

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 secure important competence in the future. Developing opportunities in a global and safe work environment are critical.

# SSAB's activities 2012

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### About this report

SSAB's Sustainability Report 2012 reflects the most important aspects of SSAB's activities from a sustainability perspective. The report covers events that occurred during the 2012 calendar year. Reported data has been compiled during the reporting period and covers all business areas and subsidiaries, unless otherwise stated. The environmental data refers mainly to the Swedish and North American 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.

# Systematic sustainability work

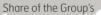
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A complete content index, in accordance with Global Reporting Initiative (GRI), is presented on pages 46–47, and SSAB has self-declared the reporting to be Application Level C. SSAB's Sustainability Report 2012 also constitutes Communication on Progress (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 steels. SSAB offers products developed in close cooperation with its customers to create a stronger, lighter and more sustainable world.









**EBITDA** 

sales



16%

registered number of employees

# Niche products

share of total shipments

Proposed dividend per share

Operating cash flow

2012

38%

SEK 1.00 2012 SEK 4,929m

Domex is a structural steel for transport solutions, and is aimed at the transportation industry.

Hardox is an abrasion-resistant steel for maximum payload, lifespan, and operational certainty.

Docol is a construction steel for lighter, safer solutions in the automotive industry, e.g. in the form of safety components.

Weldox is a steel for stronger, lighter structures and is suitable for e.g. cranes.

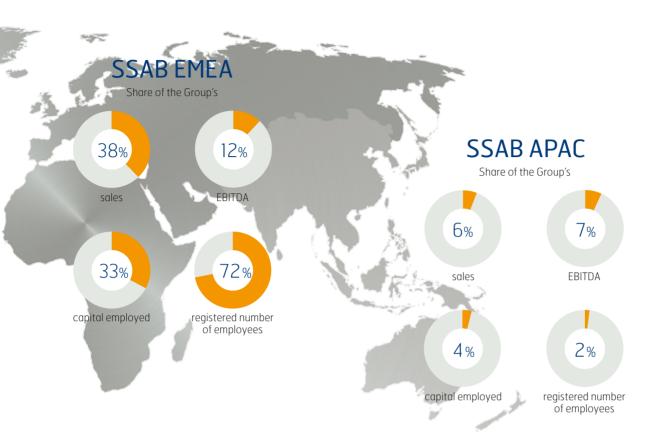
Prelag is a pre-painted steel which can be used for roofs and panels and is available in a wide range of colors.

Armox is a protection steel for personal safety.

# TOOLOX

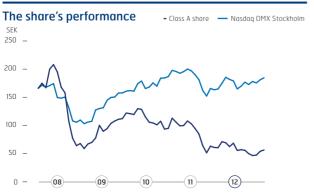
Toolox is a tempered pre-hardened tool and machine steel.

For more information about our brands and products see www.ssab.com

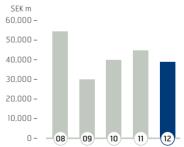


### 2012

- Sales of SEK 38,923 (44,640) million
- Operating profit/loss of SEK –96 (2,512) million
- Profit/loss after financial items of SEK –693 (1,998) million
- Earnings per share of SEK 0.05 (4.82)
- Operating cash flow of SEK 4,929 (2,821) million and cash flow from current operations of SEK 3,925 (2,200) million
- A dividend is proposed of SEK 1.00 (2.00) per share



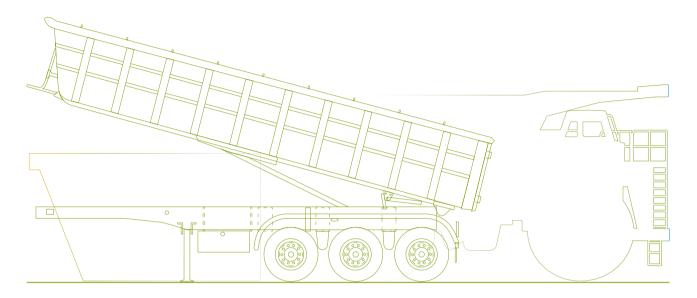




# Operating profit and margin



# The year in brief



SSAB's strategy focuses on high strength steels globally. We have a leading position in our domestic markets, North America and the Nordic region. Through development of new application and aftermarket services we cooperate with our customers. SSAB's goal is to be a leading steel producer in terms of profitability globally. Through the accomplished strategic investments in 2012, we have further strengthened our positions within high strength steels. We work continuously to be a high performing organization, with focus on a safe and stimulating workplace.



# Increased share of niche products

SSAB's high strength steels create an improved total economy for the customers.



# Focus on increased efficiency

Environmental work focused on short-term and long-term gains in terms of resources and the environment.



# Increased commitment

A Group employee survey reveals a positive trend, despite the fluctuations in the economy.

> p.10

> p.18

> p.22

SSAB SUSTAINABILITY REPORT 2012

# 2012 was a weak year for the steel industry, but with our focus on increased customer cooperation, product development and flexibility, we continue to build a strong and sustainable SSAB.

»Our customer cooperation

projects where we together

develop new ways of using steel,

processes, and new end products,

contribute to a stronger, lighter

and more sustainable world.«

new and simplified production

We translate our vision of "a stronger, lighter and more sustainable world" into actions every day. Our customer cooperation projects where we develop new ways of using steel, simplified production processes, and new end products, contribute to a stronger, lighter and more sustainable world.

Through the use of our high strength steels, excavator buckets and dumpers become more abrasion resistant and last longer. Truck beds can be made lighter, while passenger cars with side impact beams made of high strength steels become safer.

It is in this way that SSAB contributes to a more sustainable world, irrespective of how the global economy is developing.

During the past year we have updated our strategy. Just as previously, the strategy focuses on our high strength steels. In order to retain our leading position, we continuously develop new steel grades and new services. The ability to develop value added services through an expanded service offering is important. We develop maintenance

services within wear steels, while at the same time strengthening the cooperation with the customers. I would claim that SSAB's customer offering in the form of process development, design and product development is unique in the steel world.

We have a leading position in our domestic markets, North America and the Nordic region. We shall retain this position and at the same time increase our business in emerging markets. Our objective is that

high strength steels shall account for 50 percent of the shipments in 2015, with the addition that 35 percent of those shipments shall go to emerging markets.

In order to reach the strategic targets, we continue to develop our business and our employees. A safe, accident-free work environment is an important basis for SSAB's ability to be an attractive workplace. Our work method creates conditions for increased flexibility, which improve the quality in all respects.

SSAB is a member of UN´s Global Compact, thereby making clear the responsibility we assume as regards the environment, people and communities that are affected by our operations. This report constitutes a part of our communication about how we operate based on Global Compact principles. We will continue to support the UN Global Compact and its principles. Work is continuing on incorporating those principles into our strategy and ensuring that they become part of our culture and our day-to-day operations.

During the year, our strategic investment programs were realized. We have inaugurated the new quenching line in Mobile and now produce two of our most advanced grades of steel, Hardox and Weldox, in a plant which is likely the best in the US, and probably in the entire world. This, together with the production of thick plate in Oxelösund and the new quenching line in Borlänge, where we are producing thinner material, means that we offer the market a range of quenched and tempered steels, the breadth of which is unique in the world. Iron ore and coal are the most important input materials in the

operations in Sweden. This process unavoidably generates large emissions of carbon dioxide, despite the fact that from an international perspective SSAB's steel production is among the most efficient in minimizing emissions. Thus, it is worrying that the new regulations governing emission rights, which the EU is in the process of introducing, will probably mean that we will not receive an allocation corresponding to our production capacity. In the long term, this means that steel production may only increase in those countries where emissions are not regulated, and of course this will benefit neither the European steel industry nor the environment.

It is also concerning that the regulations governing shipping fuel in the Baltic Sea, North Sea and English Channel are now being sharpened compared with transportation on other seas. This means increased costs for Swedish industry, since there are currently no well-functioning alternative means of transport. It is not possible to transport by rail much greater volumes than we do today, and trans-

portation of steel by truck would be much more costly, both for the industry and the environment. Thus, it is important that the infrastructure will be developed so that we can transport our products in a safe and environmentally friendly manner.

It has been a challenging market to deal with during the year. At the beginning of the year, an efficiency program was introduced in the Swedish operations aimed at creating conditions for profitability even when we are

not producing at full capacity. Among other things, this involved a review of our production methods and a 10 percent reduction of positions among the white collar staff. During the latter part of the year, we also gave notice of a reduction of 450 positions mainly within production. The program also includes a review of what constitutes core operations, and which activities need not necessarily be carried out in-house. All in all, the entire program is to be completed during the first quarter of 2013. In addition, we have reached agreements with a large part of our employees in Sweden regarding reduced work hours and pay during a six-month period. The understanding for the situation demonstrated by our employees have been very valuable.

We probably cannot count on any particularly rapid recovery in demand, but we can ensure that we meet the challenges in the best possible manner. During the first half of 2012, SSAB was one of the most profitable steel companies in the world. We will regain that position. With our investments in place, our strategy for growth, and our skilled employees, I'm convinced that we will succeed. SSAB shall will be a winner in the steel world — also when times are tough.

Martin Lindqvist
President and CEO

Comments by the CEO SSAB SUSTAINABILITY REPORT 2012



SSAB SUSTAINABILITY REPORT 2012 Comments by the CEO

# A world of steel Drivers and challenges

Steel makes possible infrastructure, construction and transportation which move the society forward and contributes to economic and social development. At the same time, demand for efficient use of resources, efficiency and less impact on the environment increases. By applying a solution-oriented focus, it is possible to turn global challenges into opportunities.

By encouraging innovation and through close cooperation with its customers, SSAB and its high strength steels contribute to a more sustainable society. Environmental issues are global, and so are the application and needs among SSAB's customers and its customers' customers. The higher the use of high strength steels, the greater positive impact on the environment.





# Increased competition for competence

The industry as a whole is facing a challenge when it comes to securing important competence in the future. Surveys indicate that in the western world interest in studying natural sciences and engineering is in decline, and unless this trend is reversed there is a risk of competence shortages in the future. Consequently, competition is increasing to attract jobseekers possessing desired competence, and there are increased demands on employers to be able to offer an attractive workplace with developing opportunities.

All figures regarding global use of steel are derived from the World Steel Association, 2012

# Great potential in the transport sector

The world is dependent on transportation. People, products and goods around the world are being carried by various means of transport every day. Transportation accounts for 20 percent of total global primary energy use and approximately 13 percent of greenhouse gas emissions. Steel enables safer transportation through increased protection for passengers and freight. The use of high strength steel in transportation vehicles means that the weight and thereby fuel consumption can be reduced, which contributes to reduced emissions. New, innovative designs can further increase the efficiency of the vehicle. From a product life cycle perspective, there is potential to reduce passenger car greenhouse gas emissions by almost 70 percent. Steel is also crucial in the design of new, high-speed rail transport.

Transportation accounts for

20% of total global primary energy use

13% of greenhouse gas emissions



# Competition and carbon dioxide restrictions

The EU carbon dioxide emission rights trading system is becoming increasingly restrictive as regards the allocation of emission rights. At the same time, European steel companies are competing in the global market. A distortion of competition runs the risk of hampering European production. To achieve an efficient global change in carbon dioxide emissions requires that more countries introduce a corresponding system; but yet no global political agreements have been reached. Pressure is increasing on the US and Asia to introduce regulations. In 2012, Australia declared its intention to link its trading system with the European system, which is one step towards an increased international climate work.



Changes in the price of iron ore pellets, coal and scrap metal are affected 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 objective is to secure access to raw materials from reliable suppliers with a high level of responsibility for both people and the environment. The ability of companies to impose requirements and monitor conditions at their suppliers constitutes an important confidence issue. Stringent requirements regarding safe working conditions are imposed, particularly in respect of the raw materials industry, which is often associated with a risk prone work environment.



### **DEVELOPMENT AND GROWTH IN THE SOCIETY**

In recent years, China and other emerging markets have demonstrated incredibly rapid growth and a need to develop their infrastructures in a sustainable and maintainable manner. An increasing population requires safe and stable buildings in which to study, work and live. Global urbanization demonstrates that growth is taking place in metropolitan areas and ever greater numbers of people are living within smaller areas. The use of high strength steels in production instead of standard steels generates many advantages for both customers and the environment – fewer resources are used, and the structures are lighter, stronger and more durable. More than 50 percent of global steel production goes to construction.



# Resource efficiency and recycling

Steel is one of the most recycled construction materials in the world. When all sectors are considered, over 70 percent of steel is recycled globally. Efficient use of resources is an issue which has a bearing on both the economy and the environment. 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. For example, slag is processed into new products with various areas of use instead of being deposited in landfills, and energy-rich gases become electricity and district heating instead of being burnt off. The industry's objective is to minimize waste and to deposit in landfills as little waste as possible.

### CARBON DIOXIDE AND TECHNICAL DEVELOPMENT

The world steel industry accounts for almost 7 percent of the global carbon dioxide emissions. In Sweden, SSAB accounts for a large share of the country's total emissions. SSAB discharges on average 1.2 tonnes of carbon dioxide per tonne of produced steel, compared with the global average of 1.8 tonnes. 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. To achieve a more radical reduction in emissions both carbon dioxide capture and storage is required. Extensive research and development is taking place within these areas.



# Renewable energy is increasing

Structures for exploiting renewable energy would not have reached their current state of development without steel. New technologic innovations continue, with steel as an important part of the solution. Wind towers, solar power plants and wave power plants all require durable and strong structures in order to convert the forces of nature into clean energy and to distribute the energy to where it is needed.

