Matters of business ethics and anti-corruption are constantly topical and an area with which the company actively works. Boliden has continued to focus on anti-corruption issues in 2013 and has both provided training in these matters for the company's almost 150 senior managers and specialists, and online courses aimed at all clerical and administrative personnel. Boliden has previously established a whistle blower function that can be used to report suspected cases of impropriety.

Boliden decided, during the year, to allow the company's GRI Index, together with the associated information in the Annual Report and the GRI Report, to undergo a Limited Assurance Engagement. The Limited Assurance Engagement is designed to underline the importance of the sustainability work to Boliden and to further reinforce the market's confidence in the work conducted by the company in this respect.

#### **Auditors**

The auditor reports to the shareholders at the Annual General Meeting. During the year, the auditor has been in contact with the Group management in conjunction with audits or issues arising, and with the Board of Directors in conjunction with the submission of feedback reports and with assistance in the work of the Audit Committee.

The accounting firm of Ernst & Young AB was elected at the 2013 Annual General Meeting to serve as the company's auditors until the conclusion of the 2014 Annual General Meeting. Authorised Public Accountant, Lars Träff, is the senior auditor. Lars Träff's audit engagements, in addition to Boliden, include Scania, Billerud/Korsnäs, ÅF and Intrum Justitia. The Audit Committee also decided, during the year, that Lars Träff, together with Håkan Ulrichs, a partner at

Control activity	Responsible	Follow-up work
Compliance with Boliden's accounting manual	Group accounting/Controller department	Group management
Control of consolidated results	Group accounting/Controller department	Group management
Analysis and follow-up work	Business Areas/Controller department	Group management
Budget and forecasts	Business Areas/Controller department	Group management
Correct financial reporting controls	Operating units	Group accounting/internal control
Tax control	Operating units	Group Tax Director

EY Climate Change Sustainability Services, would review and sign RevR 6 "Certification of the Sustainability Report".

Remuneration is paid to the company's auditors in accordance with invoices received as agreed for the period up to the end of the 2014 Annual General Meeting. See Note 4 on page 82 for information on remuneration disbursed in 2013.

#### Internal control report by the Board of Directors

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

The Board of Directors has overall responsibility for ensuring that an efficient internal control system exists within the Boliden Group. The President is responsible for the existence of a process and organisation that ensure internal control and the quality of the internal and external financial reporting.

#### Internal control function

Boliden has an internal control function responsible for implementing processes and frameworks that secure internal control and ensure the quality of the financial reporting.

The internal control function reports to the CFO and presents reports on issues relating to internal control at the Audit Committee's meetings.

#### Control environment

The control environment within Boliden is characterised by the fact that the Group has relatively few but large operating units that have carried out their operations for many years, using well-established processes and control activities.

A structure of steering documents in the form of binding policies and guidelines for the organisation's delegated responsibilities has been established to ensure a collective attitude and methodology within the Group. The starting point is COSO, together with associated steering documents which include the Code of Conduct, decision-making and authorisation instructions, and a financial manual covering financial policy, accounting and reporting instructions. Local management systems with more detailed instructions and descriptions of important processes have also been set up.

Work continued at both Business Area and Group level in 2013 on mapping financial transaction flows, identifying risks, and documenting control activities in a uniform and standardised way within a Group-wide internal control framework known as the Boliden Internal Control System (BICS).

#### **Boliden's internal control organisation**



#### Risk analysis

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

#### Control activities

Various types of control activities are carried out within the Group and within every different aspect of the accounting and reporting process on an ongoing basis (see example below). The control activities are carried out in order to manage known risks and to detect and rectify any errors and discrepancies in the financial reporting.

Documentation of significant control activities within the accounting and reporting process continued in BICS in 2013. For every risk identified, the controls that manage the risk – either preventatively or for purposes of detection, or both – are documented.

#### Information and communication

Information on policies, guidelines and manuals is available on Boliden's intranet. Information on updates and changes to reporting and accounting principles is issued via email and at the regular treasury and controller meetings.

External information is provided and communication conducted in accordance with the Group's Communications Policy. All information must be communicated in a discerning, open and transparent manner.

Group-wide steering documents are updated and communicated on a continuous basis.

#### Follow-ups

Work on follow-ups of, improvements to and development of systems, processes and controls within the Group is ongoing. Annual testing of documented controls within the framework of BICS has been conducted since 2009. Areas where scope for improvement is identified in conjunction with audits are documented, analysed and actioned.

# Auditor's Report on the Corporate Governance Statement

To the Annual General Meeting of the shareholders of Boliden AB (publ.), corporate identity no: 556051-4142

The Board of Directors is responsible for the Corporate Governance Report for 2013 on pages 102–107 and for ensuring that it has been prepared in accordance with the provisions of the Swedish Annual Accounts Act.

We have read the Corporate Governance Report and, based on that reading and our knowledge of the company and the Group, believe that we have sufficient basis for our conclusions. This means that our statutory examination of the Corporate Governance Report has a different focus and is substantially less in scope than that of an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden.

In our opinion, the Corporate Governance Report has been prepared in accordance with and its statutory content complies with the provisions of the Swedish Annual Accounts Act and is consistent with the consolidated accounts.

Stockholm, 12 February 2014

Ernst & Young AB

Lars Träff
Authorised Public Accountant

# **Board of Directors**



## Aι

### **Anders Ullberg**

Chairman of the Board since 2005 M.Sc. Economics.

**Born:** 1946

**Directorships:** Chairman of the Boards of BE Group, Diamorph, Eneqvist Consulting, Natur&Kultur and Studsvik. Member of the Boards of Atlas Copco, Beijer Alma, Valedo Partners and Åkers. Chairman of the Swedish Financial Reporting Board.

**Previous positions:** CFO of Svenska Varv. CFO, Vice President and President and CEO of SSAB.

Shareholding<sup>1)</sup>: 45,000



## Mb

#### Marie Berglund

Member of the Board since 2003.

M. Sc. Biology.

Vice President Raw Materials and Environment, NCC Roads.

Born: 1958

**Directorships:** Member of the Boards of Baltic Sea 2020, Eurocon Consulting, the Water Delegation of the Gulf of Bothnia's Water District, and the Advisory Council of the County Administrative Board of Västernorrland.

Previous positions: Group Ecologist in the former MoDo Group, Environmental Manager within Botniabanan, President of Bio-Endev (consultant).

Shareholding<sup>1)</sup>: 1,000



## Sb

#### Staffan Bohman

Member of the Board since 2007.
M.Sc. Economics.

Born: 1949

Directorships: Chairman of the Boards of Höganäs, Cibes Lift-Group and Ersta diakoni. Deputy Chairman of the Board of Rezidor Hotel Group and of SNS – Centre for Business and Policy Studies Board of Trustees. Member of the Boards of Atlas Copco, Inter-IKEA Holding, Ratos, Rolling Optics and the Swedish Corporate Governance Board

**Previous positions:** CFO at Alfa Laval, CEO of DeLaval, Gränges and Sapa.

Shareholding<sup>1)</sup>: 40,000



### Te

#### Tom Erixon

Member of the Board since 2013.

LL.B. MBA.

President and CEO of Ovako.

**Born:** 1960

**Directorships:** Member of the Boards of Jernkontoret, Stål & Metall and Chinsay.

Previous positions:

Managing partner, Boston Consulting Group, and a variety of senior positions within Sandvik.

or I I

Shareholding<sup>1)</sup>: 2,400



### Le

#### **Lennart Evrell**

Member of the Board since 2008.

M.Sc. Engineering, Economics. President and CEO of Boliden.

**Born:** 1954

**Directorships:** Chairman of the Board of SveMin. Member of the Board of the Confederation of Swedish

Enterprise.

#### Previous positions:

President and CEO of Sapa and Munters, a variety of senior positions within ASEA, Atlas Copco and Sphinx Gustavsberg.

Shareholding<sup>1)</sup>: 39,100



# Mc

#### Michael G:son Löw

Member of the Board since 2010. M.Sc. Economics.

**Born:** 1951

Directorships: Member of the Boards of Concordia Maritime, Norstel, Preem and the Confederation of Swedish Enterprise. Deputy Chairman of IKEM, the Swedish Chamber of Commerce for Russia & CIS, and the Swedish Association for Energy Economics. Member of the Chalmers Advisory Committee and the Royal Swedish Academy of Engineering Sciences.

**Previous positions:** A variety of senior positions within Conoco in Copenhagen, Bangkok, London and Prague. President and CEO of Preem (Stockholm).

Shareholding<sup>1)</sup>: 100



## UI

#### Ulla Litzén

Member of the Board since 2005

M.Sc. Economics, MBA.

**Born:** 1956

**Directorships:** Member of the Boards of Alfa Laval, Atlas Copco, Husqvarna,

NCC and SKF.

Previous positions:
President of W Capital Management AB, wholly owned by the Wallenberg Foundations, and Managing Director and member of the Management Group of Investor AB. Responsible for Core Holdings and CEO of Investor Scandinavia.

Shareholding<sup>1)</sup>: 8,400



#### In

#### Leif Rönnbäck

Member of the Board since 2005. B.Sc. Natural Sciences, Geology.

