



Sustainability Report 2005

BOLIDEN

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BOLIDEN



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The Power of example



This is the first Sustainability Report to be published by Boliden and it contains information on and the results of our work with the environment, health, safety, quality, human resources and social commitment. Here is some of the questions and comments on our thoughts about the Report and the concept of sustainability that we have asked ourselves during the process.

WHY HAS BOLIDEN PUBLISHED A SUSTAINABILITY REPORT?

We have two main reasons. Firstly, the Group is constantly engaged in efficiency enhancement and development work on issues concerning human resources, safety, and the environment. Collecting and presenting our strategies, goals, results and experiences in a single document like this is invaluable, because it shows our stakeholders what Boliden is and where we stand on these issues.

Secondly, at the end of 2003/beginning of 2004, we created a new company through the structural deal with Outokumpu. As a result, Boliden both doubled in size and virtually doubled its number of employees. We're right in the middle of implementing Boliden's strategic platform, The New Boliden Way, which illustrates our corporate culture, our shared values, and our methodology. Sustainability work is an important part of this strategy, and we hope that by col-

lating the information in a Sustainability Report we will promote experience exchanges within the Group.

WHAT DOES SUSTAINABILITY MEAN TO US?

It means constantly striving to achieve a long-term balance between what is acceptable in a purely commercial sense, socially, and in terms of the degree of our environmental impact.

AS A MINING AND METALS COMPANY, CAN WE REALLY BE CREDIBLE WHEN WE TALK ABOUT SUSTAINABILITY?

Yes, we can. We use the planet's resources, just like any other company, but the difference is that we come first in the value chain, so our operations are very concrete. Mining ore and refining metals the way Boliden does is visible, audible and tangible – that's inescapable.

The mining and metals industry is often criticised, mainly from an environmental viewpoint. Much of the criticism is historically rooted and would benefit from a review, but some of the criticism is, unfortunately, still justified. Metals are vital to every person and every society nowadays. The challenge we face, as an individual company and as part of the industry as a whole, of course, is to run our operations in the best possible way.

WHAT SORT OF A CONTRIBUTION CAN BOLIDEN MAKE?

We are often the biggest private employer and, sometimes, the biggest single employer in the communities where we operate, so our effect on individual communities can be very significant. Between five and seven job opportunities are created in each location for every single Boliden employee, so obviously we must focus on issues that are important to the survival of our surroundings and thereby ourselves.

Boliden also has the advantage of operating in a stable region. Furthermore, we have chosen to invest in and conduct our processes using the latest technology and one of the benefits of this is that it improves our environmental performance. We might be a small player in some contexts, and our investments and programmes in the field of environmental technology for example, are marginal in terms of the improvements they bring about in the global environment. But for us, they offer concrete competitive advantages, and so establish a belief in setting a good example.

Stockholm, April 2006

Jan Johansson
President and CEO



This is Boliden



OPERATIONS

Boliden is a mining and smelting company that mainly produces copper, zinc and lead, but also gold and silver. The operations concentrate on the early processing stages in the value chain, i.e. on exploration, mining, and on smelting. Metal recycling – an area in which Boliden is one of the world leaders – also comprises a growing part of the business.

The company has approximately 4,500 employees in Sweden, Finland, Norway, Ireland and the Netherlands. The head office is in Stockholm.

The operations are conducted through three Business Areas: Mines, Copper Smelters, and Zinc Smelters. Financial results are reported for the Product Segments Copper and Zinc.

Boliden's mines are at Aitik, the Boliden Area and Garpenberg in Sweden,

and at Tara in Ireland. The company has two zinc smelters, one at Kokkola, Finland and one at Odda, Norway. The two copper smelters are at Harjavalta, Finland and at Rönnskär, Sweden. Boliden also has a lead smelter, Bergsöe at Landskrona, Sweden.

BUSINESS CONCEPT

Boliden's business concept is to extract minerals and produce high-quality

The value chain



EXPLORATION aims to discover mineral resources and securing ore reserves for future production. The exploration process entails mapping ore bodies, drilling and sampling. Detailed analyses and evaluations are performed from financial, social and environmental viewpoints before a decision is taken to start drilling ore in a specific area. Local residents, authorities and other stakeholders are involved in the process.

Boliden has increased its investments in exploration in recent years, and invested SEK 149 million in 2005. The focus is on mine-site exploration, because the infrastructure is already in place and the time from discovery to production can be reduced.

MINING involves mining ores out of the bedrock to extract metals. Mining takes place in both underground mines, at relatively large depths, and in open-pit mines. Mining includes sub-processes such as drilling, blasting, loading and transportation of the ore for processing.

Boliden operates six underground mines and two open-pit mines. The company also operates one external underground mine. In addition to zinc and copper, Boliden also produces lead, gold and silver concentrate – metals often found together in zinc and copper ores.

CONCENTRATION is the first stage in the extraction of metals from ore, and it involves processes such as crushing, milling and flotation, and sometimes, leaching. The product is metal concentrate. Most of these products are sent to Boliden's own smelters, but some are sold directly from the mines to external customers. The residue left after concentration is called tailings. It is used to back-fill mined out stopes in underground mines or deposited in tailings ponds in the vicinity of the mines.

FINANCIAL KEY RATIOS, SEK million	2005	2004
Net sales	20 441	17 928
Operating result (EBIT)	3 069	1 831
Result after financial items	2 812	1 365
Net result	2 046	1 220
Earnings per share, SEK	7.07	4.98
Cash flow from operating activities	2 540	1 552
Equity/assets ratio, %	44.9	45.2
Net debt/equity ratio, %	54	71
Return on capital employed, %	19.6	11.9
Salaries and other remuneration	1 724	1 589
Social security expenses	649	598
Investments	1 337	1 536
Provision for reclamation costs	527	363

metals in a cost-effective and environmentally friendly way, and to exploit the commercial opportunities that the market offers, thereby creating value for shareholders, customers and employees.

OWNERS

Boliden is a limited company whose share is listed on "Attract-40" on the O list of the Stockholm Stock Exchange, and which has a secondary listing on the

Toronto Stock Exchange in Canada. On 28th February 2006, Boliden had 80,755 shareholders, the biggest of which were SEB Fonder (3.74 per cent), AFA Försäkring (3.57 per cent) and Odin fonder (2.74 per cent).

Foreign ownership accounted for approximately 50 per cent of the share capital. Among the highest percentage of the foreign registered owners, most are located in the UK and the USA with

17.7 per cent and 11.8 per cent of ownership, respectively. At the end of 2005, Boliden's market capitalisation was SEK 18.8 billion. For further information on the Boliden share, please see Boliden's Annual Report for 2005 and Boliden's website at www.boliden.com



SMELTING AND REFINING The bulk of the metal concentrates produced by Boliden's mines is transported to Boliden's own smelters, where it is processed. Boliden's smelters have introduced competitive processes, such as the flash smelting method for copper and direct leaching for zinc, one of the benefits being that they reduced both energy consumption and emissions. The main products are pure metals in the form of copper cathodes and zinc ingots. By-products include gold, silver, lead, sulphuric acid, sulphur dioxide and aluminium fluoride.

RECYCLING Metals are among the few substances that can be recycled, in principle, almost indefinitely. In addition to the recycling that is continuously taking place as part of the smelters' internal processes, Boliden is also involved in commercial recycling at the smelters at Rönnskär (copper, electronic waste and zinc ashes), Harjavalta (copper) and Bergsöe (lead and tin).

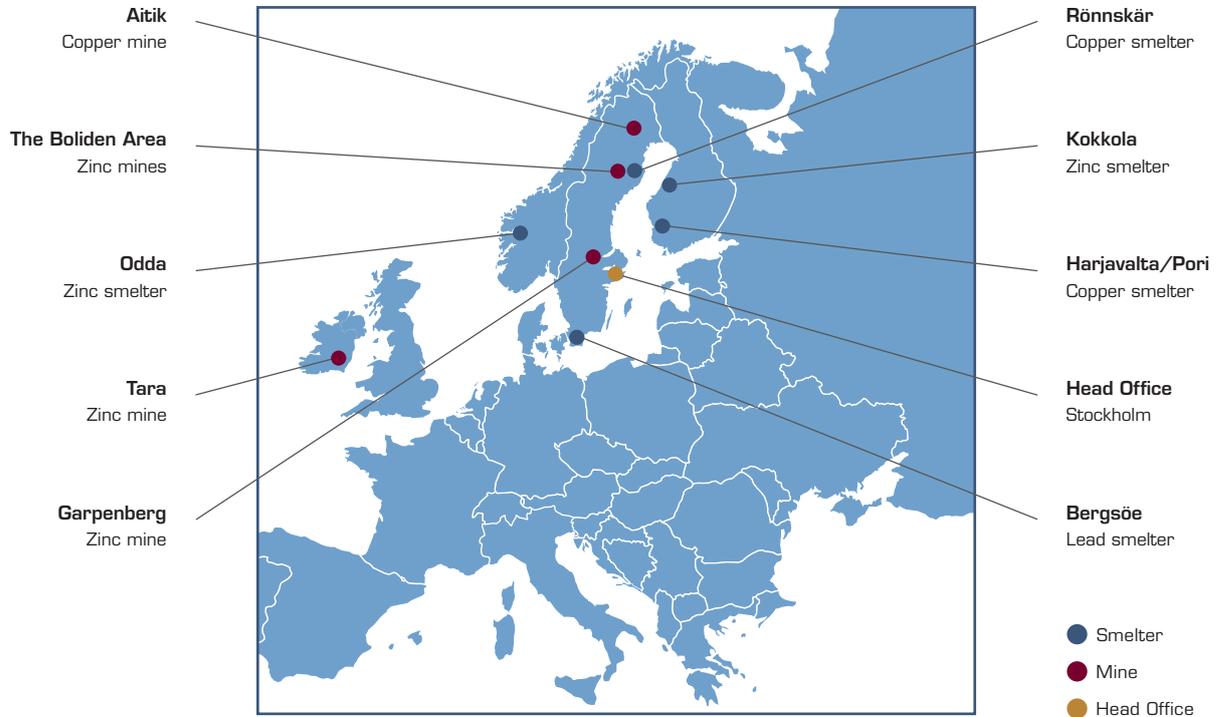
Boliden's recycling processes are environmentally friendly, which offers competitive advantages.