SSAB SUSTAINABILITY REPORT 2012 Drivers and challenges

# Strategy for long-term value creation

SSAB's target is to be one of the most profitable steel companies in the world and thereby create a long-term presence in the business. Similarly to the entire steel industry, SSAB is affected by the macroeconomic climate and the severe fluctuations in economic activity of recent years. The Group's work is focused on achieving increased efficiency and greater flexibility in the organization. SSAB's strategic objectives are global leadership within high strength steels, a leading position in the domestic markets and the ability to offer leading value added services.

# **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**

### The 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

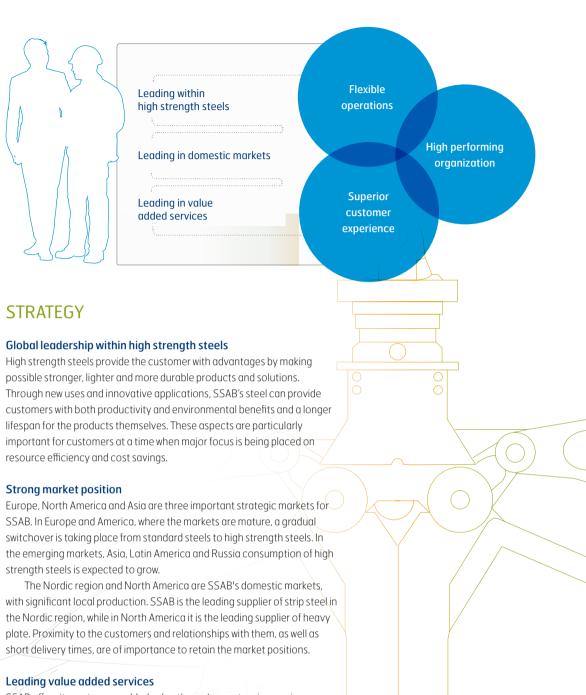
We are result-oriented. To achieve the highest performance we always proactively seek to be innovative and enhance our expertise further.

Nowadays, there is high awareness of sustainability issues. Attractive jobseekers, not least young people, often choose employers who have a strong sustainability agenda. Therefore, SSAB's sustainability work results not only in benefits for the environment and our customers, but also strongly contributes to our ability to retain and recruit the personnel we need.«

Sverker Martin-Löf, Chairman of SSAB, on SSAB's sustainability work in the report Sustainable Value Creation



Strategy and targets SSAB SUSTAINABILITY REPORT 2012



SSAB offers its customers added value through an extensive service offering connected to its products. For example, by strengthening the 'Wear services' offering within wear steels, cooperation between SSAB and the customer is enhanced.

SSAB SUSTAINABILITY REPORT 2012 Strategy and targets

# **TARGETS**

Targets for the niche products	Results for 2012
Niche products as a share of the Group's total shipments in 2015: 50%	In 2012, the share was 38% (37)
Shipments to Asia as a share of total niche product shipments in 2015: 20%	In 2012, the share was 10% (12)
Environmental targets	Development in 2012
Reduction in carbon dioxide emissions per tonne of produced steel by 2012 (base year 2008): 2%	Preliminary results show that the target has been achieved. However, the production rate in 2012 was uneven due to the weak economic growth.
Social responsibility targets	Development in 2012
Annual reduction in lost time injuries: at least 5%	In 2012, the efforts focused on systematic safety work have shown a positive trend in terms of the number of lost time injuries and accident frequency. On a Group level, there were 7.5 (9.2) lost time injuries per million worked hours.
Performance dialogues conducted with at least 90% of all employees each year	In 2012, 88% (96) of the employees had performance dialogues.





# **External undertakings**

SSAB is a signatory to the UN's Global Compact and supports its 10 principles within the areas human rights, labor standards, the environment and anti-corruption. Guidelines and policies are described on page 32 and on www.ssab.com.



The Environmental Council has produced proposals for new targets covering carbon dioxide, energy and depositing issues. The work of disseminating these proposals within the organization is beginning in 2013.«

Kim Kärsrud, Group Environmental Director, SSAB

Strategy and targets SSAB SUSTAINABILITY REPORT 2012

# Transparency and confidence

# Motto in dialogue with stakeholders

Openness is critical in creating confidence in the dialogue with various stakeholders. Through dialogue in the relationship with its stakeholders, SSAB obtains feedback about its business, identifies important issues, and has the opportunity to be proactive.

As investors, we appreciate the opportunity to have an impact on the inside of the business and the opportunity for dialogue with companies. At SSAB's plant in Borlänge, steel production takes place in processes which impose rigorous demands for safety awareness and constant improvements in the efficient use of resources in order to mitigate the impact on the environment. When we meet companies, the fact that the CEO and senior management make the connection between the sustainability work and profitability and revenues, from both risk and environmental perspectives, send an important signal.«

Pär Löfving, Senior Analyst Responsible investments, DnB



Based on its work within the environment area, social issues and corporate governance, SSAB is included in the OMX GES Sustainability Sweden Index and the OMX GES Sustainability

Sweden Ethical Index. The index is produced by the Stockholm Stock Exchange Nasdaq OMX in cooperation with the analyst firm GES Investment Services.

### Investor meeting in Borlänge focuses on sustainability

Shareholders and investors represent a group of stakeholders with a growing interest in sustainability issues and sustainability work. SSAB meets regularly with investors in order to discuss and answer to questions about its sustainability work. In the autumn, a visit in Borlänge was arranged for some twenty analysts. Sustainability issues dominated the agenda.

SSAB's CEO and colleagues discussed sustainability issues that have a clear connection to the business, such as customer benefits, environmental efficiency improvements and their economic outcome, safety work, logistics for achieving increased synergies and on-time deliveries, strategic competence development, business ethics, and the supplier chain.

# Acknowledgement of transparency

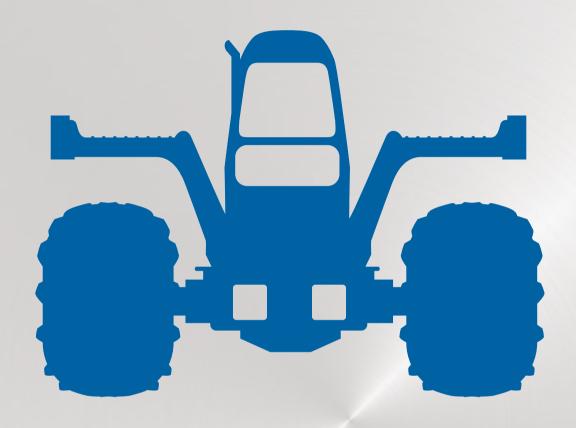
Analyses of SSAB's sustainability work have qualified the share to be included in a number of sustainability indices. Inclusion in such indices represents an acknowledgement of the work that SSAB is conducting and that its information is transparent. This makes the share attractive for investors who have particular preferences in terms of a company's risk management work and broader perspective.

### Dialogue with SSAB's stakeholders

StakeholderForumIssuesOwnerInvestor meetings for shareholders and analysts• Sustainability strategy • Economic development • Safety issues • Risks at suppliers • Climate issues		Issues	Read more on pages 6–8, 19–20, 25–26, 28, 44	
		<ul><li>Economic development</li><li>Safety issues</li><li>Risks at suppliers</li></ul>		
Employees	Performance dialogues, Employee surveys, information meetings	<ul> <li>Feedback regarding results and performance</li> <li>Planning of development opportunities</li> <li>Work environment and safety</li> <li>Strategic issues</li> </ul>	6–8, 23–27, 40–42	
Customers	Knowledge Service Center, Customer seminars and trade fairs, Swedish Steel Prize	<ul> <li>Profitability and environmental advantages with high strength steels</li> <li>Exchanges of knowledge</li> <li>On-time deliveries and quality</li> </ul>	11–14, 16, 34	
Community	Local consultation with residents, media, environmental groups and politicians	<ul> <li>Permit matters</li> <li>Impact on local communities</li> <li>Environmental impact</li> <li>Exchange of information</li> </ul>	19–20, 35–39, 45	
Public agencies and organizations	Industry organizations, research cooperation projects, consultation and negotiations in permit matters	<ul> <li>Emission trading rights and competition conditions</li> <li>Technical developments</li> <li>Reporting of environmental matters</li> </ul>	15,19–20,35–39	
Suppliers	Purchasing meetings, conferences, visits to suppliers	Contract questions concerning human rights and the environment     On-time deliveries and quality	16, 28, 44	

SSAB SUSTAINABILITY REPORT 2012 Stakeholders

# **Economic value creation**



# SSAB's offering

The strategic objective of increasing the share of high strength steels means delivering continued productivity and environmental benefits to the customers through stronger, lighter and more durable solutions. Through a clear strategy, SSAB creates new, innovative solutions based on the byproducts from steel production, thereby closing the eco-cycle.

# Swedish Steel Prize

For every winner of the Swedish Steel Prize, there are a large number of other contributions, all of which express SSAB's vision of a stronger, lighter and more sustainable world. The aim of the competition is to inspire solutions that contribute to improvements within different industries and areas of use.

# A COMPETITION WITH PEDIGREE

This year's winner of the Swedish Steel Prize was the 14th winner in the history of the competition. Since 1999, SSAB has awarded the prize to innovations which utilize the qualities of high strength steels in order to achieve important efficiency improvements — primarily in terms of productivity, costs, and the environment.

Each year, contributions are received from a number of different industries and many different countries. This reflects the great potential for solutions made of high strength steel, and the prestige that nomination in the competition carries with it. The winner is awarded SEK100,000, together with a trophy.

# THE ENVIRONMENT'S ROLE IN THE ASSESSMENT

All submitted contributions are assessed based on a number of established criteria which include applicability, profitability, environmental benefits, performance, and inventive steps. The advantages provided by the new design must result in such a reduced impact on the environment, longer product life, lower costs and strengthened competitiveness, both for the individual company and for the entire industry or society in general.

# Swedish Steel Prize-winners over the years

Shared vision of the opportunities offered by steel





# WINNERS OF THE SWEDISH STEEL PRIZE

# 2012

A-Ward Attachments Ltd.

By using high strength Hardox steel, the winner from New Zealand has developed a flexible system for compressing and packing scrap metal in containers which is of major importance for the recycling industry.

# 2011

Deere & Company

The US company
Deere & Company
(John Deere) won
with a harvester
which utilizes high
strength steels in
order to achieve
increased productivity and satisfy more
rigorous environmental requirements.

# 2010

Van Reenen Steel Ltd

Van Reenen Steel Ltd from South Africa, with its contribution in the form of a lighter and more durable platform for dumper trucks within the mining industry.

# 2009

Labrie Environmental Group, Inc.

The garbage truck manufacturer Labrie Environmental Group, from Canada, with a new vehicle model which can significantly increase the payload thanks to an optimized structure in high strength steels.

# 2008

Kuhn

The French company Kuhn was the winner with its lawn mower constructed of advanced high strength steels, which provides an improved operating economy as well as ergonomic and environmental benefits.

# 2007

Baryval Serviplem

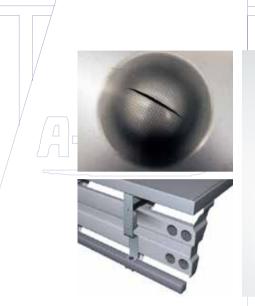
The Spanish company Baryval Serviplem's contribution in the form of a new semitrailer with concrete mixer drum, with a significant reduction in weight, generates productivity and environmental savings at construction sites.

# 2006

Fiat and Wagon Automotive

The Italian company
Fiat and the roleforming specialist
company Wagon
Automotive jointly
developed an upper
collision safety
beam which satisfies
the most stringent
collision safety
requirements while
at the same time
saving resources,
space and the
environment.

Swedish Steel Prize SSAB SUSTAINABILITY REPORT 2012







»We are pleased to announce our first winner from New Zealand.

A-Ward demonstrates the advantages of high strength steels with an innovative and well-planned solution. Productivity and service life have been improved significantly and their products contribute to a more sustainable society.«

K-G Ramström, chairman of the Swedish Steel Prize jury, and SSAB's Chief Technical Officer

# 2005

CMT

CMT from Sweden won with its containers which are characterized by low weight, high abrasion resistance, and good profitability for the customers.

# 2004

Trim Trends Co. LLC

The US company
Trim Trends' battery
holder creates
conditions for more
environmentally
efficient vehicles in
the form of hybrid
motors which require
large operating
batteries.

# 2003

Su-Dan Corporation and Superior Trailer Works

Both of the winners come from the US automotive industry. Superior Trailer Works' contribution was a new truck platform which provides improved transportation economy and a reduced impact on the environment. By choosing high strength steels, Su-Dan Corporation eliminated a complicated production stage.

# 2002

Jindo Corporation

The Korean company Jindo was awarded the prize for its steel container which weighs approximately the same as an aluminum container, but with a significantly lower production cost.

# 2001

Lear Corporation

Lear Corporation from Italy was rewarded for its rear seat design based on high strength steel which, despite strength and high performance, also reduced the weight by 25 percent compared with corresponding designs.

# 2000

Ameron
International B.V.

Ameron International from Holland, won with its tubular product for the petrochemical industry which can withstand very high pressures and creates benefits in terms of safety, cost, handling and assembly.

# 1999

Bromma Conquip AB

The Swedish company Bromma Conquip received the prize for its portbased lifting beam for containers, where dead-weight on some models has been reduced by up to 40 percent and lifting capacity increased by up to 80 percent.

