Sustainability Report 2011

SSAB

Content

Steel manufacturing is energy and resource-intensive and has an impact on the environment globally and locally. SSAB's high strength steels offer advantages for sustainable growth. SSAB's environmental strategy is long-term in nature and based on efficiency and innovation. One challenge facing the steel industry is to ensure the supply of a skilled workforce in the future. Development opportunities in a global and safe work environment are crucial.

The cover shows **Stefan Skans,** Knowledge Service Center and **Linda Larsson,** SSAB One.

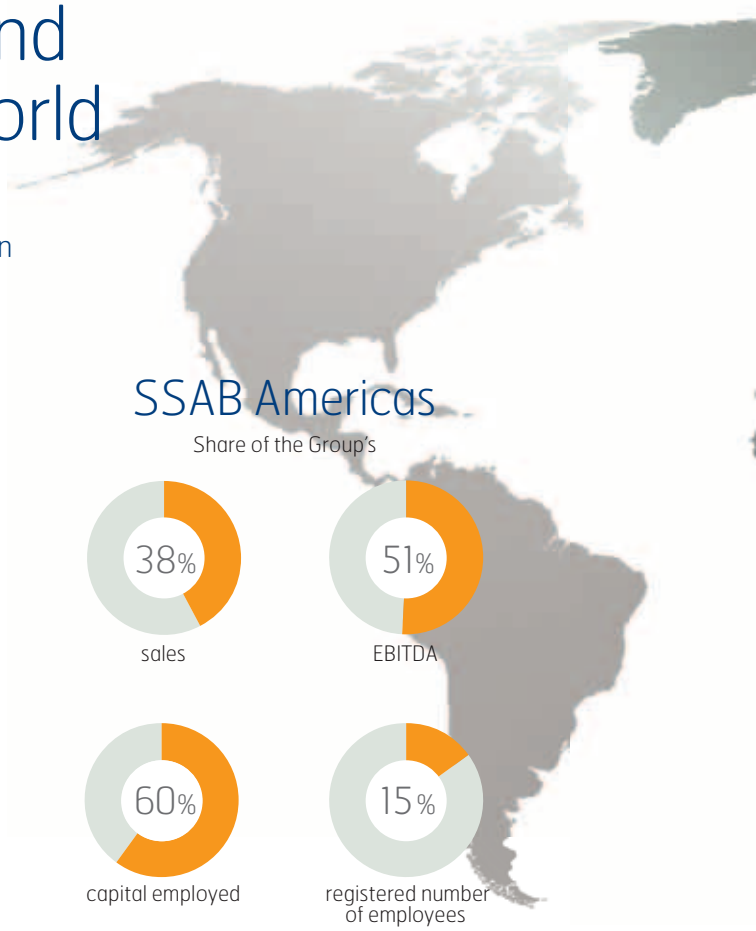
About this report

SSAB's Sustainability Report 2011 reflects the most important aspects of SSAB's activities from a sustainability perspective. The report covers events that occurred during the 2011 calendar year. Reported data has been compiled during the reporting period and covers all business areas and subsidiaries, unless otherwise stated. The environmental data is focused on the Swedish part of operations. The Sustainability Report is published in Swedish and English. In the event of differences between the English translation and the Swedish original, the Swedish Sustainability Report shall prevail.

A complete content index, in accordance with Global Reporting Initiative (GRI), is presented on pages 42–43, and SSAB has self-declared the reporting to be Application Level C. SSAB's Sustainability Report 2011 also constitutes Communication on Progress (CoP) reporting to Global Compact, where activities and results related to Global Compact principles are reported through cross-reference to a selection of GRI indicators. In the event of questions or comments, please contact SSAB at info@ssab.com.

A stronger, lighter and more sustainable world

SSAB is a global leader in value added, high strength steel. SSAB offers products developed in close cooperation with its customers to create a stronger, lighter and more sustainable world.



SSAB Americas

Share of the Group's

sales

EBITDA

capital employed

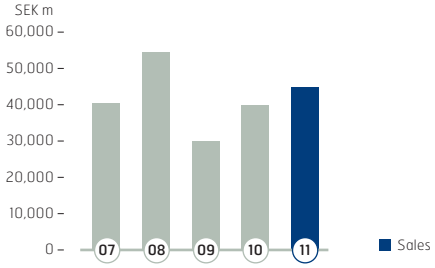
registered number of employees

See SSAB's web based annual report 2011 on www.ssab.com or by scanning the QR code.

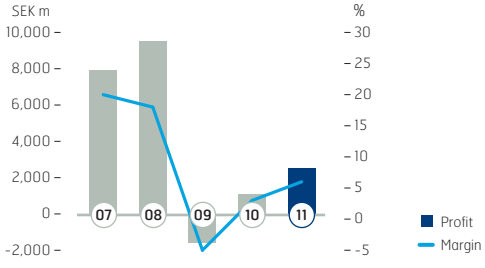
Brands	Grade of steel/important customer segments
DOMEX® HIGH STRENGTH STEEL	High strength structural steel: • Transportation industry; trailer and bodybuilders
HARDOX® WEAR PLATE	Wear plate: • Yellow goods and construction machinery
DOCOL® HIGH STRENGTH STEEL	Advanced and ultra-high strength steel: • Car manufacturers
WELDOX® HIGH STRENGTH STEEL	High strength steel: • Crane manufacturers

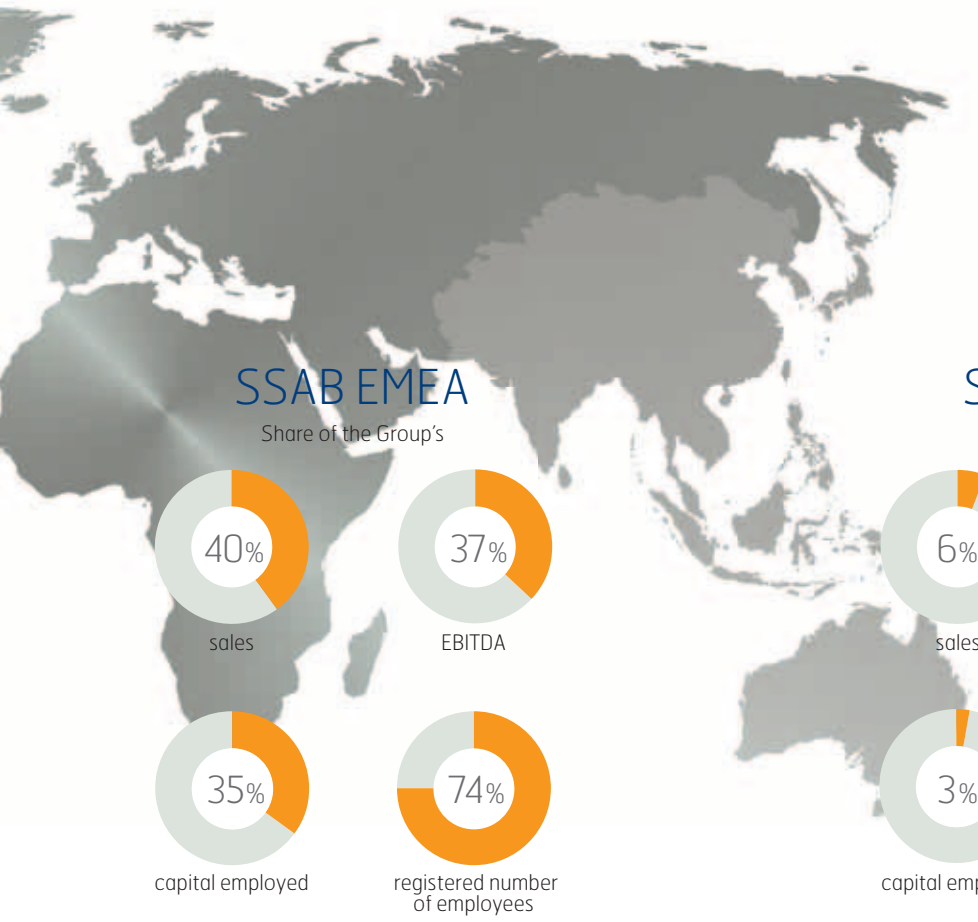
Brands	Grade of steel/important customer segments
PRELAQ® COLORFUL BUILDING	Prepainted steel sheet: • Construction companies, architects, property owners
ARMOX® PROTECTION PLATE	Protection plate: • Protection and security
TOOLOX® TOOL & MACHINE STEEL	Engineering and tool steel: • Resellers, small workshops and OEMs

Sales, total



Operating profit and margin





SSAB EMEA

Share of the Group's

sales

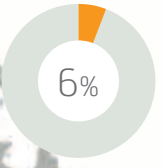
EBITDA

capital employed

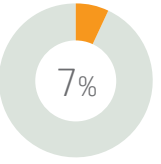
registered number of employees

SSAB APAC

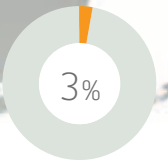
Share of the Group's



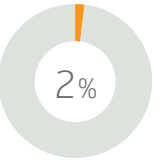
sales



EBITDA



capital employed

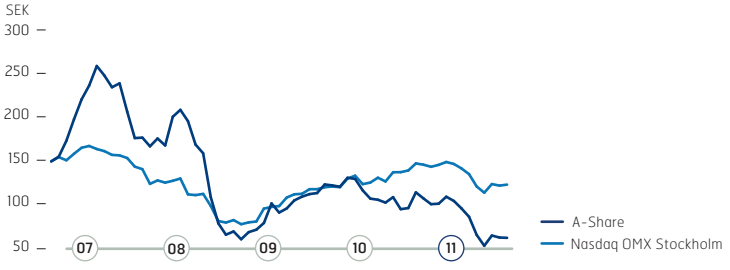


registered number of employees

Result 2011

- Sales were up 12 percent, to SEK 44,640 (39,883) million
- Operating profit improved to SEK 2,512 (1,132) million
- Profit after financial items improved to SEK 1,998 (730) million
- Earnings per share of SEK 4.82 (2.23)
- Operating cash flow of SEK 2,821 (-172) million and cash flow from current operations of SEK 2,200 (-731) million
- Niche products now account for 37 (32) percent of steel shipments
- Proposed dividend of SEK 2.00 (2.00) per share, equal to SEK 648 (648) million

The share's performance



Source: Trust and Fidessa

Sales increase compared with 2010

2011 **12%**

Niche products' share of total shipments

2011 **37%**

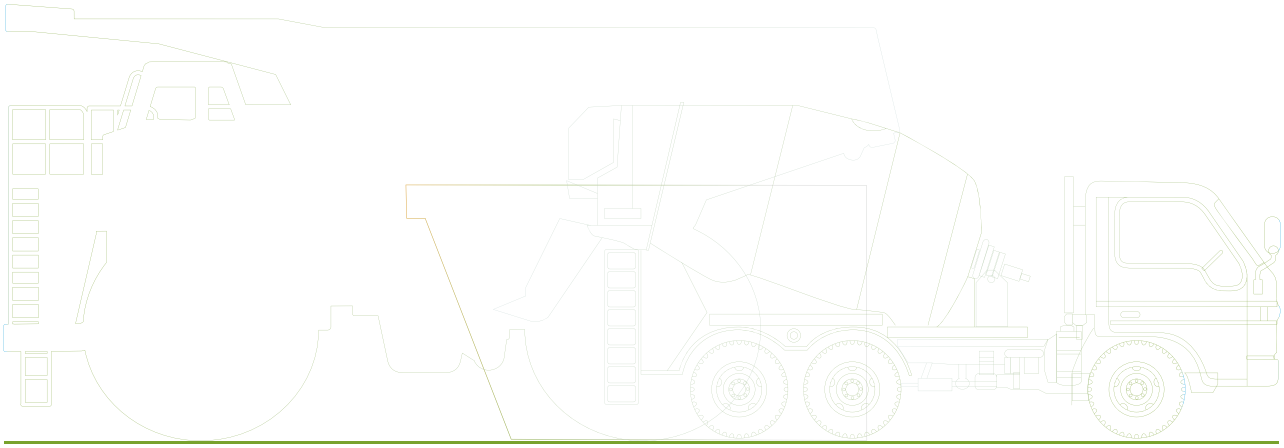
Earnings per share

2011 **4.82 SEK**

Proposed dividend per share

2011 **2.00 SEK**

The year in brief



SSAB is increasing the shipments of its niche products, advanced high strength steels and quenched steels. The development, together with the customers, of applications which improve total economy and make a positive contribution to the environment, provides a powerful stimulus resulting in new, exciting solutions and initiatives. SSAB also continues its work on enhancing the efficiency of the various stages in the production process. Major focus is being placed on safety and on developing a strong organization.

A stronger, lighter and more sustainable world. SSAB is increasing the shipments of its niche products.

Focus continues to be placed on business ethics. A large-scale training project was carried out during the year.

Achieving the same goals using fewer resources. SSAB is endeavoring to achieve maximum savings in the use of resources in all stages.

A safe workplace. SSAB is introducing standards for systematic work environment.


» Our objective is that high strength steels shall account for 50 percent of our shipments within three years. «

The past year has been full of challenges. The uncertainties in the financial markets caused many steel companies to curtail production and their share prices were pressed downwards. This happened also to SSAB. Nevertheless, I am confident as regards the future. The world needs steel, especially steels which provide major benefits in terms of both profitability and the environment.

Our vision of a stronger, lighter and more sustainable world involves how we, together with our customers, develop products which provide major benefits. Through the use of high strength steels, the customers are able to produce products which use less material, are more durable, stronger and lighter than products made of standard steels. This naturally has major advantages both for our customers and the environment.

Two years ago, SSAB signed up to the UN Global Compact. This clarifies our responsibility as regards environments, people and communities that are affected by our operations. This report constitutes a part of our communication and how we work based on Global Compact principles. We will continue to support the UN Global Compact and its principles. Work is continuing on incorporating the principles into our strategy and to ensure that they become part of our culture and our day-to-day operations.

Our goal is that high strength steels shall account for 50 percent of our shipments within three years. In 2011, we reached 37 percent. Thanks to the investments we have made in increased high strength steel production capacity, I am convinced that we will achieve our goal. The capital expenditure projects will be brought into commission during the first half of 2012. Location close to the customers is an important component in achieving the goal, not least in the expanding markets of Asia and Latin America, as is participation in finding new, innovative solutions in which our products are included. Here, functionality, total economy and environmental performance go hand-in-hand. We are often involved as early as the design stage and are able to assist our customers in the early development work. Through our annual Swedish Steel Prize competition, we stimulate the development and use of high strength steels, and the competition has demonstrated many innovative examples of more efficient use of steel.

In order to contribute to a more sustainable world, it is important that global carbon dioxide emissions be reduced. Our product offering is a major contribution to this adjustment. We also have a target that, by the end of 2012, our own carbon dioxide emissions under normal production conditions will be 2 percent lower per tonne of produced steel compared with the base year of 2008. This means that SSAB's carbon dioxide emissions will be reduced by 130,000 tonnes per year, which is equivalent to 200,000 cars being replaced with eco-friendly cars.

Generally speaking, SSAB's production is very efficient and our blast furnaces are among the best in the world when it comes to limiting carbon dioxide emissions. We work in a focused manner on achieving a more efficient use of both energy and materials. Thus, I am concerned over the structure of the new rules for limiting emissions within the EU, which may have the consequence that we are unable to increase production in Sweden. The effect may be that growth in the steel industry will end up outside the borders of Sweden and Europe, in countries where emissions per produced tonne are significantly higher. We will continue our improvement work, but with current production technology it is difficult to reduce carbon dioxide emissions by much more. Thus, SSAB is actively participating in various cooperation projects aimed at developing new technology. Construction has begun on a demonstration plant within the ULCOS cooperation project, which is aimed at reducing carbon dioxide emissions by 50 percent. SSAB is also participating in projects to investigate carbon dioxide capture and storage possibilities.