RECLAMATION is an ongoing process at our mines and tailings ponds. The same applies to both ongoing and closed down operations.

Boliden's goal is to achieve a balance between its rehabilitation of disturbed areas and the use of new land.

Nowadays, reclamation plans are incorporated in the planning stage of new operations. We work closely with universities, research institutions, other companies and authorities to achieve optimum solutions in every individual case.

Boliden has production units in Sweden, Finland, Norway and Ireland



GOALS

Boliden's overall goal is to become Europe's leading copper and zinc producer. Boliden also aims to:

- be one of the world's most cost-effective producers
- achieve a return on capital employed that exceeds 10 per cent over a business cycle
- achieve a net debt/equity ratio of approximately 40 per cent and
- to pay a dividend that corresponds to around one third of the company's net result over a business cycle.

STRATEGY

To achieve its goals, Boliden works with the following strategies:

- Ongoing operational efficiency enhancement
- Development of exploration
- Improvement of the balance in the material flows between mining and smelting operations
- Organic growth
- Becoming industry's partner of choice
- Consolidation

MARKET POSITION

Boliden is the third largest producer of copper cathodes and the second largest producer of zinc metal in Europe, in

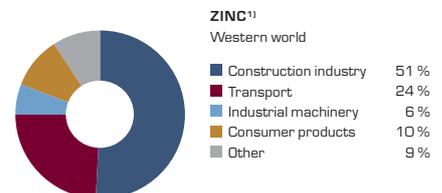
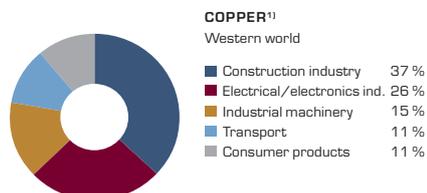
terms of volume. Boliden is also the European market leader in the rapidly growing metal recycling industry. Our goal is to become Europe's leading producer in terms of both quality and quantity.

METALS, CUSTOMERS AND SUPPLIERS

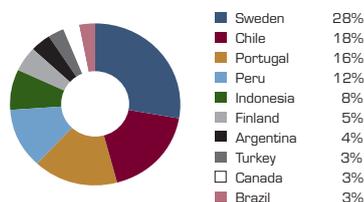
Copper

Copper is an excellent heat and electricity conductor and is consequently used in electric power distribution systems, electrical equipment and heat exchangers. Of all copper produced at Boliden, totalling approximately 350,000 tonnes, approximately 25 per

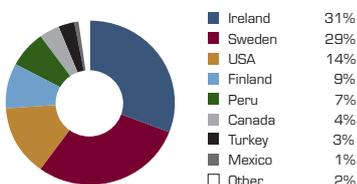
End-users of the principal metals



The origins of Boliden's copper concentrate



The origins of Boliden's zinc concentrate



cent come from concentrates from our own mines. Boliden buys approximately 75 per cent of all copper concentrate from external suppliers, mostly from South America and Europe.

Boliden's main customers for copper cathodes from the Rönnskär and Harjavalta smelters are European manufacturers of semi-finished goods, such as Elektrokoppar and Outokumpu Copper. End customers are primarily cable, industrial and electronics companies.

Zinc

The main applications of zinc are in corrosion protection for steel and, in combination with copper, in the manufacture of brass. Boliden's principal market for the zinc metal produced at the Kokkola and Odda smelters are part of the northern European steel industry, and include companies such as Arcelor, Corus, Rautaruukki and SSAB. The end customers (the customer's customers) mainly come from the construction and automobile industries.

Approximately 80 per cent of the raw material that makes up Boliden's total zinc production of approximately 430,000 tonnes is covered by concentrate from our own mines. The

remainder is bought from mines, mostly in the USA, Finland and Peru.

Lead

Lead and lead alloys are chiefly used to produce lead batteries. Lead alloys are also used in the construction and electronics industries and in medical applications. Boliden's largest lead customers include Enersys and Johnsson Control International.

Gold

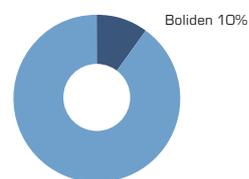
The primary applications of gold are in the manufacture of precious objects, jewellery, electrical contacts and connectors in the telecommunications and electronics industries. Boliden's main customers include Heraeus Metallhandels-gesellschaft mbH and Sempsa Joyeria Platería s.a.

Silver

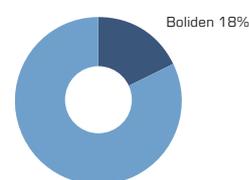
Silver is primarily used in the manufacture of jewellery, but is also used in the manufacture of photographic film, electrical conductors and advanced electrical equipment. Thessco Ltd and Umicore AG & Co. KG are amongst Boliden's largest silver customers.

BOLIDEN'S MARKET POSITIONS

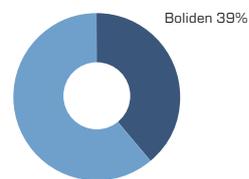
European market share – Copper Mines



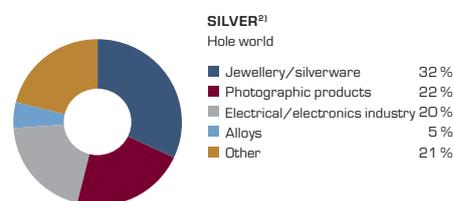
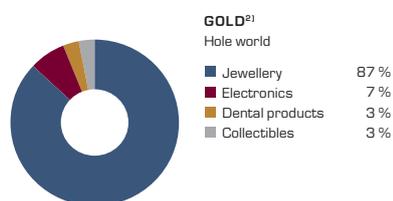
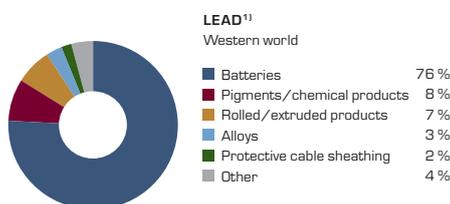
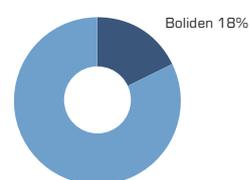
European market share – Copper Smelters



European market share – Zinc Mines



European market share – Zinc Smelters



¹⁾ Source: Brook Hunt
²⁾ Source: CRU

Organisation and Management



CORPORATE GOVERNANCE

Boliden operations are governed by the Shareholder's Meeting, the Board of Directors and the President, in compliance with the provisions of the company's Listing Agreement with the Stockholms Stock Exchange and the company's Articles of Association. Boliden has implemented the Swedish Code of Corporate Governance since 1st July 2005. For more detailed information on the way the company is governed, please see Boliden's Annual Report for 2005 and the company's website at www.boliden.com

ORGANISATION

The President, who is also the CEO, manages the Group within the framework stipulated by the Board of Directors and is responsible for the ongoing governance and control of the operations. The Group management includes the Deputy CEO, the Presidents of the Group's three Business Areas, Mines, Copper Smelters and Zinc Smelters, and the Senior Vice Presidents of the Group Staff for Finance, Communications, Legal Affairs and Human Resources respectively. The Group management is

responsible for the development and implementation of the Group's strategy, and meets regularly every month to review the operations.

Boliden's philosophy is to have minimal central administration and to delegate management to the operational level instead, wherever possible.

Environment, Health, Safety and Quality (EHSQ) work and Human Resources issues are both run in network form.

A new organisation was established for EHSQ work in 2005 with the aim of clarifying operational responsibility and enabling Boliden's various units to make better use of each other's experience.