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SSAB SUSTAINABILITY REPORT 2012 Swedish Steel Prize

# Stringent demands A reliable partner and supplier

### FIAT AND IKEA CHOOSE SSAB AS SUPPLIER

During the year, two of SSAB's customers carried out supplier audits with positive results. The ability to live up to rigorous demands in terms of quality, sound working conditions and environmental performance constitutes an important hallmark of quality, and is an increasingly decisive factor in the eyes of purchasing departments. At the beginning of the year, IKEA visited Borlänge in order to carry out an audit of SSAB's work within the areas of the environment, health, and social responsibility. The grade awarded was 'very good'.

Fiat carried out a similar supplier assessment during the autumn and, in its audit, awarded SSAB the highest grade. According to Fiat, SSAB's work with continoues improvements is world-class.



# Innovation through cooperation

Thanks to SSAB's skills and know-how regarding the use of applications, together with its customers SSAB is able to develop solutions which utilize the properties of high strength steels. Thus, the number of development projects carried out together with customers throughout the world represents a gauge of success. There was a 70 percent increase in the number of development projects in 2012.



SSAB's greatest competitive strength lies in its high quality steel products and its unique know-how regarding the properties of the steel. Value creation requires the Company to live up to its customers' demands for uncompromising integrity, sound working conditions, and a production which is as environmentally efficient as possible.

# **NEW SMART ROOFING SHEET, SHARED RESULT**

A new roofing sheet with environmental advantages was launched in 2012. Prelaq Green Coat is an example of how close cooperation with customers and others can create interesting solutions. The development is the result of a cooperation project with KTH (the Royal Institute of Technology in Stockholm), Akzo Nobel and Lantmännen. The main advantage is that the paint on the coated sheet to a large extent is comprised of components from renewable plant oils, in contrast to using fossil oils.

In Europe, 150,000 tonnes of paint are used annually for coating steel sheet, with the paint traditionally being produced with chemicals derived from fossil oils. The new product provides the sheet metal industry with an important competitive advantage in the market. Tests conducted over a number of years demonstrate that the paint is as durable as other coatings.

# NO CONFLICT MINERALS IN SSAB'S STEEL

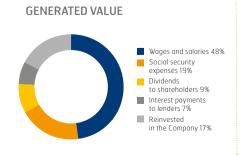
'Conflict minerals' is a term used for minerals from areas characterized by large-scale internal strife, where the mining of minerals risks contributing to, or financing, continued conflict and violation of human rights. This is a subject that has been discussed intensively at an international level, including at the UN. Minerals from the Congo (including gold, tin, tungsten, and tantalum) are examples of conflict minerals. In the US, the Securities and Exchange Commission (SEC) requires that public companies disclose whether they use conflict minerals in their products or production. SSAB does not use conflict minerals and, upon requests, provides customers with certificates affirming this.

# **DIRECT AND INDIRECT VALUE**

SSAB's operations and business create both direct and indirect economic value. In addition to direct value generated in the form of profits to the shareholders and wages and salaries to employees, SSAB is a part of the community's economic cycle. SSAB contributes to the local economies in those places where it operates through taxes and charges. The Company also contributes to the local economy through its purchasing and by contracting locally.

»Steel provides more than 2 million jobs directly and creates an additional 4 million jobs in related industries«

World Steel Association



SSAB as a partner and supplier SSAB SUSTAINABILITY REPORT 2012

# PFOCUS: EMISSION RIGHTS

# An economic control tool for climate work

The EU emission rights trading system utilizes market forces in order to achieve a reduction in carbon dioxide emissions and is a control tool for achieving climate goals. Since there is a price on emissions, there is an increased economic incentive to invest in measures that reduce emissions. The system provides an opportunity to contribute to improvements releated to emissions outside the EU, thereby reducing global emissions.

# New trading period

SSAB is covered by the EU's emissions rights trading system, and 2013 begins a new trading period which extends up to and including 2020. The EU is now decreasing the cap for greenhouse gas emissions compared with the previous trading period. The rate of emissions is such that the EU quarantees fulfillment of its target of achieving a 20 percent reduction in emissions in 2020, compared with 1990. In addition, the trading system covers new sectors, such as the aviation industry. Industries which operate in the global market and risk relocating production outside the EU in the event costs become too high, can obtain a free allocation of emission rights up to the best European performance level. The steel industry is one of those industries.

### Reduced emissions are rewarded

During some of the years the system has been in place, SSAB's operations have had lower emissions of greenhouse gases than the volume covered by the allocated emission rights. This is partly due to the fact that SSAB has invested in more efficient production processes, and is also a result of the Company not having produced at full capacity due to the global economic climate. Some of the emission rights that have not been used have been sold in the regulated market for trading in emission rights. No emission rights were sold in 2012.

### Global improvements

One aspect of the way in which the economic forces of the trading system work is that SSAB and other companies included in the system have the possibility to exchange allocated emission rights for so-called CER (Certified Emission Reduction) rights. These are emission rights that are linked to a voluntary emissions reduction project in a developing country and is conducted within the scope of project-based mechanisms provided for in the Kyoto protocol. Such projects are referred to as CDM (Clean

Development Mechanism) and are financed by various parties and audited by independent authorized public accountants who report to the UN.

The emission reduction certificates (CER rights) are issued by the UN based on what each project has actually generated in terms of emission reductions. The aim is to implement improvement projects which otherwise would not have taken place, thereby contributing to reduced emissions and more sustainable development globally.

SSAB is entitled, and has chosen, to substitute some of the emission rights submitted to the emissions register with CER rights. This means that SSAB has indirectly participated in, and financed, projects for reducing emissions in other countries. Since carbon dioxide is a global issue with a global impact, the measures are of importance for the environment wherever they are carried out. The trading system creates economic incentives for companies to make these undertakings.





SSAB SUSTAINABILITY REPORT 2012 Focus: Emission rights

# The environment and economy go hand-in-hand within logistics

SSAB's business depends on good communications and functioning logistics in order to ensure on-time deliveries. Sustainability in the society is based on good infrastructure. Thus, efficient and long-term transportation solutions — what SSAB refers to as "sustainable transportation" — constitute the basis for a well-functioning society. SSAB EMEA's logistics work is conducted through strategic plans and solutions and in dialogue with the business community and the politicians.

# Stable infrastructure is important for profitability

The railway plays a key role in the production and supply chains of SSAB and other large Swedish companies. For example, every day SSAB ships approximately 6,000 tonnes of steel by rail from Luleå to Borlänge. When the entire logistics chain functions it strengthens competitiveness. Conversely, disruptions have significant impact on competitiveness. Robust stretches and hubs are valued hundreds of millions SEK for SSAB. A stop in an important hub such as Malmö can have major consequences. Conversely, stability in the infrastructure is of great value.

Rail traffic disruptions are also costly from an environmental perspective. In order to deliver on time, companies are forced to use more flexible solutions involving means of transport with a greater impact on the environment, such as trucks. This example demonstrates how increased efficiency and environmental considerations are often two sides of the same coin. Resource-efficient solutions are often beneficial for the environment as well as being cost efficient.

# Acting together for change

Historically, disruptions in the rail traffic are primarily due to capacity, and maintenance related problems attributable to too little investments in the sector. Important freight lines are affected by bottlenecks. SSAB, together with other large Swedish companies (among other, through the Confederation of Swedish Enterprise's Swedish Shippers' Council), is acting to achieve a positive development. Focus is on the need for a long-term strategy for investments in infrastructure. This is important in order to achieve the overall aims of a transportation policy – a transportation supply structure for individuals and the business community throughout the country which is efficient from a macroeconomic perspective and sustainable in the long term.

The starting point for this work should be new, improved macroeconomic models which correctly reflect the benefit to society provided by freight transportation. It is important that political decisions take into account the bigger picture and safeguard Swedish competitiveness.

From an environmental perspective, investment in railway as a means of transport constitutes an important means for

achieving society's climate and environmental objectives, since more goods can be transported by rail, instead of by road.

### Strategic logistics efficiency work

SSAB works to achieve more efficient transportation where reliability and foreseeability play a key role. When evaluating logistics solutions, the main drivers are cost, the environment, and service level. The way in which these factors are interlinked is illustrated by SSAB's work on improved transportation corridors in Western Europe. By directing the traffic to important hubs in Europe, SSAB has created more efficient and reliable transportation, while at the same time achieving cost savings. The change has resulted in reduced transportation work, which is also a benefit from an environmental perspective.

SSAB has also worked together with suppliers of transportation services to exploit empty return journeys in order to ship freight. Here, too, political decisions are important in order to make accurate information available and to facilitate the development of such a system. SSAB is working to improve the load ratio of the vehicles, thereby contributing to fewer journeys, lower fuel consumption and, in turn, a reduced impact on the environment.



A well-functioning railway system is essential for both companies and society in general — it benefits growth and constitutes an important element of climate and energy policy in Sweden. SSAB has achieved good results within the logistics area. We are also working actively to achieve an improved infrastructure and improved political direction within the transportation sector which will provide opportunities for the future.«

Per Bondemark, Head of Logistics at SSAB EMEA

Focus: Logistics SSAB SUSTAINABILITY REPORT 2012

SSAB's distribution network in 2010.





The work on improved transportation corridors has changed the picture. The map shows SSAB's distribution network in 2012.

SSAB SUSTAINABILITY REPORT 2012 Focus: Logistics 17

# **The Environment**



# SSAB's environmental work

Environmental improvement work continued during the year. Work in 2012 focused on promoting environmental, energy and climate issues. Long-term focus is placed on efficiency improvements and innovations which reduce the environmental impact from production.

# Profitable environmental work

# Reduces use of resources and generates cost savings



# More scrap metal in Luleå

The establishment of Merox, a subsidiary which processes by-products from steel production, in Luleå has contributed to the blast furnace being able to use scrap metal as a complement to iron ore pellets, also during the winter. Previously, the piles of scrap metal attracted moisture and froze during the winter. Merox has coordinated work related to material flows in temperatures down to  $-35\,^{\circ}$ C. In addition, in 2012, briquettes produced by Merox from by-products from Oxelösund replaced parts of the iron ore as a raw material in Luleå. Savings of costs and resources continued with focus on identifying an optimal mix of scrap metal, LD slag and briquettes.



### MOBILE AWARDED GREEN PRIZE

The US industry organization, the American Steel Manufacturers Association (SMA), awarded SSAB in Mobile the 2012 Achievement in Environmental Stewardship and Recycling Award. SMA recognizes in particular SSAB's extensive recycling program and a number of other projects, such as waste minimization, lime recycling, and energy efficiency improvements. The award is part of SMA's efforts to highlight the importance of environmental stewardship in the steel industry.

Used car tires substitutes coal in the electric arc furnace in Mobile.

Environmental work during the year focused on efforts which can generate gains in terms of resources and the environment in both the shorter and longer term. Several investments and projects carried out in previous years are now showing clear results.

# ALLOCATION OF EMISSION RIGHTS 2013-2020

SSAB has been notified by the Swedish Environmental Protection Agency regarding a preliminary allocation of emission rights which corresponds to approximately 75 percent of the allocation in the preceding period. The proposal by the Swedish Environmental Protection Agency must be approved by the EU Commission in order to enter into force.

# China utilizes gas

In Kunshan, SSAB APAC has installed regenerative thermal oxidation (RTO) equipment which handles gases and waste heat from the painting line. The gases are recycled through the use, in preheaters and a drying oven, of the heat which is generated when the gases are burned. The investment represents a focus on recycling within SSAB APAC. An internal environmental organization is also under development.

# RESIDUAL HEAT BECOMES DISTRICT HEATING

At the end of 2012, a new energy recycling plant was opened in Finspång. Through the use of the flue gases from the organic coating line, 1,500 single-family homes in Finspång can be provided with district heating (equivalent to 10 MW). The municipal company Finspångs Tekniska Verk defrayed the cost of, and owns, the facility which delivers energy in the district heating network.



# Heating stoves generate double gain

At the beginning of 2012, SSAB was able to observe the full effect of the investment in heating stoves at the smaller blast furnace in Oxelösund. The gains are significant from both an environmental and economic perspective. The savings were calculated to SEK 75–120 million per year, but overall the savings are larger. The heating stoves provide a more even and stable operation of the blast furnace, which is more efficient and reduces the impact on the environment. The stoves make the hot blast air which is injected into the blast furnace even hotter, and consequently less injection coal and coke per tonne of produced iron are required in the hot metal process. This reduces carbon dioxide emissions.

SSAB SUSTAINABILITY REPORT 2012 Profitable environmental work



# Baltic Sea carbon dioxide capture and storage project

In 2012, SSAB decided to participate in a CCS (Carbon dioxide Capture and Storage) project in the Baltic Sea region. The project, BASTOR 2, is expected to end in 2014. The project involves studying whether carbon dioxide can be stored in the deep sandstone formations that are found beneath the bed of the Baltic Sea. The project takes a holistic approach and will describe consequences from both environmental and societal perspectives, and also legal aspects. In addition, possible infrastructure requirements for the transportation of carbon dioxide will be studied. SSAB, together with a number of other Swedish industrial companies, participates in the project, which is supported by the Swedish Energy Agency and Global CCS Institute.