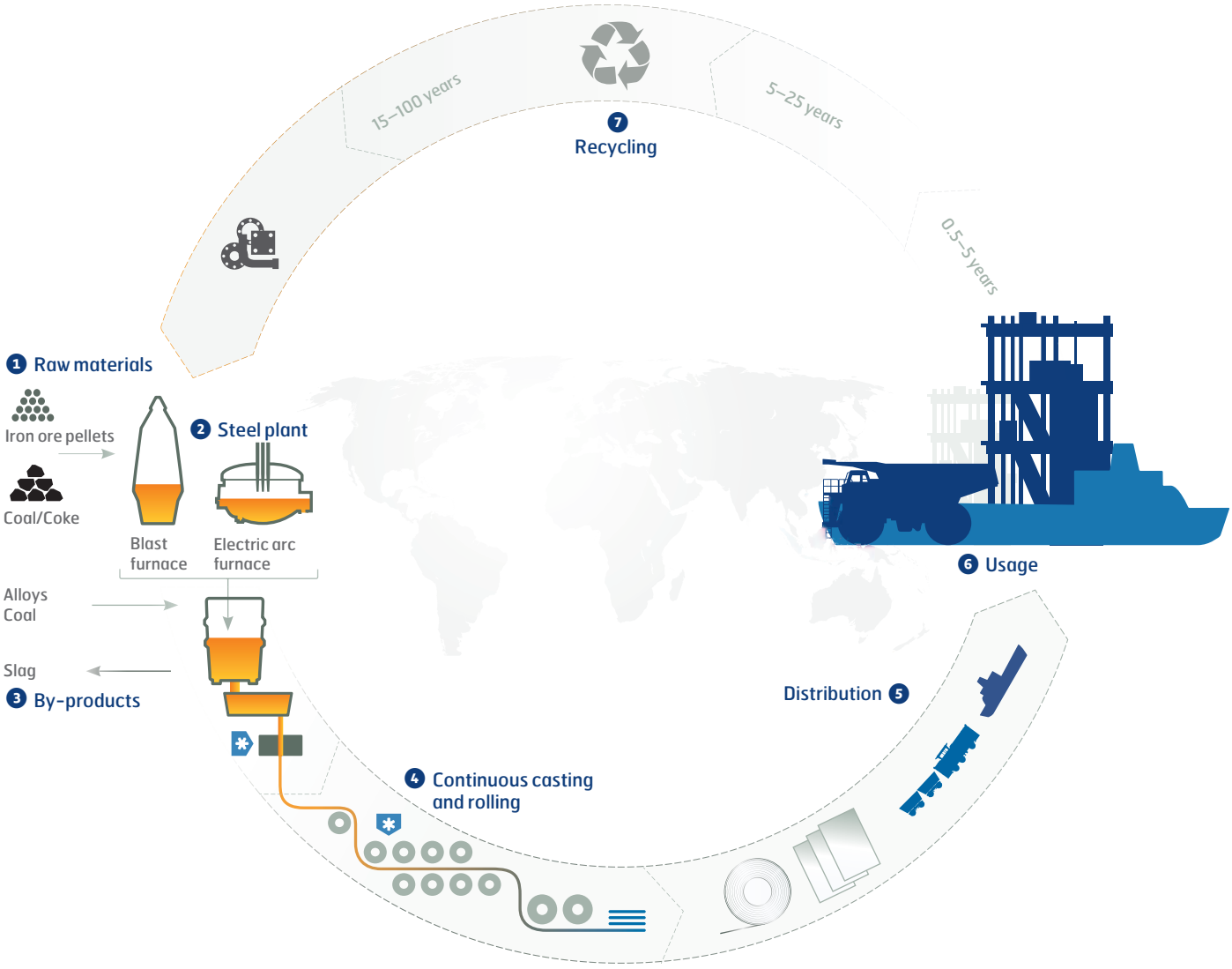
» I am optimistic as regards SSAB's future. We are continuing to focus on creating a stronger, lighter and more sustainable world through a clear strategy which meets the challenges of tomorrow. «

During the year we have continued the work on our zero vision as regards accidents in the workplace. As an employer, we must never accept safety being compromised. Year after year, independent surveys have named our plants in the US as the safest workplaces within the steel industry on the American continent, whereas we still have improvement work to do at our Swedish production plants. During the summer, a new quenching line was installed in Borlänge. This extremely large project involving a great many people was carried out without disruptions in the ordinary operations. Thanks to skilled planning and implementation, we succeeded in carrying out the entire project on schedule, within the budgeted cost limits and, it is particularly pleasing to note, without a single industrial injury. I consider this to be clear evidence that, with the right approach, we can achieve much, and that there is strength in the organization. SSAB wishes to be an attractive knowledge-based company. Having safe, exciting and stimulating workplaces helps us to develop a high-performance organization and to attract new talent to our company.

I am optimistic as regards SSAB's future. We are continuing to focus on creating a stronger, lighter and more sustainable world through a clear strategy which meets the challenges of tomorrow.

Martin Lindqvist
President and CEO

SSAB in a sustainable world



The steel industry plays a key role in the development of society, and SSAB's niche products possess several advantages from a sustainability perspective. With efficient production, SSAB is well positioned in a global market where focus is placed on the environment and sustainable growth. SSAB's focus on advanced high strength steels and quenched steels is contributing to the vision – A stronger, lighter and more sustainable world.

The steel industry is energy-intensive and dependent on natural resources. Increasingly stringent environmental demands experienced by SSAB's customers are an important driving force behind the use of high strength steels. Achieving the same goals using fewer resources constitutes a prerequisite for sustainable growth. SSAB's strategy unites economic growth with sustainable development.

Raw materials

1 Responsibility in the supplier stage

Raw materials are SSAB's most important purchases. The Swedish company LKAB supplies iron ore pellets. Scrap metal is purchased locally in the US. Metallurgical coal is procured from two suppliers, one in Australia and one in the US. Injection coal is sourced from a mine in Russia, while coke comes from Japan. Alloys are purchased from some 30 suppliers. Work is underway to coordinate purchasing processes and introduce into contracts with suppliers principles regarding labor standards and human rights.

Processing

2 Efficient and safe steel works

Two different processes are used in the production of SSAB's steels – iron-ore based production in blast furnaces and scrap-based production in electric arc furnaces. By constantly improving and increasing the efficiency of the various stages of the steel production, it is possible to mitigate the impact on the environment. Within the steel industry, a number of cooperation projects are being conducted in order to reduce the impact of production processes on the environment and climate. The safety of employees and contractor employees stands high on the agenda.

3 Market for by-products

The exact process control in the steel production processes give rise to by-products. In Sweden, SSAB Merox develops high value products based on by-products from the steel operations. The work is aimed at returning the by-products to the processes, internally or through external sales, and identifying new areas of use as alternatives to depositing.

4 Continuous casting

In the continuous casting line, large volumes of water are used to cool down the molten steel. The cooling water circulates in closed systems. The water is purified through sedimentation and filtration before it leaves the plant area. The steel strands are cut into slabs and placed on cooling racks before being transported to the rolling mill for processing into strip or plate. The heating furnaces use natural gas, coke oven gas, LPG, oil, and electricity

Distribution

5 Efficient transportation and intelligent logistics

Most of SSAB's raw materials, slabs and end-products are shipped by railway and boat. The logistics departments have the objective of making the transportation as efficient as possible in order to save money and help save the environment. The use of return freight between plants and shipping ports is one way of achieving more efficient transportation systems. Increasing load capacity on the railways represents another alternative.

Usage

6 A stronger, lighter and more sustainable world

SSAB's high strength steels have many areas of use in society. High strength steels build stronger, lighter and more durable solutions. From a life cycle perspective, the high strength steels generate lower carbon dioxide emissions than standard steels, while providing an improved total economy. Achieving the same goals using fewer materials is important, not least in conjunction with infrastructure development in the emerging economies.

Recycling

7 Part of the eco-cycle

Steel is one of the most recycled materials in the world. SSAB's plants in the US produce steel which is based solely on recycled scrap metal. A certain amount of coal and natural gas is used in the production process, but electricity is mainly used for smelting the steel scrap. All in all, carbon dioxide emissions are less than 1/10 of the emissions generated when steel is produced from iron ore

Driving forces and challenges

The steel industry plays a central role in the society, and development needs in the emerging economies is an important driving force for SSAB. SSAB's steels have several advantages for sustainable growth, where achieving the same goals using fewer resources is a prerequisite. The steel industry is energy-intensive, risk-filled and dependent on natural resources, and thus subject to environmental and safety standards.

High strength steels for sustainable growth

HIGH STRENGTH STEELS PROVIDE A COMPETITIVE ADVANTAGE

Steel is needed for infrastructure development and growth around the world. At the same time, demands are increasing for conservation of resources and sustainable development, which is to the advantage of high strength steels.

REDUCED CARBON FOOTPRINT FROM TRANSPORTATION

According to the UN, the global transportation sector accounts for almost 25 percent of global carbon dioxide emissions. With designs made of high strength steels, vehicles are lighter and consume less fuel, or can carry heavier loads, which reduces the number of journeys.

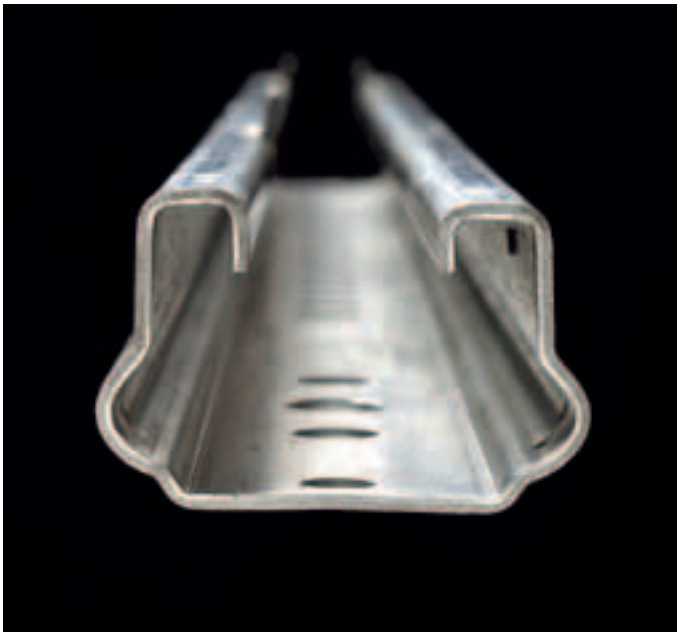
RENEWABLE ENERGY IS INCREASING

Demand for competitive, renewable energy is growing in pace with an increased focus on climate issues and higher energy prices. Steel is an important component in new technical solutions to harness nature's renewable resources. Steel is included in wind towers, solar power plants and various types of hydroelectric plants. The steel production processes also generate heat and energy-rich gases which are utilized, among other things, to supply district heating to private households.

RECYCLING AND RESOURCE EFFICIENCY

Efficient use of resources has a bearing on both the economy and environment. Steel is one of the most recycled structural materials in the world. Obsolete steel structures give rise to new raw materials, instead of generating waste. In addition to surplus energy, the steel production process also gives rise to a number of by-products. Instead of being deposited, the byproducts can be processed into new materials with various areas of use, for example slag which can replace burnt lime in the cement and concrete industry.

Approximately 35 percent of all steel in the world is manufactured from recycled scrap metal.



The environment and railway safety. Hyundai Rotem in South Korea develops and manufactures all types of railway vehicles. Thanks to Domex, Rotem has increased the safety and decreased the weight of its passenger trains. Domex 500 and 700 have been used in the framework of the carriages. Products manufactured using Domex are thinner compared with when standard steels are used, and consequently the weight of the carriages has been reduced by approximately 20 percent. "The reduced weight of the trains also greatly benefits our end-customers, since it reduces both fuel consumption and the impact on the environment," says Gilsoo Chang at Rotem's research and development center. The use of high strength steels also results in improved collision qualities; this is a critical factor as regards passenger trains, where safety requirements are extremely high.

Challenges facing the steel industry

CARBON DIOXIDE TARGETS AND TECHNICAL DEVELOPMENT

The global steel industry accounts for 4–5 percent of global carbon dioxide emissions. In Sweden, SSAB's blast furnaces are high up on the list of the largest sources of emissions in the country. With currently known technology, carbon dioxide emissions from iron-ore based steel production can be reduced only marginally. Increased demands for reduced carbon dioxide emissions require new steel production technology. In addition, carbon dioxide capture and storage is required to achieve a more radical reduction in emissions.

EMISSION RIGHTS AND CARBON DIOXIDE RESTRICTIONS

As from 2013, a greater number of industries than today will be covered by the EU's carbon dioxide emission rights trading system. The free allocation of emission rights which currently takes place will become more restrictive. The system may impede or distort the competitiveness of the European steel industry on the global market. With growing world opinion on climate issues, pressure is also increasing on the US and Asia for greater regulation of carbon dioxide emissions.

RAW MATERIALS AND SUPPLIERS

The price of iron ore pellets and coal is influenced by the balance between supply and demand. In the long term, demand is increasing for efficient use of resources and utilization of by-products in both the production and user stages. The ability of companies to impose requirements and monitor conditions at their suppliers represents an important confidence issue. Stringent requirements regarding safe working conditions are imposed, particularly in respect of the raw materials industry, which has a reputation for a risk-filled working environment.

GENERATIONAL SHIFT AND COMPETITION FOR SKILLS

A number of companies in the industrial sector are facing a significant generational shift and are competing for skilled employees in local markets which are critical for their business, as well as in an increasingly global labor market. SSAB is actively engaged in skills development and in managing a generational shift in the organization. SSAB shall be an attractive employer which offers opportunities for development and a safe workplace, even in risk-filled working environments.

Stakeholders' confidence is important for SSAB's success

SSAB has many different stakeholders. Their confidence in SSAB's ability to manage risks and exploit opportunities is important for the Company's development. Thus, SSAB maintains a continuous dialogue with the most important groups of stakeholders.

It is important for a company to be aware of, and live up to, the outside world's expectations. Accordingly, importance is attached to an open and active dialogue with the company's stakeholders.

Among SSAB's stakeholders are:

- Its shareholders
- Its employees
- Its customers
- Society
- Public agencies
- Its suppliers

The dialogue with SSAB's stakeholders

Stakeholder	Forum	Issues	Read more on page
Shareholders	Investor meetings for shareholders and analysts	• Sustainability strategy • Economic development • Safety issues • Risks at suppliers • Climate issues	4–14, 17–21, 23–31, 33–39, 40
Employees	Performance and planning interviews Employee surveys Information meetings Cooperation with labor unions	• Feedback regarding results and performance • Planning of development opportunities • Working environment and safety • Strategic issues	6–14, 33–39
Customers	Knowledge Service Center, customer seminars and trade fairs, Swedish Steel Prize	• Profitability and environmental advantages with high strength steels • Exchanges of knowledge • On-time deliveries and quality	10–11 , 17–21, 23
Society	Local consultation with residents, media, environmental groups and politicians	• Permit matters • Impact on the local community • Environmental impact	24, 23–31, 41
Public agencies and organizations	Industry organizations, research cooperation projects, consultation and negotiations in permit matters	• Emission rights trading and competition conditions • Technical developments • Reporting of environmental matters	23–31
Suppliers	Purchasing meetings, conferences, visits to suppliers	• Contract questions concerning human rights and the environment • On-time deliveries and quality	40

"In our dialogue with SSAB, we have particularly addressed safety issues and the handling of suppliers. The steel industry is a high risk industry with a major impact on the environment and risk-filled working environments. The company addresses the production-related environmental impact, and also the positive environmental qualities of the products. An important challenge which SSAB must address relates to safety in general and, in particular, when it comes to contractor employees. The company needs to do more work on training its own employees and contractor employees as regards the importance of health and safety, in order to strengthen the safety culture and reduce the number of accidents. It is positive to see that SSAB is now communicating a zero tolerance policy and that measures are being taken. It is also positive that the company now includes contractor employees in its Group safety targets.

Another important challenge which SSAB must address involves sustainability risks at suppliers, where the first step should be to clarify the management structure for handling suppliers and purchasing. SSAB has demonstrated a positive trend in its sustainability work over the past two years. We believe that a key to success for SSAB in this area lies in being open and honest as regards the challenges facing the company and not to shy away from talking about them. It is thus pleasing to see that SSAB has demonstrated openness in the dialogue with its stakeholders."

▲ Ylva Hannestad, Nordea, Analyst Responsible investments and Governance

Photo: Pelle Lundberg

Less is more. IKEA is a pioneer in the use of high strength steels for smart and environmentally friendly home furnishings. IKEA currently uses SSAB's high strength steels in three products. SSAB is actively searching for markets outside its traditional ones. 2011 saw the launch of Ducol Tubes, which has been developed for the furniture industry.

"We have chosen SSAB's steel as it helps us to achieve the correct strength and quality, but at a lower weight. This reduces both the impact on the environment and distribution costs for the product. High strength steels represent a natural way of getting more from less," says Lars Almblad, a specialist at IKEA's technical and materials department.

Driving force and a global leader within high strength steels

A stronger, lighter and more sustainable world. SSAB's vision is aimed at the customers' end products being stronger, lighter and more durable than products manufactured using standard steels. This provides major advantages for the customers, for the environment, and for SSAB.

Increase growth within niche products

The vision of a stronger, lighter and more sustainable world is based on the strategy of being the leader within defined niche products, i.e. advanced high strength steels and quenched steels. Although these types of steels generally are considerably more expensive than standard steels, they provide advantages for the end customers in the form of increased durability and abrasion resistance, lighter end product weight, while becoming significantly stronger than products produced using standard steels. Using high strength steels often also lead to more simplified and efficient production processes and reduced use of material. Consequently, the customer's total economy is significantly improved when high strength steels are used instead of standard steels. Thanks to the reduced use of material, the impact on the environment is also reduced in all stages.

SSAB has adopted a strategic objective that niche products shall account for 50 percent of shipments in 2015. In 2011, high strength steels accounted for 37 percent of total shipments. These include, for example, wear steels for mining and construction machinery, structural steels for the crane industry, and advanced high strength steels for safety components in passenger cars.

New markets growing fastest

In the Chinese market, SSAB sells only niche products. It is also there that demand for steel is increasing most rapidly. SSAB's target is that Asia shall account for 20 percent of niche products shipments in 2015. In 2011, 12 percent of niche products shipments went to the SSAB APAC business area. There is also a strong and growing interest in advanced high strength and quenched steels in other emerging markets, such as the Latin American mining industry. In more mature markets such as America and Europe, the gradual transition from standard steels to advanced high strength and quenched steels is continuing. In SSAB's domestic markets, i.e. markets where the company has significant local production, SSAB enjoys leading positions within standard steels. In the Nordic region, SSAB is the leading supplier of strip products. In North America, SSAB is the leading supplier of heavy plate. Maintenance of a leading position on the domestic markets constitutes an important element of SSAB's strategy. Here, proximity and the relationship with the customer, and short delivery times, are of crucial importance.

If SSAB reduces carbon dioxide emissions by 2 percent per tonne produced steel, this corresponds to the emissions generated by 70,000 passengers flying to and from Stockholm to Thailand.

More than merely steel

SSAB's strategy is based on more than merely steel. The customers are offered advanced services in the form of product and process development together with SSAB's experts. The entire strategy is based on close cooperation with the customers. By SSAB being involved at an early stage in the design and product development work, the steel's qualities can be utilized to best effect. This generates increased know-how both for the customers and for SSAB and distinguishes SSAB from other steel companies.

Unique sales organization and unique brands

Hardox is probably the steel world's best known product brand. By marketing the steel through strong product brands, SSAB has a unique position on the steel market. Through the "Hardox in my Body " customer program, the customers obtain a stamp of quality which is displayed on truck beds, dumpers, and containers manufactured of Hardox – a form of ingredient branding which has aroused great interest.

SSAB works continuously to increase interest in, and the development of, applications made of high strength steels. Thus, the Swedish Steel Prize competition is arranged each year. Competition entries consist of products ranging from beds to harvesters and trucks, which have been developed using high strength steels. Through this type of customer activity, long-term customer relations are strengthened.