The Vice President of EHSQ and the Senior Vice President for Human Resources report to the Deputy CEO who therefore has overall responsibility for Boliden's sustainability issues. A total of four people are linked to the EHSQ staff, and they then work with a network of approximately 60 EHSQ managers throughout the organisation. The entire EHSQ network meets once a year and the individual networks meet twice yearly. The Group's human resources network comprises seven people and

meets 2–3 times a year. Wider-ranging networks of Human Resources Managers have been set up in Sweden and Finland.

MANAGEMENT STRUCTURE

A shared approach and methodology are vital if Boliden's decentralised, network-based methodology is to work properly.

During 2005, 85 per cent of all employees have familiarised themselves with Boliden's overall strategy document, The New Boliden Way (TNBW) and its associated Code of Conduct. Work on TNBW began in early 2005 and it is the result of several internal working parties' efforts to define Boliden's values and collect them in a single document.

The Code of Conduct is intended to support and guide employees in their daily work and covers the following areas:

- *Responsibility for company assets* – We shall adhere to legislation and other regulations in force in the markets in which the company operates. We shall co-operate in developing healthy business routines and making sound risk assessments within our operations.
- *Responsibility for fellow colleagues* – We adhere to the UN Declaration of



OPERATIONAL POLICY

The vision of new Boliden is to be a world-leading, focused and cost-effective mining and smelting company. The core values of the company are passion, responsibility and commitment. Total Quality Management is applied to all operational areas including environmental matters and occupational health and safety.

The principles of the operational policy are:

- We acknowledge our responsibility for economic and social development as well as environmental impacts by promoting sustainable development and efficient use of natural resources.
- We promote the health and working ability of our employees as well as safe working environment. We strive to maintain a good and stimulating working climate and further develop our employees' expertise.
- We strive to exceed our customers' expectations. Customer satisfaction originates from the quality of our products and services.
- We appreciate the excellence of our partners and expect them to act according to our principles. By maintaining the dialogue with our partners we identify mutual opportunities and continuously improve our performance.

Boliden's overall goals for its EHSQ work are:

- Implement Group-wide Environment Health, and Safety work guidelines before the end of 2006
- Draw up Group-wide quality management guidelines in 2006
- Perform internal audits every second year at every unit
- Ensure that all units have certified management systems for Environment, Health and Safety by the end of 2008
- Introduce energy management systems at all units by the end of 2008

Overview of the introduction of various management systems at Boliden's units 2005

	Boliden	Aitik	Garpenberg	Tara	Rönnskär	Bergsöe	Harjavalta	Kokkola	Odda	Boliden Zinc Commercial B.V.
ISO 9001					C	C	C	C	C	C
ISO 14001	•	•	•	•	•	C	C	C	C	
OHSAS 18001	•	•	•		•	•	C	C	C	
ISRS				C						
Dam safety	X	X	X	X			X	X	•	
Safety report (Seveso)	X	X	X		X		X	X	X	
Energy management system	•	•	•	•	•		X	X	•	

•=initiated X=implemented C=certified

Human Rights and to the ILO's core conventions.

- *Responsibility for the environment* – We shall constantly strive to minimise our impact on the environment and to use natural resources wisely.
- *Responsibility for sales and marketing* – All activities designed to support our business operations shall be in keeping with what is generally regarded as good taste and shall be subjected to careful consideration prior to implementation.
- *Responsibility for society* – At corporate and individual employee level, we shall show commitment to the societies in which we operate and make a positive contribution to their development. Concrete policies and guidelines have been produced for work relating to en-

vironmental, health, safety and energy aspects among other things. Boliden focuses on Total Quality Management (TQM) and the Group wide guidelines for quality work that will be introduced in 2006 are among the first steps in this process.

INTERNAL AUDITS

The company has developed a system of internal audits in 2005 for its work with Environment, Health and Safety. The audit criteria have been formulated using The New Boliden Way, the Operational Policy, and the Group wide guidelines. Each of the Group's units will be audited at least once every second year. The audit team is made up of employees from different areas of the Group, and is headed

by the EHSQ staff. Every audit results in a report in which deviations from policy as well as areas in which there is scope for improvement are identified. A timetable for implementing the requisite measures is then drawn up and the EHSQ staff are responsible for ensuring that these action plans are implemented. In 2005, audits were performed at the Bergsöe lead smelter, the Odda zinc smelter, and the Aitik and Garpenberg mines.

The units audited and the participating internal auditors have all spoken very highly of the audits. They were of the opinion that this is a good way of transferring knowledge between the various units and of boosting the competence levels of the individual internal auditors.

Internal audit of the Odda zinc smelter



The Group-wide guidelines for Environment, Health and Safety (EHS) formed the basis for the audit performed by the

EHS Group staff at Boliden's zinc smelter at Odda in October 2005. Similar audits will be performed at each unit

every second year. Odda was number two in the list of units to be audited. The Bergsöe lead smelter was the first.

The focus at Odda was on issues such as communication, risk management/contingency planning, document handling, and incident management.

The feedback report is divided into:

- Positive observations
- areas with scope for improvement and
- deviations.

An action plan will be used to follow up on the latter two categories. The Group staff is accompanied by EHS representatives from other units, with the aim of promoting the transfer of knowledge between the units. ”

Unit and Individual awards for 2005

An annual award for commendable work in the field of Environment, Health and Safety was instituted by Boliden in 2005. The award is presented in two categories: Unit and Individual.

The Individual EHS award for 2004 went to Christer Winsa from the Aitik mine for his indefatigable and systematic efforts to enhance knowledge and awareness of risks in the workplace among employees and contractors alike.

The “best Unit” award for 2004 went to zinc smelters Kokkola for its long-term work and efforts that have resulted in excellent performances in the fields of Environment, Health and Safety. ”



Goals and goal fulfilment 2005

The baseline year for Boliden's goals is 2004 and all improvement goals relate to this year

<p>MANAGEMENT SYSTEMS Internal guidelines for EHS will be implemented throughout the Group by 31st December 2006.</p>	<p>RESULTS, 2005 Work is in progress at all operational units.</p>
<p>Internal, Group-wide audits against current guidelines will be carried out every second year at each unit.</p>	<p>Audit plans and audit routines have been established. In 2005, four of nine operational units were audited.</p>
<p>All units will be ISO 14001 certified by 31st December 2008.</p>	<p>Four units are ISO 14001 certified. Work towards certification has begun at other units. The Rönnskär copper smelter is planning to achieve certification in 2006.</p>
<p>All units will be OHSAS 18001 certified, or meet the requirements of ISRS (level 6) by 31st December 2008.</p>	<p>Three units are OHSAS 18001 certified and one, Tara, achieved ISRS level 7 certification in 2005. Work towards certification has begun at other units.</p>
<p>An energy management system will be implemented at all units by 31st December 2008.</p>	<p>Two units have an energy management system. A further four units plan to implement an energy management system during the first half of 2006.</p>
<p>Group-wide guidelines for quality work will be adopted in 2006.</p>	<p>Work has begun within the Group network for quality work.</p>
<p>PEOPLE A Group-wide inventory of key individuals and future managers will be carried out.</p>	<p>The inventory process has begun and is scheduled for completion in 2006.</p>
<p>The frequency of accidents leading to absence (total for the Group) will be reduced by at least 25 per cent by the end of 2007.</p>	<p>The accident frequency has increased during the year from 11.1 to 11.9 per 1 million hours worked.</p>
<p>Absence due to sickness (total for the Group) will be reduced by at least 10 per cent by the end of 2007.</p>	<p>Sickness absence has remained unchanged from 2004 to 2005 (5.3 per cent).</p>
<p>ENVIRONMENT The Group's specific emissions to air of metals (Cu+Zn+Pb+Ni+Cd+As) will be reduced by at least 20 per cent by 31st December 2008.</p>	<p>Emissions have been reduced by 10 per cent during the year.</p>
<p>The Group's specific emissions to water of metals (Cu+Zn+Pb+Ni+Cd+Hg) will be reduced by at least 20 per cent by 31st December 2008.</p>	<p>Emissions have increased by 4 per cent during the year.</p>
<p>The Group's specific emissions of carbon dioxide will be reduced by at least 5 per cent by 31st December 2008.</p>	<p>Emissions of carbon dioxide have been reduced by 2 per cent during the year.</p>
<p>The Group's specific generation of non-industry specific waste sent to landfills will be reduced by at least 20 per cent by 31st December 2008.</p>	<p>The quantity of non-hazardous waste sent to landfills has been reduced by 5 per cent since 2004.</p>
<p>There will be a balance between rehabilitation of disturbed areas and the use of new land over a five-year period.</p>	<p>47 hectares of previously unaffected land have been utilised during the year. 30 hectares of affected land have been the subject of reclamation work.</p>
<p>COMMUNITY All units will produce a public, local EHS Annual Report.</p>	<p>All units published an official, local EHS Annual Report in 2005.</p>
<p>All units will have and maintain an external contacts plan and will act in accordance with this plan.</p>	<p>Work on developing these plans has begun.</p>
<p>A Group-wide sustainability report in accordance with international practice will be produced, starting in 2006.</p>	<p>This is the first Group-wide sustainability report for Boliden.</p>

People



Boliden wishes to develop a learning business culture that is open to change so as to become the company of choice for customers, suppliers and, in particular, employees.