### **ULCOS-BF AND HISARNA**

SSAB participates in two European cooperation projects within ULCOS, both of which are aimed at achieving a 50 percent reduction in carbon dioxide emissions generated in conjunction with steel production. One of the projects, called ULCOS-BF, involves an entirely new type of blast furnace in which carbon dioxide can be captured for storage. The preparations for converting one of ArcelorMittal's blast furnaces in France into a demonstration plant have proceeded in accordance with the plan to bring the plant into operation before the end of 2015. However, in the autumn of 2012, ArcelorMittal announced that it did not intend to start the furnace. SSAB and other project participants are studying the possibilities for continuing with the project. The second project, called HIsarna involves an entirely new type of process for producing hot metal, is being conducted on a pilot scale. During the year, a number of tests were carried out at the facility, which is located at Tata Steel's steelworks in IJmuiden in the Netherlands.



# **VANADIUM PROJECT TOGETHER WITH MISTRA**

During the year, the eight-year long Steel Eco-Cycle project, which was partially financed by Mistra, came to its conclusion. In one of the sub-projects, SSAB together with LKAB and Rautaruukki supported research on vanadium, in a project managed by Swerea Memos. The research covers from basic research to industrial trials and the impact of vanadium on the environment. Vanadium is present in the iron ore which SSAB uses, and it has been a challenge to find ways to utilize the vanadium, which is a useful alloying agent for the steel industry. The vanadium normally ends up in steel slag, and thus the possibilities to use the slag are limited. The research has resulted in a new method for the production of a commercial vanadium product, and this can now be implemented incrementally in SSAB's processes.

### PERMIT MATTERS AND DIALOGUE WITH GOVERNMENT AGENCIES

As part of the EU's Industrial Emissions Directive (IED), the so-called BREF document (BAT Reference Documents) for the steel industry was translated during the year. It describes what are considered to be the best available techniques (BAT) in the various process stages in the production of steel. One important point is that the emission values which can be achieved when using best available techniques will become binding values, equal to conditions, in each steel company's permit to conduct operations. Commencing 2014, the IED will apply to operations in Sweden that are subject to a permit requirement.

SSAB will partially finance the taking of test samples to investigate any contamination around the Dannemora mine, where SSAB has conducted operations in the past.

SSAB in Oxelösund has conducted extensive studies into emissions into the air and water, energy efficiency and noise in the immediate surroundings. These studies were submitted to the Land and Environmental Court in the form of 12 trial period studies. SSAB in Luleå has carried out a number of studies into emissions of, among other, dust and sulphur, which have been reported to the same authority. Decisions are expected in 2013.

SSAB Americas continues to engage in dialogue with local and federal authorities, both directly and through industry associations, to ensure they recognize the operational impact of proposed environmental legislation and changes to environmental regulations.

# CONTINUOUS IMPROVEMENTS IN SSAB AMERICAS

The environmental managers of Mobile and Montpelier are participating in cross-functional teams of people from across the organizations, to identify potential efficiency measures, including waste minimization and recycling opportunities, as part of an effort to reduce operational costs in the steel works.

In Montpelier, a new baghouse for the melt shop was put into operation. Having this additional baghouse capacity in place is beneficial not only from an operational standpoint, but also from a safety and environmental aspect. The new baghouse improves the working conditions for the melt shop significantly by evacuating larger volumes of particulates generated during the melting and refining of steel scrap in the electric arc furnaces.



Read more about the systematic environmental work and compiled figures for the year in the section on pages 35–39

Profitable environmental work SSAB SUSTAINABILITY REPORT 2012

# PFOCUS: BALTIC SEA SULPHUR DIRECTIVE

# New sulphur directive imposes stricter requirements

The new sulphur directive, with its stringent maritime fuel requirements regarding the Baltic Sea, North Sea and English Channel, is intended to strengthen protection of the sensitive maritime environment. At the same time, it will have consequences on the competitiveness of, among others, many Swedish companies. Part of the criticism is that the directive imposes differing conditions for the various seas within the EU.





### Already strongly protected

The EU's sulphur directive, which impacts on SSAB's maritime transport, is a decision which has proven to be problematic. Critics believe that the marine environment in the Baltic Sea is already protected through the current requirements regarding the sulphur content of shipping fuel. The current requirement of 1.0 weight percent can be compared with global limits of 3.5 percent for 2012–2020.

The new sulphur directive requires that the sulphur content in the fuel of vessels plying the Baltic Sea, North Sea and English Channel be reduced to 0.1 percent in 2015. On the other hand, outside this specially protected area, a reduction to only 0.5 percent is required, and this will not enter into force until 2020.

This means that players within the EU's maritime areas will be competing on unequal terms, which could be considered to contradict the EU's fundamental principle of free competition in the internal market.

# Total change-over in the long term

The background to the directive lies in a decision from the International Maritime Organization (IMO) regarding sulphur dioxide restrictions in maritime transport. In the long-term, the similar restrictions will apply to all seas, but implementation will take place at different speeds. The waters around the coast of North America are subject to similar requirements regarding low sulphur levels in marine fuel as apply in the Baltic sea.

### Protection or hindrance?

In the short-term, the directive risks leading to an imbalance between players in the European market. In the long-term, its impact on the environment may be more negative than positive since, in order to avoid becoming uncompetitive, for economic reasons the industry might be forced to use of road transport more than maritime transport.

In a report from 2009, the Swedish Maritime Administration calculates that the switchover to marine fuel in accordance with the directive will result in increased costs of SEK 13–28 billion in respect of retained traffic. The same report assesses the environmental benefit of the decision as equivalent to approximately SEK 7 billion.

# Dialogue and cooperation

Individual enterprises or companies which are disproportionately disadvantaged by the new rules have the possibility to request an exemption. A number of countries, such as France and the UK, have already sought exemptions.

SSAB is cooperating with the rest of Europe on these issues, among other things through participation in networks such as the European Shippers Council and by supporting initiatives such as the Trans European Transport Network (TEN-T), which is aimed at linking together transportation networks within the EU.

SSAB SUSTAINABILITY REPORT 2012 Focus: Baltic Sea sulphur directive

# **Social responsibility**



# People and the community

The year has involved structural changes at SSAB and continued work to achieve higher flexibility in the organization. The Voice employee survey, covering the entire Group, demonstrates that the long-term work is generating results.

# High performing organization With a focus on a safe and stimulating workplace

### **VOICE '12 REVEALS CONTINUED POSITIVE TREND**

During the year, SSAB conducted the Voice '12 employee survey across the entire Group. This is the third time since 2008 that a full-scale Voice survey has been carried out. The survey is intended for all employees. Voice constitutes an important tool for managers at all levels with respect to continued improvement work and development of leadership. This year's survey was conducted in 12 languages and the 86 percent response rate was the highest ever.

Results from Voice have shown a positive trend, despite fluctuations in the economic climate and the internal measures taken to reduce costs. The Employee Satisfaction Index (ESI), a gauge of how satisfied employees are with SSAB as an employer, increased from 84 percent in 2010 to 89 percent in 2012. One of the strategic objectives of the work on achieving a high performing organization is to achieve an ESI of more than 90 percent by 2015 at the latest. One explanation for the positive trend lies in the improvement work which has been carried out since the last Voice survey in 2010.

Employees in all business areas are also demonstrating increased commitment, expressed as energy level and clarity with respect to their own goals and the Company's goals.





One of the cornerstones in SSAB's strategy is a high performing organization. This involves long-term work on developing and strengthening the performance culture, zero tolerance as regards accidents, and continuing to be an attractive knowledge company. Developing employees and creating exciting career opportunities are important priorities.

# New network for female managers

Together with nine companies in Sweden, SSAB participates in a diversity initiative called Battle of the Numbers, which is aimed at increasing the number of women who hold senior corporate management positions. This is a way of contributing to achieving, in the long-term, greater equality in the sourcing of managers, increased profitability and competitiveness. The companies operate in different industries and represent in total 570,000 employees. Ten future or current female managers from each of the participating companies will act as internal consultants and be included in a network of 100 women. Their task is to produce proposals as to the specific work that each of their companies can do to achieve increased diversity, taking into consideration career paths and work life balance. Proposals are to be presented to each relevant Group management.

Within SSAB, in 2012 women accounted for 18 percent of the managers, and 23 percent of the managerial candidates.



SSAB SUSTAINABILITY REPORT 2012 High performing organization



### INCREASED STRATEGIC FOCUS

During the year, systematic work was initiated to identify future competence requirements based on strategic initiatives. The aim is to identify, in a structured manner, where critical competence exists in the company and where it will be needed in the future. In an initial phase, SSAB focuses on a number of critical competence areas in order to establish the methods and way of working in mapping competences against demand.

The successful implementation of the global capital expenditure projects for increased high strength steel production capacity is an acknowledgement of the Group's ongoing work with competence development and safety. Exchange of competences within the Group together with a strong focus on safety have been crucial factors behind the efficient implementation of SSAB's major projects in 2012 — the quenching line in i Mobile, the quenching line in Borlänge, the new finishing line in Kunshan, and increased capacity in Oxelösund.

# ORGANIZATION AND FLEXIBILITY IN SWEDEN

SSAB works to reduce costs and create higher flexibility in the organization, in order to adapt operations to the prevailing economic climate.

During the spring, a review of the organization and white collar staffing was initiated, resulting in a reduction in the number of positions. Towards the end of 2012, a program was introduced involving a reduction of work hours and pay for employees in the Swedish operations. The program extends for six months and covers approximately 70 percent of all employees in Sweden.

In addition to the reduction of positions among the white collar staff, in October 2012 a notice of a reduction of 450 positions, mainly within production, was given. The notice of redundancy covers 200 employees in Borlänge, 150 in Oxelösund and 100 in Luleå. SSAB is cooperating with the Trygghetsrådet outplacement service in order to support those employees covered by the redundancy in finding new employment.



# Important starting point for e-learning



Through graphics and clear language in an e-learning course, SSAB's employees are educated and trained regarding the Code of Business Ethics.

SSAB has a comprehensive approach to the issue of training and education within the Group and, during the year, established a global platform for delivering and administering e-learning. At the same time, the possibilities to offer ever more training internally in the form of e-learning are under review. In the long-term, this might result in e-learning modules for the mandatory training stages in the production process, and also for further training within specialist areas.

During 2012, SSAB worked on two important e-learning training courses. SSAB's sales staff will be offered supplementary training about products through a module which is planned to be launched at the beginning of 2013. The other training course, which relates to business ethics, was

introduced in the autumn of 2012. The training covers the entire Group and is focused on SSAB's Code of Business Ethics and ethical approach, Instructions regarding the prohibition of bribery and the Whistleblower reporting routine. The training is available in three languages – Swedish, English and Chinese. The purport of the Company's guidelines is explained through the use of graphics and in clear, simple language. Employees conducting the training are presented with a number of ethical dilemmas in which SSAB's guidelines serve as guidance. At the end of 2012, more than 20 percent of employees had undergone the training course. The objective is that, in 2013, 75 percent of all employees will have taken the course.

High performing organization SSAB SUSTAINABILITY REPORT 2012

# Hosting international safety conference

In spring 2012, SSAB was honored to host the annual safety conference for member companies of World Steel Association. During three days in Stockholm delegates from 27 companies from across the world met and shared experiences from safety work, exchanging advice and best-practice. This illustrates the importance of, and commitment to, workplace safety in the steel industry. Ahead of the conference, members were invited to submit their programs of safety excellence that embody the World Steel Association's safety principles, for instance on how to prevent lost time injury. During the conference outstanding achievements were recognized.



# SSAB – A POSITIVE EXAMPLE IN THE SWEDISH DEBATE

During 2012, SSAB participated in the Swedish debate concerning work environment issues in the steel industry as a whole. SSAB was invited to the Almedalen week (an important forum in Swedish politics) to talk about safety work, with a focus on changes in attitudes and the importance of systematic surveying of accidents and risks. The seminar during politicians' week in Almedalen was arranged by AFA Försäkring, which has developed the MIA reporting system together with the steel and metal industry.

### CONTRACTOR REPORTING OF ACCIDENTS AND NEAR ACCIDENTS

In SSAB Americas every contractor that is engaged for business or any contractor that wishes to be considered for business must register in the purchase system. Since 2012, it is compulsory to complete a questionnaire regarding the contractor's safety preparedness, documentation that testifies to their safety programs being on par with SSAB Americas' program and requirements, and finally to provide a historic safety track record.

As from 2012, SSAB EMEA's 10 largest contractors are required to report in the same reporting system as SSAB. A pilot project has been started in Borlänge. The contractors must report risk observations, accidents and near accidents, and the results are analyzed by the local work environment committee for contractors. The aim is to increase safety in the workplace for both contractor employees and SSAB employees.

In Luleå, SSAB has also created a work environment forum for contractors. It provides the possibility for collaboration and dialogue in jointly identifying solutions to safety challenges. The forum serves as a complement to the webbased safety training.



SSAB SUSTAINABILITY REPORT 2012 High performing organization

### SAFETY PLAN IN PLACE IN CHINA

In SSAB APAC, safety work has been a priority from the start. A safety committee meets quarterly and the safety plan for 2012 focused on implementing policies for occupational health and safety, and to develop guidelines to support employees. As part of the systematic work SSAB has identified a number of improvement areas highlighted in so-called safety messages. There are also weekly "safety walks" when the area supervisors walk the workshop area to review safety, and each month an employee is recognized as a "safety star".

In addition, SSAB held various safety training sessions, including firefighting and first aid. The safety work will be subject to third party assessment.

Another focus in 2012 has been on safety training for contractors in APAC, and there is a contractor safety hand book to inform about SSAB standards.