Efficient processes generate profitability and environmental gains

SSAB's profitability is clearly linked to efficiency and cost control. Raw materials and energy are major cost items in SSAB's operations. More efficient production reduces the use of energy and materials, which leads to lower costs, while at the same time mitigating the impact on the environment and climate.

SSAB is already one of the most efficient steel producers in the world, but the objective is to achieve further reductions in carbon dioxide emissions at the blast furnace-based plants. By the end of 2012, carbon dioxide emissions per tonne of steel produced under normal production conditions are to be reduced by 2 percent compared with the base year of 2008. For SSAB, this corresponds to a reduction of 130,000 tonnes in carbon dioxide emissions per year.

» A stronger, lighter and more sustainable world «

– SSAB's vision

A safe and attractive workplace

The employees are crucial for continued success, and SSAB's goal is to strengthen the organization and be an attractive employer. SSAB's employees shall be motivated, proud and have confidence in SSAB acting responsibly in all situations. They must be able to develop in the work and contribute to promoting a safe workplace.

SSAB is continously improving safety in the workplace, with the aim of reducing by at least 5 percent a year the number of injuries resulting in sick leave. Targets have also been formulated to strengthen the organization. The goal is to achieve and maintain a high level in terms of employee performance interviews and internal recruitment to vacant managerial positions. In this way, the individual is developed and the organization's strengths are utilized.

Interaction between vision, values and strategy

The interaction between values, vision and strategy is of crucial importance in the work of achieving the Group's overall objectives. Together with its customers, SSAB will go further than any other company to realize the full value of stronger, lighter and more durable steel products. This is SSAB's long-term vision. The conditions for achieving this are formulated in SSAB's values:

- **Customer's business in focus:** We always take an active interest in the customers' business and seek long-term relationships. By sharing knowledge, together we create value.
- **True:** We are dedicated and proud of what we do. We build strong relationships by being open-minded, straightforward and honest and by sharing information and knowledge.
- **Always ahead:** We are result-oriented. To achieve the highest performance we always proactively seek to be innovative and enhance our expertise further.

SSAB is a member of the UN Global Compact, which with its ten principles regarding corporate responsibility describes SSAB's approach in the areas of human rights, labor, the environment and anti-corruption.

THE GLOBAL COMPACT
WE SUPPORT

Vision

A stronger, lighter and more sustainable world
Together with our customers, we will go further than anyone else in realizing the full value of lighter, stronger and more durable steel products.

Values

Customer's business in focus
We always take an active interest in the customers' business and seek long-term relationships. By sharing knowledge, together we create value.

True
We are dedicated and proud of what we do. We build strong relationships by being open-minded, straightforward and honest and by sharing information and knowledge.

Always ahead
We are result-oriented. To achieve the highest performance we always proactively seek to be innovative and enhance our expertise further.

External commitments

SSAB is a member of the UN Global Compact and supports the ten principles in the areas of human rights, labor, the environment and anti-corruption.

SSAB's targets

SSAB has strategic tagets regarding its operations and also targets regarding the sustainablitity area. Further, the company has financial targets [1]. The targets have been set with the aim of securing SSAB's long-term development and profitability.

STRATEGIC TARGETS

Strong position
Ensure strong position in Europe, North America and Asia

World leader
in the niche segment within the production, process development, innovation and sales

Safety
Attractive employer based on being one of the world's safest steel companies and having a high performing organization with empowered employees

Share of niche products
of the Group's total shipments 2015

50%

Asia's share
of total shipments of niche products 2015

20%

SUSTAINABILITY TARGETS

Environment
Reduction in carbon dioxide emissions per tonne of produced steel by 2012 (base year 2008)

-2%

Social responsibility
Annual reduction in injuries resulting in sick leave

≥5%

Social responsibility
Percentage of employees conducting performance and planning reviews during the year

≥90%

Social responsibility
Number of internal candidates for each managerial position

≥3

[1] For financial targets, see page 10 in the SSAB Annual Report 2011 on www.ssab.com.

From overall vision to instructive guidelines

SSAB has adopted an Environment and Sustainability Policy. The Policy covers the environmental and social aspects which play a key role in a sustainable development of SSAB's business. SSAB's Code of Business Ethics provides guidelines how SSAB acts vis-à-vis stakeholders and in the market. Coordination of the sustainability work was strengthened during the year.

New position for coordination of the sustainability work

In 2011, a new position was established, tasked with further improving work within various sustainability areas. The primary aim is to coordinate and develop sustainability issues within the Group as regards the social and business ethics areas.

The Environmental and Sustainability Policy sets the bar

SSAB has adopted an Environmental and Sustainability Policy in order to support the day-to-day work in the organization. The Policy sets forth the most important ambitions for SSAB's sustainability work and covers the environmental and social aspects that play a key role in a sustainable development of SSAB's business.
The Environmental and Sustainability Policy in brief:

- SSAB shall continue to develop products and services in cooperation with its customers, while remaining actively committed to operating as an environmentally sound and profitable business
- SSAB attaches importance to efficient use of raw materials and energy, while minimizing the generation of waste
- SSAB shows respect for employees and their well-being by providing a safe and fulfilling working environment
- Transparency and openness are sought after

The Code of Business Ethics provides guidance

SSAB's Code of Business Ethics lays down guidelines for SSAB's behavior vis-à-vis stakeholders and in the market. The provisions of the Code take precedence over all other policies on a business area or subsidiary level and, in certain cases, may be more far reaching than laws and regulations.
SSAB's Code of Business Ethics provides guidance within:

- Employee health and safety
- Diversity and internationally recognized labor law guidelines
- Business ethics and integrity
- Human rights
- Stakeholder and community relations
- The environment
- Communication

SSAB has issued special Instructions regarding the Giving and Acceptance of Bribes. Diversity and equality of opportunity issues are addressed in a separate policy.

Continued focus on business ethics

During 2011, SSAB has continued to focus on business ethics. SSAB's lawyers have initiated an internal work project focused, among other things, on business ethics, with the aim of preventing corruption and fraud. SSAB has actively provided information in order to strengthen and disseminate SSAB's rules and guidelines. Several training courses have been carried out focusing on SSAB's values, policies and guidelines.

On a number of occasions in recent years, SSAB has discovered that personnel have abused their position or acted in a disloyal or criminal fashion. SSAB has thereupon acted to investigate the events and concluded that ignorance or deliberate criminality have been involved. The consequences have been, for example, dismissal and prosecution.

SSAB's lawyers have continued to hold information and training sessions for the sales corps in order to emphasize that deviations from SSAB's policies are unacceptable, and to underline the importance of business ethics.

▲ Kristin Nordström, CSR Director

» The sustainability issues are important and constitute an integral part of our operations. I hope to be able to contribute to further development of SSAB's sustainability work and thereby strengthen SSAB as a responsible supplier and employer. «

▲ Traverse crane training for Mats Janers in Borlänge.

▲ Ronnie Högberg, site manager, Borlänge.

In 2010, SSAB APAC initiated a training course for its employees regarding SSAB's values, policies and guidelines, and the work has continued in 2011. Thus far, most employees within the sales corps have taken the course, and it will continue in order to provide the business area's employees with greater knowledge on these questions.

In addition, personnel in SSAB EMEA's sales companies have received a review of SSAB's most important policies and guidelines from their respective controller. In SSAB Americas, too, SSAB's lawyers, in cooperation with the HR department, have held training and information sessions for employees concerning applicable rules and ethical norms within SSAB.

Risk awareness and systematic basis for success

Management systems and plans of action ensure that the Group carries out its work on critical sustainability issues in a systematic fashion. Several different management systems and tools are used to effectively control the operations in accordance with SSAB's objectives, the Environmental and Sustainability Policy, and the Code of Business Ethics. Systems developed in-house as well as third-party certified systems are in place.

The environmental and climate work is taking place primarily within the scope of the ISO 14001 environmental management standard and via local energy management systems. The OHSAS 18001 standard for systematic health and safety work is being gradually implemented at all production plants. In order to identify business ethics risks, a whistleblower system is in place through which employees can report irregularities and suspicions of criminal activities.

Environmental risks and working environment risks are covered by SSAB's internal risk controls and in internal audits. Insurable risks within the scope of SSAB's property and liability insurance cover are analyzed annually together with the insurance companies. Sound management of risks associated with injury to individuals and damage to the environment and plants is a sine qua non for being able to take out insurance cover.

Corporate governance

Corporate governance within SSAB involves continuous development of rules and routines that ensure transparency, a clear allocation of responsibilities between various company bodies, and well-functioning board work. SSAB is listed on the Nasdaq OMX Stockholm and applies to the Swedish Code on Corporate Governance.

External and internal regulations

With its registered office in Sweden, SSAB's corporate governance is regulated by external rules and regulations consisting of, among other things, the following Swedish statutes: the Swedish Companies Act, the Swedish Accounting Act, and the Swedish Annual Reports Act. Also, as a listed company, SSAB complies with Nasdaq OMX Stockholm's Rule Book for Issuers and the Swedish Code on Corporate Governance.

In addition, there are a number of internal rules, regulations and policies that affect corporate governance including: the by-laws, the Procedure Rules for the Board of Directors with instructions for the President, instructions for Board committees, and a finance manual (Financial Guidelines), as well as the Finance Policy. The internal rules also include SSAB's Code of Business Ethics.

Shareholder governance

The general meeting is the Company's highest decision-making body, at which shareholder influence in the Company is exercised. At the annual general meeting (AGM) the shareholders decide, among other things, on the members of the Board of Directors, compensation to the Board, as well as guidelines for compensation to the President and senior executives. Pending the annual general meeting, shareholders are able to submit proposals to the Nomination Committee or submit other matters to be addressed, by following the instructions available on www. ssab.com.

Corporate governance

Corporate governance within SSAB involves continuous development of rules and routines which ensure transparency, a clear allocation of responsibilities between various company bodies, and well-functioning board work, in accordance with the Swedish Code on Corporate Governance.

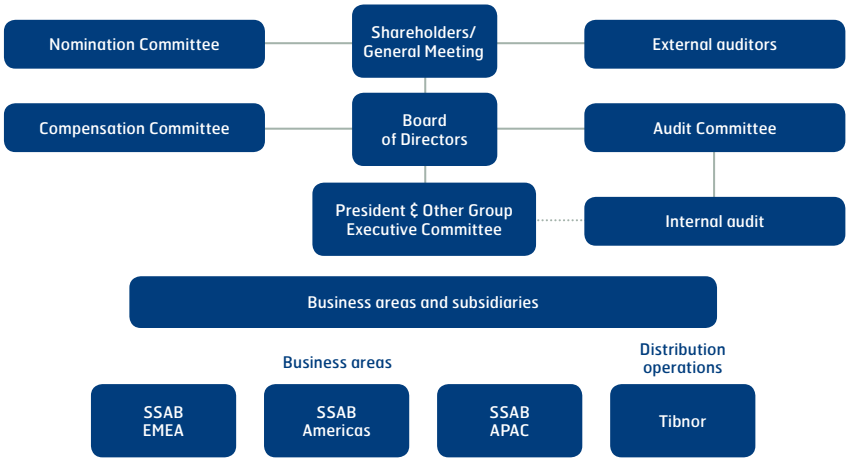
The Board of Directors

SSAB's Board of Directors currently comprises nine members elected by the general meeting, of whom one is a woman. SSAB's President is also a member of the Board. Taking into consideration the Company's operations, phase of development and circumstances in general, the Board shall have an appropriate composition which is characterized by diversity and breadth as regards the experience, expertise and background of its members. Five of the directors are independent in relation to both the Company and SSAB's major shareholders.

The Board is responsible for the internal control and has established a process for internal control based on the internationally established framework from The Committee of Sponsoring Organizations of the Treadway Commission (COSO). The process is based on five components: control environment, risk assessment, control activities, information and communication, as well as monitoring.

The Chairman of the Board is responsible for presiding over the work of the Board, represents SSAB on owner issues, and is responsible for the evaluation of the work of the Board. The Chairman of the Board also serves as the link between the Board and the President.

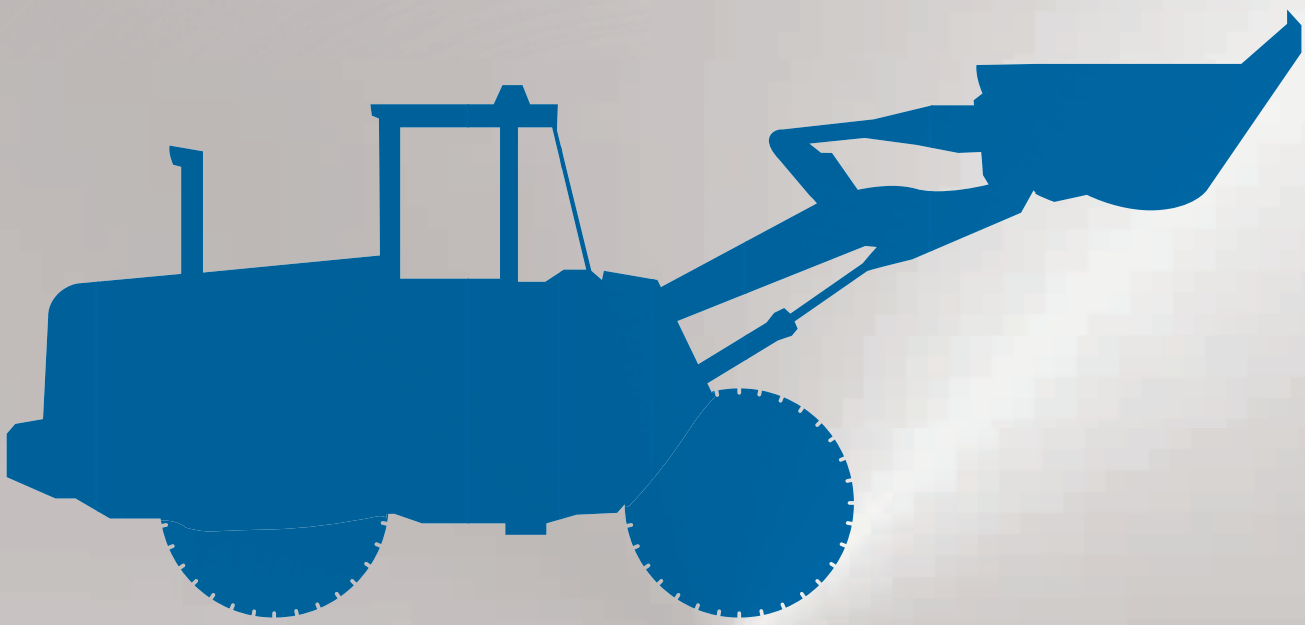
For the complete Corporate Governance Report, read pages 48–53 in the SSAB Annual Report 2011 on www.ssab.com.



Further information regarding corporate governance in SSAB is available on www.ssab.com, including the following information:

- Routines regarding the Annual General Meeting (when the AGM must be held, notice to attend and registration procedure, as well as which important decisions must be taken at the AGM)
- Information from SSAB's previous Annual General Meetings (since 2005), including notices, minutes, addresses by the President and communiqués
- The by-laws
- Corporate governance reports from previous years
- Information regarding the Nomination Committee

Economic value creation



SSAB's offering

SSAB's niche products – advanced high strength steels and quenched steels – provide advantages in the form of stronger, lighter and more durable solutions. By-products from the steel production processes are used in new, innovative solutions which close the eco-cycle and creates new, exciting markets for SSAB.

High strength steels provide improved total economy and save the environment

SSAB's niche products provide advantages in the form of stronger, lighter and more durable solutions. This leads to improved total economy, a reduced impact on the environment and products with a longer lifespan. The by-products from the steel production processes are used in new, innovative solutions which contribute to closing the eco-cycle and creates new, exciting markets for SSAB.

Improved environment and economy in all stages

SSAB's focus on high strength steels represents a focus on an improved environment and economy in all stages. From a life cycle perspective, the high strength steels generate lower carbon dioxide emissions than standard steels. Light and durable steel designs save material and energy, both in production and the user stage. High strength steels are stronger than standard steels. Consequently, less steel is used in the manufacture of a product, which also reduces emissions.

A dumper bed made of SSAB's high strength steels is 8 tonnes lighter than if manufactured using standard steels. Fuel consumption is reduced by 10 percent.

SSAB's high strength steels have many different areas of use within most industrial sectors. Many of the applications have a direct role to play in the transition towards a more sustainable society. A rapid development of new infrastructure is taking place in emerging economies. At the same time, natural resources are limited and increased importance attached to achieve the same goal using less material. The automotive industry develops lighter cars with greater load capacity in order to reduce fuel consumption. Steel is also included in wind towers, solar power plants, and various types of hydroelectric plants.

SSAB shall lead the development

Since 2008, SSAB has a Research and Development Council tasked with leading the development and realizing the potential of high strength steels. The Council coordinates work within the area and is entrusted with ensuring a continuous transfer of technology between the business areas.

Through an established dialogue between SSAB and its customers, new products are developed which meet the needs of the various markets. In October 2010, SSAB's Knowledge Service Center inaugurated a new research and development center in Montpelier, Iowa, USA, and a new research and development center was opened in Kunshan, China at the beginning of 2012.

The aim is to strengthen SSAB's position as a leading producer of high strength steels, while at the same time developing the markets in North and Latin America and Asia through advanced offerings based on SSAB's cutting edge expertise. The new centers will enable more customers to develop production efficiency and product design in close cooperation with SSAB. Local process development within the various production units is also carried out at SSAB's major production plants.

Growing market for high strength steels

In 2011, SSAB delivered 1,713 thousand tonnes of niche products, representing 37 (32) percent of the company's shipments. SSAB's strategy is to increase shipments of niche products to 50 percent of total shipments in 2015.

A truck bed with a frame made of SSAB's high strength steels becomes approximately 1,300 kg lighter than if made of standard steels. This means a 30-tonne reduction in carbon dioxide emissions over the lifespan of the truck.