Born: 1945

**Previous positions:** HR Director, Production Director, and Business Development Director within LKAB.

Shareholding<sup>1)</sup>: 1,000



## Ra

#### **Roland Antonsson**

Employee Representative. Member of the Board since 2012. Deputy Member of the Board: 2009–2012. Representative of IF Metall (the Swedish Metalworkers' Union). Chairman of the IF Metall Rönnskär branch.

Born: 1957 Shareholding<sup>1)</sup>: O



## M

#### **Marie Holmberg**

Employee Representative.
Member of the Board since 2008. Deputy Member of the Board: 2005–2008.
Representative of the Swedish Association of Graduate Engineers.

Born: 1963 Shareholding<sup>1)</sup>: 248



# Hg

#### Hans-Göran Ölvebo

Employee Representative. Member of the Board since 2009. Member of the Board: 2001-2005. Deputy Member of the Board: 2005–2009.

Representative of IF Metall (the Swedish Metalworkers' Union). Production worker, Aitik.

Born: 1955 Shareholding<sup>1)</sup>: 50



## Oh

#### Ola Holmström

Employee Representative.
Deputy Member of the
Board since 2012.
Representative of IF Metall
(the Swedish Metalworkers'
Union). Chairman of the IF
Metall Kristineberg branch.
Deputy Chairman of Boliden's Group Council and
Boliden Works Council.

Born: 1965 Shareholding<sup>1)</sup>: 170



## Dk

#### Ditte Kilsgaard Möller

Employee Representative. Deputy Member of the Board since 2012.

Geologist working with field exploration. Representative of the Swedish Association of Graduate Engineers. Chairman of the local trade union at Boliden Mines.

Born: 1979 Shareholding<sup>1)</sup>: O



## Em

#### Einar Mikkelsen

Employee Representative.
Deputy Member of the
Board since 2012.
Representative of the Industry Energy trade union in
Norway and the Unionen
salaried employees' trade
union in Sweden. Member of
the Board of Boliden Odda.

Born: 1964 Shareholding<sup>1)</sup>: O

 $<sup>^{1)}</sup>$  Own holdings and/or those of related legal or natural persons, on 31st December 2013.

# Group management



#### **Lennart Evrell**

M.Sc. Engineering, Economics. President & CEO of Boliden.

Born: 1954 Employed: 2007

Directorships: Chairman of the Board of SveMin. Member of the Board of the Confederation of Swedish Enterprise.

Previous positions: President and CEO of Sapa and Munters, a variety of senior positions within ASEA, Atlas Copco and Sphinx Gustavsberg.

Shareholding<sup>1)</sup>: 39,100



## Kk

#### Kerstin Konradsson

M.Sc. Engineering. Senior Vice President - Business Area Smelters.

Born:1967 Employed: 2012

Directorships: Member of the Board of Swerea Mefos.

**Previous positions:** 

Business Area President and CEO within the Åkers Group and a variety of senior positions within SSAB.

Shareholding<sup>1)</sup>: 80



#### Jan Moström

B.Sc. Engineering. Senior Vice President - Business Area Mines.

Born: 1959

Employed: 1979-1998,

2000.

Directorships: Member of the Board of SveMin. Member of the SGU (Geological Survey of Sweden) Advisory Council and Mining Industry Council.

Previous positions: A variety of senior positions within Boliden. Administrative Director of Skellefteå Municipality. Shareholding<sup>1)</sup>: 18,500



## Ms

### Mikael Staffas

M.Sc. Engineering, MBA.

Born: 1965 Employed: 2011

**Directorships:** Member of

the Board of SJ.

Previous positions:

CFO of Södra Skogsägarna, Partner McKinsey&Co. Shareholding<sup>1)</sup>: 5,300



## Hö

#### Henrik Östberg

M.A. in languages and pedagogics.

Senior Vice President - Corporate Responsibility.

Born:1960 Employed: 2008 Directorships: -

Previous positions: HR &Sustainability Director, Sapa Group, Management Consultant at McKinsey&Co and Booz Allen Hamilton. Shareholding<sup>1)</sup>: 3,690

<sup>1)</sup> Own holdings and/or those of related legal or natural persons, on 31st December 2013.

# Mineral reserves and resources

Mineral reserves and mineral resources are the basis on which a mining company's operations are built and require successful exploration results. Mineral resources and reserves are affected not only by exploration, but also by important factors such as mining costs and assumed metal prices. Exploration work is carried out both in the vicinity of existing mines and in new areas.

Boliden's investments in exploration over the last 10 years have resulted in substantial increases in both mineral resources and reserves, particularly at Garpenberg and Aitik, which were followed by substantial investments in boosting production and extending production plans. The Boliden Area has also seen positive development in recent years, as has Tara, which has only seen a slight reduction in mineral reserves over the past 10 years despite having mined over 20 million tonnes of ore during that period.

#### Mineral resources and mineral reserves 2013

Boliden, in common with other mining companies, produces an annual summary of their mineral resources and mineral reserves. Boliden's calculations and compilations are carried out in accordance with the recommendations of the Swedish industry organisation for mining and metal companies, SveMin.

Aitik An extensive assessment of the potential for increased production at Aitik (Aitik 45) was carried out during the year and the results are now being evaluated and may be incorporated into the mine's plans in 2014. Both mineral reserves and resources have fallen slightly.

**The Boliden Area** A number of studies of the potential for upgrading mineral resources to reserves were carried out in the Boliden Area during the year, and resulted in the Area's mineral reserve increasing by 3.2 Mtonnes (25 per cent). This upgrade, coupled with

more stringent economic requirements for mineral resources, has resulted in a reduction in mineral resources of 4.7 Mtonnes.

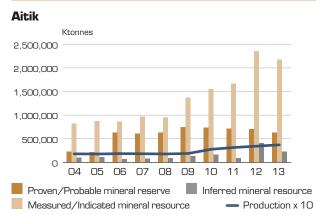
**Garpenberg** Mineral reserves at Garpenberg increased by almost 11 Mtonnes as a result of the upgrading of the Kvarnberget mineral resource. New mineral resources were identified during drilling at Kvarnberget and the mineral resources' grades were shown to have been overestimated. Exploration has, at the same time, yielded an extra 6 Mtonnes of mineral resources, but the upgrading of 11 Mtonnes to mineral reserves means a reduction in mineral resources.

**Tara** Exploration in and around the mine enabled mineral resources to be added and existing resources to be upgraded to mineral reserves. The addition to the reserve was, however, unable to compensate in full for the 2.5 Mtonnes mined during the year, and the reserve shrank by 0.9 Mtonnes. Mineral resources increased by 1.9 Mtonnes and the lifespan of the production plan has been extended.

#### About the classification

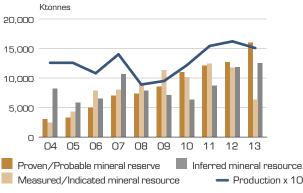
Mineral resources and mineral reserves are calculated separately and broken down into different categories. The mineral reserves are not subsidiary amounts of the mineral resources, and when a mineral resource is upgraded to a mineral reserve, the quantity is eliminated from the mineral resource.

A mineral resource is a concentration of minerals in the bedrock that is present in a form, quality and quantity that means there is a reasonable possibility of it becoming commercially extractable. Mineral reserves are calculated on those parts of a measured or indicated mineral resource that can be mined and processed in accordance with the company's profitability requirements, taking into account factors such as waste rock dilution, ore losses, pillar offset and process recovery.



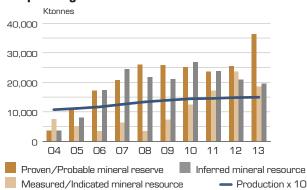
Mineral reserves have decreased and mineral resources have increased slightly during the year.

#### The Boliden Area



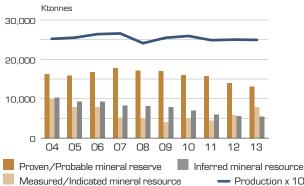
3.2 Mtonnes upgraded from mineral resources to mineral reserves.

#### Garpenberg



Mineral resources at Kvarnberget were upgraded to mineral reserves thereby by increasing mineral reserves by 11 Mtonnes.

#### Tara



Mineral resources fell slightly, as did mineral reserves, despite the addition from mineral resources. This addition was, however, unable to compensate in full for the quantities extracted.

#### Inferred mineral resource

An inferred mineral resource is a mineral resource that has been identified through drilling, sampling and geoscientific interpretations, but where the information is so sparse that the geology and grade continuity of the deposit cannot be confirmed and where the basic technical data consists of reasonable assumptions. This means that continued investigations will not, with any degree of certainty, enable the entire inferred mineral resource, or parts of it, to be moved to a higher category.

#### Indicated mineral resource

An indicated mineral resource is a mineral resource that has been identified through drilling and sampling with an information density that is too sparse to confirm continuity but which, together with geoscientific interpretations, nevertheless provides a reasonable idea of the deposit's geology and grade continuity. Collectively, the information and interpretations are sufficient to enable the technical and economic calculations to be performed to assess the project's profitability.

#### Measured mineral resource

A measured mineral resource is a mineral resource where the information obtained from drilling and sampling confirms the deposit's geology and/or grade continuity. The basic technical data is such that mining plans can be drawn up.