### SAFETY AWARD TO SSAB AMERICAS

The Steel Manufacturers Association (SMA) in the US presented SSAB in Mobile with its most prestigious safety award, the Don Daily SMA Achievement in Safety, for 2012. SSAB in Mobile was recognized for efforts related to contractor safety, program implementation, training, and continuous improvement. The award is a reward to companies that emphasize safety and move the EAF steel industry forward in its safety stewardship.

# Work environment management system in SSAB EMEA

During the year, work was concluded on implementation and certification of the Swedish plants in accordance with OHSAS 18001, work environment management system.

All Swedish plants are now certified. The work has contributed to further strengthening procedures for safer work methods, creating clear instructions, and safer workplaces.

During 2012, SSAB EMEA conducted safety audits of all major operations outside Sweden; in Poland, the Netherlands, the UK, Italy and South Africa. The aim was to ascertain the progress of safety work at each center and to exchange experiences. One example from the South African operations is "Toolbox talks", in which specific situations or issues are discussed at regular gatherings at the workplace. This can mean, for example, that routines concerning fall protection or personal safety equipment are discussed in groups. During the year, the plant in Johannesburg, South Africa also became OHSAS 18001 certified.

»Why zero vision? We are convinced that successful safety work promotes long-term productivity.« Martin Lindqvist, President and CEO

Read more about our work with employees and competence in the section on pages 40–43.

High performing organization SSAB SUSTAINABILITY REPORT 2012

# More preventive health care

As a cost saving measure within SSAB EMEA, most employees in Sweden agreed to a temporary reduction of work hours and pay at the end of 2012. At the same time, SSAB is investing resources in preventive health care and offers a number of different activities in which employees can participate during part of their time off work. The good health of its employees is of strategic importance for SSAB.

# The reduced work hours and pay program

The offer, which was made to full-time employees, was to accept a reduction of work hours to 80 percent of a full-time position and to receive 90 percent of the pay. The program runs from December 2012 up to no longer than the middle of June 2013, and represents an important cost saving measure. In connection with the program, SSAB has offered the employees a voluntary preventive health care program where it is possible to devote four hours per week to various activities. The idea is to incentivize more employees to take part in physical training and a more active, healthy lifestyle.

# Large range of activities

At SSAB's production plants in Sweden, a large range of activities is being offered in order to encourage participation in the

preventive health care program. The range is varied and includes gym training as well as riding, skiing, golf, and countryside walks.

"Day-to-day physical exercise is important when it involves activating the body. It's a question of doing things which create well-being and provide strength and energy. Since the matter is highly individual, it's even more pleasing that we're able to offer this range of activities. The goal is to the reach out also to those people who have not trained or exercised previously," says Kerstin Hammarlund, who is a rehabilitation coordinator at Oxelösund and responsible for the preventive healthcare part of the reduced work hours program at the plant.

As an example, Korpen in Oxelösund has launched a challenge called the "Oxelösund Classic", which starts in March 2013. Each month, the challenge will involve some activity in the form of a competition. In order

to qualify for the competition, the employees must participate in at least four activities. The winner will be announced in October.

# Preventive health care – a strength in recruitment

SSAB has a long tradition of engaging in preventive health care work, and it is natural to utilize this possibility to stimulate additional activities among employees which promote good health.

"Our preventive health care work has been pointed out as a distinguishing feature in our recruitment work for the past several years. Potential employees view it positive, and it's something that those of us at SSAB have felt pride in. The fact that the company is now strengthening the program during a period of reduced work hours sends a signal that it is important," says Kerstin Hammarlund.





SSAB SUSTAINABILITY REPORT 2012 Focus: Work environment and health

# Site visits in Australia

SSAB regularly visits important suppliers of raw materials around the world. During the spring of 2012, SSAB EMEA's buyers with technical responsibility for purchases of coal and coke visited, among others, two Australian coal suppliers in order to inspect their plants and production, and to conduct quality controls. The environment and safety were important issues at these visits.

### Part of the routine

Regular monitoring of important suppliers constitutes a prerequisite for being able to conduct product quality controls. It also provides an opportunity to monitor other important issues connected to the processes and operations. One of the Australian coal producers has been a supplier to SSAB for several years, and their environmental and safety work, and relations with the local community, are well documented. During the course of the visit, the company presented its overall sustainability work, as well as work focused on the relevant mining operations.

"It's almost self-evident that we receive this type of information nowadays when we visit suppliers whose operations have a major impact on the environment or are conducted in a risk prone work environment. This is something that has changed in recent years and we believe that it reflects the fact that the suppliers have experienced increased pressure from us, the buyers, and also that it is obvious for them to do so if they wish their business to enjoy the confidence of public authorities, employees and local communities," says Katarina Pein, one of SSAB's

technical experts with responsibility for coal and coke purchases at SSAB EMEA.

### A new supplier

One of the coal producers visited in Australia is a first-time supplier to SSAB, with its first delivery having been made in 2012. Before entering into any collaboration, SSAB visits the facility and the actual mine where the raw material comes from.

The agreement was also preceded by checking against the risk assessment which has been made by SSAB, with consideration being given, among other factors, to human rights, working conditions, and corruption. SSAB has had long experience with other suppliers from Australia and is familiar with conditions and regulations in the country. In addition, the supplier has completed a self-assessment form regarding, among other, its environmental and social responsibility work.

# The environment – an obvious issue

The primary reason for the visit to the new supplier was to conduct an initial inspection of all parts of the operations from a technical and quality perspective, with observations

also being made regarding social aspects and environmental aspects of the operations.

"The open pit mine we visited is located in a barren area with limited development. Coal mining has a large impact on the environment, but consequently is also strictly regulated; the environmental regulation is at least as extensive as in Sweden. Work is carried out regularly to restore environments affected by the mining, and this has actually resulted in a more varied landscape and richer vegetation compared with the original environment", says Dan Hedkvist who, together with Katarina Pein, is one of the buyers with technical responsibility for coal and coke purchases within SSAB EMEA.

"We inspect the supplier's entire production chain in order to monitor technology and quality. In this case, it also involved visiting their port and coal terminal on the coast. The surrounding environment there is more sensitive, with rainforest and coral reefs. Here, too, we were favourably impressed by the high standard of the company's environmental and safety work."

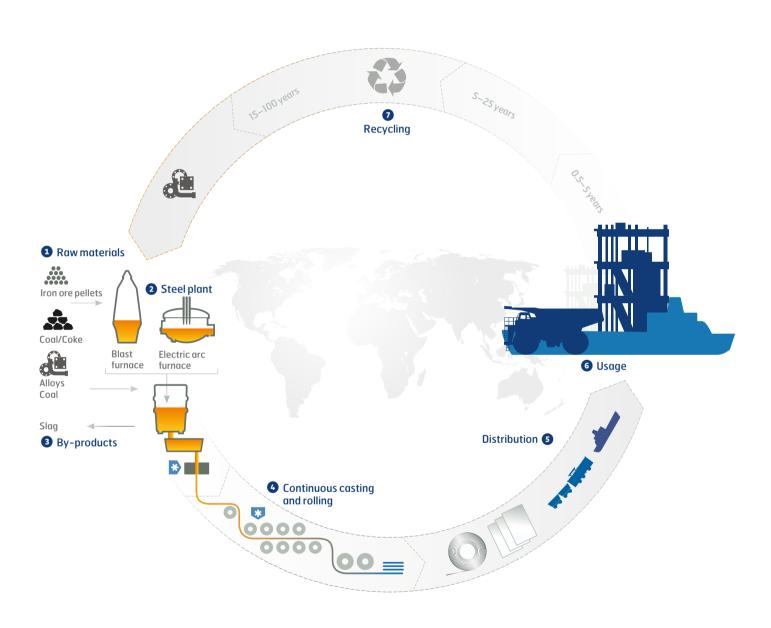


# Sustainability in SSAB



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# SSAB in a sustainable world



SSAB in a sustainable world SSAB SUSTAINABILITY REPORT 2012

### Raw materials

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

Through the use of high strength steels, customers are able to produce products which use less material, are more durable, stronger and lighter than

products made of standard steels.
This has major advantages for both the customers and the environment.

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 leading to the use of high strength steels. The attainment of the same goals using fewer resources constitutes a prerequisite for sustainable growth. SSAB's strategy unites economic growth with sustainable development.

# 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 secured from suppliers in Australia and 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 steelworks

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. The impact on the environment can be mitigated by constantly improving and increasing the efficiency of the various stages of the steel production. Within the steel industry, there are a number of cooperation projects aimed at reducing the impact on the environment and climate from the production processes. 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 gives 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 and rolling

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 endproducts are shipped by railway and by 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 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. Certain amounts of coal and natural gas are used in the production process, but electricity is mainly used for melting 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.

SSAB SUSTAINABILITY REPORT 2012 SSAB in a sustainable world

# Policies and guidelines

SSAB has adopted an Environmental and Sustainability Policy. The Policy establishes the most important ambitions for SSAB's sustainability work and 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 on how SSAB is to act vis-à-vis stakeholders and in the market.

### **Environmental and Sustainability Policy**

SSAB has adopted an Environmental and Sustainability Policy in order to support the day-to-day work in the organization. The Policy essentially entails the following:

- SSAB shall continue to develop products and services in cooperation with customers, so as to actively contribute to 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 provides a safe and fulfilling work environment;
- Transparency and openness are sought after.

### **Code of Business Ethics**

SSAB's Code of Business Ethics lays down quidelines 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 quidance 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

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

# Risk awareness and systematic work

Management systems and action plans ensure that the Group carries out its work on

critical sustainability issues in a systematic way. 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 takes 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.

Environmental risks and work environment risks are covered by SSAB's internal risk controls and internal audits. Insurable risks within the scope of SSAB's property and liability insurance 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.

# Whistleblower

A whistleblower function for the entire Group allows all employees to report serious irregularities and violations of SSAB's various policies.



Policies and guidelines SSAB SUSTAINABILITY REPORT 2012

# Governance

SSAB's organization is characterized by a decentralized work method in which responsibilities and powers are, to a large degree, delegated to the respective business areas and subsidiaries. SSAB is listed on Nasdaq OMX Stockholm and complies with its Rule Book for Issuers and applies the Swedish Code on Corporate Governance (the "Corporate Code).

#### **General meeting**

The General Meeting is the Company's highest decision-making body; it is where shareholder influence in the Company is exercised.

#### The board's responsibilities

The overall task of the Board of Directors is to manage the Company's affairs on behalf of the shareholders in the best possible manner. The Board of Directors shall regularly assess the Group's financial position and evaluate the operational management. The Board of Directors decides, among other things, on questions concerning the Group's strategic focus and organization, and decides on important capital expenditures (exceeding SEK 50 million).

Each year, the Board shall prepare proposals for guidelines regarding determination of pay and other compensation for the

President and other members of the Company's senior management, to be decided upon at the Annual General Meeting.

THE BOARD'S RULES OF PROCEDURE

Each year, the Board adopts rules of procedure including instructions to the President which, among other things, govern the allocation of work between the Board and the President

The rules of procedure also regulate the manner in which Board work is allocated amona the directors, the frequency of Board meetings, and the allocation of work among Board committees. The rules of procedure state that there shall be a compensation committee and an audit committee. Prior to each Board meeting, the directors receive a written agenda and full documentation to serve as a basis for decisions. At each Board meeting, a review is conducted regarding the current state of the business, the Group's results and financial position, and prospects. Other issues addressed include competition and the market situation. The Board also regularly monitors the health and safety work, including the Group's accident statistics.

#### CHAIRMAN OF THE BOARD

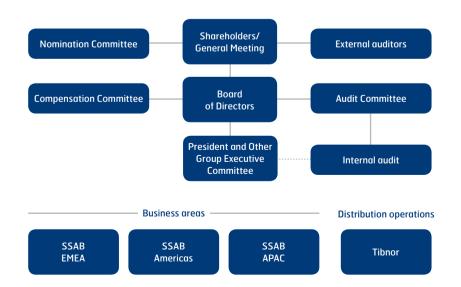
The Chairman of the Board of Directors presides over the Board's work, represents

the Company on ownership issues, and is responsible for the evaluation of the work of the Board. In addition, the Chairman is responsible for regular contacts with the President and for ensuring that the Board of Directors performs it duties.

#### COMPOSITION OF THE BOARD

According to the by-laws, the Board shall consist of no fewer than five and no more than ten directors elected by the General Meeting. The Board is quorate when more than one-half of the total number of directors are present. Taking into consideration the Company's operations, phase of development and circumstances in general, the Board must have an appropriate composition which is characterized by diversity and breadth as regards the expertise, experience and background of its members. New directors undergo an introduction course to rapidly acquire the knowledge which is expected in order to best promote the interests of the Company and its shareholders.

More information regarding corporate governance in SSAB can be found on www.ssab.com



Important external and internal rules and policies which affect corporate governance:

#### Significant internal rules and policies

- By-law
- The Board's rules of procedure, incl. instructions to the President and instructions to board committees
- Accounting manual Financial Guidelines and finance policy
- Code of Business Ethics

#### Significant external rules

- Swedish Companies Act
- Swedish Accounts Act
- · Swedish Annual Reports Act
- Rule Book for Issuers Nasdaq OMX Stockholm, www.nasdaqomx.com
- Swedish Corporate Governance Code, www.bolagsstyrning.se

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# SSAB's offering

SSAB's high strength steels 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. This contributes to closing the eco-cycle and to create new markets for SSAB.