New tool demonstrates customer benefit. Upgrading a trailer, a bed, or a container to Hardox or Domex has advantages: it saves money and results in a reduced impact on the environment. With a new calculation tool it is possible to show exactly how great the savings can be. When SSAB's sales staff meet customers, they can use the SSAB Instant Valuecalc software to show what the customer will gain by switching to Hardox or Domex. The tool shows how much fuel can be saved, by how much the load can be increased, and the size of the reductions in emissions.

»Deere & Company (USA) –Harvester. With the help of advanced high strength steels combined with a carefully thought out and innovative design, Deere & Company has developed harvesters with improved productivity, which at the same time satisfy new environmental standards. The harvester is lighter and has a greater harvesting width, while the new cutting table is more flexible and better follows the contours of the ground, thereby increasing the yield compared with conventional designs. «

OMX GES Sustainability Index. The Stockholm Stock Exchange OMX Nasdaq, together with the analyst firm GES Investment Services, has produced a number of indices based on various sustainability criteria. SSAB is included in three of these indices; OMX GES Sustainability Nordic Index, OMX GES Sustainability Sweden Index, and OMX GES Sustainability Sweden Ethical Index. The companies included in the indices have qualified for inclusion through sound preparedness within the areas of the environment, social issues and corporate governance.

Ethibel Excellence Investment Register. Since 2008, SSAB has been included in Ethibel's Excellence Investment Register, an investment forum for shareholders who wish to include consideration of the environment, social issues and corporate governance in their investment decisions. Inclusion in the register is based on analyses conducted by Vigeo, an established analyst firm for responsible investments, with the ultimate decision being taken by an independent panel of experts. SSAB's inclusion in the register was confirmed at the beginning of 2011.

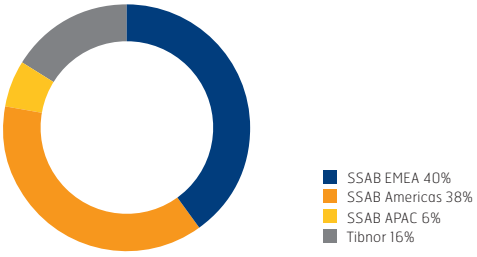
Strong position in China

Nearly one half of the steel produced in the world is used in China, which is considered the engine of the global steel market. SSAB has strengthened its positions in Asia, and particularly in China, in order to be able to offer the region various high strength steel products. SSAB strategic target is that 20 percent of the shipments of niche products will go to Asia by 2015. By investing in a finishing line in Kunshan, SSAB can reduce lead times and optimize the products based on the customers' needs. With the new research and development center in Kunshan, SSAB will become an important partner for Chinese customers, who will benefit from the knowledge and experience available within the Group. In 2011, 214 thousand tonnes of niche products were delivered to Asia, corresponding to 12 percent of shipments.

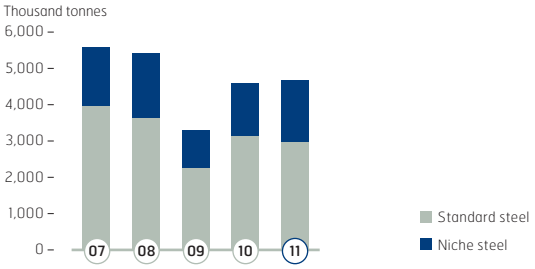
Operations that create value

SSAB plays a vital role in the communities where the company operates. SSAB thereby contributes directly and indirectly to the development of these communities. An overarching goal is to generate a sound return to SSAB's shareholders and to invest in continued growth. SSAB is also an important employer in the localities where it operates and contributes to the community through salaries, social security contributions and, in the case of healthy earnings, through profit-sharing with the employees. Purchases from suppliers contribute to job creation outside the company and stimulate other local economies. In addition, taxes and interest payments to lenders contribute to the financial system.

Sales per business area



Shipments



Efficiency creates value throughout the value chain

Through efficiency, innovation and product development SSAB saves both its own resources and those of its customers. When achieving the same objectives, using a smaller amount of raw material and supplies, economic benefit is created throughout the value chain. From a global perspective, SSAB's processes and products lead to a reduced need for energy, raw materials, and finished steel.

High percentage of recycled raw materials

SSAB uses approximately 20 percent scrap metal in conjunction with steel production in Sweden, and 100 percent in the US. Consequently, recycled scrap metal accounts for 44 percent of total production, which is a high percentage from a global perspective.

The Swedish operations only have minor opportunities to increase the percentage of recycled scrap metal. However, recycling of the scrap generated in the steel production process is possible. This reduces raw material costs and carbon dioxide emissions since less hot metal need be produced. Within SSAB, a number of substitution projects are underway in which the volume of finished steel relative to hot metal will be increased.

SSAB's processes deliver district heating to 70 percent of the residents in Oxelösund and Luleå.

Internal recycling reduces purchases of coal and electricity

Other materials can also be returned directly to the production process. Certain waste products which contain coal and/or iron can be returned, and in this way SSAB reduces waste from the production process and the need for new coal and pellets. The energy-rich coke oven and blast furnace gases which cannot be used in the steel production are used in combined heat and power plants, among other things to supply SSAB with approximately 50 percent of the electricity needs of the Swedish operations. In addition, district heating is supplied to over 70 percent of the households in Oxelösund and Luleå and to 15 percent of the households in Borlänge.

New markets for by-products

Thanks to the exact control of the steel production processes, by-products are generated which are well-defined, of a high quality, and thereby can be sold externally. In Sweden, SSAB Merox develops high-quality products based on by-products from the steel operations. Examples include Hyttsten for road construction, the cement and concrete materials Merit 5000 and Merolit, Paddex for riding tracks, as well as the organic plant fertilizer, M-kalk. Another example is Black Iron, which is sold for the manufacture of ferrite magnets, which are included in almost all modern electronic devices.

Within the scope of MEFOS, SSAB is engaged in active research work together with other parties in order to identify new areas in which by-products can be used as raw materials. For example, trials are taking place to enrich vanadium in a special slag which can be sold for further extraction of vanadium, which is a valuable alloy within steel production. The Swerea MEFOS ViLD project was awarded the Inspiration Prize 2011 by the Swedish Recycling Industries' Association.

The drive is to identify new external markets for SSAB's residual products, and also to develop new ways of using material internally in SSAB's own processes. The value of doing so can be measured against the cost of purchasing equivalent material and against the alternative cost of waste management and depositing.

In the American operations, recycled scrap metal is used as the sole raw material.

Efficient transportation and intelligent logistics

Most of SSAB's raw materials, slabs, and end products are transported by railway and boat. The logistics departments have the objective of making the transportation as efficient as possible in order to save resources and help save the environment. The use of return freight between plants and shipping ports is one way of achieving more efficient transportation systems; increasing load capacity on the railways represents another alternative. SSAB has participated in several projetcs where the payload has increased significantly. The wagons of the pellet trains which operate between LKAB in Kiruna and SSAB in Luleå, and which are manufactured of high strength steels, is an example. The payload has increased by 25 percent when changing for using SSAB's high strength steels instead of standard steels.

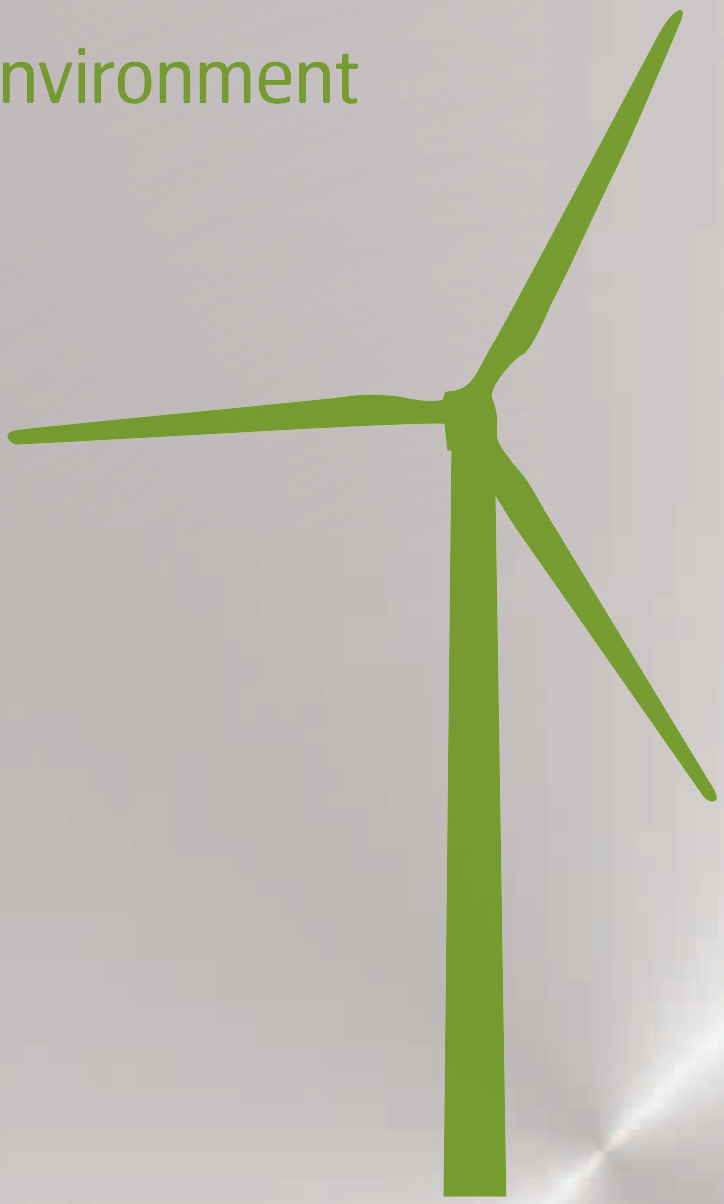
Durable products

SSAB's advanced high strength steels provide advantages in the form of stronger, lighter and more durable solutions. This results in an improved total economy, a reduced impact on the environment, and a longer lifespan of the products.

We have reduced the weight without reducing durability. Tremac manufactures equipment for the forestry industry in Chile. Tremac needed log trailers which were lighter, stronger and safer in order to cope with an increased load. Everything from chassis to bracing on the new trailers is produced using Domex 700. The trailer is now 20 percent lighter and can carry an additional 800 kilo load.

"We have reduced the weight without reducing durability. Although the price of the trailer has increased by 15 percent, customers are waiting in line. We expect the wagons to last longer and the user to save money, since the payload increases and fewer trucks are needed", says marketing manager Rafael.

The environment



SSAB's environmental work

SSAB's environmental strategy is long-term and is based on efficiency improvements and innovation in order to mitigate the environmental impact from production. Industry-wide cooperation is important in order to identify the solutions of tomorrow.

Strategic environmental work

Steel production involves the large scale use of energy and resources, and has a significant impact on the environment, both globally and locally. SSAB's environmental strategy is long-term and is based on efficiency improvements and innovation in order to mitigate the environmental impact from production. Industry-wide cooperation is important in order to identify the solutions of tomorrow.

Important environmental aspects

Steel production involves the large scale use of energy and resources and has a significant impact on the external environment. According to the International Energy Agency, IEA, the global steel industry jointly accounts for 4-5 percent of global carbon dioxide emissions. In Sweden, SSAB's blast furnaces are included in the list of the largest sources of emission in the country. SSAB's steel works are among the most efficient in the world, but there is still room for further improvement.

The impact on the local environment in the vicinity of SSAB's plants has decreased significantly over recent decades. Technical developments and increasingly stringent external demands dictate constant improvements in the operations. The most important environmental aspects for SSAB are:

- Reduced emissions into the air of carbon dioxide, nitrogen oxides, sulfur oxides and dust
- Reduced emissions into water of nitrogen and suspended substances
- Efficient use of raw materials and energy in all stages
- A reduction in the volume of process waste sent for depositing

The Environmental Council coordinates strategy

The Group has a joint organization, the Environmental Council, for coordinating issues concerning the external environment. The work of the Environmental Council focuses on overarching and strategic environmental work, and monitoring of the work. In 2011, the Council's work primarily addressed energy and climate issues and the way in which they are to be coordinated between different functions. The Environmental Council, which meets each quarter, includes representatives from all business areas and is chaired by SSAB's Environmental Director. During 2011, local environmental councils were also set up.

Operative environmental work takes place locally

The objective is that the business areas themselves shall handle the day-to-day environmental work. Each business area and subsidiary has a separate environmental department with responsibility for monitoring compliance with laws and agreements and for handling permit matters. It is also responsible for taking measurements and the reporting of environmental data.

All manufacturing units work with environment management systems that are certified in accordance with ISO 14001 and each location with production plants has identified its most important environmental issues. Targeted activities are carried out within these areas in order to achieve improvements. Self-inspection programs ensure monitoring of the local environment at all of SSAB's production plants, e.g. by collecting water, air and noise samples. The results are reported to the relevant supervisory.

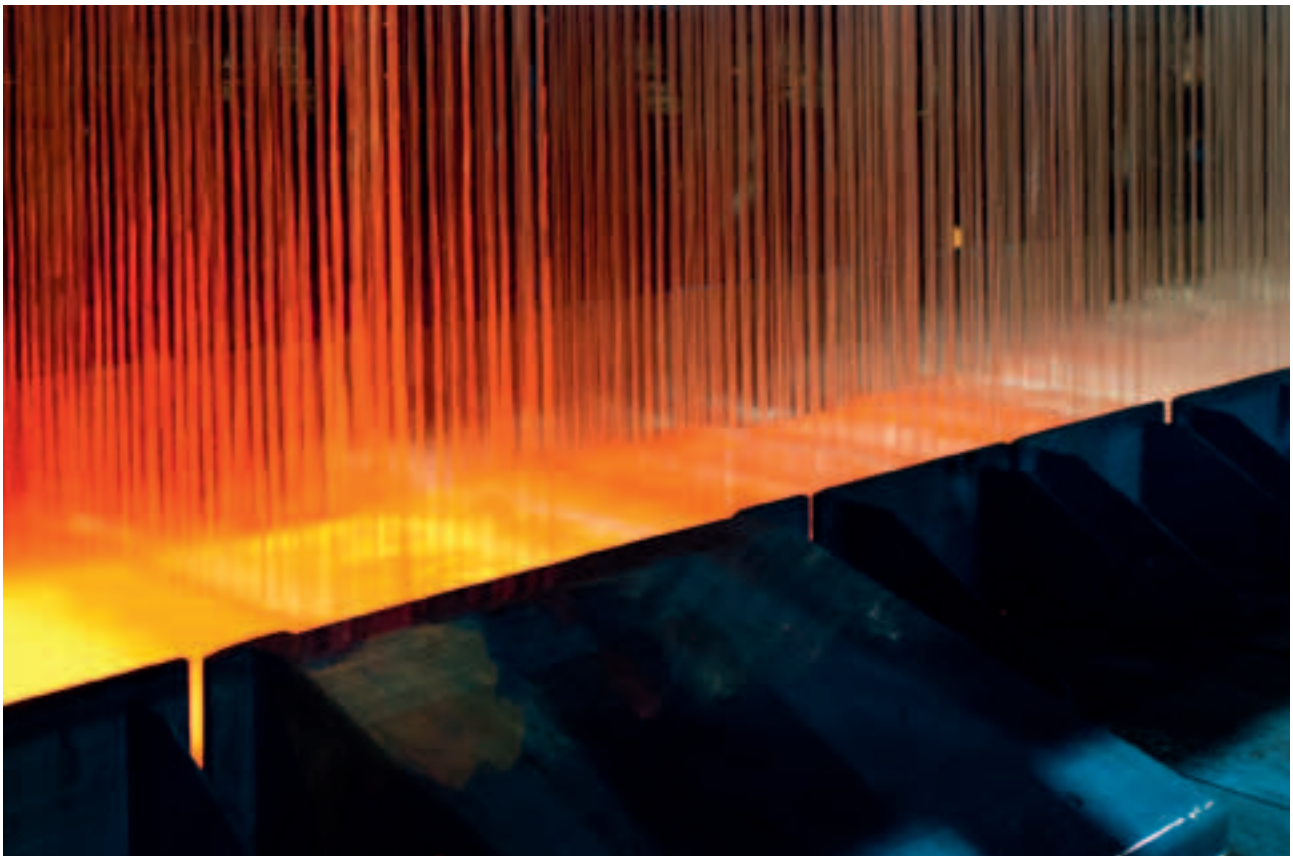
Development driven by research cooperation

Within the steel industry, a number of different cooperation projects are underway aimed at reducing the environmental impact and carbon footprint from production processes. The most important cooperation partners are:

- The industry cooperation project, ULCOS (Ultra-Low Carbon dioxide Steelmaking)
- The Swedish Energy Agency
- The institutions Swerea MEFOS, Swerea KIMAB and IVL Swedish Environment Institute
- The PRISMA skills center
- Mistra
- The Swedish Steel Producers' Association and Eurofer
- US Department of Energy
- American Iron and Steel Institute (AISI)
- The World Steel Association (WSA)

Environmental work in 2011

- Energy recycling in Finspång
- SSAB Merox operations established in Luleå
- Reduced dust and noise in Montpelier and Oxelösund
- Application regarding new emission rights in the EU's 2013–2020 trading period
- System for monitoring and reporting carbon dioxide emissions in SSAB Americas
- Demonstration plant for halved carbon footprint



▲ The new quenching line in Borlänge.

Environmental permits for the operations

In Sweden, the Land and Environmental Court establishes conditions for SSAB's operations, a process which is affected by decisions taken within the EU as regards inter alia environmental legislation. In the US, the Federal Government and the US Environmental Protection Agency play a corresponding role. SSAB's operations are subject to environmental permits with hundreds of environmental conditions governing, among other things, production levels, emissions into the air and water, noise levels, and rules regarding deposition sites.

All production units comply with their respective local environmental requirements and the Group holds mandatory environmental damage insurance as well as liability insurance covering damage to third parties. The maximum permitted production levels for the Swedish operations are shown in the table. In North America, production levels are determined in the form of maximum permitted hourly production volumes.