#### Probable mineral reserve

A probable mineral reserve is calculated from those parts of an indicated or, under certain circumstances, measured mineral resource where mining-engineering and profitability studies show that it is technically and economically feasible to mine and process the deposit in line with the company's profitability requirements.

#### Proven mineral reserve

A proven mineral reserve is calculated from those parts of a measured mineral resource where mining-engineering and profitability studies show that it is technically and economically feasible to mine and process the deposit in line with the company's profitability requirements.

#### Basis for the calculations

Boliden holds the required environmental permits and exploitation concessions for all of the mines currently in operation. The mineral resources are protected by exploitation concessions or exploration permits. The calculations are based on the following underlying factors:

#### Cut-off grades

The lowest grade to be mined is calculated separately for each deposit on the basis of its characteristics, that is to say the direct costs for mining, ore haulage, milling, concentrate haulage, and administration.

#### Metal prices

Mineral resources and mineral reserves are the basis for the company's long-term planning and will be mined for many years to come. Planning prices, which are an expression of the anticipated average prices for metals and currencies over the forthcoming business cycle are, therefore, primarily utilised in the calculations. Shorter term prices are, however, used in some exceptional cases. Boliden's current planning prices are shown in the table below:

Planning prices	Prices/Exchange rates, 2013	Change 13 vs.12
Copper	6,600 USD/tonne	+300
Zinc	2,300 USD/tonne	_
Lead	2,300 USD/tonne	_
Gold	1,200 USD/tr. oz.	_
Silver	20 USD/tr. oz.	_
Molybdenum	15 USD/lb.	_
Tellurium	150 USD/kg	-130
USD/SEK	6.70	-0.30
EUR/SEK	8.51	-0.39

#### Density

A formula based on head grades is utilised for large polymetallic ores, which make up the majority of Boliden's mineral resources and mineral reserves. The formula is verified using density measurements. In other cases, measurements are carried out for the different ores or rock types that affect the density.

#### Waste rock dilution

Mining usually incurs some waste rock dilution that varies, depending on the mining method used, the ore's geometry, and other geological factors. Boliden systematically monitors the waste rock dilution of the ore extracted and the experience gained thereby enables waste rock dilution to be included in all mineral reserve calculations.

#### Ore losses

Some ore, known as pillar offset, may have to be left unextracted, depending on the mining method used, the ore's geometry and other technical factors. The mineral reserve calculations take these factors into account, based on the mining method and the information available when the calculations were made.

#### Minimum ore width

The minimum horizontal ore width is determined by the mining method and equipment. Ore zones that are narrower than the minimum ore width are recalculated using the average for the full width.

#### Regulations, codes and recommendations

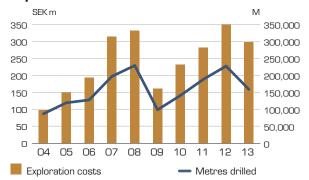
Boliden's mineral reserves and mineral resources have been calculated and compiled in accordance with recommendations by the Swedish industry organisation for mining and metal companies, SveMin, known as the FRB standard. This is an independent set of regulations but based on "The International Template for the public reporting of exploration results, mineral resources and mineral reserves, July 2006", produced by the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) in a bid to achieve a harmonised international practice. The FRB standard is, therefore, consistent with international regulations such as the Australasian Institute of Mining and Metallurgy's JORC code and the "CIM Standards on Mineral Resources and Mineral Reserves, Definitions and Guidelines", which constitute that part of the Ontario Securities Commission (OSC) rules and regulations, National Instrument 43–101, that regulate how mineral reserves and mineral resources should be reported.

The mineral resources and mineral reserves have been compiled under the supervision of Gunnar Agmalm, who is registered as a "Qualified Person" by SveMin. Gunnar Agmalm is a member of AUSIMM and has more than 25 years' experience in the mining and minerals industry.

February 2014

Gunnar Agmalm Qualified Person SveMin

#### **Exploration costs and number of metres drilled**



The year saw a continued high level of exploration activities with SEK 298 million invested and 158.957 metres drilled.

# Mineral reserves

		<b>Q</b> uantity, I	Ktonnes				2013			
	••	2013	2012	Au (g/t)	Ag (g/t)	Cu (%)	Zn (%)	Pb (%)	Mo (g/t)	Te (g/t)
The Boliden Area										
Polymetallic mineralisations										
Kristineberg	Proven	840	1,000	1.1	24	1.3	1.7	0.1		
	Probable	6,800	3,600	0.6	43	0.5	6.7	0.4		
Renström	Proven	150	140	2.8	127	0.9	13.1	1.3		
	Probable	3,360	2,840	1.8	149	0.8	6.4	1.0		
Maurliden	Proven	1,400	1,300	1.5	56	0.3	3.9	0.4		
	Probable									
Maurliden Östra	Proven									
	Probable	200	190	0.3	7	1.0	0.0			
Total	Proven	2,360	2,430	1.4	49	0.7	3.7	0.3		
Polymetallic mineralisations	Probable	10,320	6,680	1.0	77	0.6	6.5	0.6		
	Probable	10,320	0,000	1.0	//	0.0	0.5	0.0		
Gold mineralisations										
Kankberg	Proven	880	1,050	2.4	10					172
	Probable	2,390	2,530	4.3	16					185
Aitik	Proven	499,000	476,000	0.15	1.7	0.24			27	
	Probable	134,000	226,000	0.11	1.7	0.25			37	
Garpenberg	Proven	14,900	15,400	0.3	116	0.06	5.5	2.2		
-a. Pansai 8	Probable	21,400	10,200	0.3	143	0.04	3.9	1.7		
Tara	Proven	3,400	2,300				7.3	1.7		
	Probable	9,700	11,700				6.9	1.5		

Figures may be rounded up or down.

# Mineral resources (excl. mineral reserves)

		Quantity,	Ktonnes				2013			
		2013	2012	Au (g/t)	Ag (g/t)	Cu (%)	Zn (%)	Pb (%)	Mo (g/t)	Te (g/t
The Boliden Area		2010	2012	Au (g/ u)		<b>Ga</b> (70)	E11 (70)	F 15 (70)	1410 (g/ 0)	10 (9/ 0
Polymetallic mineralisations										
Kristineberg	Measured	50	50	0.7	45	1.3	4.2	0.2		
	Indicated	480	3,760	1.0	22	1.1	2.8	0.2		
	Inferred	4,440	5,530	0.7	36	0.8	3.7	0.2		
Petiknäs N	Measured	310	310	8.1	73	1.8	3.1	0.3		
	Indicated	1,200	1,200	2.7	52	0.6	1.8	0.3		
	Inferred	720	720	3.3	33	0.5	1.2	0.2		
Renström	Measured	720	720	0.0	00	0.0	1.6	0.2		
Rensurom		4.000	4.450	4.0	O.E.	0.4	4.0	0.0		
	Indicated	1,220	1,450	1.9	85	0.4	4.6	0.8		
	Inferred	2,950	3,960	3.2	160	0.3	8.5	1.7		
Maurliden	Measured	1,050	1,050	1.3	40	0.4	3.3	0.2		
	Indicated	360	360	0.9	45	0.7	2.9	0.2		
	Inferred									
Maurliden Östra	Measured									
	Indicated	360	360	0.4	11	0.4	0.2			
	Inferred									
Total	Measured	1,410	1,410	2.8	47	0.7	3.3	0.2		
Polymetallic		,	,							
mineralisations	Indicated	3,600	7,100	1.8	54	0.6	2.8	0.4		
	Inferred	8,100	10,200	1.8	81	0.6	5.2	0.7		
		•	•							
Gold mineralisations										
Kankberg	Measured	110	140	3.0	12					149
Rankberg	Indicated	150	180	3.9	11					205
										232
×1	Inferred	1,890	340	7.4	13					232
Älgträsk	Measured									
	Indicated	1,080	2,930	2.7	4					
	Inferred	2,500	1,270	1.9	3					
Total	Measured	110	140	3.0	12					
Gold mineralisations	Indicated	1,200	3,100	2.8	5					
	Inferred	4,400	1,600	4.3	7					
 Aitik	Measured	508,000	960,000	0.11	1.2	0.17			19	
Aloik	Indicated	1,666,000	1,393,000	0.10	0.9	0.17			25	
	Inferred	225,000		0.10	0.3	0.17			22	
	merrea	225,000	404,000	U. 1 1	0.4	U. 13			22	
Garpenberg	Measured	2,800	5,100	0.3	98	0.06	3.8	1.7		
	Indicated	15,800	18,500	0.4	131	0.05	3.4	1.7		
	Inferred	19,500	20,900	0.5	113	0.07	3.2	1.6		
 Tara	Measured	600	500				6.3	2.2		
	Indicated	7,300	5,300				6.5	2.0		
	Inferred	5,400	5,600				6.6	1.9		
 Laver	Measured	1,100		0.11	4.4	0.2			18	
	Indicated	512,400		0.13	3.1	0.22			36	
	mulcateu	J 12,400								
		550 600	690 000	117	.5 1				: -: -: -:	
	Inferred	550,600	690,000	0.1	3.1	0.2			33	
		550,600	690,000	U.1	ا .ق	0.2				
Rockliden	Inferred	550,600 800	1,040	0.08	102	2.1	4.4	0.9	33	

Figures may be rounded up or down.