EMPLOYEES

Boliden has 4,530 employees, of whom 2,262 work in Sweden, 1,166 in Finland, 391 in Norway, 683 in Ireland and 28 in other countries – primarily the Netherlands. The company's ambition is to create a working environment that enthuses, involves and develops all of them, while also enabling them to maintain a balance between working life and private life. At Boliden, older people, younger people, specialists, generalists, men and women should all be able to make a contribution and develop. As part of our efforts to promote integration, employees are encouraged to set up meetings and opportunities to exchange experiences both between the different units and across the generation boundaries.

In early 2006, Boliden launched an employee opinion survey known as "My opinion". The aim of the survey is to identify areas where there is scope for improvement, both at local and at Group wide level, and to act as a tool for Boliden's senior management in their target management work. "My opinion" will, among other things, be used to fol-

low up on the implementation of The New Boliden Way.

TRADE UNION COOPERATION

Boliden respects its employees' right to join a trade union and actively supports cooperation between employers and employees and their respective representatives, in every area of shared interest.

For a number of years, the company has had an agreement with the trade union organisations with regard to union-related cooperation at all levels within the Group. The Boliden Works Council (BWC) is the company's overall trade union body, comprising union representatives from all units. BWC provides a forum for important dialogues between the employees' representatives and the company management, and BWC is therefore an important disseminator of our corporate culture and a bridge between different units and countries.

Boliden applies the terms of employment and labour market rules prevailing in the various countries in which it operates.

Around 80 per cent of all of Boliden's employees are trade union members.

HEALTH AND SAFETY

Boliden's goal is for all units to be OHSAS 18001 certified or to meet the requirements of ISRS level 6 by the end of 2008.

The frequency of accidents leading to absence from work to be reduced by at least 25 per cent, and for absence due to sickness to be reduced by at least 10 per cent by the end of 2007.

Boliden operates in an industry and engages in activities that are associated with risk. A strong commitment to issues relating to health and safety is therefore a matter of high priority throughout the Group. Working correctly not only boosts our own well-being and results, it also increases the outside world's confidence in Boliden.

Boliden's strategy, wherever possible, is to minimize the risk of accidents to which its employees are exposed. Focused efforts at several of Boliden's units have yielded results in this respect. At the end of 2005, for example, the Harjavalta copper smelter received an honorary mention from the Finnish Ministry of Health and Social Welfare for its efforts to reduce accidents in the workplace. In 1999, Harjavalta set a zero tolerance target for accidents, and by November 2005, the unit's electrolysis plant at Pori had recorded 1,400 accident-free days.

Three of Boliden's nine facilities are now certified in accordance with OHSAS, and Boliden's Tara mine in Ireland achieved ISRS level 7 in 2005.

In 2005, the sick leave rate within the



Group was 5.3 per cent and the lost time injury frequency was 11.9 accidents per million hours worked.

Both the lost time injury frequency and sick leave rate have generally fallen throughout the Group since 1992 from their previously high levels, but there are signs at some units that the number of accidents is increasing. Targeted measures have been initiated in these cases. Tragically, one employee died in an accident at Boliden's Tara mine in Ireland in 2005.

Over the past year, the company's health network has drafted an action programme for health promoting measures. The programme rests on three cornerstones: problem solving, preventative and health promoting measures. A number of key indicators have been identified within the framework of the programme. Staff turnover as well as drug and alcohol-related ill health will be measured, for example, in addition to the sick leave rate and lost time injury frequency.

TRAINING AND RECRUITMENT

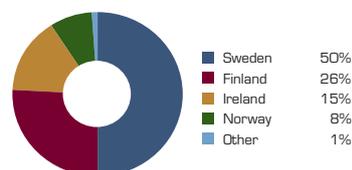
A Group wide identification and inventory of key individuals and future managers has been initiated and will be completed by the end of 2006.

There is a constant focus within the Group on recruiting new personnel – both experienced and newly qualified – and on developing the skills of existing employees. Boliden works closely with universities and upper secondary schools to generate interest in the mining and smelting industry among young people. As several of Boliden's units are facing a generation shift this work is being prioritised.

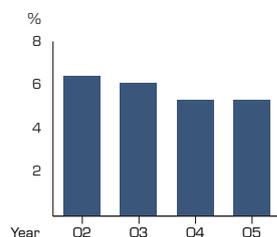
Employees' skills are developed in a number of ways. Development plans are discussed with each employee at an annual performance review. In addition, the operations also set their own objectives. The goal set by the Kokkola zinc smelter, for example, is for every employee to hold an official professional qualification by 2015.

The development programme entitled "Young Professionals" and aimed at young Boliden employees with higher

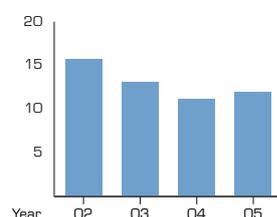
Employee breakdown by country



Sick leave rate (percentage of contracted working hours)



Lost time injury frequency (number per 1 million hours worked)





education was launched at Group level in 2005. The goal is to give the participants a chance to learn about Boliden's operations and fundamental values and to form personal networks. The programme is also designed to promote the integration work within the Group. The first group of Young Professionals comprises 18 employees between the ages of 25 and 35. Eight of them are women.

EQUAL OPPORTUNITIES

Boliden strives to ensure diversity with regard to gender, age, nationality and other factors that contribute to a stimulating equal-opportunities workplace. Boliden does, however, operate in what is traditionally a male-dominated industry. In 2005 12.4 per cent of employees were female, an increase of 1.5 percentage points since 2002. Women account for 12.5 per cent of Boliden's Group Management and 25 per cent of its Board of Directors.

Measures and programmes are constantly being implemented within the Group with the aim of:

- enabling employees to combine their working and family lives,

- counteracting a distorted gender breakdown within various occupational groups,
- increasing the percentage of female managers,
- maintaining equal opportunities for men and women throughout the Group's operations, and
- ensuring that no pay discrimination occurs.

CUSTOMERS AND SUPPLIERS

Boliden's Code of Conduct describes the overall values and guidelines for all business support activities. Boliden expects its partners to act in accordance with Boliden's values.

Boliden's contacts with suppliers can, roughly speaking, be divided into two parts. One section procures metal concentrate and secondary metal raw material within the two market organisations, Copper Market and Zinc Market, while the other is responsible for the purchase of all goods and services, including logistics.

Boliden's customers mainly comprise European smelting and steel companies as well as manufacturers of semi-finished

goods, who buy the company's copper and zinc metal. Boliden has introduced a system of audits for customers who buy certain selected products, such as mercury and copper cement, in order to minimize the environmental and health risks associated with incorrect use. Boliden has decided that these products will only be sold to a few pre-approved European customers. Six customers were audited in 2005.

An efficiency enhancement programme is currently being implemented for input goods and service procurement with the aim of cutting costs. This is being achieved partly by reducing the number of suppliers, intensifying the relationship with remaining suppliers, standardising purchases and improving the efficiency of the processes. The total number of suppliers is approximately 6,000, of whom 25 account for 45 per cent of the volumes purchased.

Group-wide routines are now being drawn up for supplier evaluations in order to ensure, among other things, that Boliden uses suppliers who are quality conscious and environmentally aware and who take responsibility for their internal work environment.



Environment



Environmental impact is an unavoidable consequence of Boliden's operations at its mines and smelters. Boliden's operations are at the beginning of the refinement chain in our production, consumption and service society. The ore is mined from rock which has an impact on the landscape, causes noise and dust, and gives rise to waterborne emissions and large quantities of waste, mainly in the form of tailings, as it is known, and waste rock. The mined ore is concentrated and the concentrate is transported to the smelters, which extract and refine metals. The environment is also affected at this stage by airborne and waterborne emissions and waste generation.

Boliden has made major progress on its environmental protection work in recent decades. The efficiency of the production processes has been enhanced and modern cleaning equipment has been installed, and these two factors have reduced both airborne and waterborne emissions, as well as the specific energy consumption. Boliden's smelters are now among the most modern and cleanest in the world. But new knowledge is continuously being acquired. Customers, legislators and other stakeholders are all imposing new demands, and new competitive situations are arising. Boliden must therefore work unceasingly to improve its environmental performance.

PERMITS AND LEGISLATION

All of Boliden's facilities in Sweden, Finland, Norway and Ireland are subject to environmental legislation and regula-

tions. Boliden is also subject, where applicable, to EU regulations concerning waste management, chemicals and carbon dioxide emissions. The EU has recently decided to issue a new directive on mining waste and this will now be implemented into national legislation. In addition, work is underway within the EU on formulating new chemicals legislation, REACH, which will impact on parts of Boliden's operations when it comes into force.