Permitted production at the Swedish plants

Thousand tonnes	Locality	Permitted production	Production 2011
Coke	Luleå	1,100	**727**
	Oxelösund	530	**424**
Hot metal	Luleå	– [1]	**2,121**
	Oxelösund	2,000	**1,119**
Crude steel	Luleå	3,000	**1,930**
	Oxelösund	1,900	**1,066**
Hot-rolled steel	Borlänge	3,200	**2,022**
	Oxelösund	820	**595**
Pickled steel	Borlänge	2,500	**1,350**
Cold-rolled steel	Borlänge	1,400	**896**
Annealed steel	Borlänge	650	**484**
Metal-coated steel	Borlänge	680	**390**
Organic-coated products	Borlänge	140	**84**
	Köping	30	**16**
	Finspång[2]	40	**23**

[1] Not relevant.
[2] Unit million m^2.

Tougher climate goals – a challenge for the steel industry

Commencing 2013, more industries will be covered by the EU's carbon dioxide emission rights trading system, at the same time as the emissions ceiling will be reduced. The current free allocation of emission rights will become more restrictive. The same rules will apply throughout the EU, but the system may distort the European steel industry's competitiveness on the global market.

New trading period 2013–2020

Commencing 2013, the EU will enter into a new emission rights trading period. The period will extend until 2020. The EU is now setting a lower ceiling for greenhouse gas emissions. The emissions ceiling is being set in such a manner that the EU guarantees attainment of its goal of a 20 percent reduction in emissions by 2020, compared with 1990. In addition, new sectors are covered by the trading system. Emission rights may be allocated free of charge to industries which operate on the global market and which risk transferring production outside the EU if the costs become too high. The steel industry is one of those industries.

Previously, allocations to the steel industry were based on production capacity data for each plant. For the next period, the allocation will take place based on various product benchmarks, i.e. emissions per produced unit, where the 10 percent most efficient producers in Europe will constitute the norm. The steel industry is covered by benchmarks as regards coke, sinter, hot metal, as well as low-alloy and high-alloy steel crude steel. As regards processes which use or produce heat and where there is no product benchmark, plants will obtain an allocation as if they used natural gas as fuel.

Steering towards increased efficiency

If a plant applies to obtain emission rights to produce 1,000 tonnes of hot metal, the intention is that the allocation will correspond to the emissions of the most efficient plants in the EU, when producing the same volume. If the plant in question is less efficient, the consequence will be that it has an emission rights deficit. It will then have to purchase the remaining portion in the market, at the prevailing market price. The fundamental thinking behind the system is that it will ultimately become cheaper to increase the efficiency of the operations than to purchase emission rights, and that the best plants will be favored.

The same regulatory regime will apply throughout the EU, which is a change compared with the current trading period in which national rules have been applied. The allocation of emission rights is decided upon in 2012, based on applications submitted in 2011.

Consequences for the steel industry

The target for the period 2013–2020 is ambitious, and the European steel industry faces major challenges due to the reduction in the emissions ceiling. In steel production, carbon dioxide emissions are not merely energy-related; rather, coal is also an essential reduction agent in the blast furnaces. Through the thermochemical process, a given quantity of carbon dioxide is unavoidably generated for each tonne of steel produced. Thus, the ceiling on emissions also becomes a ceiling on production, if the steel manufacturer does not buy emission rights in the market.

Very few steel producers are expected to have sufficient free emission rights. The product benchmarks have been set low and, in the case of hot metal, even lower than the very best plants in the EU. One consequence of the new regulatory regime is that organic growth will be possible only if companies are willing to pay for increased marginal costs in the form of emission rights.

FACTS EU's climate targets 2020

- To reduce greenhouse gas emissions within the EU by 20% compared with 1990 – 30% if other countries follow suit
- Consumption of primary energy to be reduced by 20% (enhanced efficiency)
- Renewable energy to increase from the current 8.5% to 20%
- 10% renewable vehicle fuel

FACTS New features for the 2013-2020 trading period

- New allocation rules based on benchmarks for different products
- Benchmarks favor those who are best
- Uniform rules throughout the EU
- Fewer available emission rights

Renewable energy

8.5% ⇨ 20%

Greenhouse gas emissions

-20%

Improvement work is continuing within the environmental area

The 2011 environmental year was characterized by climate issues. Extensive work took place due to the EU's new emission rights trading period. SSAB has begun reporting its carbon dioxide emissions also within the American operations. The ULCOS research cooperation project has taken an important step forward and many initiatives are being carried out at SSAB's plants.

Material efficiency and reduced waste

During the year, measures were taken to achieve improved utilization of raw materials and a reduction in the volume of waste sent to deposition sites. Through a research program supported by Mistra, methods are being studied for processing vanadium in slag. The vanadium content restricts the possibility to use the slag for various external purposes due to the fact that, in certain situations, it can have a negative impact on the environment. Vanadium is, though, a valuable alloy within steel manufacturing. In Luleå, trials have been initiated to enrich vanadium in a separate slag product, which can subsequently be sold for further extraction of the vanadium. In Oxelösund, a world-unique method has begun to be applied whereby 90 percent of the coal-rich dust separated from one of the blast furnace's gases (referred to as flue dust) is returned to the blast furnace. The need to purchase injection coal is thereby reduced. Since the flue dust was previously deposited, deposition site space is also saved.

Reduced dust and noise

During the year, work began on expanding the capacity for capturing dust from the steel works in Montpelier. The project is expected to be completed in 2013 and will further improve the working environment. In Oxelösund, SSAB is continuing to cooperate with the port and the municipality in order to reduce the occurrence of dust around the operations. In Oxelösund, measures have been taken to reduce noise levels around the plant. The most important measure was to equip the smoke stack at the power plant with a more efficient sound damper.

SSAB Merox establishes operations in Luleå

SSAB Merox AB has a long history within SSAB. As early as the 1970s, the first initiatives were taken to utilize by-products from steel production. During 2010, Merox was given an expanded mandate to coordinate these activities throughout SSAB EMEA, and operations were established in Luleå in 2011.

The practical production operations are largely handled by contractors, but during the year focus has been placed on identifying logical interfaces and gradually transferring the operations to SSAB's own management. The motivation is to identify new external markets for SSAB's by-products, and also to develop new methods for recycling material internally in SSAB's own processes.

Energy recycling in Finspång

In Finspång, SSAB and the municipality have signed an agreement regarding the recycling of waste energy from the incineration of solvents from SSAB's plant. The recycled energy will be transferred to the municipal district heating network and Finspång will be able to reduce its carbon dioxide emissions by 4,000 tonnes per year.

Demonstration plant for halved carbon footprint

Within the steel industry's research cooperation project, ULCOS, work began during the year on the construction of a demonstration plant at which the objective is to reduce by half carbon dioxide emissions from steel production. This will be achieved through the capture and storage of carbon dioxide from process gases. At the same time, remaining energy-rich gases will be returned to the blast furnace, which will thereby be able to reduce the use of coke by 25 percent. The plant is being built adjacent to ArcelorMittal's steelworks in Florange, France. SSAB is one of the co-financiers of the project, which is dependent on financial support from the EU. The plant will be brought into commission in 2015.

SSAB is also participating in the ULCOS project entitled HISARNA, in which a pilot plant has been built at Tata Steel's works in the Netherlands. The process is based on the use of coal instead of coke and iron ore instead of pellets; consequently no coking plant or pellet plant is required. Here, too, carbon dioxide capture and storage is required in order to achieve the target of halving carbon dioxide emissions. SSAB is playing a central role in Swedish carbon storage projects supported by the Swedish Energy Agency.

SSAB publishes results from CDP

For the fourth consecutive year, SSAB participated in the extensive questionnaire survey from the Carbon Disclosure Project (CDP), which evaluates the climate work of companies. The results are public information and available on SSAB's website at www.ssab.com and from CDP. The initiative has been backed by international and Swedish investors since 2003, and more than 2,500 companies took part in this year's survey. SSAB's score for 2011 was 77 (78) out of a maximum of 100. This score is regarded as affirmation of the company's transparency.

New climate requirements in the US

In 2010, the US Congress voted down a proposal for a carbon dioxide emission rights trading system. However, the US Environmental Protection Agency (EPA) is continuing to develop the framework. The first stage involves increased monitoring and reporting

of existing emissions and, in the longer term, it may potentially result in increased energy costs for steel producers. Both Montpelier and Mobile have developed systems for compiling the emissions data requested by the EPA.

Mercury

The EPA is planning to introduce a new limit on mercury emissions from electric arc furnaces. In order to be able to determine the limit, nine companies with electric arc furnace operations in the US, of which SSAB was one, were instructed to compile data. The measurements, which were carried out in Mobile, were extensive. The requested information was submitted to the EPA in March.

Permit matters

In November 2010, the Land and Environmental Court issued a permit to increase coke production in Luleå from 0.8 to 1.1 million tonnes and the production of slabs from 2.5 to 3.0 million tonnes. SSAB utilized the new permit in February 2011.

A new 'Title V' permit has been obtained in respect of SSAB's plant in Mobile. The permit was issued by the US Environmental Protection Agency (EPA) and relates to emissions into the air. In addition, the new permit resolves many earlier problems relating to reporting routines. The permit is for five years.

Application for new emission rights

During the year, intensive work took place in connection with applications for free emission rights for the 2013–2020 trading period. One change compared with the preceding trading period is that available emission rights will be reduced year on year. Applications are being made in respect of Luleå, Oxelösund and Borlänge. A novel feature this year is that LuleKraft is also applying for free emission rights. LuleKraft operates a combined power and heat plant which is owned in equal shares by the SSAB Group and Luleå municipality. Energy is derived from process gases from SSAB's steel works in Luleå. The applications were submitted in September 2011 and decisions from the EU Commission are expected during 2012.

SSAB's previously owned mines

SSAB has previously conducted mining operations at a number of sites in Bergslagen. During 2011, it was possible – in a positive manner not included in the original plan – to close a deposition site at the Blötberget mine. By refraining from planting a forest, the biological diversity has proved to be significant. SSAB has also produced a sample testing plan in order to study any possible contaminants around the Dannemora mine.

Follow-up of incidents

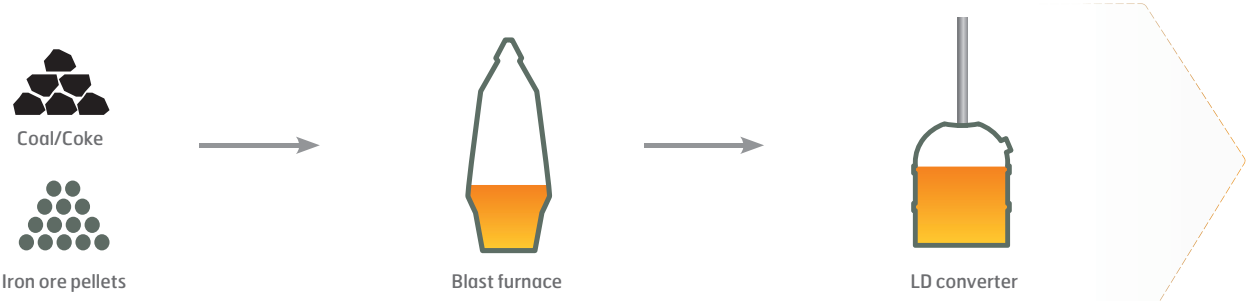
The leachate from a deposition site in Oxelösund, which during 2010 proved to contain cyanide, is now being handled in separate collection systems.

In connection with the tsunami and the nuclear power breakdown in Fukoshima, SSAB's five employees in Japan were given the opportunity to relocate southwards with their families. None of them chose to relocate. No radioactive contamination could be demonstrated at SSAB's product depot in Japan.

In March, a discharge of benzene into the sea occurred at SSAB's port in the Oxelösund. The discharge was quickly discovered and handled in accordance with prescribed routines and reported immediately to the County Administrative Board. An investigation was carried out within one week, which was also sent to the County Administrative Board.

More efficient processes reduce the impact on the environment

1. From iron ore to steel



Raw materials

Coal undergoes dry distillation in the coking plant to produce coke. Energy-rich gas is formed which can be used as fuel in furnaces and combined heat and power plants. Other usable by-products include tar, ammonium sulfate, benzene, sulfur and sulfuric acid. The dust content in the emissions from the coking plant is measured and reduced to a minimum.

Iron ore pellets from LKAB are transported by rail to Luleå and from there by ship to Oxelösund. The iron ore in the pellets is magnetite, which emits heat during production; this result in a lower use of energy compared with hematite-based pellet production.

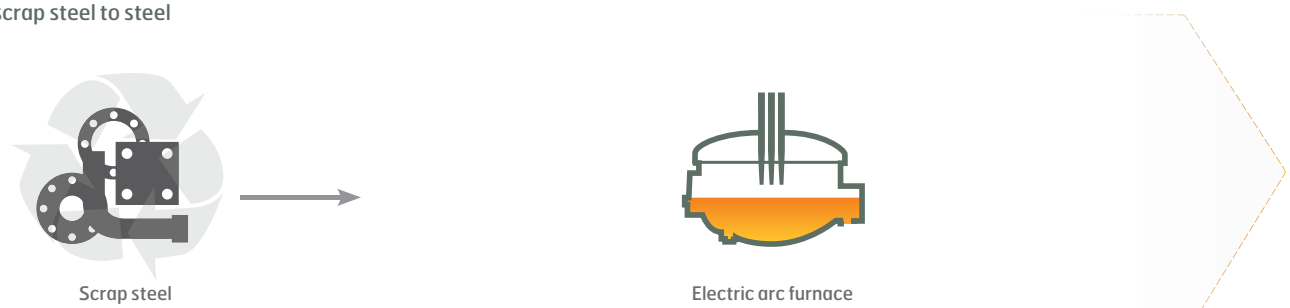
Hot metal

In the blast furnace, the iron ore pellets are mixed with coke, lime and additives. Liquid hot metal and slag are poured off from the lower part of the furnace. The slag is separated and constitutes an important by-product. The energy-rich gas which exits from the top of the blast furnace, and also the coke oven gas, is purified and used as a source of energy in the steel production. This meets approximately 50 percent of the electrical power needs in the Swedish operations. In addition, district heating is delivered to external parties.

Crude steel

In the LD converter, the carbon content of the hot metal is reduced through the addition of oxygen which binds the carbon. Contaminants are reduced through the use of lime. The process creates a surplus of heat, and scrap metal is added to achieve cooling. From the LD converter, the steel is poured into steel ladles, where alloys are added. The temperature and composition of the steel are fine-tuned. One half of the slag from the converter is returned to the blast furnaces. The slag contains 15–20 percent iron and 40 percent lime, which reduces the need to purchase iron ore and limestone.

2. From scrap steel to steel

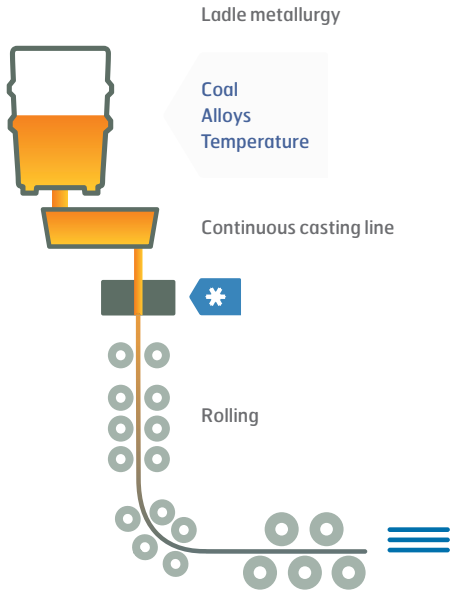


Raw materials

In North America, scrap steel is purchased in the open market. SSAB's two electric steel plants in Montpelier and Mobile have been located based on the potential market and access to scrap metal raw material. This strategy minimizes the environmental impact of transportation since all plants have access to railways. In North America, the inland waterway system is also used.

Crude steel

Scrap steel is smelted in electric arc furnaces where the smelted scrap becomes new crude steel. Mobile and Montpelier have twin furnaces in which the scrap in one of the vessels is pre-heated using natural gas, while the scrap in the second vessel is smelted using electricity through an electric arc being formed with an extremely high temperature when the high tension voltage is connected. Recycled coal residue is used as a source of coal. This has reduced the quantity of deposited waste and replaced up to 60 percentage of purchased coal. A certain quantity of coal and natural gas is used in the electric arc furnace, which generates carbon dioxide. However, mainly due to the fact that scrap steel is smelted using electricity, the volume of carbon dioxide is far less than when steel is produced from iron ore.



Processing

In ladle metallurgy, the crude steel is finely adjusted in accordance to specific recipes and among other things, through the addition of alloying materials. Whether the steel is to be hard or soft is determined in the ladle metallurgy process. The SSAB recipe books contain almost 500 different steel grades.

In the continuous casting line, the steel is converted from liquid to solid form. The water used for cooling circulates in closed systems and is purified through sedimentation and filtration before leaving the area. The steel strands are cut into slabs, which are subsequently rolled into strip or plate. The heating furnaces use coke oven gas, LPG, oil and electrical power. In North America, the various heating furnaves for steel slabs primarily use natural gas as a source of energy. The combustion generates certain emissions of carbon dioxide and nitrogen oxides.

www.ssab.com/en/Investor--Media/About-SSAB/Steel-making-process/The-metallurgical-process/

Steel processes

Two different processes are used in the production of SSAB's steels – ore-based in blast furnaces and scrap-based in electric arc furnaces. The processes have different conditions from an environmental and carbon footprint perspective. The impact on the environment can be mitigated by constantly improving and increasing the efficiency of the various stages of the steel production process. SSAB's work is also aimed at reducing waste by recycling by-products in the processes or by identifying new areas of use as an alternative to deposition.