## Beneficial for the economy and the environment

SSAB's high strength steels provide an improved economy and environment 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 the production and user stages. High strength steels are stronger than standard steels. Consequently, less steel is used in the manufacture of a product, which also reduces emissions.

By replacing standard steels in a dumper platform, through the use of SSAB's high strength steels it is possible to reduce the weight significantly. A weight reduction of eight tonnes can lead to a ten percent cut in

fuel consumption. A truck platform with a frame built of SSAB high strength steels becomes almost 1,300 kg lighter compared with standard steels. This means a reduction of 30 tonnes in carbon dioxide emissions over the life of the truck.

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. Rapid infrastructure development is taking place in emerging economies. At the same time, natural resources are limited and increased importance is being attached to achieving the same goal using less material. The automotive industry is developing lighter cars and cars with greater load capacity in order to reduce fuel consumption. Steel is also included in the constructions for renewable energy plants, such as wind towers, solar power plants, and various types of hydropower plants.

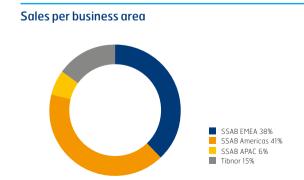
#### Research and development

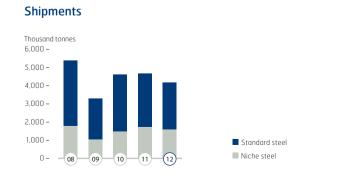
SSAB has a Research and Development Council tasked with leading the development and realizing the potential of high strength steels. The Council coordinates work within the area and is entrusted with ensuring a continuous transfer of technology between the business areas.

Through an established dialogue between SSAB and its customers, new products are developed which meet the needs of the various markets. SSAB has Knowledge Service Centers in the different business areas. 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 centers allow numerous 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 centers.

#### The market

In 2012, SSAB delivered 1,585 (1,713) thousand tonnes of niche products, representing 38 (37) percent of the Company's shipments. SSAB's strategy is to increase shipments of niche products to 50 percent of total shipments in 2015. In 2012, 160 (214) thousand tonnes of niche products were delivered to Asia, representing 10 (12) percent of shipments.





# Systematic 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 based on efficiency improvements and innovation in order to mitigate the environmental impact from production. Industry-wide cooperation is important for identifying the solutions of tomorrow.

#### Most important environmental aspects

In Sweden, SSAB's blast furnaces are among the largest sources of emission in the country. SSAB's steelworks are among the most efficient in the world in terms of minimizing emissions, but there is still some room for further improvement. The impact on the local environment in the vicinity of SSAB's plants has decreased significantly in 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, sulphur oxides and dust
- Reduced emissions into water of nitrogen and suspended substances
- Efficient use of raw materials and energy
- A reduction in the volume of process waste sent for depositing

SSAB had a target of reducing carbon dioxide emissions per tonne of produced steel by 2 percent in 2012, compared with 2008 as base year. The preliminary indications are that the target has been reached, thanks to increased efficiency in operation of the blast furnaces in both Oxelösund and Luleå. However, an uneven rate of production due to the economic climate has pulled in the opposite direction.

#### **Environmental organization**

The Company has a joint group organization, the Environmental Council, for coordinating issues concerning the external environment. The Environmental Council focuses on the overarching and strategic environmental work, and monitoring of that.

The Environmental Council, which meets each quarter, includes representatives from the three business areas SSAB EMEA, SSAB Americas and SSAB APAC, as well as the subsidiaries Tibnor, Plannja and Merox. The Council is chaired by SSAB's Environmental Director.

## Environmental management system and local environmental work

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 which is responsible for monitoring compliance with laws and agreements and handling permit matters. It is also responsible for taking measurements and the reporting of environmental data.

All manufacturing units work with environmental management systems that are certified in accordance with ISO 14001 and each production plant center 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 authority.

#### Research cooperation projects

Within the steel industry, a number of different cooperation projects are underway aimed at reducing the environmental impact

and carbon footprint from production processes. Some of the most important cooperation partners include:

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

#### Environmental permits and legislation

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 landfill sites. All production units comply with the respective local environmental requirements and the Group holds mandatory environmental damage 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

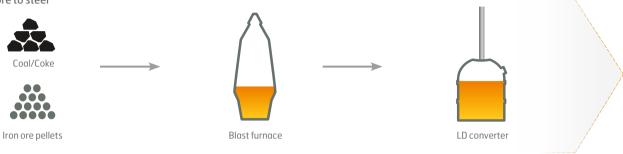
Thousand tonnes	Locality	Permitted production	Production 2012
Coke	Luleå	1,100	652
	Oxelösund	530	396
Hot metal	Luleå	_ 1)	1,927
	Oxelösund	2,000	879
Slabs	Luleå	3,000	1,803
	Oxelösund	1,900	882
Hot-rolled steel	Borlänge	3,200	1,720
	Oxelösund	820	532
Pickled steel	Borlänge	2,500	1,133
Cold-rolled steel	Borlänge	1,400	717
Annealed steel	Borlänge	650	415
Metal-coated steel	Borlänge	400	284
Organic-coated products	Borlänge	140	74
	Köping	30	15
	Finspång <sup>2)</sup>	40	17

 $<sup>^{1)}</sup>$  Not regulated.  $^{2)}$  Unit million  $m^2$ .

SSAB SUSTAINABILITY REPORT 2012 Systematic environmental work

# More efficient processes reduce environmental impact

#### 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, sulphur and sulphuric 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; consequently, less energy is used than in the case of hematite-based pellet production.

#### Hot metal

In the blast furnace, the iron 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 as well as the LD-gas in Luleå, 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



Scrap steel



Electric arc furnace



#### Raw materials

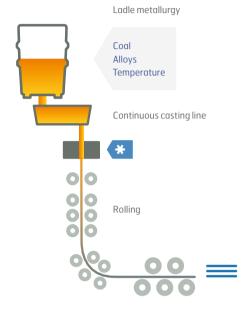
In the US, scrap steel is purchased on the open market. SSAB's two electrical steel plants in Montpelier and Mobile have been located based on the potential market and access to scrap metal raw material. This strategy minimizes the environmental impact of transportation since all plants have access to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

#### Crude steel

Scrap metal is melted in electric arc furnaces where the melted scrap becomes new crude steel. Both 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 melted using electricity through an electric arc being formed with an extremely high temperature when the high tension voltage is connected. Certain

amounts of coal and natural gas are used in the electric arc furnace, which generates carbon dioxide, but by no means to the same extent as when steel is produced from iron ore. A large percentage of the coal required is derived from recycled coal residue, which has thereby reduced the quantity of deposited waste and replaced up to 60 percent of purchased coal.

Efficient processes SSAB SUSTAINABILITY REPORT 2012



#### **Processing**

In ladle metallurgy, the crude steel is finely adjusted in accordance to specific recipes and 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. 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 furnaces for steel slabs primarily use natural gas as a source of energy. The combustion generates certain emissions of carbon dioxide and nitrogen oxides.



http://www.ssab.com/Steel-making-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 a 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 depositing.

### The blast furnace process generates carbon dioxide

SSAB EMEA's steel production 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 pellets, high quality coke and efficient production processes in which the blast furnaces produce without disruption. In order to utilize the raw materials as much as possible, a large number of usable by-products are also produced, including slag and gas purification dust. In addition, the excess heat and gases formed in the processes are used.

Certain by-products which contain coal, lime and/or iron can be returned directly to the processes, and in this way SSAB reduces waste from the production process and the need for new coal, iron ore pellets and lime. 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 at 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.

#### Less carbon dioxide with recycled steel

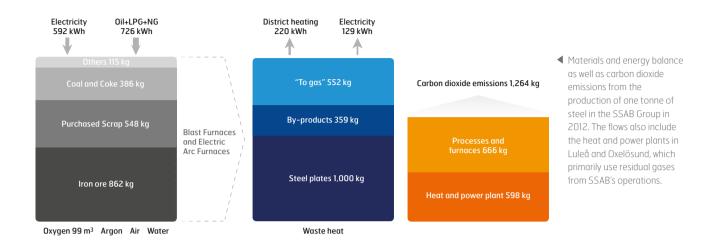
Steel is one of the most recycled materials in the world. SSAB's plants in the US produce steel based exclusively on recycled scrap metal. Small amounts of coal and natural gas are used in the production process, but mainly electricity is used for melting the scrap metal. All in all, carbon dioxide emissions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

SSAB uses approximately 20 percent scrap metal in conjunction with steel production in Sweden, and 100 percent in the US.

The Swedish operations have little scope to increase the percentage of recycled scrap metal. However, it is possible to recycle to a greater degree the scrap generated in the steel production process. This reduces raw material costs and carbon dioxide emissions, since less hot metal need be produced. Within SSAB, a number of projects are underway with the aim of increasing the volume of finished steel relative to the produced volume of crude iron.

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SSAB SUSTAINABILITY REPORT 2012 Efficient processes



#### Waste and useful by-products

Thanks to the exact processes involved, steel production gives rise to a number of valuable, high quality by-products. SSAB develops and sells by-products in the Swedish market through its subsidiary Merox.

Ongoing research areas 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 in North America, which now goes to a recycling plant instead of being deposited into landfills.

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 environ-

mental reasons. At SSAB, this waste largely consists of flue purification gas 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.

#### Merox in SSAB's value chain

Thanks to expertise and long experience regarding the properties of the by-products and how they can be utilized to the best effect, Merox creates added value for SSAB. Merox is a resource company in Sweden whose main task is to manage and develop SSAB's eco-cycle. This is done primarily by

reusing the Company's by-products such as scrap, iron-rich dust and slag in SSAB's own processes, where they replace iron ore, coal and coke and, to a certain extent, also alloying agents and lime. Approximately 45 percent of the total volume of by-products is used in this way. Where this is not possible, needs are identified on other markets, such as agriculture, steel and chemical industries, where the material can be sold as products. This applies to approximately 35 percent of the total volume.

Merox is a flexible company with a small business organization. Most of the sales organization is located in Oxelösund where, just as in Luleå, production, marketing, research and development have been brought together under one roof.

#### Absolute emissions1)

Absolute cillis									
	Country <sup>2)</sup>	Volume	20121)	2011	2010	2009	2008	2007	2006
Dust	Sweden	Tonne	542	583	748	551	888	919	942
Nitrogen oxide	Sweden	Tonne	1,158	1,315	1,392	1,118	1,657	1,709	1,801
Carbon dioxide	Sweden <sup>3) 4)</sup>	Thousand tonne	4,403	5,806	5,974	3,711	6,187	6,410	6,229
Carbon dioxide	USA <sup>5)</sup>	Thousand tonne	666	675	688	_	_	_	_

 $<sup>^{\</sup>rm 1)}$  The information for 2012 is preliminary.

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Efficient processes SSAB SUSTAINABILITY REPORT 2012

<sup>&</sup>lt;sup>2)</sup>The reporting with respect to Sweden covers operations at the plants in Oxelösund, Borlänge and Luleå.

With respect to Luled, emissions are also included from LuleKraft AB (which is 50-percent owned by SSAB), the operations of which are based on SSAB's process gases.

<sup>&</sup>lt;sup>3)</sup> Carbon dioxide emissions from the Swedish operations correspond to those reported to the EU trading system; this does not include transportation.

<sup>&</sup>lt;sup>4)</sup>Due to a lower rate of production, Oxelösund has built up a stock of its own-produced coke. Accordingly, the reporting system has been adjusted in order that figures reported for future individual years will better correspond to actual emissions. Adjustments apply commencing 2008 but are included only in the carbon dioxide emissions reported for 2012, which thus are 395 thousand tonnes lower than the actual emissions. This is balanced by the fact the emissions reported for the period 2008–2011, particularly for 2011, are larger than the actual emissions.

<sup>5) 2010</sup> was the first year in which the US authorities requested information regarding carbon dioxide emissions from SSAB's plants in Mobile and Montpelier.

The sales organization possesses a breadth of skills within widely differing areas and markets. Through cooperation with external parties, such as Cementa in the ground stabilization market, Merox creates conditions for being able to jointly deliver high-quality products.

One of SSAB strategic aims is to achieve increased flexibility. In times of high production rates, a large flow of by-products is obtained which can be allocated for external use or used again in the production process. When production is slower, SSAB saves costs through greater use in the production process of raw materials derived from by-products.

#### Challenges and opportunities

Steel production generates large volumes of slag which are sometimes difficult to sell. Factors such as research, social changes, legislation, the price of carbon dioxide, and political decisions determine the value derived from the use of such slag. With an increased focus on carbon dioxide, the slag can be attractive for the cement industry since it then represents a carbon dioxideneutral alternative due to the fact that, technically speaking, the carbon dioxide emissions occur during the steel production process. Focus on reduced use of natural

gravel and crushed rock also results in areater demand for the material.

A general increase of interest in closing the eco-cycle creates great opportunities for Merox. This is the focus of a number of research projects into the way in which by-products from the steel industry might be used in other operations.

Merox has expanded its operations and is now located at both of SSAB's steel production centers in Sweden, Oxelösund and Luleå. The result is the development of new know-how concerning methods and processes, and the creation of a useful contact network on the market. This creates increased synergies and enhances the possibility to close the eco-cycle to an ever greater degree.

## Railways, an important means of transport

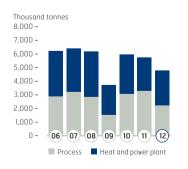
Transportation takes place primarily by railway and ship, but also by truck. All of SSAB's business areas have their own logistics departments with the objective of making transportation efficient and economical.