# Ten-year overview – the Group

	20041)	2005	2006	2007	2008	2009	2010	2011	<b>2012</b> <sup>2)</sup>	2013
Consolidated income and result,										
SEK m										
Revenues	17,928	20,441	35,213	33,204	30,987	27,635	36,716	40,323	40,001	34,409
Operating profit before depreciation	2,977	4,303	9,831	6,805	2,426	5,186	7,445	6,674	6,731	4,632
Operating profit	1,831	3,069	8,522	5,428	1,004	3,623	5,643	4,748	4,171	1,803
Operating profit excluding										
revaluation of process inventory	1,776	2,631	7,891	5,620	1,793	2,350	4,830	5,008	4,042	2,271
Profit after financial items	1,365	2,812	8,313	5,196	723	3,377	5,331	4,560	3,992	1,581
Taxes	-145	-766	-2,045	-1,409	212	-876	-1,375	-1,171	-651	-288
Net profit for the year	1,220	2,046	6,268	3,787	935	2,501	3,957	3,389	3,341	1,294
Income and profit per Business Area, SEK m										
Revenues – Mines	4,568	4,642	7,261	7,567	5,178	6,509	9,580	10,279	9,509	8,303
Revenues – Smelters	16,600	20,826	37,514	34,704	31,256	26,765	34,390	38,471	38,753	33,410
Revenues – Other and eliminations	-3,240	-5,027	-9,562	-9,067	-5,447	-5,639	-7,254	-8,427	-8,261	-7,305
Operating profit – Mines	1,395	1,117	3,010	3,135	734	2,159	4,113	3,913	2,974	1,598
Operating profit – Smelters	751	2,210	5,652	2,297	372	1,724	1,946	790	1,224	210
Operating profit – Other and eliminations	-315	-258	-141	-4	-102	-260	-416	45	-27	-5
Consolidated cash flow, SEK m										
Cash flow from operating activities	1,552	2,540	8,010	3,730	5,470	3,974	6,197	4,021	5,518	3,505
Cash flow from investment										
activities	-1,508	-982	-1,739	-2,518	-4,633	-4,922	-2,995	-4,024	-4,129	-4,971
Free cash flow	44	1,558	6,271	1,212	837	-948	3,202	-3	1,389	-1,466
Cash flow from financing activities	-549	-912	-4,593	-3,532	-514	571	-3,199	-464	-730	1,060
Cash flow for the year	-505	646	1,678	-2,320	323	-377	3	-467	659	-406
Consolidated financial position, SEK m										
Balance Sheet total	20,176	22,918	26,929	27,231	30,252	33,258	35,128	37,615	40,080	41,841
Capital employed	15,393	15,822	17,667	20,145	24,733	26,229	27,151	30,473	31,236	34,451
Return on capital employed, %	12	20	52	29	5	14	21	17	14	5
Shareholders' equity	9,118	10,289	16,089	12,932	16,131	16,257	18,846	20,032	22,354	23,075
Return on shareholders' equity, %	16	22	51	26	7	16	23	17	16	6
Equity/assets ratio, %	45	45	60	47	53	49	54	56	56	55
Net debt	6,468	5,526	-195	5,524	6,305	7,402	4,584	6,063	6,276	8,673
Net debt/equity ratio, %	71	54	-1	43	39	46	24	29	28	38
Data per share, SEK										
Earnings for the period	4.00	7 07	04.66	10.07	0.40	0.44	11 17	40.00	12.21	4 70
Basic	4.98	7.07	21.66	13.37	3.42	9.14	14.47	12.39		4.72
Diluted	4.97	7.06	21.66	13.37	3.42	9.14	14.47	12.39	12.21	4.72
Cash flow from operating activities  Basic	6.34	8.77	27.67	13.17	20.00	14.53	22.66	14.70	20.17	12.82
Diluted	6.32	8.76	27.67	13.17	20.00	14.53	22.66	14.70	20.17	12.82
Shareholders' equity	0.02	0.70	۲۷.۵۷	10.17	20.00	14.50	22.00	14.70	۵۵.۱۶	12.02
Basic	31.51	35.55	55.58	47.28	58.98	59.44	68.90	76.90	81.68	84.31
Diluted	31.46	35.50	55.59	47.28	58.98	59.44	68.90	76.90	81.68	84.31
Proposed dividend	-	2.00	4.00	4.00	1.00	3.00	5.00	4.00	4.00	1.75
Share price, 31/12	26.21	59.98	162.41	81.25	17.80	92.1	136.7	100.5	122.1	98.45
Highest price paid	38.94	59.98	163.80	165.00	86.00	95.3	137.7	143.5	125.6	126.7
Lowest price paid	22.70	24.64	57.91	79.00	14.60	16.1	79.5	65.35	87.8	80.2
P/E ratio	5.70	8.48	7.50	6.07	5.20	10.07	9.45	8.11	10.0	20.9
Change in share price										
during the year, %	-26	129	171	-50	-78	417	48	-26	21	-19
Dividend yield, %	-	3.3	2.5	4.9	5.6	3.3	3.7	4.0	3.3	1.8
Total yield, %	-26	129	174	-48	-73	423	52	-23	25	-16
Number of shares, million										
Number of shares, 31/12	289	289	289	274	274	274	274	274	274	274
Average number of shares	245	289	289	283	274	274	274	274	274	274
No. own shares held, 31/12	_	-	-	16	_	_	_	-	_	-

# Ten-year overview – the Group, cont.

Sustainability-related key ratios	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Employees										
Number of Group employees, total <sup>3)</sup>	4,479	4,530	4,519	4,524	4,608	4,379	4,412	4,597	4,795	4,815
Number of female employees <sup>3)</sup>	536	563	587	604	650	598	669	736	813	824
Percentage of women on the Board/in Group management, %	25/12.5	25/12.5	25/20	25/33	25/29	27/17	27/0	27/0	27/17	27/20
Accidents per one million hours worked, own personnel, frequency	11.1	11.9	11.2	9.9	9.1	5.5	8.2	4.9	6.6	7.0
Accidents per one million hours worked incl. contractors, frequency	I								9.1	8.9
Sick leave rate, %	5.3	5.5	5.1	4.7	4.7	4.2	4	3.7	3.7	3.9
Energy consumption										
Total energy consumption, TJ	14,930	14,866	15,183	16,303	15,257	14,664	16,147	15,579	16,140	16,415
Water withdrawal, total, km <sup>3</sup>	0.137	0.143	0.145	0.125	0.134	0.135	0.140	0.153	0.160	0.155
Emissions & Discharges										
Direct emissions of greenhouse gases (incl. sources added since 2007), Ktonnes	413	402	384	413	450	486	510	499	574	578
Indirect emissions of greenhouse gases, electricity purchased, Ktonnes	386	384	395	384	357	356	398	408	416	402
Indirect emissions of greenhouse gases, heating and steam purchased, Ktonnes	19	12	13	24	0	5	6	17	18	20
Carbon dioxide emissions, total, Ktonnes	817	798	791	822	807	848	913	924	1,008	1,000
Emissions of metals to air, tonnes	39	35	35	35	23	21	23	23	20	19
Sulphur dioxide emissions to air, tonnes	6,580	6,910	7,890	8,070	8,260	6,930	6,850	7,410	8,140	6,290
Discharges of metals to water, tonnes	18	19	25	28	29	14	18	14	13	12
Discharges of nitrogen to water, tonnes	364	354	295	294	283	225	199	205	253	219

<sup>&</sup>lt;sup>1)</sup> 2004 was not reported in accordance with IFRS. The 2005 AR was produced in accordance with IFRS and the comparison figures were, therefore, also cor-rected. These figures are not, therefore, presented in the 2004 AR.

<sup>&</sup>lt;sup>2)</sup> The 2012 comparison year has been restated due to the changes to the IFRIC 20 and IAS 19 accounting principles in 2013.

 $<sup>^{\</sup>rm 3)}$  Refers to full-time employees from 2008 onwards. The period from 2004–2007 refers to average number of employees.