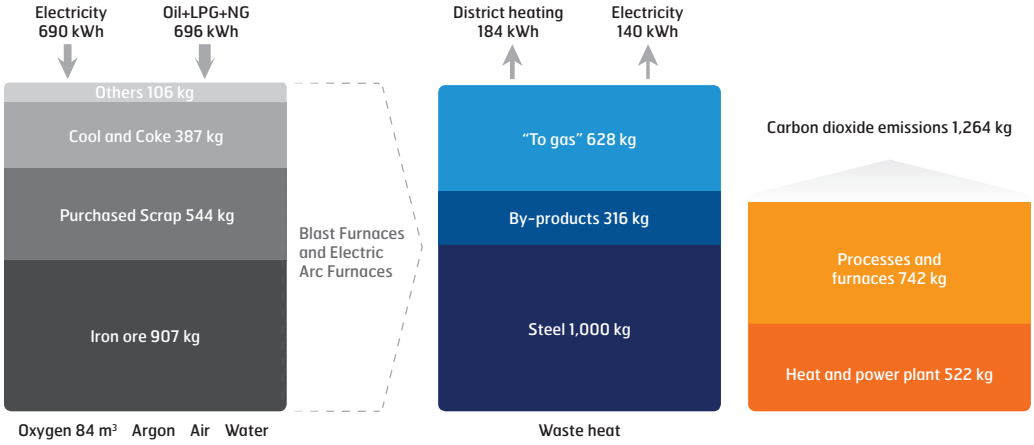
The blast furnace process generates carbon dioxide

Steel production within SSAB EMEA is blast furnace-based. Hot metal is produced by the reduction of iron ore, through coal and coke being added to the blast furnaces. The process gives rise to carbon dioxide. With current technology, it is not possible to produce steel without carbon dioxide being formed.

The process has been continuously developed and improved to become extremely efficient, with waste energy being utilized in the form of district heating and for the production of electricity. International comparisons show that SSAB's blast furnaces are at the forefront as regards low carbon dioxide emissions per tonne of hot metal. There are several reasons for this: the use of high-grade raw materials in the form of iron ore pellets, high-quality coke, and efficient processes in which the blast furnaces produce without disruption. A large number of usable by-products, such as heating, gas, slag and dust, are also produced in order to utilize as much material as possible.

Less carbon dioxide with recycled steel

Steel is one of the most recycled materials in the world. SSAB's plants in the US produce steel based exclusively on recycled scrap metal. A certain amount of coal and natural gas is used in the production process, but mainly electricity is used for smelting the scrap steel. All in all, carbon dioxide emissions are less than one-tenth of the emissions generated in conjunction with iron ore-based steel production.



Materials and energy balance as well as carbon dioxide emissions from the production of one tonne of steel in the SSAB Group in 2011. The flows also include the heat and power plants in Luleå and Oxelösund, which primarily use residual gases from SSAB's operations.

Waste and useful by-products

Thanks to the exact processes involved, steel production gives rise to valuable, quality by-products. SSAB sells by-products in the market through its subsidiary, Merox. Ongoing research projects are aimed at identifying new areas of use and conditions for converting additional material into relevant offerings to the market. One example is the zinc-rich dust from the electric arc furnaces, which now goes to a recycling plant instead of being deposited.

There are waste products from the production processes for which at present there is no environmentally or economically justified area of use, or which should be removed from the use cycle for environmental reasons. At SSAB, this waste largely consists of flue gas purification dust and steel slag which cannot be used due to its physical or chemical characteristics. The waste is either destroyed or deposited. The management and monitoring of the Company's deposition sites are strictly regulated by governmental agencies. Deposited waste must be handled in such a way that these resources, too, might be utilized in the future.

Railways, an important means of transport

Transportation takes place primarily by railway and ship, but also by truck. All of SSAB's business areas have their own logistics departments with the objective of making transportation efficient and economical. In Sweden, raw materials are transported to Luleå and Oxelösund by train or ship. Transportation of slabs between the production plants takes place by rail.

In Sweden, SSAB was awarded Green Cargo's "Climate Certificate for Transportation" also in 2011; this means that the transportation satisfied the criteria established by the Swedish Society for Nature Preservation with respect to Good Environmental Choice for Transportation. Prior to the construction of SSAB's two electric steel plants in Montpelier and Mobile, the locations were chosen based on the potential market and access to the scrap metal raw material. This strategy minimizes the environmental impact from transportation since all plants have access to railways. In North America, the inland waterway system is also used.

Absolute emissions [1]

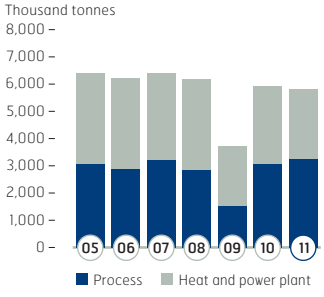
	Country	Volume	2011 [2]	2010	2009	2008	2007	2006	2005
Dust	Sweden [3]	Tonne	584	748	551	888	919	942	933
Nitrogen oxide	Sweden [3]	Tonne	1,319	1,392	1,118	1,657	1,709	1,801	1,776
Carbon dioxide	Sweden [3]	Thousand tonne	5,803	5,974	3,711	6,187	6,410	6,229	6,407
Carbon dioxide	USA [4]	Thousand tonne	675	688	-	-	-	-	-

[1] Data for the period 2005–2010 has been updated from preliminary to finally reported data.
[2] The information for 2011 is preliminary.
[3] The reporting as regards Sweden covers the plants in Oxelösund, Borlänge and Luleå. Luleå also includes emissions from the operations of LuleKraft AB, which are based on SSAB's process gases; LuleKraft AB is 50% owned by SSAB. Carbon dioxide emissions correspond to those reported within the EU trading system. Transportation is not included.
[4] As from 2010, carbon dioxide emissions are also reported from the plants in Mobile and Montpelier. Reporting takes place to the USEPA (U. S. Environmental Protection Agency).

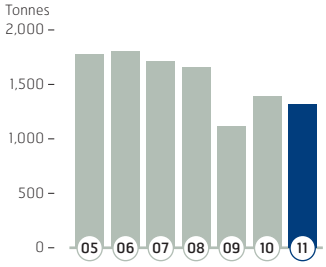
Reduced carbon dioxide emissions in conjunction with the production of hot metal. In addition to improved profitability, an investment in new hot blast stoves at one of the two blast furnaces in Oxelösund has given rise to many positive environmental effects. At blast furnace 2, a reduction in carbon dioxide emissions has been achieved equal to 1,100 journeys by air between Stockholm and New York, or more than 3 million car journeys between Nyköping and Stockholm. Thanks to the new hot blast stoves, the air-blast in the blast furnace is hotter than previously. The hotter the air, the more efficient the hot metal process. The need for injection coal and coke is reduced, and thereby also carbon dioxide emissions.

SSAB receives award from Green Cargo. Green Cargo is a state-owned logistics company that awards Climate Certificates to companies whose transportation efforts meet stringent requirements regarding low emissions of greenhouse gases. The award was distributed for the first time in 2003 and was granted to SSAB at that time. In 2011, 28 companies received the award, including SSAB EMEA.

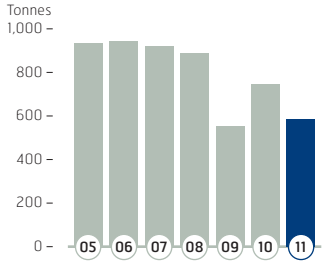
Carbon dioxide [1) 2)]



Nitrogen oxide [1)]



Dust [1)]



[1)] The report covers the Swedish operations at the plants in Oxelösund, Borlänge and Luleå. With respect to Luleå, emissions are also included from the half-owned LuleKraft, which bases its operations on SSAB's process gases. Transportation is not included.
[2)] The emissions of carbon dioxide correspond to those reported within the EU's trading system.

Social responsibility

People and the community

A stimulating and safe workplace is prioritized within SSAB. Work is taking place to introduce principles regarding labor rights and human rights into contracts with suppliers. SSAB's social commitment is visible both locally and globally.

The objective – a high-performing organization

One of the major challenges facing the steel industry and SSAB is to ensure the supply of a skilled workforce in the future. SSAB is working proactively to be considered an attractive employer and to promote the availability of the right skills in the labor market. Development opportunities in an exciting, global and safe working environment are crucial factors.

Development and leadership for continued success

SSAB's HR strategy is aimed at continuously developing the organization and encouraging a high-performance culture. It is a question of attracting and retaining skilled employees and developing current employees through training, feedback, other skills, and internal mobility. Employee performance interviews represent an important instrument in all development work.

SSAB encourages internal mobility and skills development. The employees' wishes to develop, and mutual learning represent key factors for SSAB as a knowledge-based company. The objective is to have an individual development plan for each employee and to carry out annual performance and planning interviews between managers and employees. The development plan work stimulates internal mobility and promotes internal candidates when vacancies are to be filled.

SSAB conducts an annual manager survey. All managers and potential managers in the Group are evaluated based on SSAB's managerial criteria and individual performance. One important aim of the manager survey is to ensure that there are suitable internal candidates for every vacant managerial position, thereby facilitating exchanges of experience and skills development within the Group. An important key performance indicator for SSAB, which is monitored monthly, is the percentage of vacant managerial positions to which internal candidates are appointed. During 2011, no less than 85 percent of managerial recruitments took place internally.

Focus has been placed on strengthening the organization and ensuring that established goals are achieved. During 2011, the work on developing a high-performance organization has included continuation of the Change Implementation Program. The program is focused on second-tier managers within SSAB and is aimed at increasing the understanding of SSAB's strategy and creating conditions for implementation of the strategy throughout the business.

Cooperation and influence strengthen the organization

For SSAB, it is important that employees are able to express themselves and contribute their views regarding the business and how it is to be developed. SSAB's employees must be given a hearing as regards their situation at the workplace, and afforded an opportunity to react in those cases where anomalies are discovered.

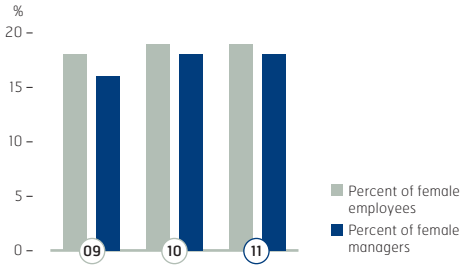
In 2010, a whistleblowing system was established for the entire Group, to which employees can anonymously report irregularities and suspicions of criminal offences.

Equality of opportunity and diversity

SSAB operates in a traditionally male-dominated industry. This is particularly noticeable in the production part of the operations. In the Group, women account for a total of 19 percent of employees and 18 percent of managers. The aim is that the percentage of women in the Group shall be reflected in the percentage of female managers.

SSAB is working with, among other things, mentor programs and women's networks in order to increase career opportunities for women within the Group. Within SSAB, there are a number of employees who have been identified as potential managers of the future; just over one-quarter of them are women, which is a good prerequisite for achieving the established goal.

Equality of opportunity and diversity



Average number of employees, gender breakdown

	Number of employees		Women, %	
	2011	2010	2011	2010
Parent Company				
Sweden	52	48	50	46
Subsidiaries				
Sweden	6,644	6,413	19	19
USA	1,239	1,107	12	12
Other	895	909	29	25
Total	**8,830**	8,477	**19**	19

Follow-up of the investments made in potential future managers since 2000 demonstrates that two-thirds of the men and women who have undergone the development program for managerial candidates proceed to manager or head positions. This confirms that the development was as positive for female candidates as for male candidates, even if in total there were fewer female than male candidates.

2 out of the 9 members of the Group Executive Committee are women. The composition of the managerial corps in the new business areas also reflects breadth in diversity factors. This sends signals to the rest of the organization and, together with the increased internal mobility, in the long run contributes to increased diversity on all levels.

Proactive health care prevents ill-health

SSAB has a major commitment to improved health, and a number of proactive health care projects are being carried out. Examples include support for hiking paths in the vicinity of the steelworks in Montpelier and Mobile, a project involving the municipality in the form of a preventive health care center in i Oxelösund, as well as the HälsoSAM health project for the working environment ergonomy in Luleå. HälsoSAM is now the model for the systematic work environment work also in Borlänge.

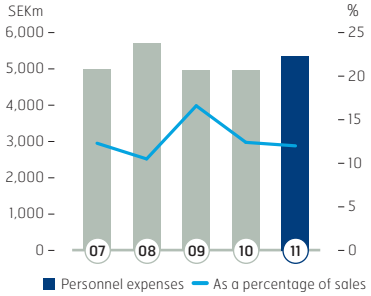
During the year, sick leave within the Swedish part of the group amounted to 3.2 (2.8) percent. Sick leave amounted to 3.9 (3.3) percent among blue-collar employees and 1.6 (1.6) among white-collar staff.

▲ Water testing in Oxelösund.

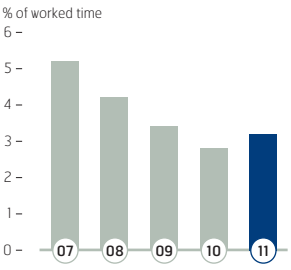
Number of employees at year-end

	2011	2010	Change,%
SSAB EMEA	6,742	6,569	3
SSAB Americas	1, 338	1 ,221	10
SSAB APAC	171	104	64
Tibnor	798	838	-5
Other	58	58	0
Total	**9,107**	**8,790**	**4**

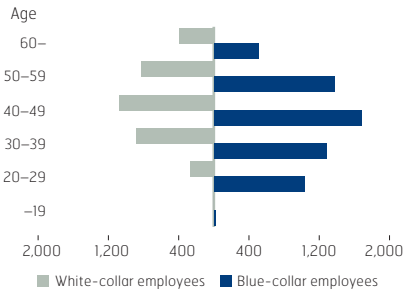
Personnel expenses



Lost time



Age breakdown



Continued focus on employee safety and development

Focus in the organization is being placed on strengthening employees in their roles and structures, and promoting consideration of the bigger picture. Despite the work carried out during the year, the Swedish operations failed to reach the targets set as regards health and safety. Results within SSAB Americas continued to be very good.

Zero tolerance program

SSAB's ambition is to be one of the world's leading steel companies as regards health and safety. SSAB possess the technical and practical conditions for achieving this. Hazardous work situations have gradually been eliminated. Strict routines and procedures are in place in respect of any hazardous elements which it has not been possible to eliminate . At the same time, work is also taking place to improve safety through increased understanding, attitudes towards safety, and behavior which affects safety. The zero tolerance program is focused on this and 2011 has been characterized by a strong focus on safety. Numerous activities have been carried out, including working environment days at all of the Swedish plants.

Very good results within SSAB Americas

In 2011, too, the two steel works in Mobile and Montpelier have demonstrated extremely positive results as regards safety and, according to independent analysts, are among the leading steel works in North America in this respect. SSAB Americas exceeded its target and only three accidents resulting in sick leave occurred during the year, all of which involved slight injuries which occurred at processing plants with fewer than 25 employees. In total, this was a 25 percent improvement compared with the previous year. Top priority is being given to achieving the same excellent results in the Swedish operations. In this endeavor, it is an advantage to be able to study and learn from the American operations.

SSAB EMEA did not meet set targets

Despite vigorous safety measures, 2011 failed to witness a change in the trend in the Swedish steel operations. On a Group level, the number of accidents resulting in sick leave was 9.2 per million worked hours, slightly up on the preceding year.

Improved systematic work with OHSAS 18001

During 2010, the American steelworks were granted certification in accordance with the international standard for systematic working environment work, OHSAS 18001. The goal of obtaining certification for the entire American operations was achieved in 2011, when all three cutting lines were granted certification. This means that SSAB Americas has a standardized management system in place as regards health and safety. In practice, this involves the joint policies, procedures and documentation, which will strengthen the organization's ability to address safety issues systematically. Preparations took place in 2011 for certification of the Swedish production plants. Luleå is already certified, and the aim is that all plants will be certified by the end of the first half of 2012.

Employee surveys support the improvement work

Within SSAB, employee surveys covering all employees are conducted regularly. The survey constitutes an important support in implementing improvement work within the organization. Based on results from the employee surveys, each supervisor devises improvement plans which address areas for development.

In order to monitor the results of the improvement work since the major survey carried out in 2010, a smaller scale employee survey was carried out during the year. In this survey, focus was placed solely on the Employee Satisfaction Index (ES I), i.e. employee motivation and commitment. Since 2010, ESI has increased from 84 to 85.

▲ Daniel Bälter and Sara Åslund.

Employee development

Each employee shall have an annual performance and planning review with his or her immediate supervisor. The aim of the reviews is to monitor results and performance, provide feedback, set new goals, and prepare and plan development activities . During 2011, 96 percent of employees had such reviews with their immediate supervisor. The percentage of performance and planning reviews held is an important key performance indicator for SSAB's work on being a high-performance organization.

Long-term skills supply initiative

SSAB is a knowledge-based company whose success depends on the skills of current and future employees. SSAB works actively vis-à-vis schools, colleges and universities through the University & College Group, a cross-functional team comprising employees from different functions . SSAB's participation in the Teknikspråget project in Sweden serves as an example of activities aimed at promoting a long-term supply of skilled employees. Some 10 industrial companies are participating in Teknikspråget, which was initiated by Industrivärden and Nordstjernan. The aim of Teknikspråget and the work within the University & College Group is to encourage young people to choose to train as engineers. By, at an early stage, experiencing the reality at a technology-based company, young people can be attracted to studying engineering. Via Teknikspråget , all students in Sweden graduating from high school natural science and technology programs will be offered a four-months internship at a Swedish technology-based company. Teknikspråget provides SSAB with the possibility to contribute to increased knowledge about, and an increased interest in, careers in technology.

▲ SSAB's ambition is to be one of the world's leading steel companies as regards health and safety.


SSAB

Vision of zero accidents

A safe workplace is a top priority for SSAB. A number of serious accidents in the Swedish operations in recent years have resulted in greater preparedness, with projects to strengthen routines and increase safety awareness. Compromises on safety are never accepted.

The message has been reinforced

SSAB has formulated a zero-tolerance policy as regards accidents, with the intermediate objective of reducing by more than 5 percent per year the number of injuries resulting in sick leave. The zero-tolerance program was launched in 2010 and involves practical preventive work through training and strengthened routines, as well as a lower level of tolerance in cases where safety is disregarded. Risking one's own safety or that of one's colleagues can never be tolerated and result in disciplinary measures, irrespective of the outcome. SSAB's increased focus is being felt throughout the organization and safety is a common day-to-day topic of discussion. It is primarily a question of changed attitudes. This is a readjustment which takes time, but as an employer SSAB must create the most favorable conditions and never turn a blind eye to carelessness.