All of Boliden's units hold the permits and licenses required for their ongoing activities and expansions, and all operations in 2005 were conducted within the framework imposed by legislation and applicable terms and conditions.

The following significant permit application issues have been processed in 2005:

- The Aitik mine was granted a new permit to increase annual production from 18 million to 28 million tonnes. The part of the permit that refers to financial security for reclamation work has been appealed by the Swedish Environmental Protection Agency.
- The Pori electrolytic refinery (part of the Harjavalta smelter facility) has been granted a new permit that complies with the IPPC directive's requirements and which permits increased production. Boliden has lodged an appeal against some of the conditions as the sampling requirement has increased considerably.
- The permit granted to the Harjavalta copper smelter in 2004 has been

appealed by Boliden because, among other things, the dust emissions conditions have been set at a level that would be impossible to maintain in the event of disruptions to production.

- Negotiations have been conducted with the Environmental Court regarding a permit for a new tailings pond in the Boliden Area. In March 2006, the Environmental Court rejected Boliden's application. Boliden has filed an appeal.
- Work is also in progress at the Garpenberg mine to apply for a permit for future production increases, as well as other changes.

REPORTING AND TARGETS

Boliden has developed an index as a group-wide indicator for environmental performance. It is a key ratio that relates consumption and emissions to production. The indexing enables the environmental performance of both smelters and mines to be added to a Group's overall indicator, which shows development trends. The base year for this index is 2002 and, as such, has a value of 100 for that year.

Boliden has set a number of Group-wide targets. The base year for all of these targets is 2004.

RAW MATERIALS CONSUMPTION

Boliden's structure as an integrated mining and smelting company means, in practice, that Boliden's mines produce raw materials in the form of metal concentrates for the smelters. One of the







benefits of this is that Boliden has more reliable control over the origins of its raw materials. In-house zinc and lead production accounts for 80 per cent of the smelters' capacity, with copper production from the mines accounting for approximately 25 per cent of the quantity of metal produced.

Recycled metal-bearing material accounts for a substantial part of metal production.

CHEMICALS AND GOODS

Boliden aims to reduce the number of hazardous chemicals used and to replace them with less hazardous equivalents wherever possible.

The processes within the Boliden Group require not only ore, metal concentrates and waste metal, but also chemicals and other materials. Mining ore and waste rock naturally requires the use of explosives, one of the by-products of which is nitrogen emissions. Collecting agents and frother are added to the process at the mines' concentrators, where ore is processed to create metal concentrates. Calcium and liquid caustic soda are used during

water purification, and limestone and sand are added to form slag at the smelters.

Boliden works constantly to evaluate and assess the risks associated with chemicals hazardous to health and the environment. Boliden's Swedish operations have established a central chemicals group tasked with addressing general issues, such as purchasing and risk assessment routines, etc.

The Group's other operations in Finland, Norway and Ireland handle the health and environment related aspects of chemicals within the framework of the environmental management system and the purchasing processes.

The EU is currently drafting new chemicals legislation, known as REACH. The aim of REACH is to improve knowledge of and control over chemicals handling within the EU by, for example, mandatory registration. Boliden will be affected by the new chemicals legislation in a number of ways: the proposal will, for example, introduce a requirement to register the metals that Boliden produces. It seems likely that the registration requirement will not apply to ores and metal concentrates, but that permits may

be required to handle them, depending on their content. The registration requirements will probably apply to secondary raw materials, i.e. recycled materials, but it is too early to say what form these requirements will take.

ENERGY

Boliden's goal is for all facilities to implement energy management systems by the end of 2008.

Mines and smelters both require large amounts of energy, and electricity costs are among Boliden's largest expenditure items. Around 15 per cent of Boliden's total expenses comprise energy related costs, primarily for electricity. The largest consumers are the smelters. At the same time, production is increasing at the mines – they are getting deeper and this means an increase in their energy consumption. Boliden's strategy with regard to our in-house energy consumption focuses both on enhancing the efficiency of our energy usage and, wherever possible, on using renewable forms of energy. Boliden is one of the initiators of BasEl, in which some fifteen companies,

Raw materials consumption

Raw materials (tonnes)	2002	2003	2004	2005
Sand	245 528	259 908	281 518	251 944
Explosives	15 287	17 131	15 742	20 652
Chalk and limestone	25 187	25 258	28 426	29 310
Liquid caustic soda	34 850	50 343	57 737	36 555
Collecting agents (flotation)	576	768	757	760
Frother (flotation)	190	253	206	209

Surplus energy from Rönnskär benefits society

New electricity corresponding to the annual electricity consumption of 1,000 normal-sized houses is produced from recovered energy from the Rönnskär plant – with no environmental impact. This is the heart of the ECOEL project, a collaboration between Boliden and the energy company, Skellefteå Kraft.

Boliden's Rönnskär smelter is an energy-intensive industry. The facility works constantly to reduce its energy consumption, and over the last 20 years it has successfully halved its consumption per tonne of product. The ECOEL project is another step in this direction. Total energy reclamation levels at the smelter are increasing by around 30 per cent at the same time as electrical energy costs are being cut. As ECOEL uses completely new technology in some areas of the project, it is very much in tune with the trend towards a sustainable society.

EXPANDED DISTRICT HEATING NETWORK

The project entails a restructuring of Rönnskär's energy system. Waste heat from the smelter's processes is used by a substantially expanded district heating network to heat premises in the industrial area, many of which were previously steam-heated. The steam freed up can now be used instead to produce electricity in Skellefteå Kraft's turbines and generators, which are located in Rönnskär's energy centre. Sufficient electricity to heat 700 homes electrically is already being produced. The increase will yield approximately 30 GWh of electricity per annum, corresponding to a further 1,000 homes, plus some 200 GWh of district heating that will mainly be used to heat premises at Rönnskär.

The sulphur product plant lies behind the new and previously unused energy. New heat exchangers utilise the process energy to produce water heated to 100°C for use in district heating. As steam is a more valuable form of energy than district heating, using the hot water to heat premises and converting the steam into electricity is more efficient.

CUTTING CONSUMPTION

"ECOEL has laid the foundations for a more energy-efficient Rönnskär. Boliden benefits by reducing its consumption of fresh water and oil, cutting operating and maintenance costs, and sharing in the electricity production revenues," says Rönnskär's General Manager, Roger Sundqvist.

The name, ECOEL sends a clear signal that concern for the environment is one of the cornerstones of the project. An increasing percentage of the process heat from the sulphur product plant is now being processed and converted into district heating, instead of simply being discharged into the sea. The project reduces Rönnskär's fresh water consumption by 300,000 m³ every year. Furthermore, the need to provide support fuel for the district heating system in the form of oil is minimised to cover any operational disruptions during the cold months of the year – which cuts airborne carbon dioxide emissions.

COOPERATION BETWEEN INDUSTRY AND ENERGY COMPANIES

The project is a great example of co-operation between an industry and an energy company.

Rönnskär already supplies district heating to Skellefteå Kraft to heat areas in the nearby communities of Skelleftehamn and Ursviken. The quantities supplied will probably increase in the future.

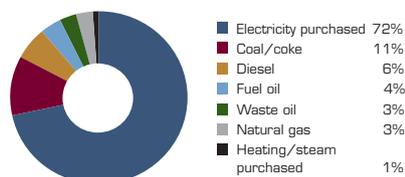
There is clear potential for further increasing the efficiency of the smelter's energy consumption.

"We can already see opportunities to produce substantially larger amounts of district heating than we do at present," says Roger Sundqvist. "In the short-term, we can replace existing electrically powered heating systems with district heating and connect more premises up to the district heating system. We're also looking at making better use of the waste heat from processes where utilisation levels are currently low. "

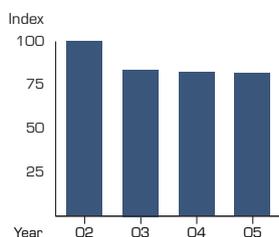


Land usage (hectares)	2002	2003	2004	2005
Total area	19 337	19 837	19 858	19 806
Affected, as yet not rehabilitated (opening balance)	4 703	4 652	4 681	4 652
Affected during reporting period	0	38	1	47
Rehabilitated during reporting period	50	9	30	30
Affected, as yet not rehabilitated (closing balance)	4 652	4 681	4 652	4 669

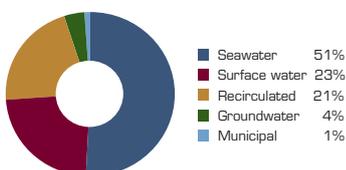
Energy consumption per energy type, 2005 (total 17 million GJ)



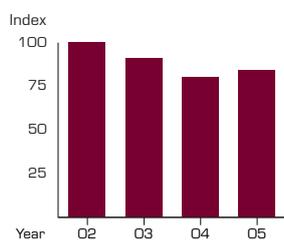
Specific energy consumption



Water consumption, 2005 (total 180 million m³)



Specific freshwater usage



mainly operating in the electricity-intensive forestry, steel, chemicals and mining industries, joined together in 2005 to augment the supply of electricity, mainly in Sweden and Finland.