In Sweden, raw materials are transported to Luleå and Oxelösund by railway or ship.
Transportation of slabs between the production plants takes place by railway. Prior to the construction of SSAB's two electrical steel

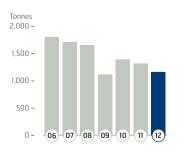
plants in Montpelier and Mobile, the locations were chosen based on the potential market and access to the scrap metal raw material. This strategy minimizes the impact on the environment since all plants have access to railways. In North America, the inland waterway system is also used.

For more info about the environmental work and highlights during the year, see pages 18–21.

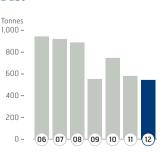
#### Carbon dioxide 1) 2)



#### Nitrogen oxide 1)



#### Dust 1)



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SSAB SUSTAINABILITY REPORT 2012 Efficient processes

<sup>&</sup>lt;sup>1)</sup> The reported data covers the Swedish operations at the plants in Oxelösund, Borlönge 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. The information for 2012 is preliminary.

 $<sup>^{2)}</sup> With \, respect \, to \, the \, Swedish \, plants, \, the \, emissions \, correspond \, to \, those \, reported \, within \, the \, EU's \, trading \, system.$ 

# Employees and competence

Sourcing competence for the future represents a challenge for the steel industry and SSAB. SSAB is actively working to be an attractive employer and to promote the availability of the right competence on the labor market. Opportunities to develop in an exciting global and safe work environment are critical factors.

#### **Overall priorities**

In order to achieve the overall strategic objective of being a high performing organization, SSAB engages in systematic work on prioritized issues:

- Employee development
- Leadership
- Long-term sourcing of competence
- Equality of opportunity and diversity
- Safety in the work environment
- Preventive health care

There are several strategic targets, for example:

- to achieve an annual reduction of at least 5 percent in lost time injury
- at least 90 percent of employees shall have an annual performance dialogue

#### Results and feedback

Clarity concerning goals, anticipated performance and feedback are central to SSAB's strategic focus on being a high performing organization. Individual development plans and annual performance dialogues between employees and supervisors are a prioritized area for SSAB. It is in the performance dialogue that results are

followed up, feedback given, new goals set, and individual development is planned.

#### Leadership

SSAB conducts an annual management review. All managers and potential managers in the Group are evaluated based on SSAB's manager criteria and individual performance relative to the demands of the position. One important aim of the management review 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. The results from the management review are used actively during the year to plan development work and as a support in organization development activity and succession planning.

### Initiatives for long-term sourcing of competence

SSAB is a knowledge-based company whose success depends on the competence of current and future employees. Various activities are carried out to promote access to competence:

- SSAB works actively vis-à-vis schools, colleges and universities in Sweden through the University & College Group, a cross-functional team comprising employees from different functions.
- SSAB's participation in the Tekniksprånget project, which was initiated by Industrivärden and Nordstjernan and includes approximately ten industrial companies.
- Cooperation with other Swedish companies in order to meet Chinese university students in Beijing and Shanghai.

One important aim of the activities is to encourage more young people to choose technical and engineering educations. By experiencing at an early stage the reality at a technology-based company, young people can be attracted to studying engineering. For example, via the Tekniksprånget project, students graduating from high school natural science and engineering programs will be offered a four-month internship at a Swedish technology-based company. Tekniksprånget provides SSAB with the possibility to contribute to increased knowledge about, and increased interest in, careers within engineering.

#### Equal opportunity and diversity

SSAB operates in a traditionally male-dominated industry. The aim is that the percentage of female employees in the group shall be reflected in the percentage of female managers. SSAB is working with, among other things, mentor programs and female networks in order to promote career opportunities for women within the Group; read more about Battle of the Numbers on page 23. Within SSAB, there are number of employees who have been identified as potential managers of the future; since almost one quarter of them are women, this represents a favorable basis for increasing the percentage of female managers.

Follow-up since 2000 of the endeavors of potential future managers in Sweden shows that women and men who have undergone the program for managerial candidates continue to stay in head positions to the same extent, irrespective of gender.

#### Number of employees at year-end

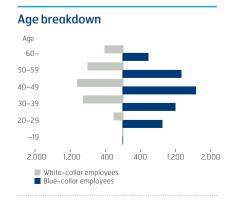
	2012	2011	Change, %
SSAB EMEA	6,504	6,742	-4
SSAB Americas	1,394	1,338	4
SSAB APAC	220	171	29
Tibnor	797	798	_
Other	63	58	9
Total	8,978	9,107	-1

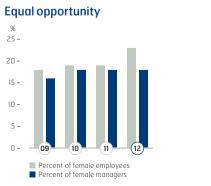
#### Average number of employees, gender breakdown

	-	Number of mployees	١	Vomen, %
	2012	2011	2012	2011
Parent Company			•	
Sweden	57	52	51	50
Subsidiaries				
Sweden	6,402	6,644	20	19
USA	1,273	1,239	12	12
Other	963	895	29	29
Total	8,695	8,830	20	19









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SSAB SUSTAINABILITY REPORT 2012 Employees and competence

This confirms that the development was as positive for female candidates as it was for male candidates, even if in total there were fewer female than male candidates.

Two out of the ten members of the Group Executive Committee are women. The composition of the management teams in the 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-term contributes to increased diversity on all levels.

#### Zero tolerance program

SSAB's ambition is to be one of the world's leading steel companies as regards health and safety. SSAB possesses the technical and practical conditions for achieving this. Hazardous work situations have been gradually 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.

Important aspects of the program include regular reminders through training courses, meetings, information campaigns, exchange of experiences and follow-up.

# OHSAS 18001 certified work environment management system and safety

All units within SSAB Americas – production plants as well as cutting lines – are certified in accordance with OHSAS 18001. During 2012,

all Swedish plants within SSAB EMEA became certified and there are also long-term plans as regards SSAB APAC. In practice, a standardized health and safety management system means that SSAB has in place joint policies, procedures and documentation. This strengthens the organization's ability to address safety issues systematically.

Within the Group, Tibnor is also OHSAS 18001-certified.

#### Preventive health care

SSAB has a strong 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 Oxelösund, as well as the HälsoSAM work environment and ergonomy health project in Luleå. HälsoSAM now serves as a model for the systematic work environment work also in Borlänge.

#### Accidents and sick leave

During 2012, the efforts focused on systematic safety work have shown a positive trend in terms of the number of lost time injuries and accident frequency. Within SSAB EMEA, the work has led to appreciable improvements in accident statistics. The OHSAS 18001 certification creates conditions for further improvements. The operations in North America show remarkably low accident figures and are an industry leader in terms of safety work.

With respect to sick leave, there has

been a slightly negative development in 2012, indicating a trend which SSAB wishes to break. The focus on preventive health care within the scope of the reduced work hours program in SSAB EMEA provides an example of how SSAB is expanding preventive health care work and encouraging more people to participate in preventive health care activities. Within all parts of the business, SSAB offer some form of preventive health care to employees and this is an area in which the Group is continuing to focus efforts.

#### **Employee surveys**

It is important for SSAB that employees are able to speak their mind and contribute their views on the business and how it should be developed. SSAB carries out regular employee surveys covering all employees.

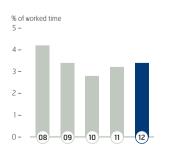
The survey constitutes an important tool in the implementation of improvement work within the organization. Based on results from the employee surveys, each supervisor devises improvement plans which address areas for development. Every second year, an employee survey is carried out covering the entire Group.

#### Whistleblower

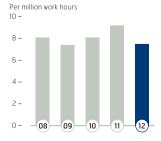
SSAB employees should feel a responsibility to act in the event irregularities are uncovered. Since 2010, a whistleblower system has been in place for the entire Group, to which employees can anonymously report serious irregularities and violations of the Company's various policies. During 2012, ten complaints were made to the whistleblower function, of which six matters have thus far resulted in measures being taken by SSAB. In 2012, and e-learning course was launched in order to ensure awareness of the whistleblower function and how it is used. See more on page 24.

For more information regarding employee activities and special events in 2012, see pages 23–27.

#### Sick leave



#### Number of accidents



2 Employees and competence





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# Suppliers

The raw materials that SSAB uses in steel production constitute the strategically most important purchases. Purchases are made from a number of suppliers throughout the world.

#### Guidelines and governance

SSAB has a procurement policy which governs all of the Group's purchases. SSAB is a member of the UN's Global Compact and its principles are applied in the work with suppliers. SSAB's Code of Business Ethics reflects Global Compact principles and represents 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 its contacts with suppliers, SSAB communicates the Code of Business Ethics and encourages the suppliers to comply with and respect the Code. SSAB has also developed Instructions regarding the prohibition of bribery. 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 the supplier risks

During 2012, a strategy was formulated for the entire Group governing the identification of supplier risks. The strategy places suppliers in various risk categories based on the countries in which the suppliers operate. It elucidates risks relating to, for example, human rights, labor conditions and corruption.

SSAB has more than 10,000 suppliers, and SSAB EMEA alone has approximately 6,000 suppliers. The risk identification survey is in progress. SSAB EMEA's risk identification survey has prioritized suppliers of raw materials. Stringent quality requirements and long-term business relationships provide the purchasing organization with a good insight into conditions at the suppliers. Within SSAB Americas, SSAB APAC, Tibnor and Plannja, work is also taking place aimed at matching suppliers against the risk map.

#### Assessment and measures

Work is taking place 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.

When the identification of supplier risks is completed and the purchasing system is in place, those suppliers who are placed in the risk class medium level or high level will be required to complete a self-assessment questionnaire. Through the self-assessment, SSAB will obtain more information about, for example, social conditions and environmental conditions at the suppliers. Self-assessment questionnaires have previously been used within SSAB, but in the future SSAB will have a single questionnaire for the entire Group.

During 2012, SSAB has informed and trained the purchasing organizations within SSAB EMEA, Tibnor and Plannja about the ongoing work on developing a common strategy for identifying supplier risks. Training courses are also being planned in SSAB Americas and SSAB APAC.

#### Sources of SSAB's raw materials



# SSAB in the community

SSAB is engaged in 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, the media and the public with the aim of contributing to knowledge about steel and steel production.

#### Supporting local communities

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.

## Christmas present donated to children

SSAB EMEA and the head office have jointly entered into a cooperation project with the SOS Children's Villages organization to support a children's village in the Central African Republic, one of the poorest countries in the world. Specifically, SSAB is contributing to building a family house for ten to twelve orphaned and abandoned children in a village called Bullerbyn. This is the third children's village in that country which SOS Children's Villages is involved in constructing, and SSAB's building (one of twelve buildings) is expected to be completed in 2014. SSAB chose to give this Christmas present to its employees, and they will be able to monitor its progress through regular information on the Company's intranet. The initiative has been very much appreciated.

#### SSAB EMEA's local activities

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 also participates in the Festival's "Meeting point", which addresses sustainability matters.



Photo: Marcus Frendberg



Photo: Anna Lundqvisi

SSAB EMEA supports Lion's large spring market in Oxelösund, which attracts 20,000 visitors. Among other things, SSAB assists with a financial contribution, and the profit from the market always goes to Lion's help activities.

#### Tibnor supports Totalskidskolan

In Sweden, Tibnor cooperates with Totalskid-skolan in Åre. This is a non-profit organization which has the aim of providing disabled people of all ages with a chance to ski or learn to ski based on their own circumstances. In addition to a financial contribution, there is a cooperation in conjunction with various customer and supplier activities at which Totalskidskolan often holds inspiration presentations.

## Strong employee involvement in SSAB Americas

SSAB Americas engages in extensive work to support the local communities in the areas around its facilities. This involves financial contributions to a number of different projects as well as initiatives by committed employees.

Employees support The United Way with donations, and SSAB makes matching contributions. In Mobile, money equivalent to the savings realized by recycling car tires for energy instead of primary fossil fuel is donated to an education fund. Employees

participate also as volunteers in the annual Fill the Bus campaign which SSAB initiated in 2005 in order to provide children from disadvantaged homes with textbooks and school material.

The employees in Montpelier sponsor and support The Make-a-Wish Foundation, an organization which aims to provide support to very sick children. Broader support from the Company in Montpelier also goes to The Community Foundation of Greater Muscatine, which supports small local organizations and charitable projects in the region.

#### Disaster aid

In the event of crisis situations which severely hit communities and their inhabitants, SSAB is able to lend a hand and provide support in ways other than through purely financial contributions. Following the disaster in the wake of the earthquake in Haiti, during a period of two years, SSAB and Plannja assisted in the rebuilding work by contributing roofing sheet for schools, homes and hospitals.



SSAB is a partner company to SOS Children's Villages.