# Ten-year overview – Mines

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
AITIK										
Milled ore, Ktonnes	17,663	16,674	18,481	18,178	17,813	18,791	27,596	31,541	34,321	37,070
Head grades		•	·	•	•	•	•	•	•	,
Cu, %	0.41	0.44	0.40	0.32	0.30	0.27	0.27	0.24	0.22	0.21
Au, g/tonne	0.22	0.22	0.25	0.14	0.14	0.13	0.16	0.14	0.11	0.10
Ag, g/tonne	3.77	3.61	2.72	3.67	2.81	1.99	2.07	2.15	2.50	2.28
Concentrate production										
Cu, Ktonnes	231	237	240	185	174	171	263	267	270	292
Concentrate grade										
Cu, %	27.98	27.67	27.55	27.25	27.20	26.94	25.58	25.00	24.85	24.29
Metal production										
Cu, Ktonnes	64	66	66	50	47	46	67	67	67	71
Au, kg	1,985	1,840	2,342	1,178	1,218	1,348	2,208	2,447	1,959	1,765
Au, tr. oz.	63,824	59,157	75,286	37,865	39,172	43,338	70,987	78,657	62,996	56,731
Ag, kg	44,946 1,445	41,297 1,328	35,730 1,149	42,301 1,360	32,087 1,032	24,701 794	36,468 1,172	45,040 1,448	51,698 1,662	53,612 1,724
Ag, '000 tr. oz. Financial performance, SEK m	1,445	1,320	1,143	1,300	1,032	/ 34	1,1/6	1,440	1,002	1,724
Revenues	1,292	1,653	2,995	2,305	1,949	1,997	3,996	4,549	4,170	3,593
Operating profit before depreciation	619	900	2,207	1,388	1,049	1,134	2,442	2,583	2,651	1,902
Operating profit  Operating profit	522	793	2,073	1,217	876	949	2,008	2,046	1,732	882
Investments	242	325	420	760	2,994	3,674	1,210	1,178	1,2071)	1,143
Cash cost USc/lb. Cu C1, Normal	64	76	85	129	124	86	105	120	83	131
Proven and probable mineral reserves										
Mtonnes	232	219	625	610	633	747	733	710	702	633
Cu, %	0.33	0.31	0.28	0.29	0.27	0.25	0.25	0.25	0.25	0.25
Au, g/tonne	0.20	0.20	0.20	0.20	0.20	0.10	0.10	0.10	0.10	0.14
THE BOLIDEN AREA										
Milled ore, Ktonnes	1,774	1,782	1,679	1,848	1,355	1,192	1,375	1,677	1,862	1,809
of which, slag	153	166	222	187	293	242	157	134	241	301
Head grades										
Zn, %	5.69	6.08	5.56	4.81	4.01	3.69	3.69	2.87	2.15	2.61
Cu, %	1.26	1.49	1.56	0.81	1.00	0.95	0.79	1.03	0.84	0.61
Pb, %	0.60	0.56	0.47	0.50	0.43	0.46	0.37	0.27	0.23	0.28
Au, g/tonne	2.7	2.1	1.8	1.6	1.5	2.0	1.6	1.2	1.3	1.6
Ag, g/tonne	80	78	66	66	61	65	55	41	35	42
Concentrate production										
Zn, Ktonnes	150	162	131	131	70	58	74	69	56	63
Cu, Ktonnes	64	76	72	42	32	28	31	60	47	31
Pb, Ktonnes	12	11	7	11	5	4	4	3	3	3
Precious metals, tonnes	358	347	354	385	289	399	529	568	541	415
Gold doré bullion, kg	3,960	2,480	3,246	1,466	171	280	0	0	1,619	2,810
Concentrate grade	53.7	54.0	54.5	54.0	54.7	54.7	54.7	55.7	E4 C	55.9
Zn, % Cu, %	27.0	27.5	27.9	27.8	29.0	28.4	26.4	23.3	54.6 25.5	25.4
Cu, % Pb, %	30.1	28.9	31.1	31.6	41.7	42.7	41.5	41.7	44.5	45.26
Metal production	00.1		01.1	01.0	71.7		71.0	71.7	77.0	70.20
Zn, Ktonnes	80	87	72	71	38	31	40	38	30	35
Cu, Ktonnes	17	21	20	12	9	8	8	14	12	8
Pb, Ktonnes	4	3	2	3	2	2	2	1	1	1
Au, kg	3,026	2,428	1,900	1,412	1,141	1,568	1,285	989	1,434	1,808
Au, tr. oz.	97,289	78,065	61,071	45,405	36,679	50,414	41,318	31,781	46,102	58,117
Ag, kg	77,091	87,212	67,828	79,753	47,671	48,186	52,806	45,318	41,405	45,212
Ag, '000 tr. oz.	2,478	2,804	2,181	2,564	1,533	1,549	1,698	1,457	1,331	1,454
Financial performance, SEK m										
Revenues	949	1,359	2,262	1,928	1,013	1,109	1,448	1,587	1,552	1,317
Operating profit before depreciation	309	476	1,129	976	222	405	588	659	554	250
Operating profit	180	350	981	849	115	303	481	530	369	19
Investments	95	98	107	144	237	264	298	565	623	364
Cash cost USc/lb. Zn C1, Pro-rata										72
Cash cost USc/lb. Zn C1, Normal  Proven and probable mineral reserves	18	22	31	30	29	-6	-18	-58	-54	26
Polymetallic ores, Ktonnes	2,860	2,920	4,450	7,020	7,350	6,950	8,220	8,980	9,110	12,680
Zn, %	6.8	6.7	5.0	3.6	4.3	4.3	5.3	5.2	5.4	6.0
Cu, %	0.8	0.7	1.0	0.9	0.8	0.8	0.6	0.6	0.6	0.6
Gold ores, Ktonnes	180	400	530	0.3	0.0	1,610	2,780	3,100	3,584	3,274
Au, g/tonne	7.3	4	3.2	0	0	4.9	4.1	3.6	3.8	3.8
Te, g/tonne	1.2	1.5	1.4	0	0	0	186	165	177	181

# Ten-year overview – Mines, cont.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
GARPENBERG										
Milled ore, Ktonnes	1,074	1,102	1,182	1,255	1,365	1,394	1,443	1,456	1,484	1,495
Head grades	,-	•	•	,	,	•	•	,		,
Zn, %	5.6	5.8	5.7	6.3	6.9	7.3	6.6	6.2	5.6	5.2
Cu, %	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pb, %	2.2	2.3	2.2	2.5	2.6	2.8	2.5	2.4	2.1	2.1
Au, g/tonne	0.3	0.3	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.3
Ag, g/tonne	124	117	123	125	130	139	133	133	129	153
Concentrate production										
Zn, Ktonnes	100	106	113	132	158	167	160	148	136	127
Cu, Ktonnes	3	3	3	3	3	3	3	2	2	3
Pb, Ktonnes	26	28	29	36	41	44	41	39	35	36
Concentrate grade										
Zn, %	55.0	55.0	54.2	54.1	53.1	53.8	53.7	55.0	54.8	55.4
Cu, %	21.1	21.9	23.1	22.1	20.4	18.3	18.3	19.1	17.7	18.0
Pb, %	72.6	74.2	71.5	70.1	69.0	71.3	72.0	72.4	70.7	70.3
Metal production										
Zn, Ktonnes	55	58	61	71	84	90	86	81	75	70
Cu, Ktonnes	0.6	0.6	0.6	0.7	0.6	0.5	0.5	0.4	0.4	0.5
Pb, Ktonnes	19	21	21	25	29	31	29	28	25	25
Au, kg	217	203	269	244	243	214	234	246	250	277
Au, tr. oz.	6,977	6,517	8,648	7,851	7,821	6,870	7,534	7,895	8,051	8,911
Ag, tonnes	106	98	108	118	130	139	140	140	135	162
Ag, '000 tr. oz.	3,393	3,138	3,475	3,787	4,189	4,473	4,505	4,505	4,341	5,201
Financial performance, SEK m										,
Revenues	505	637	1,311	1,710	1,163	1,490	1,902	2,155	1,876	1,675
Operating profit before depreciation	167	257	927	1,195	598	945	1,293	1,506	1,262	1,025
Operating profit	113	194	850	1,095	466	793	1,124	1,314	1,033	776
Investments	135	230	273	323	344	157	281	660	1,459	328
Cash cost USc/lb. Zn C1, Pro-rata										46
Cash cost USc/lb. Zn C1, Normal	25	31	37	6	19	3	-16	-56	-44	-32
Proven and probable mineral reserves	3									
Ktonnes	3,640	10,600	17,200	20,800	26,000	25,800	25,100	23,600	25,600	36,300
Zn, %	5.5	5.7	5.7	5.2	5.1	5.4	5.3	5.1	5.1	4.6
Ag, g/tonne	100	121	123	116	134	142	145	144	131	132
TARA	0.500	0.554	0.754	0.050	0.444	0.500	0.500	0.400	0.500	0.400
Milled ore, Ktonnes	2,522	2,551	2,751	2,658	2,411	2,508	2,593	2,486	2,502	2,493
Head grades	0.0	0.4			7.0	7.0	7.0	7.0	7.0	- 4
Zn, %	9.2	8.4	7.7	7.7	7.8	7.9	7.0	7.0	7.0	7.1
Pb, %	1.8	1.6	1.4	1.5	1.5	1.5	1.4	1.4	1.4	1.5
Concentrate production	004	050	OEC	OE4	000	044	040	207	205	000
Zn, Ktonnes	381	359	356	351	320	344	316	307	305	298
Pb, Ktonnes	52	45	44	42	40	41	34	34	41	39
Concentrate grade		E 4 C	E 4 C		E 4 3	FC C	FC C	FC C	E 4 4	
Zn, %	55.9	54.6	54.8	54.5	54.7	53.9	53.0	53.3	54.4	55.9 50.4
Pb, %	60.4	57.6	58.8	60.9	56.7	57.5	53.7	58.8	55.2	56.1
Metal production	040	400	405	404	475	400	407	404	400	400
Zn, Ktonnes	213	196	195	191	175	186	167	164	166	166
Pb, Ktonnes	32	26	26	26	23	24	19	20	23	22
Ag, kg	4,390	1,959	1,775	1,850	1,638	2,092	1,344	909	1,673	1,197
Ag, '000 tr. oz.	141	63	57	59	53	67	43	29	54	39
Financial performance, SEK m	4 400	4.000	0.050	0.400	4.055	4.074	4 004	4 755	4 70-	4 5 40
Revenues	1,120	1,306	2,950	3,129	1,357	1,671	1,831	1,757	1,727	1,542
Operating profit before depreciation	498	453	1,887	1,989	154	303	619	503	421	595
Operating profit	343	294	1,722	1,796	-40	76	383	268	100	195
Investments	186	278	265	277	305	338	285	372	268	201
Cash cost USc/lb. Zn C1, Normal	38	48	76	65	79	64	69	72	69	68
Proven and probable mineral reserves		45.000	40 700	47.000	47.400	47.000	40.000	45 700	44.000	40.455
Ktonnes	16,300	15,900	16,700	17,800	17,100	17,000	16,000	15,700	14,000	13,100
Zn, %	8.7	8.5	8.4	7.7	7.4	7.2	7.1	7.1	7.1	7.0
Pb, %	1.9	1.8	1.8	1.7	1.8	1.8	1.8	1.8	1.7	1.6

<sup>1)</sup> Comparison figures for 2012 have been restated due to changes in accounting regulations. Investments at Aitik increased by SEK 383 million.