However, in 2011 one fatality occurred at SSAB's plants and the accident figures for the Swedish operations as a whole are on a level which is not in line with SSAB's strategic objective.

Crush injuries and sprains are most common

Steel production involves many elements which require a high level of safety preparedness. There are many potential risks of accidents unless safety awareness is a factor in every decision and every stage in the process. Accidents more often occur in conjunction with maintenance outages and disruptions in production. Detailed documentation and analysis of accidents and incidents are crucial for being able to implement appropriate measures and for developing safety routines.

Crush injuries, strains and minor burns are the most common injuries. Due to the heavy snowfall of the past two winters in Sweden, there have been abnormally high numbers of accidents due to slipping, which is reflected in the accident statistics. Within SSAB, it is not only at the steelworks that there are risk-filled working environments. Around the world, there are cutting lines and sales depots with powerful machines, heavy materials, and vehicles. Risks exist also within the international sales organization; detailed identification of the risks will be carried out.

Trend towards less serious accidents with shorter absence

Lost Time Injuries (LTI) is the key performance indicator most commonly used within industry to measure injury frequency. LTI measures the number of injuries which result in absence from work, per million work hours. Over the past four years, SSAB's LTI has been relatively unchanged, in line with the industry average. However, there is an underlying trend behind these figures. Generally speaking, less serious accidents are involved, resulting in shorter sick leave. Extremely positive results can be presented in respect of individual plants. For example, the plant in Borlänge has succeeded in significantly reducing its accident figures. During the summer of 2011, very large capital investment projects were carried out at the plant. They were implemented without a single accident, which demonstrates how far the company has come in achieving a correct approach and work method.

Standard for systematic work environment

OHSAS 18001, which is an international standard for systematic working environment work, is gradually being introduced within SSAB. OHSAS 18001 helps the company create the optimal conditions for regular improvements. The OHSAS work is based on monitoring the risks and preparing plans of action to eliminate them. The plans of action and the company's objectives and results are audited annually, both through an internal audit as well as an external audit carried out by an accredited firm. In this way, systematic work environment is developed for the entire Group.

All units within SSAB Americas, both production facilities and cutting lines, are certified. SSAB EMEA's production plants in Borlänge, Oxelösund and Finspång are to be certified by the end of the first half of 2012. Luleå has already obtained certification. Common routines and guidelines for SSAB EMEA were developed during 2011. SSAB EMEA has adopted a new working environment policy which sets out the

The vision of zero accidents is feasible. During the three-week long scheduled outage in Borlänge, four major capital expenditure projects were carried out involving almost 1,000 maintenance jobs. In addition to SSAB's own employees, 700 contractor employees were present within SSAB's area during the period. From day one, there was a strong focus on a safe working environment. With the end result – zero accidents – the conclusion is clear. It is possible to avoid accidents, even under the most challenging conditions conceivable. Björn Jansson, project manager for the project, points out that essentially what is involved is considering the bigger picture, communicating well, focusing on tasks at hand, avoiding stress, and keeping things in order.

▲ Björn Jansson, project manager, Safe Start-up, 2011.

company's ambitious objectives within the working environment area.

Responsibility for contractor employee safety

Each year, hundreds of people from external companies work at SSAB's plants, primarily on maintenance and repairs. In Sweden, SSAB has a statutory responsibility to coordinate safety work, and employees of external contractors are included in SSAB EMEA's composite injury statistics since 2010. During the year, several serious accidents occurred in which contractor employees were injured. A driver was fatally injured at the sales depot in Portugal, while in Borlänge a contractor employee suffered serious burns in conjunction with a repair outage.

Work is continuing on imposing requirements on, and supporting the development of safety work among, SSAB's contractors. Together with the contractor, SSAB conducts a risk analysis regarding relevant work duties. All reported industrial injuries, near accidents or critical elements are investigated.

Within SSAB EMEA, there is a safety committee for contractor employees at each production plant. The aim is to place further focus on the issues and create a forum in which the largest contractors report twice a year the way in which reported events have been followed up and the systematic measures they are taking to prevent accidents. Prior to commencement of the actual work, all contractor employees must participate in local safety training. Safety training courses are held regularly, but more intensively prior to the summer maintenance outages when a large number of contractor employees are admitted to the plants.

Work promoted by exchanges of experience

SSAB's American operations have achieved extremely good results thanks to long-term and systematic safety work. The plants in Mobile and Montpelier are both top listed in independent rankings of the safety performance of American steel companies. The work to improve the safety work within SSAB EMEA continues. Within the Group, an organized exchange is taking place in which the American operations share their experiences and success factors in the safety area. The Swedish steel works, for their part, have come a long way in terms of other working environment issues, such as ergonomy, lighting and automation. Through cooperation and regular learning, the organization can utilize the successes achieved in various parts of the operations.

SSAB EMEA: New working environment policy

During the year, a new working environment policy was adopted within SSAB EMEA aimed at emphasizing the increased focus on health and safety. In order to achieve the objective of zero accidents and injuries, SSAB will:

- Ensure that the working environment is taken into account in all activities and decisions taken throughout the Company.
- Co-operate in preventing accidents and work-related ill-health by identifying, evaluating and eliminating risks.
- Systematically identify and eliminate the basic causes of near accidents and accidents, with the aim of preventing them happening again.
- Endeavor to develop a safety culture in which employees help and care about themselves, their work colleagues, and contactor employees. We must stop and instruct colleagues and contractor employees when they take a risk or fail to comply with established safety rules. All work which is not carried out safely must be discontinued.
- Set a good example. Supervisors are responsible for the working environment and must set a good example and serve as role models;
- Ensure that all employees understand the importance of good health and a high level of safety, by providing them with all necessary instructions as well as training and necessary equipment which facilitates a safe method of working.
- Improve the employees' physical and mental well-being through preventive work.
- Fulfill or exceed all applicable laws and requirements imposed by governmental agencies or other legal entities.
- Establish clear goals and carry out regular monitoring to ensure that these goals are fulfilled.

Raw materials suppliers

The raw materials used in steel production are SSAB's strategically most important purchases. Purchasing takes place from number of suppliers in different parts of the world. Work is ongoing to coordinate purchasing processes and for the inclusion of principles regarding labor rights and human rights in contracts with suppliers.

Guidelines and governance

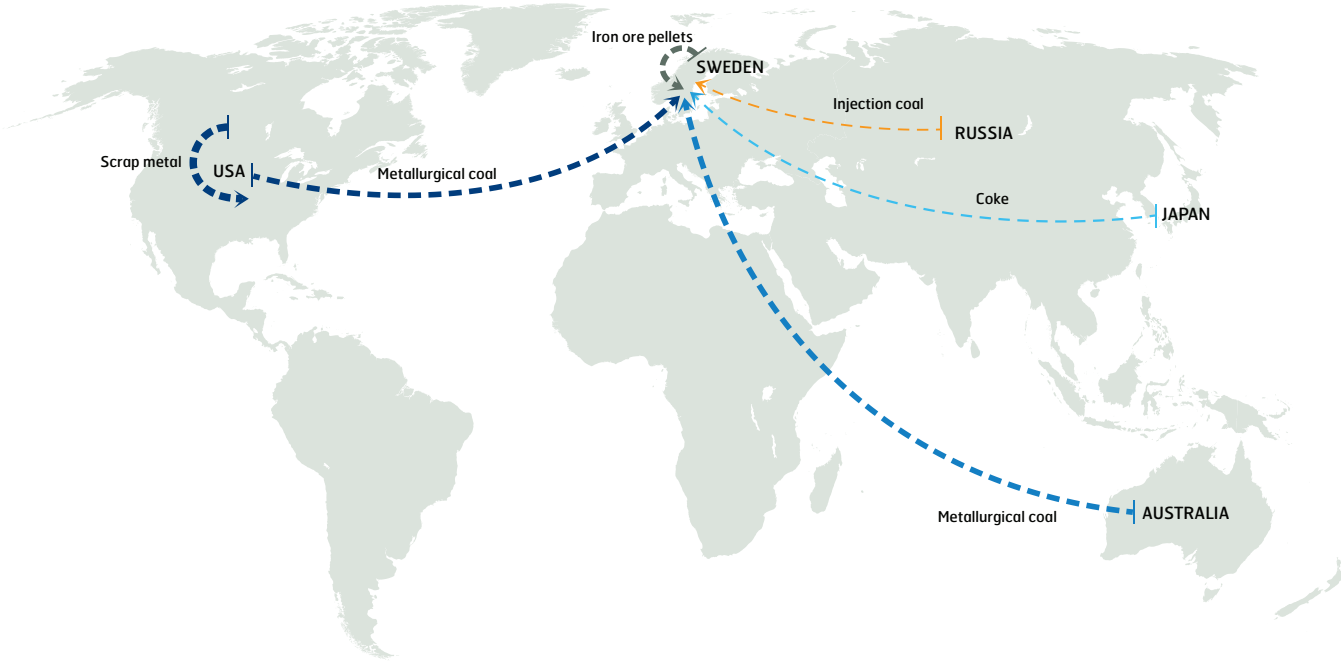
In 2010, SSAB adopted a Procurement policy which governs all of SSAB's purchases throughout the Group. SSAB has signed up to the Global Compact and its principles are applied in the work with suppliers. SSAB's Code of Business Ethics reflects Global Compact principles and is the most important control document as regards work with suppliers. The Code of Business Ethics places particular emphasis on the abolition of forced labor and child labor. In contacts with suppliers, SSAB communicates its Code of Business Ethics and encourages the suppliers to comply with, and respect, the Code.

SSAB has also developed Instructions regarding the Giving and Acceptance of Bribes. The Instructions provide employees with clear information on how SSAB defines bribery and improper benefits, and how employees are expected to act in relation to suppliers, customers and other business partners.

Systematic identification of supplier risks

Stringent quality requirements and long-term business relations provide the purchasing organization with good insight into conditions at the suppliers. In 2011, work began on developing a joint purchasing system for the Group. With a joint purchasing system for the Group, improved conditions will be created for the continued work on monitoring suppliers.

The source of SSAB's raw materials



SSAB purchases iron ore pellets from a Swedish supplier, LKAB. Metallurgical coal is purchased from two major suppliers in Australia and the US, while injection coal is sourced from a specific mine in Russia. Scrap metal is purchased locally in the US. Coke is purchased from Japan. Alloying agents is procured from some 30 different suppliers.

SSAB in the community

SSAB is an active member of the community in the localities where it operates. The company aims to contribute to and support local and international projects of importance to its employees and its local presence. SSAB maintains an open dialogue with politicians, governmental agencies, media and the public, with the objective to contribute to knowledge about steel and steel production.

Photo: Hoppets Stjärna

▲ After the earthquake, only a pile of rubble remained of the school in Hesse, Haiti. 400 students now have a roof over their heads again.

▲ The roofing sheet was manufactured by SSAB in Borlänge and processed by Plannja.

Supporting local communities and contributing to activities

At the localities where it operates in Sweden, SSAB contributes to creating a wide range of recreational activities which can be enjoyed by SSAB's employees and their families. Examples include sponsorship of local sports organizations and an exchange of knowledge with schools. SSAB also has the possibility of supporting associations in which employees are involved, primarily within sport and culture.

For several years, SSAB EMEA has supported the Peace & Love Festival in Borlänge. SSAB has been involved in the Clean Town project and the objective is that Peace & Love will be Sweden's cleanest festival. SSAB lends out its personnel and assists with work management in the Clean Town project, and provides training on how to work on order and tidiness. SSAB EMEA supports Lions' large spring market in Oxelösund, which attracts 20,000 visitors. SSAB assists, among other things, with a financial contribution, and the profit from the market always goes to Lions' help activities.

Support to Haiti

During 2011, SSAB and Plannja continued to supply sheet to Haiti to help in the rebuilding following the severe earthquake in 2010. The sheet is used for roofing on schools, orphanages, houses and hospitals. The help is channeled through the aid organization Star of Help, which has worked in Haiti for more than 30 years and focuses on children and their future. 42 tonnes of roofing plate were supplied in 2011, compared with 11 tonnes the previous year.

Strong employee involvement

SSAB Americas engages in extensive work to support the local communities in the areas around the plants. This involves both financial contributions to a number of different projects as well as initiatives by committed employees. Among other things, employees support The United Way with donations, with SSAB making matching contributions. In Mobile, money equivalent to the saving realized by recycling car tires for energy instead of primarily using fossil fuel is donated to an education fund. The employees in Montpelier sponsor and support The Make-a-Wish Foundation, an organization which works to give comfort and support to very sick children.

GRI table

SSAB self-declares the report to be Application Level C in accordance with the GRI (Global Reporting Initiative) guidelines for reporting on sustainability work. SSAB is engaged in producing joint key performance indicators for the entire Group, but in certain respects data is reported only for the Swedish operations. The business areas and subsidiaries covered are revealed regularly and in connection with the reporting of data. Acquired companies are included in the report commencing the date on which a controlling influence is obtained. Reporting is in accordance with the same principles as in previous years.

The table below states where information sought in GRI is available in the 2011 Sustainability Report. Since the Report is a supplement to the 2011 Annual Report, the table also includes references to that information, as indicated by the initials 'AR'. The GRI table contains all core indicators, as well as those additional indicators that SSAB has considered to be relevant for its operations. This is based on the Company's most important sustainability issues.

GRI	GC	Page reference	Degree of reporting
1. STRATEGY AND ANALYSIS			
1.1 CEO statement		2–3	
1.2 Description of key impacts, risks and opportunities	1, 7–9	4–7, 12, AR 42–43	
2. ORGANIZATIONAL PROFILE			
2.1 Name of the organization		Cover page	
2.2 Primary brands, products and services		Edge, back page	
2.3 Operational structure of the organization		15	
2.4 Location of organization's headquarters		45	
2.5 Countries where the organization operates		45	
2.6 Nature of ownership and legal form		15	
2.7 Markets		Edge, back page	
2.8 Scale of the organization		Edge, back page	
2.9 Significant changes during the reporting period		AR 20, 25	
2.10 Awards received during the reporting period		19, 20, 31, 35	
3. REPORT PARAMETERS			
3.1 Reporting period		Edge, cover page	
3.2 Date of most recent previous report		Edge, cover page	
3.3 Reporting cycle		Edge, cover page	
3.4 Contact point for questions regarding the report		Edge, cover page	
3.5 Process for defining report content		4–9, 42	
3.6 Boundary of the report		Edge, cover page, 42	
3.7 Specific limitations on the scope or boundary of the report		Edge, cover page, 42	
3.8 Basis for reporting on joint ventures, subsidiaries, etc.		Edge, cover page, 42	
3.10 Explanation of the effect of any restatements of information provided in earlier reports		Edge, cover page, 42	
3.11 Significant changes from previous reporting principles regarding scope, boundaries, etc.		Edge, cover page, 42	
3.12 GRI table		42–43	
4. GOVERNANCE, COMMITMENTS AND ENGAGEMENT			
4.1 Governance structure of the organization		15	
4.2 The Chairman of the Board's role in the organization		15	
4.3 Independent and/or non–executive board members		15	
4.4 Mechanisms for shareholders and employees to provide recommendations to the board		15	
4.5 Principles for compensation to senior executives		AR 40, 71–74	
4.6 Processes for avoiding conflicts of interests in the board		15, AR 44–53	
4.7 Processes for determining the qualifications of board members		AR 44–53	
4.8 Mission, values, Code of Conduct, etc.	1–10	11, 13–14	
4.9 The board's monitoring of the sustainability work		15, AR 51	
4.10 Processes for evaluating the board's own performance		15, AR 46	
4.12 Endorsement of external voluntary codes, principles or other initiatives		11	
4.13 Memberships in associations		23, 36	
4.14 List of stakeholder groups		8	
4.15 Basis for identification and selection of stakeholders with whom to engage		8	
4.16 Approaches to stakeholder engagement		8	
4.14 Key topics and concerns that have been raised through stakeholder engagement		8–9	
5. ECONOMIC INDICATORS			
EC1. Direct economic value generated and distributed		19	
EC2. Risks and opportunities for the organization due to climate changes	7	17, 19	
EC3. Coverage of the organization's defined benefit plan obligations		AR 86	
EC4. Financial assistance received from government		AR 72	
EC6. Policy, practices and proportion of spending on locally–based suppliers			
EC7. Local hiring and proportion of senior management hired from the local community			
EC8. Infrastructure investments and services provided for public purposes		41	
6. ENVIRONMENTAL PERFORMANCE INDICATORS			
EN1. Materials used by weight or volume	8	24, 30	
EN2. Percentage of recycled input materials	8–9	20, 28, 30	
EN3. Direct energy consumption by primary source	8	20, 30	
EN4. Indirect energy consumption by primary source	8	30	

SSAB signed up to the UN Global Compact (GC) in 2010 and supports its ten principles. Activities and results related to Global Compact principles are reported below through cross-reference to a selection of GRI indicators.

Global Compact's principles

Human rights
1. Businesses should support and respect the protection of internationally proclaimed human rights; and
2. Make sure that they are not complicit in human rights abuses.

Labor standards
3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; and
4. The elimination of all forms of forced and compulsory labor; and
5. The effective abolition of child labor; and
6. The elimination of discrimination in respect of employment and occupation.

Environment
7. Businesses should support a precautionary approach to environmental challenges; and
8. Undertake initiatives to promote greater environmental responsibilities; and
9. Encourage the development and diffusion of environmentally friendly technologies.

Anticorruption
10. Businesses should work against corruption in all its forms, including extortion and bribery.