Programmes and measures designed to increase energy efficiency are taking place at the various Boliden facilities. The ECOEL project, a partnership between the Rönnskär copper smelter and Skellefteå Kraft (see separate article) is just one example. Another is the ongoing expansion and efficiency enhancement work at the Harjavalta copper smelter and the tank house at Pori. The investment totalling approximately SEK 400 million means not only increased production capacity and reduction of unit costs by approximately 20 per cent, it will also reduce specific energy consumption by 13 per cent.

WATER CONSUMPTION

Boliden is working continuously to reduce its consumption of, and emissions to, water.

Water is one of the vital process elements for mining, ore concentration, and metal production. At the same time, water is a valuable natural resource and it must be used with respect, even though the countries in which Boliden operates, do not normally suffer from water shortages.

Boliden is working continuously to optimise its water usage and recycling systems and to develop water treatment methods in order to reduce the consumption of, and emissions to, water.

Several bodies of water and water-

courses receive emissions from Boliden's operational activities. The most important recipients are the Kalixälven, Skellefteälven and Dalälven rivers in Sweden, the Gulf of Bothnia between Sweden and Finland, the River Boyne in Ireland, the River Kokemäenjoki in Finland, and the Sörfjorden fjord in Norway. Rivers and water are affected even when mining operations have ceased in an area.

Boliden implements monitoring programmes in cooperation with the relevant authorities for both operational facilities and those which have closed down.

Boliden has reduced its freshwater consumption by approximately 16 per cent since 2002.

LAND MANAGEMENT

Boliden's goal is to establish a balance, over a five-year period, between the rehabilitation of previously disturbed land and the use of new land.

As a mining company actively involved in exploration and mining activities, Boliden requires access to large areas of land, both for its exploration work and to enable it to run mining operations and establish tailings storage facilities. It is important, therefore, that the legal and permit-related preconditions are clear, unambiguous and secured, not least with regard to the establishment and conduct of operations. Boliden's guiding principle is to maintain an ongoing dialogue and to cooperate with landowners, authorities and other stakeholders, with the aim of achieving consensus at an early stage.



Boliden's operations, and its mining operations in particular, have an impact on surrounding areas of land and on the biological diversity of these areas. Approximately 20 per cent of Boliden's total land holdings of around 20,000 hectares comprises disturbed and as yet unrehabilitated land. This figure also includes currently active areas. Approximately 8 per cent of Boliden's land holdings are designed to protect and promote nature conservation interests. Between 2002 and 2005, 86 hectares of previously unused land have been utilised and 119 hectares of disturbed land have been rehabilitated.

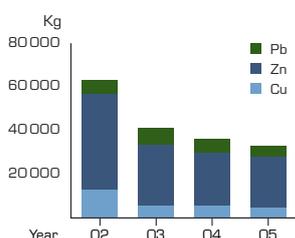
Reclamation measures are an ongoing feature, both in areas where operations have ceased and in those where they are still being conducted. Boliden has implemented reclamation measures at about 50 mines to date. Planting trials are, for example, currently taking place at the Aitik copper mine, in cooperation with the Swedish University of Agricultural Sciences, with the aim of developing an efficient means of greening rehabilitated areas in the future. Trials to date have demonstrated that planting directly on the surfaces of tailings ponds is possible, but requires the addition of nutrients.

The reclamation programme at the Tara mine in Ireland includes analyses of flora and fauna in order to determine the environmental and health-related effects of the reclaimed areas.

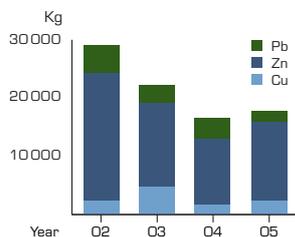
Provisions for reclamation costs are continuously reviewed based on an estimate of future costs, taking account of modern technology and other circumstances. Provisions are made for the estimated reclamation costs and booked as costs over the total operating period. At the end of 2005, there was a total of SEK 527 million for reclamation costs.



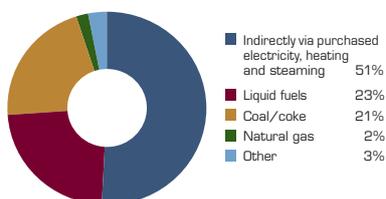
Metal emissions to air



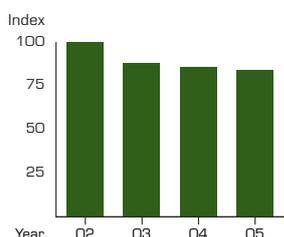
Metal emissions to water



Carbon dioxide emissions, 2005 (total 703 ktonnes)



Specific carbon dioxide emission



DAM SAFETY

Dams are used, often in combination, to deposit tailings, to treat process water, and for water storage. Boliden is responsible for a total of 34 dam facilities for water regulation and tailings impoundment in Sweden, Norway, Finland, Ireland and Canada. This figure includes both operational facilities and those no longer operational.

Boliden has been conducting a dam safety programme for a number of years now in accordance with the Swedish power industry’s guidelines for dam safety, RIDAS. In addition to the coordinator who is responsible for the Group’s dam safety work, every operational unit with their own dams has an appointed Dam Safety Manager.

EMISSIONS AND WASTE

Emissions of metals and other substances into the air, soil and water are among the most significant environmental issues for Boliden. The company strives constantly to reduce these emissions and can in fact demonstrate that specific emissions for all reported parameters have been steadily declining.

Metals

Boliden’s goal is to reduce the collective emissions to air of copper, zinc, lead, nickel, cadmium and arsenic per unit produced by at least 20 per cent by the end of 2008. The goal for specific emissions to water is to achieve a 20 per cent reduction in copper, zinc, lead, nickel, cadmium and mercury by the end of 2008.

Metals are emitted into the air via process gases, principally from the smelters. Emissions to water take the form of used

process and cooling water from the smelters and the tailings ponds. The introduction of more efficient cleaning techniques and water recirculation have enabled a reduction in metals emissions. Emissions of copper, zinc and lead to air and water have been collectively reduced by 60 per cent and 52 per cent respectively since 2002.

Carbon dioxide

Boliden’s goal is to reduce carbon dioxide emissions by at least 5 per cent per unit produced by the end of 2008.

Direct emissions of carbon dioxide from the combustion of fossil fuels, are generated by Boliden’s processes and transportation. Specific emissions of carbon dioxide from Boliden processes have fallen by 16 per cent since 2002.

Two of Boliden’s facilities, the Rönnskär copper smelter and the Bergsöe lead smelter, have taken part in the trade in emissions rights since 2004. The facilities have been allocated 12,492 and 46,876 tonnes per annum, respectively, during the period from 2006 to 2008.

Sulphur dioxide

Constant process development and the introduction of efficient flue gas cleaning have led to a substantial reduction in sulphur emissions from Boliden’s smelters. Specific emissions have fallen by 30 per cent since 2002 and measurements of air quality also show low sulphur dioxide levels outside the industrial areas. Sulphur dioxide and sulphuric acid are obtained from sulphur-containing process gases and sold externally. The main buyers for these products are the forestry and chemicals industries.

Waste and residual products, 2005

Waste quantity (tonnes)	2005
Waste rock and tailings sand	45 160 660
- internal landfills (ktonnes)	31 464 894
- internal construction purposes (ktonnes)	1 962 604
- storage for future use (ktonnes)	11 733 162
Hazardous waste	728 195
- process waste for internal landfills	698 326
- other hazardous waste, processed internally	156
- externally processed	29 713
Non-hazardous waste	133 326
- internal landfills	82 975
- recycling and energy reclamation	49 045
- external landfills	1 306

Sulphur dioxide is emitted into the air from mines and concentrators, partly in conjunction with the use of diesel powered machinery and vehicles, and partly as a result of heating with fossil fuels and thermal dewatering of mineral concentrates. Technology that eliminates airborne emissions is, however, increasingly being used for dewatering.

Waste and Residual Products

Boliden's goal is to reduce the amount of non-industry-specific waste sent to landfills by at least 20 per cent by the end of 2008.

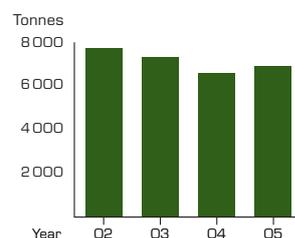
Boliden's waste is mainly operation specific waste and comprises waste rock, tailings sand, slag, sludge and dust. A significant percentage of the waste rock and tailings is used to backfill the mined out stopes in underground mines. Granulated slag from the copper smelters is used as building material. Copper bearing slag from the Rönnskär smelter is sent to the concentrator in the Boliden Area, where the metal content is once

again extracted as part of the concentration process. The slag from Harjavalta's smelting processes is also concentrated and the metal content returned to production. Other waste, such as metal waste, paper, waste oil, etc., is sent for energy recovery, recycling or to landfill.