# Ten-year overview – Smelters

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
RÖNNSKÄR										
Smelting material										
Copper, Ktonnes										
Copper concentrate	598	606	587	598	611	565	544	651	624	605
Secondary raw materials	147	137	159	160	173	154	155	175	221	209
of which, electronics <sup>1)</sup>	147	107	100	100	170	104	37	64	108	109
Copper, total	745	744	746	758	784	719	699	826	844	814
Lead, Ktonnes	740	7	7 10	, 00	, , ,	7.10		020	0-1-1	- 017
Lead concentrate	41	40	36	38	18	14	16	11	27	38
Secondary raw materials	4	4	4	2	5	7	6	5	2	1
Lead, total	45	44	39	40	22	21	23	17	29	39
Production										
Cathode copper, Ktonnes	236	223	229	214	228	206	190	219	214	206
Lead, Ktonnes	28	27	26	26	14	13	17	11	19	24
Zinc clinker, Ktonnes	35	35	33	36	41	39	37	36	36	36
Gold, tonnes	15	17	16	12	13	13	12	11	13	12
Gold, '000 tr. oz.	484	546	506	389	432	427	400	341	403	402
Silver, tonnes	439	434	374	347	430	481	386	415	448	437
Silver, '000 tr. oz.	14,112	13,947	12,023	11,142	13,813	15,472	12,340	13,344	14,395	14,051
Sulphuric acid, Ktonnes	569	580	551	544	557	515	502	571	553	536
Liquid sulphur dioxide, Ktonnes	39	35	37	50	53	36	43	42	38	39
Palladium concentrate, tonnes	2	3	3	3	3	3	2	2	3	2
Financial performance, SEK m		<u>J</u>	<u>_</u>		<u> </u>	<u>_</u>			<u>_</u>	
Revenues	1,289	3,204	2,322	2,131	1,882	1,669	1,799	2,226	2,398	2,029
	415	564	1,075	846	637	338	441	715	832	374
Operating profit before depreciation	214	364	861	615	395	83	187	470	535	53
Operating profit Investments	85	153	318	228	192	199	270	1,074	481	345
		100	010		102	100		1,074	401	
BERGSÖE										
Smelting material, Ktonnes										
Secondary raw materials	66	65	59	61	65	57	56	57	62	63
Production, Ktonnes										
Lead alloys	46	46	45	44	43	39	42	41	43	45
Financial performance, SEK m										
Revenues	237	530	787	918	142	632	793	787	698	715
Operating profit before depreciation	119	104	149	344	142	106	99	95	52	57
Operating profit	110	94	138	330	127	91	82	75	34	39
Investments	16	25	55	10	12	12	14	24	10	12
HARJAVALTA										
Smelting material, Ktonnes										
Copper concentrate	540	521	538	451	529	400	434	456	516	471
Secondary raw materials	16	19	16	12	7	11	22	14	16	26
Copper, total	540	540	554	462	536	411	456	471	532	497
Nickel concentrate	205	156	205	262	273	211	262	259	248	251
Production										
Cathode copper, Ktonnes	124	124	127	101	122	97	113	116	125	119
Gold, tonnes	5	4	4	3	2	2	2	2	4	4
Gold, '000 tr. oz.	156	111	128	90	66	56	57	72	117	119
Silver, tonnes	36	35	40	33	59	58	65	73	128	101
Silver, '000 tr. oz.	1,151	1,119	1,300	1,067	1,886	1,876	2,077	2,350	4,122	3,244
Sulphuric acid, Ktonnes	618	566	632	557	659	501	573	600	639	590
Liquid sulphur dioxide, Ktonnes	48	41	43	42	37	33	27	35	37	37
Palladium concentrate, tonnes	0.71	0.92	0.71	0.46	0.21	0.27	0.72	0.84	0.54	1.47

# Ten-year overview – Smelters, cont.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
HARJAVALTA, cont.										
Financial performance, SEK m										
Revenues	1,231	4,000	1,915	1,267	1,432	1,261	1,468	1,552	1,666	1,631
Operating profit before depreciation	390	511	976	289	212	203	318	373	479	496
Operating profit before depreciation excl. PIR <sup>2</sup>	390	511	976	289	339	62	318	373	479	496
Operating profit	239	357	820	149	64	24	154	222	324	316
Operating profit excl. PIR <sup>2)</sup>	239	357	820	149	191	-117	154	222	324	316
Investments	67	91	211	366	225	148	122	229	215	246
KOKKOLA										
Smelting material, Ktonnes										
Zinc concentrate	548	547	548	581	576	571	587	600	589	602
Production, Ktonnes										
Zinc	285	282	282	306	298	295	307	307	315	312
Sulphuric acid <sup>3)</sup>							199	302	313	319
Financial performance, SEK m										
Revenues	1,009	1,319	2,713	2,523	1,848	1,979	2,062	1,818	1,778	1,795
Operating profit before depreciation	127	409	1,722	1,434	632	558	685	417	432	398
Operating profit	-33	246	1,563	1,273	469	362	505	246	261	248
Investments	75	53	95	236	162	99	248	237	210	318
ODDA										
Smelting material, Ktonnes										
Zinc concentrate (incl. zinc clinker)	264	276	291	292	270	245	277	283	279	263
Production, Ktonnes										
Zinc	141	151	161	157	145	139	149	153	153	143
Aluminium fluoride	30	30	29	35	35	33	22	35	36	34
Sulphuric acid	193	193	158	130	113	108	123	125	128	119
Financial performance, SEK m										
Revenues	675	858	1,636	1,441	1,200	1,123	1,128	1,212	1,184	1,070
Operating profit before depreciation	36	160	783	576	360	161	184	123	184	116
Operating profit	-53	22	652	439	210	6	39	-25	31	-26
Investments	592	80	103	168	146	22	75	44	61	269

The operating profit per smelter excludes the revaluation of process inventory, with the exception of Harjavalta, 2008–2009.

 $<sup>^{1)}\,\</sup>mbox{Electronic}$  scrap recycling was not reported separately between 2004 and 2009.

<sup>&</sup>lt;sup>2)</sup> Process Inventory Revaluation.

<sup>&</sup>lt;sup>3)</sup> Investment in sulphuric acid plant, 2010.

# **GRI** index

Boliden's sustainability reporting comprises the sustainability information contained in Boliden's 2013 Annual Report and in Boliden's 2013 GRI Report. The information presented in the Annual Report is based on the areas that Boliden deems to be its highest priorities in this respect. The GRI Report has been drawn up in accordance with GRI guidelines. Boliden applies the GRI sector-specific guidelines for the mining and extraction

industry (MM). Boliden considers that the account complies with the information requirement mandated in version 3.0 of the GRI guidelines for level B+, which has been attested by a third party, Ernst & Young AB.

See below for a GRI Index designed to enable navigation in Boliden's 2013 sustainability report. Boliden's GRI Report for 2013 is also available on the company website, www.boliden.se.