GRI	GC	Page reference	Degree of reporting
EN5. Energy saved due to conservation and efficiency improvement	8–9	26, 28–29, 31	
EN6. Initiatives to provide energy–efficient or renewable energy based products/services	8–9	7, 17	
EN8. Total water withdrawal by source			
EN10. Percentage and total volume of water recycled and reused	8–9	5	
EN11. Location/scope of land owned near protected areas/areas of biodiversity value			
EN12. Impacts of products and operations on biodiversity			
EN16. Direct and indirect greenhouse gas emissions	8	30–31	
EN17. Other relevant indirect greenhouse gas emissions			
EN18. Initiatives to reduce greenhouse gas emissions	7–9	17, 20, 26	
EN19. Emissions of ozone–depleting substances			
EN20. NO, SO and other significant air emissions	8	30	
EN21. Total water discharge	8	23	
EN22. Waste by type and disposal method	8	30	
EN23. Number and volume of significant spills	8	27	
EN 26. Initiatives to mitigate environmental impacts of products and services	7–9	7, 9, 17–19, 20–21, 28–29	
EN27. Products sold and their packaging materials that are reclaimed			
EN28. Fines and/or non–monetary sanctions for non–compliance with environmental laws			
EN29. Environmental impact of transports	8	20, 30	
7. SOCIAL PERFORMANCE INDICATORS			
LA1. Total workforce by employment type, contract and region		34	
LA2. Rate of employee turnover by age group, gender and region	6	33–34	
LA4. Percentage of employees covered by collective bargaining agreements			
LA5. Minimum notice period(s) regarding operational changes			
LA7. Rates of injury, occupational diseases, lost days, work–related fatalities per region	1	34–39	
LA8. Education, training, prevention and risk–control programs in place	1	38	
LA10. Average hours of training per year per employee	10	13–14, 33, 38	

GRI	GC	Page reference	Degree of reporting
LA13. Composition of governance bodies and employees according to diversity indicators	6	15, 34, AR 112–115	
LA14. Ratio of basic salary of men to women			
HR1. Investment agreements that include human rights clauses	1–6	40	
HR2.Suppliers that have undergone screening on human rights, and actions taken	1–6	40	
HR4. Total number of incidents of discrimination and actions taken			
HR5. Operations where freedom of association and collective bargaining may be at significant risk and actions taken	1–3	40	
HR6. Operations identified as having significant risk for incidents of child labor and actions taken	1–2, 5	40	
HR7. Operations identified as having significant risk for incidents of forced or compulsory labor and actions taken	1–2, 4	40	
SO1. Programs for evaluating the operation's impacts on communities		8	
SO2. Business units analyzed for risks related to corruption	10	13–14	
SO3. Employees trained in the organization's anti–corruption policies and procedures.	10	13–14	
SO4. Actions taken in response to incidents of corruption	10	13	
SO5. Participation in public policy development and lobbying	7–9	8, 23	
SO8. Monetary value of fines for non–compliance with applicable laws		AR 94	
PR1. Life cycle stages in which health and safety impacts of products and services are assessed	1	4–5	
PR3. Type of products and service information required by procedures, and percentage of products subject to such information requirements			
PR6. Programs for adherence to laws, standards and voluntary codes for marketing communications			
PR9. Monetary value of fines for non–compliance with regulations concerning the use of products and services			

Explanation of degree of reporting:
- Fully reported
- Partially reported
- Not reported

Steel Talk ABC – a glossary

A

After-treatment – Heat treatment, cooling, etc., in order to endow the steel with certain qualities; also galvanizing, organic coating, and cutting to size

Alloy – A substance composed of two or more metals

Alloy Steel – An iron-based mixture is considered to be an alloy steel when manganese is greater than 1.65%, silicon over 0.5%, copper above 0.6%, or other minimum quantities of alloying elements such as chromium, nickel, molybdenum, or tungsten are present. An enormous variety of distinct properties can be created for the steel by substituting these elements in the recipe

Alloying material – Material that is added to the molten metal during the steelmaking process and which combines with iron or other metals and changes the metal's qualities

Annealing – A thermal cycle involving heating to, and holding at a suitable temperature and then cooling at a suitable rate, for such purposes as reducing hardness, improving machinability, facilitating cold working, producing a desired microstructure, or obtaining desired mechanical or other properties

Application – Area of use; a product which uses a certain grade of steel

Applications engineer – Trained specialists in the qualities of the material and its areas of use; problem solvers and developers

B

Billet – A semi-finished steel form that is used for "long" products: bars, channels or other structural shapes. A billet is different from a slab because of its outer dimensions; billets are normally 50 to 180 mm square (2 to 7"sq), while slabs are 760 to 3,200 mm (30 to 126") wide and 50 to 250 mm (2 to 10") thick. Both shapes are generally continually cast, but they may differ greatly in their chemistry

Blast Furnace – A shaft furnace lined with heat-resistant (refractory) bricks, used by integrated steel mills to reduce and melt iron ore to iron. Its name comes from the "blast" of hot air and gases forced up through the iron ore, coke, and limestone that load the furnace

Blast air – Heated air which is blown into the blast furnace under high pressure

C

Carbon dioxide – CO_2, colorless gas, soluble in water to form carbonic acid; included in carbonated drinks and comprises 0.03% of the atmosphere and is identified as a greenhouse gas

Carbon monoxide – Colorless and odorless energy-rich gas which burns with a blue flame; noxious. Upon combustion, carbon dioxide is formed

Carbon steel – Unalloyed steel

Charging – The act of loading material into a vessel. For example, iron ore, coke, and limestone are charged into a blast furnace; a basic oxygen furnace is charged with scrap and hot metal, and an electric arc furnace is charged with steel scrap and fluxes

Coilbox – Rolling machinery; box for coiled steel employed to promote temperature uniformity during the hot rolling process

Coiler – Mechanical part which captures plate, sheet or strip from the rolling mill and coils it

Coke – Dry distilled coal, the basic fuel consumed in blast furnaces in the smelting of iron ore. Approx. 450 kg (1,000 pounds)) of coke are needed to process a ton of pig iron, an amount which represents more than 50% of an integrated steel mill's total energy use

Cold rolling – Metalworking process in which the thickness of a sheet, strip or plate is reduced by rolling at ambient temperature

Continuous casting – A process by which molten metal is solidified into a semi-finished billet, bloom, or slab for subsequent rolling

Cowper stoves – Heating apparatus; ceramic towers used for preheating blast air

Crude steel – Steel in its solidified state directly after casting. This is then further processed by rolling or other treatments, which can change its properties

Cutting station – Place for cutting the steel strand into slabs

D

Decarburization – In oxygen-blown steelmaking processes, the reduction of the hot metal's carbon content during refining by the use of gaseous oxygen

Desulphurization – Method for removing sulphur from the hot metal; for example, through the addition of calcium carbide or magnesium oxide

Dry distillation process – Combustion without entry of oxygen

Dual-phase steel (DP) – High-strength steel that has a one soft (ferrite) and one hard (martensite) microstructure which allows for desired combination of good formability with high strength

E

Electric arc furnace (EAF) – Steel-making furnace where scrap is generally 100% of the charge. Heat is supplied from electricity that arcs from the graphite electrodes to the metal bath. Furnaces may be either an alternating current (AC) or direct current (DC). DC units consume less energy and fewer electrodes, but they are more expensive

F

Fatigue – The progressive and localized structural damage that occurs when a material is subjected to cyclic loading at stresses considerably below the ultimate tensile strength

Four-high rolling mill – Mechanical equipment; comprises four cylindrical rollers with extremely high pressure which press slabs into plate by repeatedly rolling backwards and forwards

H

Hardening – Process that increases the hardness of steel, i.e. the degree to which steel will resist cutting, abrasion, penetration, bending, and stretching

Hearth – Lower part of the blast furnace; area for collection of molten hot metal

Hematite –Fe_2O_3, non-magnetic iron ore or blood ore

High strength steel – Strong steel with high resistance to tensile stress before fatigue and breaking may occur. A very strong steel that is able to withstand high loads before failure

Hot dip galvanization – Method for adding a rust protection surface layer. For example, adding zinc and aluminum in hot molten form on the steel. The opposite to zinc-plating, an electrochemical method of applying a coat of molten zinc to the surface of steel for the purpose of enhancing corrosion resistance

Hot metal – The name for the molten iron produced in a blast furnace. It proceeds to the basic oxygen furnace in molten form or is cast as pig iron

Hot strip rolling mill –A mill for rolling heated slabs through a series of rolling stands to produce sheet steel in coil form

Hot rolling – A metalworking process in which slabs are heated to high temperatures and then deformed between rollers to form thinner cross-sections

I

Injection coal – Coal powder which is injected into the blast furnace under high pressure without being converted to coke

Iron ore pellets – Iron ore particles rolled into small balls and compacted by heating

L

Ladle – A "bucket" lined with refractory (heat resistant) bricks, used to transport molten steel from process to process in a steel plant

Ladle change – Switch from an empty to a full container of steel

Ladle Metallurgy Furnace (LMF) – An intermediate steel processing unit that further refines the chemistry and temperature of molten steel while it is still in the ladle. The ladle metallurgy step comes after the steel is melted and refined in the electric arc or basic oxygen furnace, but before the steel is sent to the continuous caster

Ladle treatment method – Different methods for ladle metallurgy

LD converter – Oxygen steelmaking process employing a converter (vessel) and top blowing oxygen lance to refine the blast furnace hot metal into crude steel. Named for the Austrian towns of Linz and Donawitz, L-D. Often referred to as Basic Oxygen Furnace (BOF) in North America

Low alloyed steel grades – A steel, other than a carbon steel, that requires the minimum content for each specified alloying element to be lower than the applicable limit for the definition for alloy steel

M

Magnetite – Fe_3O_4, magnetic iron ore

Martensitic steel – Steel with a very hard form of steel crystalline structure called martensite that is formed by displacive transformation. The martensite is formed by rapid cooling (quenching) of austenite which traps carbon atoms that do not have time to diffuse out of the crystal structure

Material design – Control of the steel chemical composition and processing to achieve a microstructure that offers a combination of properties desirable for an intended product or application

Metallurgy – The science and technology of metals – a broad field that includes, but is not limited to, the study of internal structures and properties of metals, and the effects on them of various processing methods

Mold – Casting mold

O

Ore car – Railcar for transportation of lump ore, iron ore concentrate or pellets

Oxide scale – An oxide of iron which forms on the surface of hot rolled steel

Oxygen lance – Pipe-shaped lance for treatment using oxygen

P

Pair of rollers – A pair of cylindrical rollers for rolling steel to thinner dimensions under high pressure

Particulates filter – Purification plant for gas or air in which particulates are separated and condensed for recycling

Phases – Steel has different crystal structures at various temperatures and the phase(s) present depend on heat treatment, alloy quantity, hardening, quenching, etc. Best known are the martensite (quick hardening) phase, ferrite phase (pure iron) austenite (non-magnetic) phase and bainite phase

Pickling line – A processing line which chemically removes oxide or scale from the steel surface to obtain a clean surface for subsequent processing

Plate – Flat rolled steel product which is typically classified as over 1,200 mm (48") in width and 4.5 mm (0.180") in thickness

Process gas – Gas from metallurgical processes; often energy rich

Process methods – Methods for extracting raw materials and manufacturing products in a continuous cycle without disruption

Process water – Water from cooling or treatment in the processes. Always undergoes purification and can often be re-circulated

Q

Quenched steels – Hardened or toughened steel. SSAB's quenched steels are also high strength

R

Recycling – Return of used products or by-products to enter a new cycle of production and use

Reduction agents – Carbon or hydrogen used to remove oxygen from iron ore to produce iron

Rolling mill – Any of the mills in which metal undergoes a rolling process. For plate, sheet and strip, these include the slabbing mill, hot rolling mills, cold rolling mills, and temper mills.. Any operating unit that reduces gauge by application of loads through revolving cylindrical rolls; operation can be hot or cold. The elevated temperature rolling mill is the Hot Mill and is capable of reducing the gauge of a slab 92-99%

Roll pass – Number of times a billet or slab passes through a pair of rollers

Rougher – Two rough cylindrical rollers which press the steel to thinner dimensions prior to hot rolling

Runner – Ceramic-lined spout for controlling molten, hot metal

S

Scrap – Ferrous (iron-containing) material that generally is re-melted and re-cast into new steel. Integrated steel mills use scrap for up to 25% of their basic oxygen furnace charge; electric-arc furnace based steel mills may use scrap for 100% of the furnace charge

SEN – Submerged entry nozzle, a ceramic pipe which protects the steel from exposure to air, in conjunction with casting

Sintering – A process that combines iron-bearing particles, once recovered from environmental control filters, into small pellets. Previously, these materials were too fine to withstand the air currents of the smelting process and were thrown away. The iron is now conserved because the chunks can be charged into the blast furnace

Skirt – Pipe around the blast furnace for the supply and allocation of hot blast air, also known as a bustle pipe

Slab furnace – Furnace for heating steel slabs to rolling temperatures

Slabs – The most common type of semi-finished steel. Traditional slabs can measure 150 to 400 mm thick (6 to 15.7") and up to 3,200 mm (126") wide, while the output of the recently developed "thin-slab" casters is approximately 40 to 70 mm (1.6 to 2.7 ") thick. Subsequent to casting, slabs are sent to the hot-strip mill or plate mill to be rolled into coiled sheet and plate products

Slag – Solution of mainly liquid oxides. Flux such as limestone may be added to foster the congregation of undesired elements into a slag. Because slag is lighter than iron, it will float on top of the pool, where it can be skimmed.

Smelting reduction process – Process for smelting and removing unwanted substances from, for example, metal raw materials

Special steel – Alloyed steel

Steckel mill – A four-high reversing rolling mill, the Steckel mill allows the rolling of a large slab by providing heated coil furnaces or boxes on both sides of the mill to store the increased length produced during rolling. These coil furnaces allow for additional heat retention and thermal consistency in the rolled piece, which in turn produces improved uniformity throughout the rolled product

Steel – Alloy of iron and carbon with a carbon content of less than 1.7%

Steel bath – The hot, molten steel in a container

Steel shuttle – Train system for transportation of steel slabs between Luleå, Borlänge and Oxelösund production facilities

Strand – The continuous cast slab within the continuous casting machine prior to cutting into individual slabs

Strength – Properties related to the ability of steel to oppose applied forces. Forms of strength include withstanding imposed loads without a permanent change in shape or structure and resistance to stretching

Structure – The steel's molecular form following different treatment methods; crystalline structure. May also refer to the size, shape, and arrangement of phases within the steel

Strip – Thin, flat steel that resembles hot-rolled sheet, but it is normally narrower (up to 300 mm, or 12" wide) and produced to more closely controlled thicknesses. Strip also may be cut from steel sheet by a slitting machine

Surface treatment – Cleaning, polishing or coating of surfaces; for example, through galvanization or organic coating

T

Temper Mill – A type of cold-rolling mill, usually a four-high, single stand mill, used to provide a relatively light cold rolling reduction to hot rolled, cold rolled, or coated flat steel products to improve flatness, minimize surface disturbances such as coil breaks, and to alter mechanical properties

Tempering – Heating to 200-500°C degrees in order to make steel tougher and less brittle

Tensile strength – Ability to withstand tensile stress. (See Strength)

Torpedo – Cylinder-shaped brick-lined railway car used for transporting hot, molten metal

Tundish – An intermediate container in the casting process to facilitate ladle change without disruption in the process

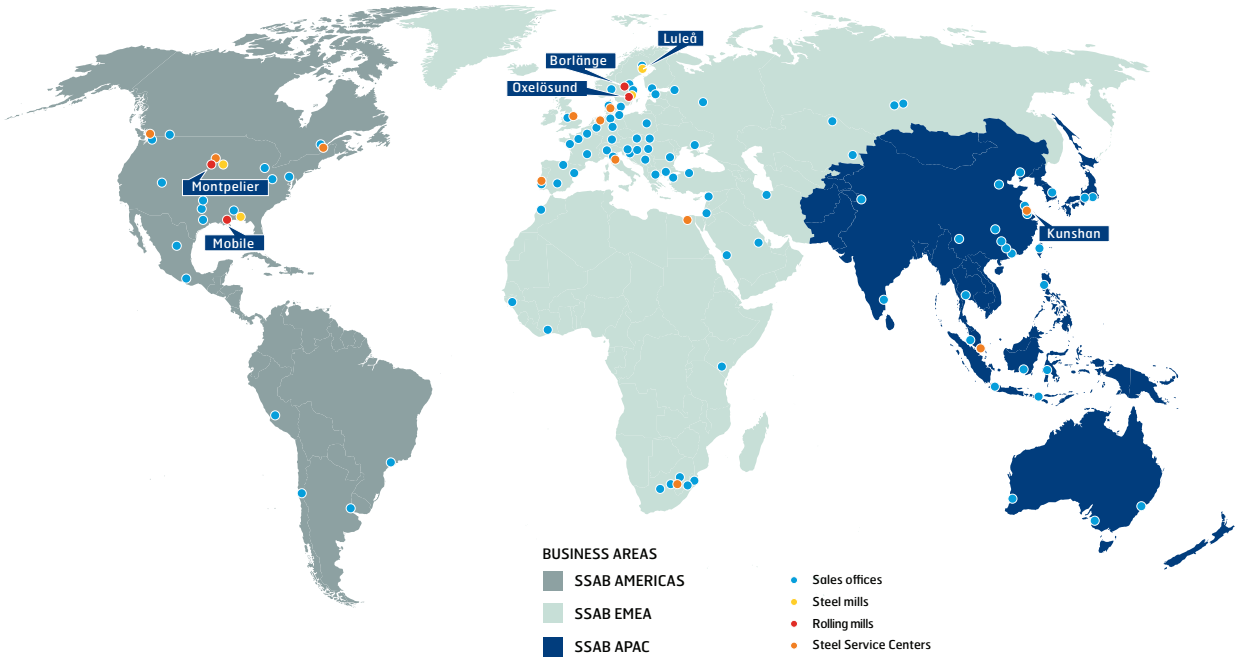
V

Vacuum Degassing – An advanced steel refining facility that removes oxygen, hydrogen and nitrogen under low pressures (in a vacuum) to produce high quality steel for demanding applications. Normally performed in the ladle, the removal of dissolved gases results in cleaner, higher quality, more pure steel (see Ladle Metallurgy)

W

Wear resistance – Ability to resist the erosion of material from the surface as a result of mechanical action, e.g. abrasion and friction

Addresses



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