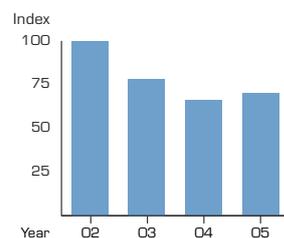
The EU has recently decided to issue a new mine waste directive. A BREF note (Best available technology Reference note) for mine waste processing has also been produced in tandem with this directive. Boliden has been actively involved in developing these documents via the Swedish mining industry organisation, SveMin, and has a generally positive attitude towards the new European legislation, which not only provides a high degree of environmental protection, but also takes into account the industry's special conditions.

The new directive will, however, include requirements to post security for further costs, and this may entail additional financial commitments for Boliden.

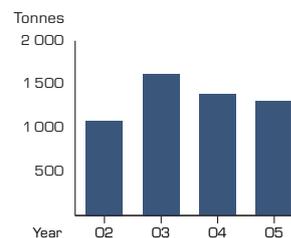
Sulphur dioxide emissions to air



Specific sulphur dioxide emissions to air



Non-hazardous waste sent to external landfills





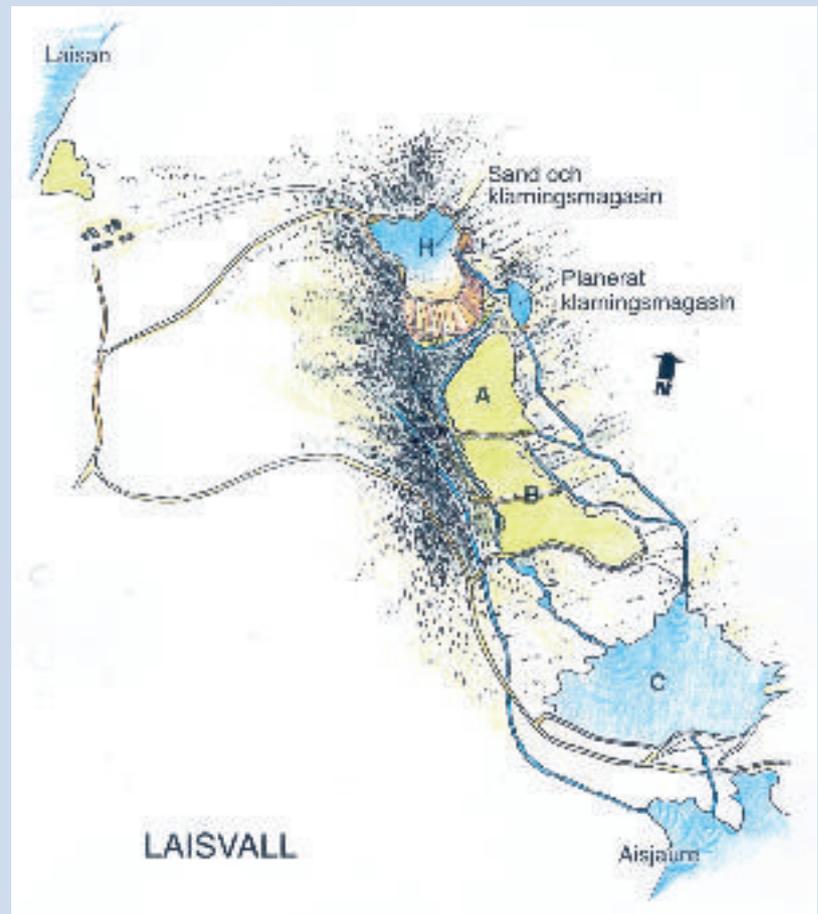
Reclamation in Laisvall

Between 1943 and 2001, Boliden conducted mining operations in Laisvall in Norrbotten. The mines have closed, but the operations continue.

This is the situation in Laisvall today – the office and the old warehouse have been pulled down and the equipment and other buildings sold. The operations now focus primarily on reclamation and have at times been fairly intensive.

This year, the final reclamation measures for the tailings and settling ponds (H) are due to be implemented. The very last measure relating to the ponds involves designing a new outlet for the settling pond (pond C) that will be lowered to its previous level prior to being dammed up. This is due to take place next year.

“We have used moraine, bark chips and digested sludge to cover the ponds and establish some vegetation. The bark chips and digested sludge have been used to add organic material and fertiliser so as to encourage sustainable vegetation in



these areas,” says Björn Johansson, one of Boliden’s employees who works in Laisvall. There are also several sub-contractors involved on a more or less regular basis in the close down and reclamation work.

COMPLETION IN 2006

Several more buildings are due to be removed during the autumn, while the concentrator is due to be demolished next year.

“We estimate that most of the major reclamation work will be completed in 2006,” says Björn Johansson.

Some monitoring will be required in the area for a certain period after this. This is particularly true of the banks of the ponds, where checks will have to be performed to ensure that there has been no erosion damage in connection with thaws or severe downpours. It is also necessary to check that the vegetation has not been damaged. ”

100 per cent recycling

Boliden Bergsöe, located in southern Sweden and employing 100 people, is one of Europe's leading producers of highly refined lead and tin. Bergsöe is the Nordic region's only dedicated secondary smelter for lead and tin, making it the largest single consumer of used lead batteries in the region. Production has been taking place at this facility since 1942, when it was known as Paul Bergsöe and Son. With a record high lead price, an efficient process and production, and a facility that is one of the most eco-friendly in Europe, the smallest facility in the Boliden Group has shown that recycling pays.

RECOVERING LEAD AND TIN

"About 70,000 tonnes of waste batteries are delivered to Bergsöe by rail, road and sea. Due to the environmentally sensitive nature of the cargoes, the transporting is handled by specially licensed companies. The waste batteries are delivered in stainless steel, acidproof containers, to ensure no contamination occurs en route," says Catharina Nordeman, Bergsöe's Environmental Manager.

Every year, Bergsöe takes delivery of between 4 and 5 million scrapped lead batteries that have done their job in private cars, trucks, submarines, etc. The majority of the 50,000 or so tonnes of lead manufactured every year at Bergsöe, then ends up with battery manufacturers in Europe.

CUSTOMISED PROCESS

"When the batteries arrive, they're crushed and converted into raw lead by means of a combustion process in the shaft furnace. Waste batteries and other types of lead waste make up 66 per cent of the raw materials. Around 20 per cent is made up of recycled ashes and slag, and the remaining 14 per cent is lime-



stone, coke, sand, mill scale and cast iron chips," explains Catharina Nordeman. "The lead is then refined and then alloyed with other substances, such as antimony or calcium, depending on what the customer wants, to give them the properties the customer requires. The end products are cast ingots weighing 45 kg, which are shipped out from Bergsöe in 1 tonne bundles," she continues.

The almost 20,000 tonnes of incoming material that disappears during the process comprises battery acid and plastic. The acid is neutralised in the purification plant and the plastic is burned and partially used as a reduction agent in the raw lead process.

The surplus heat is supplied to Landskrona's district heating network.

Bergsöe also takes delivery of scrap tin that yields 1,000 tonnes of tin every year in the form of ingots, bars and wire

used by the electronics and automobile industries and by artists.

ACTIVE ENVIRONMENTAL WORK

The process at Bergsöe is environmentally demanding and the facility has implemented a systematic environmental programme for a number of years now. Thanks to this work, the facility is now one of the cleanest in Europe.

Boliden Bergsöe holds ISO 14001 and 9001 certifications, and has an accredited laboratory for water sampling and analysis.

Recycling levels for lead batteries in the industrialised countries now exceed 90 per cent, thanks to the highly developed recycling system.

"It's exciting to be a significant part of an efficient recycling process," concludes Catharina Nordeman. **»**



RECYCLING

Metals are one of the few substances that can be recycled and recovered, in principle, an unlimited number of times. In 2005 Boliden's smelters took delivery of approximately 225,000 tonnes of metal-bearing recovered material for metal extraction.

Over and above the recycling constantly being carried out in all of the Boliden operating processes, three of Boliden's facilities are engaged in recycling for purely commercial reasons.

The Rönnskär copper smelter enjoys a dominant position in Europe as a recycler of electronic waste and handles

around 40,000 tonnes every year.

Approximately 10 per cent of copper production, 40 per cent of gold production, and 75 per cent of all zinc produced at the Rönnskär facility originates from secondary raw materials.

The Harjavalta copper smelter also began recycling electronic waste in 2005.

The Bergsöe lead smelter is the Nordic region's only dedicated secondary lead and tin smelter (see separate article).

TRANSPORTING

Boliden is working to increase the efficiency of its transporting and to reduce emissions.

Boliden's transport operations mainly involve carrying ore, metal concentrate and metals between mines and smelters, and between smelters and customers. A certain amount of ore is also transported within the mining operations, between the mining areas, the crusher and the concentrator.

Approximately 3.5 million tonnes of metal concentrate and metals are transported every year between and from Boliden's facilities. Approximately 60 per cent of this is by boat, 25 per cent by truck, and 15 per cent by train.