<ul> <li>Fully reported</li> </ul>	= Partially reported

GRI Rep. = 2013 GRI Report AR = 2013 Annual Report

Profile di	sclosure	Reference
Strategy	and analysis	
1.1	CEO statement	AR 6-7, GRI Rep. 4-5
1.2	Key impacts, risks and opportunities	AR 49–50, 56–57, 59–61, 63–64, GRI Rep. 4–5, 9
Organisat	ional profile	
2.1	Name of the organisation	AR 102
2.2	Primary brands, products and services	AR 16, 26–27
2.3	Operational structure of the organisation	AR 26-27, 86
2.4	Location of the organisation's head office	AR 127
2.5	Number and name of countries where the organisation operates	AR Inside of front and back cover
2.6	Nature of ownership and legal form	AR 8-9
2.7	Market served	AR Inside of front and back cover, 4-5
2.8	Scale of reporting organisation	AR 2, 79–80
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 1
Report pa	rameters	
3.1	Reporting period	Calendar year
3.2	Date of most recent previous report	Annual Report including sustainability report 2012, published in March 2013
3.3	Reporting cycle	Annually
3.4	Contact point for questions regarding the report or its contents	AR Inside of front and back cover, GRI Rep. 8
3.5	Process for defining report content	GRI Rep. 9
3.6	Boundary of the report	GRI Rep. 8–9
3.7	Specific limitations on the scope or boundary of the report	GRI Rep. 9
3.8	Basis of reporting on entities that can significantly affect comparability from period to period, and/or between organisations	GRI Rep. 9
3.9	Data measurement techniques and the bases of calculation	GRI Rep. 8
3.10	Explanation of the effect of any re-statements of information provided in earlier reports	Not applicable
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	AR 97
3.12	Table identifying the location of the Standard Disclosures in the report	GRI Rep. 6-8
3.13	Policy and current practice with regard to seeking external assurance for the report	AR Inside of front cover, 65
Governan	ce and CSR management	
4.1	Governance structure of the organisation	AR 102-106, GRI Rep. 9
4.2	Indicate whether the Chair of the highest governance body is also an executive officer	AR 104
4.3	Number of members of the highest governance body that are independent and/or nonexecutive members	AR 104
4.4	Mechanism for shareholders and employees to provide recommendations or direction to the highest governance body $ \frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) \left( \frac{1}{2$	AR 102, 109, GRI Rep. 23
4.5	Linkage between compensation and the organisation's performance	AR 35
4.6	Process in place for the highest governance body to ensure conflicts of interest are avoided	AR 102-106
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body	AR 103–104
4.8	Internally developed statements of mission or values, codes of conduct and other principles	AR 18-19, 63, GRI Rep. 4-5, 9
4.9	Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental, and social performance	AR 104–105
4.10	Process for evaluating the highest governance body's own performance	AR 105
4.11–13	Commitments to external initiatives	AR 7, 63, GRI Rep. 4-5, 9
4.14	Stakeholder engagement	AR 4, 63, GRI Rep. 9
4.15	Basis for identification and selection of stakeholders with whom to engage	GRI Rep. 9
4.16	Approaches to stakeholder engagement	AR 56, 63, GRI Rep. 9, 28-30, 32
4.17	Key topics and concerns that have been raised through stakeholder engagement	AR 64, GRI Rep. 9

Indicator		Reference
nvironmental performance (EN)	Performance, targets, risk management and policies	AR 49, 59, 64, GRI Rep. 4–5, 9–10
N1 •	Materials used by weight	GRI Rep. 11
N2 <b>•</b>	Recycling and materials used that are waste	AR 62, GRI Rep. 11
V3-5	Energy use and energy efficiency	AR 61, GRI Rep. 12
N7	Initiatives to cut indirect energy use	AR 61, GRI Rep. 13
v8, 10	Water use	AR 116, GRI Rep. 13
N11-14		•
	Biodiversity	GRI Rep. 13–14
IM1 • IM2 •	Amount of land disturbed or rehabilitated  Number and percentage of total sites identified as requiring biodiversity management	AR 61–62, GRI Rep. 13–14 GRI Rep. 13–14
	plans and the number (percentage) of those sites with plans in place	
N16–18	Greenhouse gas emissions	AR 59–61, 116, GRI Rep. 15
N20	Other significant air emissions	AR 61, 116, GRI Rep. 16
N21	Water discharge	AR 60, GRI Rep. 17
N22 <b>–</b>	Waste types and disposal methods	AR 62, GRI Rep. 17-18
1M3	Total amounts of overburden, rock, tailings, and sludges and their associated risks	GRI Rep. 17-18
N23 •	Significant spills	AR 59, GRI Rep. 18
N28 •	Significant fines	GRI Rep. 18
N29 •		AR 61, GRI Rep. 19
	Significant environmental impacts from transport and travel	· · · · · · · · · · · · · · · · · · ·
ocial indicators	Performance, targets, risk management and policies	AR 49–50, 56–58, 63, 116, GRI Rep. 4–5, 9, 20
abour practices ar ecent work (LA)	nd	
A1 –	Workforce	AR 116, GRI Rep. 21
A2 •	Employee turnover	GRI Rep. 21
_	• •	·
A3 •	Benefits	GRI Rep. 22
A4	Collective bargaining agreements	GRI Rep. 23
A5 •	Notice regarding operational changes	GRI Rep. 23
A6 •	Representation in health and safety committees	GRI Rep. 24
/M4	Number of strikes and lock-outs exceeding one week's duration, by country	GRI Rep. 23
A7 👄	Injuries and occupational diseases	AR 56-57, 116, GRI Rep. 24
A8 •	Assistance regarding serious diseases	GRI Rep. 25
A9 •	Health and safety topics covered in formal agreements with trade unions	GRI Rep. 25
	· · · · · · · · · · · · · · · · · · ·	
	Training, skills management and lifelong learning	AR 57, GRI Rep. 25
A12	Performance and career development reviews	GRI Rep. 26
A13 😑	Composition of employees and governance bodies	AR 108–110, 116, GRI Rep. 26
A14 –	Equality in remuneration	GRI Rep. 27
luman rights (HR)		
iR1	Investment agreements that include human rights clauses or have been screened	AR 63, GRI Rep. 28
IR2	Suppliers and contractors screened on human rights and actions taken	AR 63, GRI Rep. 28
HR3	Employees trained on human rights	GRI Rep. 28
IR4	Incidents of discriminations and actions taken	GRI Rep. 28
_		•
IR5 •	Freedom of association and collective bargaining	GRI Rep. 28
IR 6-7	Child labour, forced and compulsory labour	GRI Rep. 29
/M5 ●	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 Rep. 29
ociety (SO)		
01	Local community engagement	AR 4, GRI Rep. 30
1M6 •	Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples	GRI Rep. 30
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 Rep. 30
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 Rep. 30
MM9 •	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process	GRI Rep. 30
4N 44 O	•	CDI Don OO
1M10 •	Number and percentage of operations with closure plans	GRI Rep. 30
03 –	Training in anti-corruption policies and procedures	GRI Rep. 31
04	Incidents of corruption	GRI Rep. 31
_	Public policy development and lobbying	GRI Rep. 31
05	Anti-competitive behaviour and compliance	GRI Rep. 31
_	· · · · · · · · · · · · · · · · · · ·	·
07–8 • roduct responsibil	ıty	
07–8 • Product responsibil PR)		AD 64 60 CDID-: 00
07-8 • Product responsibil PR) MM11 •	Programmes and progress relating to materials stewardship	AR 61-62, GRI Rep. 32
SO7-8 Product responsibil PR) MM11 PR1 PR1	Programmes and progress relating to materials stewardship Customer health and safety	GRI Rep. 32
	Programmes and progress relating to materials stewardship	· •

Economic Performance, targets, risk management and policies performance (EC)		Reference	
		Performance, targets, risk management and policies	GRI Rep. 33-34
EC1	$\Theta$	Economic value generated and distributed	GRI Rep. 34
EC2		Climate change implications, risks and opportunities	AR 49, 60-62, GRI Rep. 34
EC3		Benefit plan coverage	AR 81, 89-90, GRI Rep. 34
EC4		Significant financial support received from government	GRI Rep. 34
EC5	$\bigcirc$	Entry and minimum wage	GRI Rep. 34
EC8		Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	GRI Rep. 34
EC9		Understanding and describing significant indirect economic impacts, including the extent of impacts.	AR 4, GRI Rep. 34

GRI Rep. = 2013 GRI Report AR = 2013 Annual Report

# **Definitions**

**Average number of employees** The average number of employees during the year converted to full-time positions.

**Balance Sheet total** The sum of the assets side or the sum of the shareholders' equity and liabilities side of the Balance Sheet.

Capital employed The Balance Sheet total less interest-bearing investments, tax receivables and non-interest-bearing provisions and liabilities

**Cash flow per share** The cash flow for the period divided by the average number of outstanding shares.

**Dividend yield** Dividend per share as a percentage of the share price.

**Earnings per share** Net result for the period divided by the average number of outstanding shares

**Equity/assets ratio** Shareholders' equity as a percentage of the Balance Sheet total.

**Equity per share** Shareholders' equity divided by the number of outstanding shares.

Free cash flow Cash flow from operating activities including cash flow from investment activities

**Net debt** Interest-bearing current and longterm liabilities (including pension liabilities excluding special payroll tax) less financial assets (including liquid assets).

**Net debt/equity ratio** Net debt divided by shareholders' equity.

**Operating profit (EBIT)** Revenues less all costs attributable to the operations but excluding net financial items and taxes.

Operating profit (EBIT) excluding revaluation of process inventory Revenues minus all costs attributable to the operations but excluding the effects of the revaluation of process inventory, net financial items and taxes.

**P/E ratio** Share price divided by earnings per share.

**Return on capital employed** Operating profit divided by the average capital employed. The average capital employed for each year consists of an average of the closing capital employed in the last 13 months. Measured before tax.

**Return on shareholders' equity** Profit for the year as a percentage of average shareholders' equity in the last 13 months. Measured after tax.

**Total return** The sum of the share's performance during the year plus dividend paid divided by the share price at the beginning of the year.

#### **Definition of Cash cost**

Boliden uses the Wood Mackenzie's cash cost metrics, C1 Normal costing and C1 Pro rata costing, to measure the mines' cost position in relation to other mines worldwide. The lower a mine's cash cost, the better its cost position.

#### Normal costing

In normal costing calculations, the costs are allocated in their entirety to one main metal and then reduced by the net revenue<sup>(1)</sup> of other metals, known as subsidiary metals.

- Mining operations, concentration and administration costs<sup>2)</sup>
- + Costs of freighting concentrate to smelters
- + Treatment and refining charges (TC/RC)
- Deductions for net revenue of subsidiary metals
- = Cash cost C1 Normal costing

#### Pro rata costing

In pro rata cash costing, the costs are divided up between the various metals on the basis of the individual metal's share of the total net revenue.

#### Composite costing

In composite costing, mines are included using either normal costing or pro rata costing on the basis of criteria based on the metals' net revenue. If a metal accounts for 65 per cent or more of the total net revenue, the cash cost is calculated using normal costing, while if a metal accounts for less than 65 per cent of the total net revenue, the cash cost is calculated using pro rata costing.

- Calculating the net revenue of mines' metals
   The net revenue is the payable income from the metal, less freight costs and treatment and refining charges.
  - + Income from payable metal
  - The metal's freight cost
  - The metal's treatment and refining charges
  - = The net revenue of the metal

#### **Definition of Cash margin**

Boliden uses Wood Mackenzie's cash margin compilations to measure the smelter's cost position in relation to other smelters. The cash margin is the difference between income and cash cost, expressed in USc/lb. of metal. The income comprises treatment and refining charges, free metals and income from byproducts.

The income for zinc smelters includes income generated by sales of surplus energy, while for copper smelters, the income generated by the sales of sulphuric acid and surplus energy is added as a credit when calculating the cash cost.

The calculations for copper smelters are expressed as unit of metal produced from concentrate, while for zinc smelters, it is expressed as unit of finished metal produced. Income is normally included if it is regarded as having been derived from the main process during the production of metal and the product is saleable.

<sup>2)</sup> Administrative costs attributable to the mine.

# Industry-specific concepts and definitions

**Alloy** Substance with metallic properties which is composed of two or more chemical elements, at least one of which is a metal.

**Base metals** The most common metals, e.g. zinc, copper, lead, nickel and aluminium.

**Cash cost** Common measurement used to show the costs affecting a mine's cash flow, converted into US dollars (average rate for the measurement period). Used to compare the mine's cost position in relation to other mines. See pages 17 and 123.

**Complex ore** Ore that contains several metals, e.g. zinc, copper, lead, gold and silver.

**Concentrator** A plant in which ore is processed mechanically and/or chemically to extract and produce a concentrate of the valuable minerals

**Copper cathode** An end product from copper smelters in the form of 99.99 per cent pure copper plates.

**Feed** The smelter's raw material consumption, i.e. the amount of metal concentrate or secondary material processed and refined.

**Field exploration** Exploration in new areas. Associated with higher costs than with minesite exploration.

Free metals The percentage of metal concentrates bought in that an individual smelter can process over and above the payable metal content. This percentage generates income without incurring a raw material cost.

**Galvanising** An electrochemical process whereby a metal is coated with a thin layer of another metal, such as zinc. Galvanising is commonly used to protect against corrosion (rust).

**Gold doré** An impure gold/silver alloy cast as a bullion in the refinery. Further processed to pure gold and silver at a smelter.

**ISO** International Organization for Standardization. Standards include environmental management (ISO 14001) and quality (ISO 9001), etc.

Kaldo furnace Rotating and tippable furnace for the smelting and process treatment of copper, lead and precious metals, etc., including the recycling of metals from electronic scrap. The plastic present in the scrap is used to smelt the metals, thereby reducing the process' energy requirement.

**LBMA** London Bullion Market Association. International market responsible for the daily pricing of precious metals.

**LME** London Metal Exchange. International market where non-ferrous metals are bought and sold. Trading on the LME is used as the basis for the daily pricing of metals worldwide. The LME also maintains warehouse stocks of the metals traded.

**Metal concentrate** Also known as dressed ore or mined concentrate. Metal concentrate is the result of the concentration processes that separate out the financially valuable minerals present in ore from those with no financial value.

Metal content The quantities of, for example, zinc, copper, lead, gold and silver contained in concentrates. Zinc concentrates generally contain approximately 50 per cent zinc metal, while copper concentrates generally contain approximately 30 per cent copper. The lead content of mined concentrate is usually around 65 per cent.

**Metal premium** The price agreed in advance, over and above the LME price, and paid by customers for specifically adapted metal that is supplied to them.

**Mineralisation** A concentration of minerals in the bedrock

Mineral reserves Those parts of a mineral resource that can be mined and processed in accordance with the company's profitability requirements and taking into account factors such as waste rock dilution and the percentage of metal in an ore that can be extracted in the concentration process. Mineral reserves are divided into two categories: proven mineral resources and probable mineral resources.

Mineral resource A concentration of minerals in the bedrock that may become commercially extractable. Mineral resources are divided into three categories: assumed mineral resources, inferred mineral resources, and measured mineral resources.

Mine-site exploration Exploration in the vicinity of existing mines. New deposits located close to existing mines mean a shorter time from discovery to production because the infrastructure is already in place.

**Open pit** A method of mining mineral deposits located near the surface. The waste rock is stripped and the ore mined directly at the surface.

**Ore** Economic term for minerals, rock types or other bedrock components that can be profitably mined to extract metals or other valuable substances.

**Ore grade** The average quantities of valuable metals in a tonne of ore, expressed in grams per tonne for precious metals and as a percentage for other metals.

Payable metal content The percentage of the metal content of the concentrate for which the smelters pay when purchasing concentrate.

Precious metals Metals that are less commonly present in the earth's crust than base metals and which are regarded, to a greater extent, as a type of investment asset by financial sector players. The most common precious metals are gold, silver, platinum and palladium.

**Price escalators (PP)** Also known as pricesharing clauses. The clauses in the agreements for zinc smelting charges that distribute changes in metal prices between mines and smelters. There have been no price escalator clauses in copper treatment and refining charges for many years now. **Recovery** The percentage portion of the quantity of a given metal in an ore extracted during the concentration process.

**Secondary materials** Various types of recycling materials from which metals can be recovered, e.g. electronic and metal scrap, metal ashes, slag, dust and scrap lead batteries.

**Smelter** A plant in which metal raw materials, metal concentrates or secondary materials are processed to separate metals from impurities by means of high temperature reactions

#### Treatment and refining charges

(TC/RC) The remuneration received by a smelter for processing smelting material (concentrate and secondary materials) and extracting metals. Copper smelters' processes can be broken down into a treatment phase and a refining phase, while zinc smelters' processes only involve a treatment phase, and hence zinc smelters' remuneration only comprises a treatment charge (TC).

**Underground mine** Mine where the ore is mined using underground tunnels. The mining methods used in Boliden's underground mines include the cut-and-fill method and sub-level stoping.

**Waste rock** Economic term for rock which, unlike ore, contains no valuable material.

**Zinc ingot** An end product from zinc smelters with detailed specifications with regard to degree of purity, weight and size.

#### **Abbreviations**

Lb. = pound = 0.4536 kg

Troy ounce = 31.104 gram

USD = US dollars

USc = US cents

SEK = Swedish kronor

NOK = Norwegian kroner

EUR = euro

Ag = silver

Au = gold

Cu = copper

Pb = lead

Zn = zinc

# 2014 Annual General Meeting

Boliden's Annual General Meeting will be held on Tuesday, 6th May 2014 in Boliden.

#### **Participation**

Shareholders wishing to participate in the Annual General Meeting must both be registered in the shareholders' register kept by Euroclear Sweden AB on Tuesday, 29th April 2014 (for details of the re-registration process for nominee shareholders, please see below) and have notified the company of their intention to participate, either via Boliden's website, www.boliden.com, by calling the company on tel. +46 (0)8 32 94 29, or by writing to the company at the following address: Boliden AB, Legal Affairs, Box 44, SE-101 20 Stockholm, Sweden. All such notifications must be received by the company no later than Tuesday, 29th April 2014.

Shareholders' notifications of their intention to attend the Annual General Meeting shall include the shareholder's name, Civic ID no. or corporate ID no., address and telephone number, and the number of assistants who will accompany them. The information provided will be computerised and used exclusively in connection with the Annual General Meeting.

#### Nominee shareholders

In order to be entitled to participate in the Annual General Meeting, nominee shareholders must, no later than Tuesday, 29th April 2014, have their shares temporarily re-registered in their own names with Euroclear Sweden AB. All such requests for registration in the shareholder's own name must be submitted to the relevant trustee well ahead of this date.

#### **Complete convening notice**

A complete notice convening the Annual General Meeting, as well as financial and other information, can be found on Boliden's website at www.boliden.com. Printed financial information may also be ordered via the website or from Boliden AB, Box 44, SE-101 20 Stockholm, Sweden.

#### **Financial information**

6th May Interim Report, January–March 2014

18th July Interim Report, January–June 2014

22nd October Interim Report, January–September 2014

11th February 2015 Year-end Report, January-December 2014

#### Questions

Any questions concerning the content of Boliden's financial information can be submitted to:
Boliden's Investor Relations
Tel. +46 8 610 15 00 or
e-mail: investorrelations@boliden.com

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