“ Eco-driving cuts emissions and costs



The Aitik mine in Sweden has organised an Eco-driving training course for all its truck drivers, in cooperation with the Swedish Road Administration. Eco-driving teaches the driver to drive efficiently, reducing fuel consumption and there-

by emissions of carbon dioxide and other substances. The Eco-driving concept originated in Finland and was initially introduced for private cars, and then for buses and trucks. The method has now been adapted for industrial machines and

heavy vehicles. Aitik hopes to be able to reduce diesel consumption by at least 5 per cent, and thereby reduce carbon dioxide emissions by 1,900 tonnes. ”

Society



Boliden aims to involve itself in, and make a positive contribution to, the development of the communities in which it operates.

The Group currently has nine separate operations (mines and smelters) the majority of which are by far the dominant employer in their communities. This means that the influence and effect of the individual operations on the community, not just as an employer but as a purchaser of local goods and services, infrastructure user, cultural and sporting sponsor, etc, should not be underestimated and must be handled responsibly. In the really small towns, Boliden's employees and their family form a critical mass for the local community. This means that Boliden plays a decisive role for the source material on which the planning of schools, shops, etc is based. A rough estimate shows that for every one Boliden employee, between five and seven additional job opportunities are created in individual towns.

Boliden's operations have collectively contributed a total of over 4 MSEK to a variety of local and national sporting and cultural events, schools and hospitals in 2005.

NEIGHBOURS

Boliden's goal is for all units to institute and maintain a plan for external contacts, and to publish a local, public EHS (Environment, Health & Safety) report every year.

Boliden's operations not only engage in a continuous dialogue with the relevant authorities and hold the statutory meetings with interested parties ahead of planned expansions, for example, they also make extensive contacts with a wide

range of stakeholders. Several of the facilities invite members of the community to regular information meetings and "open house" sessions in order to strengthen the dialogue with their neighbours. The Rönnskär copper smelter, for example, invited the public to an information meeting in the autumn of 2005 and successfully attracted both private individuals and their own employees. On the agenda were a presentation of the Boliden Group and Rönnskär, and details of the way in which Rönnskär works with environmental and human resource issues.

In conjunction with the planning work for the new Hötjärn tailings pond in the Boliden Area, Boliden has conducted negotiations with its neighbours most affected by the plans. The negotiations held in 2005 have resulted in agreements being reached with property owners to acquire all of the land directly affected by the tailings pond and which was not already owned by Boliden. The agreements have, among other things, resulted in the property owners receiving compensation in the form of other land.

MEMBERSHIP AND COOPERATION

Boliden is both a central and a local member of several national and international organisations. The most important include the European Association of Mining Industries (Euromines), the European Association of Metals (Euro-metalex), the International Zinc Association (IZA) and the International Copper Association (ICA). At a national level, Boliden is a member of SweMin (the former Swedish Mining Association), the Association of Finnish Steel and Metals Producers and Technology Industries of

Finland in Finland, Norsk Industri in Norway and the Irish Mining and Exploration Group and the Irish Business and Employees Confederation in Ireland.

Boliden has partnerships with universities such as Luleå University of Technology, Umeå University and the Swedish University of Agricultural Sciences in Sweden, the Helsinki University of Technology, Oulu University in Finland, the Norwegian University of Science and Technology in Trondheim and the University of Bergen in Norway. In Ireland, Boliden is working in partnership with, among others, University College Dublin and Trinity College at the University of Dublin.

The Group also maintains close contact with the Royal School of Mines in London and the Colorado School of Mines in Denver.



The Schools Business Partnership



In November 2005, Boliden Tara Mines Ltd agreed to become involved in the Schools Business Partnership, a programme designed to promote cooperation between schools and business.

The cooperation programme is part of the Business in the Community – Ireland (BITC) initiative. BITC is Ireland's national expert organisation on Corporate Social Responsibility and works to ensure that the effects of Irish business are maximised for all stakeholders.

The purpose of the Schools Business Partnership is to match up one business and one school in partnership to engage in programs that gives the school's students insights into the world of work as well as how to look for, find and retain employment. Tara Mines was partnered with Beaufort College, the only mixed secondary school in the area around the town of Navan. One of the priorities for Beaufort College was to encourage its students to continue at school and to

recognize the value of completing at least their upper secondary education.

The programme involved a range of activities spread over several months. As part of the initial activity, representatives of Tara Mines gave overview presentations of their operations to a group of selected students aged between 16 and 18. This was followed up by a programme session entitled "A day in the life..." at which several Tara employees each gave the students a 10-minute presentation of their role at Tara Mines.

During the third programme session, the students from Beaufort College visited Tara operations where they toured the surface facilities and the processing plant. Many of the students had never seen a major industry like Tara before

and found it very interesting.

The fourth session focused on giving the students the chance to practice applying for jobs and complete CVs. The students played an active part in discussions and their homework involved drafting a letter of application and a CV. In the final session, personnel from Tara held mock job interviews and gave the students valuable advice afterwards.

Both the personnel at Tara and the students from Beaufort College have found the programme extremely worthwhile, and in the light of these positive experiences, Tara Mines intends to become involved in the programme again next year. ”

“ Boliden saves the shop in Garpenberg

Boliden isn't just a mine owner in Garpenberg. The company is now also a joint owner of the town's grocery store.

“We've joined the business, along with other stakeholders, in an attempt to secure an integral part of the communal services here,” says Gunnar Eklöv, Garpenberg's Administrative Director.

Garpenberg has a grocery store that has been battling the stiff competition of Dalarna's big shopping centres. The store was threatened with closure and the expert advice needed to save the store was proving expensive. But Boliden, Metall (the Swedish Metalworkers' Union) and Dalarna County Administrative Board have banded together in an attempt to ensure the store's survival.



COMMUNAL SERVICES IMPORTANT
Metall provided a loan and Boliden provided a subsidy.

“But we haven't just thrown money at the business – we've also imposed demands on the way in which the business and the financial reporting are conducted,” says Gunnar Eklöv. “As the major employer in the town, it's vital to

us that this type of communal service continues to exist, both for our own employees and for the town as a whole. We hope that the solution we have put together will prove successful.”

A number of non-profit organisations in the Garpenberg area have also added their support to the efforts to preserve the store. ”

“ Geology Day in Boliden

Geology Day was held for the fifth year running in Boliden and a number of other locations throughout Sweden. Geology Day is a national theme day that aims to disseminate information and knowledge about geology and geosciences. Activities took place in several locations in Sweden, and in the Boliden Area almost 400 people were attracted to activities that included a display of rock types and minerals, ore detection using metal detectors, stone polishing, a display of the drill core archive, and, of course, gold washing.

The local organisers, including Boliden, Bergum and Far North Sweden Gold Panning Club, hope that Geology Day will demonstrate the importance of our metals and their wide-ranging spheres of application. ”



Glossary

Alloy

Substance with metallic properties and which is composed of two or more chemical elements, at least one of which is a metal.

Base metals

The most commonly occurring metals, such as copper, lead and zinc, etc.

Cathode copper

99.99% pure copper plates.

Concentrate

The product that results from the separation of the economically valuable minerals in an ore from those with no economic value. Separation by milling and flotation, considerably increases the grade of the material.

Concentrator

A plant in which ore is processed mechanically and/or chemically to extract and produce metal concentrate.

Concentrator tailings

Fine-grained waste from the concentration process used to obtain metal concentrate.

Galvanising

A process whereby zinc is applied to steel to protect it against corrosion.

GJ

Giga joule. 1 GJ = 0.28 MWh.

ILO

International Labor Organisation, a UN body devoted to labour related and occupational issues.

Index

In order to enable the environmental performances of both mines and smelters to be added together, an index-linked indicator has been developed. This is a key ratio that relates consumption and emissions to quantity of metal (copper, zinc and lead) produced at various units. The baseline year for the index is 2002, which has been allocated a value of 100.

IPPC

Integrated Pollution Prevention and Control – joint EU regulations applied to licenced industrial activities.

ISO

International Organisation for Standardisation. The organisation's standards apply, among other things, to environmental management (ISO 14001) and quality (ISO 9001).

ISRS

International Safety Rating System, a work environment management system.

Metal ashes

Pulverised slag from metal foundries and brass manufacturers.

Metal content

The amounts of e.g. copper or zinc contained in concentrates or ore.

OHSAS

Occupational Health and Safety Assessment Series, work environment management systems.

Open pit

A method of mining mineral deposits located near the surface which involves stripping the overburden to expose the ore.

REACH

Registration, Evaluation and Authorisation of Chemicals, the EU's proposal for a new chemicals directive. In brief, this proposal entails the imposition of requirements with regard to tests performed to assess the impact on health and the environment of many chemicals available in the market.

Secondary raw materials

Various types of materials from which metals can be recovered, e.g. electronic and other types of scrap metal, metal ashes, slag, dust, scrap lead batteries, etc.

Slag

Product generated in conjunction with various types of metallurgical reactions and which primarily consists of oxides.

Smelter- and electrolytic refinery

A plant in which metal raw materials are processed to separate metals from impurities by means of high-temperature reactions.

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