SSAB SUSTAINABILITY REPORT 2012 SSAB in the community

# 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. 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 2012 Sustainability Report. Since the Report is

a supplement to the 2012 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	4–5, 11–13, AR 44–45	
2. ORGANIZATIONAL PROFILE			
2.1 Name of the organization		Cover page	
2.2 Primary brands, products and services		Edge, cover page	
2.3 Operational structure of the organization		33	
2.4 Location of organization's headquarters		49	
2.5 Countries where the organization operates		49	
2.6 Nature of ownership and legal form		33	
2.7 Markets		Edge, back page	
2.8 Scale of the organization		Edge, cover page	
2.9 Significant changes during the reporting period	l	2	
2.10 Awards received during the reporting period		9,19,26	
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		6-9,46	
3.6 Boundary of the report		Edge, cover page, 46	
3.7 Specific limitations on the scope or boundary of the report		Edge, cover page, 46	
<ol> <li>Basis for reporting on joint ventures, subsidiaries, etc.</li> </ol>		Edge, cover page, 46	
3.10 Explanation of the effect of any restatements of information provided in earlier reports		Edge, cover page, 46	
3.11 Significant changes from previous reporting principles regarding scope, boundaries, etc.		Edge, cover page, 46	
3.12 GRI table		46–47	
4. GOVERNANCE, COMMITMENTS AND ENGAGE	MENT		
4.1 Governance structure of the organization		33	
4.2 The Chairman of the Board's role in the organization		33	
4.3 Independent and/or non—executive board members		33, AR 51	
4.4 Mechanisms for shareholders and employees to provide recommendations to the board	-	33, AR 47, 49, 57	

GRI	GC	Page reference	Degree of reporting
4.5 Principles for compensation to senior executives		AR 42	
4.6 Processes for avoiding conflicts of interests in the board		33, AR 47, 51	
4.7 Processes for determining the qualifications of board members		AR 47,50	
4.8 Mission, values, Code of Conduct, etc.	1–10	6,32	
4.9 The board's monitoring of the sustainability work		33, AR 55	
4.10 Processes for evaluating the board's own performance		33, AR 47, 50	
4.12 Endorsement of external voluntary codes, principles or other initiatives		8	
4.13 Memberships in associations		8, 35	
4.14 List of stakeholder groups		9	
4.15 Basis for identification and selection of stakeholders with whom to engage		9	
4.16 Approaches to stakeholder engagement		9	
4.17 Key topics and concerns that have been raised through stakeholder engagement		9	
5. ECONOMIC INDICATORS			
EC1. Direct economic value generated and distributed		14	
EC2. Risks and opportunities for the organization due to climate changes	7	4-5,15	
EC3. Coverage of the organization's defined bene- fit plan obligations		AR 90	
EC4. Financial assistance received from government		AR 75–76	
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		45	
6. ENVIRONMENTAL PERFORMANCE INDICATOR	RS		
EN1. Materials used by weight or volume	8	35,38	
EN2. Percentage of recycled input materials	8–9	37,38	
EN3. Direct energy consumption by primary source	8	38	
EN4. Indirect energy consumption by primary source	8	38	
EN5. Energy saved due to conservation and efficiency improvement	8-9	19, 36, 37	
EN6. Initiatives to provide energy—efficient or renewable energy based products/services	8–9	37	

SSAB is a signatory to the UN Global Compact (GC) since 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
- Make sure that they are not complicit in human rights abuses.

#### Labor standards

- Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; and
- 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
- Undertake initiatives to promote greater environmental responsibilities; and
- 9. Encourage the development and diffusion of environmentally friendly technologies.

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

GRI	GC	Page reference	Degree of reporting
EN8. Total water withdrawal by source			
EN10. Percentage and total volume of water recycled and reused	8–9	31	
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	38–39	
EN17. Other relevant indirect greenhouse gas emissions			
EN18. Initiatives to reduce greenhouse gas emissions	7–9	8, 19–20, 35–37	
EN19. Emissions of ozone—depleting substances		-	
EN20. NO, SO and other significant air emissions	8	38-39	
EN21. Total water discharge	8	31	
EN22. Waste by type and disposal method	8	38–39	
EN23. Number and volume of significant spills	8	201)	
EN 26. Initiatives to mitigate environmental impacts of products and services	7–9	11–13	
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	16–17, 39	
7. SOCIAL PERFORMANCE INDICATORS			
LA1. Total workforce by employment type, contract and region		40	
LA2. Rate of employee turnover by age group, gender and region	6	40	
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	8, 42	
LA8. Education, training, prevention and risk—control programs in place	1	26, 27, 42	
LA10. Average hours of training per year per employee	10	24, 26, 27	
LA13. Composition of governance bodies and employees according to diversity indicators	6	33, 40–42, AR 47–49	•
LA14. Ratio of basic pay of men to women			
HR1. Investment agreements that include human rights clauses	1–6	44	

GRI	GC	Page reference	Degree o
HR2.Suppliers that have undergone screening on human rights, and actions taken	1–6	44	
HR4. Total number of incidents of discrimination and actions taken			
HRS. Operations where freedom of association an collective bargaining may be at significant risk and actions taken	d 1–3	44	
HR6. Operations identified as having significant risk for incidents of child labor and actions taken	1–2, 5	44	
HR7. Operations identified as having significant risk for incidents of forced or com pulsory labor and actions taken	- 1–2, 4	44	
SO1. Programs for evaluating the operation's impacts on communities		9	
SO2. Business units analyzed for risks related to corruption	10	32,44	_
SO3. Employees trained in the organization's anti–corruption policies and procedures.	10	24	
SO4. Actions taken in response to incidents of cor- ruption	- 10	32,42	
SO5. Participation in public policy development and lobbying	7–9	9, 16, 21, 25, 35	
SO8. Monetary value of fines for non—compliance with applicable laws		AR 98	
PR1. Life cycle stages in which health and safety impacts of products and services are assessed	1	30–31	
PR3. Type of products and service information required by procedures, and percentage of products subject to such information requi rements	i-		
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			

<sup>1)</sup> There were no significant spills in 2012

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

SSAB SUSTAINABILITY REPORT 2012 GRI table 47

# Steel Talk ABC — a glossary

A Advanced high strength steels — Multi-phase steels which contain martensite, bainite and/or retained austenite to achieve an improved balance of strength and formability as compared to ventional high strength steels

**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

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

B Blast Furnace – Continuously operating shaft furnace for the reduction of iron ore. The end product in the blast furnace is called nia iron or hot metal.

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

C Carbon dioxide — CO<sub>2</sub>, 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 **Landon Monature** — Coloriess 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, charging—The act of localing indential into a vessel, in 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

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 Construction steel - See structural steel

**Corrosion protection** – The minimization of corrosion by coating with a protective metal

Cowper stoves - Heating apparatus; ceramic towers used for

pre-heating blast air

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

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 $\begin{array}{l} \textbf{Dual-phase steel (DP)} - \textbf{High-strength steel that has a one soft} \\ \text{(ferrite) and one hard (martensite) microstructure which allows for desired combination of good formability with high strength} \end{array}$ 

- 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
- $\label{eq:Fatigue} \textbf{-} The progressive and localized structural damage that occurs when a material is subjected to cyclic loading at stresses considerably below the ultimate tensile strength$

Formatting – Marking, wrapping or cutting the steel into desired

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

- G Galvanization The process of applying a protective zinc coating steel or iron, in order to prevent rusting or corrosion
- 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

Heat treatment – Heating and cooling a steel product in such a manner as to obtain desired conditions or properties

Hematite -Fe<sub>2</sub>O<sub>3</sub>, non-magnetic iron ore or blood ore

**High strength steels** – Strong steel with high resistance to tensile stress before fatique and breaking may occur

stress before tatigue and preaking may occur. 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 pia 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

- Injection coal Coal powder which is injected into the blast irnace 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

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 coster

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

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

Magnetite - Fe<sub>3</sub>O<sub>4</sub>, 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 Microalloying – In the case of advanced fine grain steels with particularly stringent yield strength and tensile strength requirements, small quantities of annoying agents such as niobium, vanadium, or titanium are added

Mold – Castina mold N Niche products – In SSAB's case advanced High strength steels and quenched and tempered steels

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

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

 $\begin{tabular}{ll} \textbf{Pickling line} - A processing line which chemically removes oxide or scale from the steel surface to obtain a clean surface for subsequent processing \\ \end{tabular}$ 

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

**Profiled** – Profiled (or corrugated) steel which is pressed in order to

Protection steel – Structural steel with ballistic qualities

- Q Quenched and tempered steels Hardened or toughened steel. SSAB's quenched and tempered steels are also high strength
- Recycling Return of used products or byproducts to enter a new e of production and use

Reduction agents - Carbon or hydrogen used to remove oxygen

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 not 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

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

**Scrap** – Ferrous (iron-containing) material that generally is re-melted and re-cast into new steel

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

**Sheet pile** – Long structural sections with a vertical interlocking system that creates a continuous wall. The walls are most often used to retain either soil or water

Shot blasting — Cleaning and descaling metal by means of a stream of abrasive powder or shot. The shot can be sand, small steel balls of various diameters, granules of silicon carbide, etc

**Sintering** – A process that combines iron-bearing particles, once recovered from environmental control filters, into small pellets.  $\textbf{Skirt}-Pipe\ around\ the\ blast\ furnace\ for\ the\ supply\ and\ allocation\ of\ hot\ blast\ air,\ also\ known\ as\ a\ bustle\ pipe$ 

**Slab furnace** – Furnace for heating steel slabs to rolling temperatures

**Slabs** – The most common type of semi-finished steel, used for production of flat steel 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

**Slitting** – A metalworking process involving shearing which is typically employed to cut a wider steel coil into one or more narrower coils

Smelting reduction process — Process for smelting and removing unwanted substances from, for example, metal raw materials Special steel — Alloyed steel

Standard steels - Steels with lower strength (yield strength 235—275 N/mm²). Used within more conventional applications within the engineering industry and building sector

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

Steel – Alloy of iron and carbon with a carbon content of less

Steel hath - The hot malten 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

**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

Structural steel – Steel intended for, e.g. load-bearing structures, e.g. crane girders. Important qualities include strength, weldability, bendability and toughness

 $\textbf{Strip}-\mathsf{Thin}, \text{flat steel that resembles hot-rolled sheet, but it is normally narrower (up to 300 mm, or 12" wide) and produced to more closely controlled thicknesses$ 

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

 $\label{thm:continuous} \textbf{Temper Mill} - A type of cold-rolling mill, usually a four-high, single stand mill, used to provide a relatively light cold rolling reduction to hot rolled, cold rolled, or coated flat steel products to improve$ 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.

**Thermo-mechanical treatment** – Heat treatment/quenching of the steel in order to achieve special material qualities

**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

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

Wear steel - Steel with qualities adapted to withstand wear,

# Addresses



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#### Who are the employees on the front cover?



Tredrik Haglund After having familiarized himself with Tibnor's organization as a consultant, it was an easy decision for Fredrik Haglund, Vice president Logistic ξ production Tibnor, to choose to take part in the implementation of the change proposals. Four years later, Fredrik is a member of Tibnor's management team and sits on the boards of the Norwegian affiliated companies, within which he strives to create new customer value. ② Anna Norfjell at head office in Stockholm enjoys the varied nature of her work as Cash Manager within the Group. She has come to the realization that it's not possible to fully foresee what's going to happen. This means that it's never possible to be really fully trained; instead, people are constantly developing within their area of work. Anna works together, on a daily basis, with different parts of the organization and appreciates the friendly atmosphere at work and the open dialogues that take place with colleagues in Stockholm, around Sweden, and throughout the world.

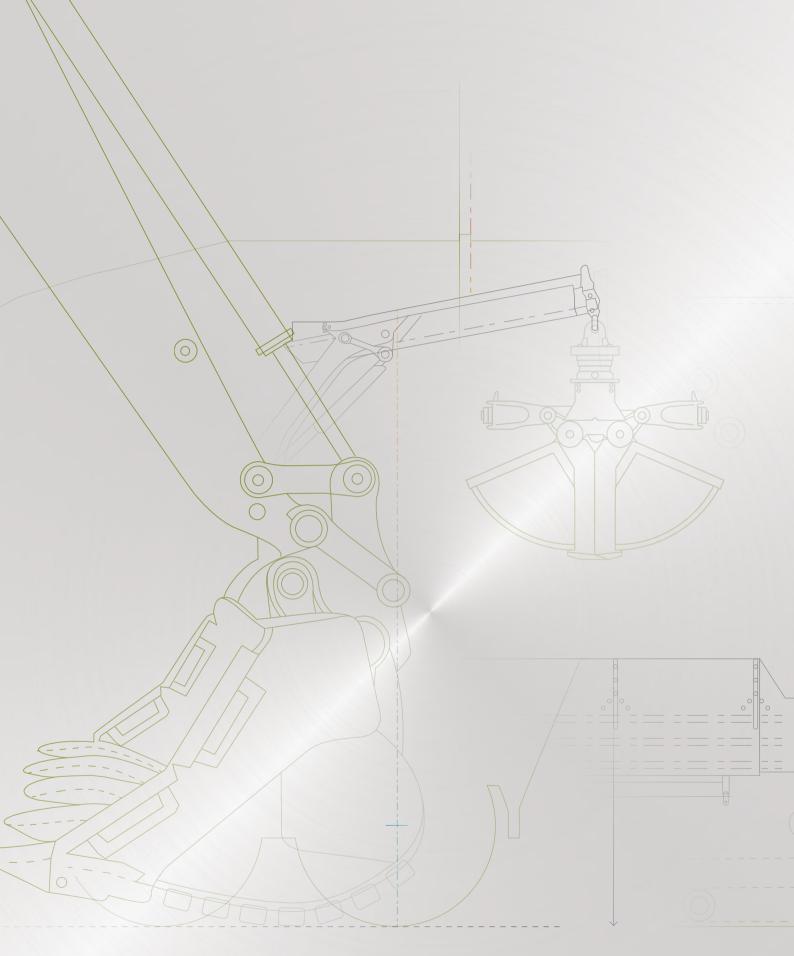
#### (3) Gani Mohammed Abdul is

a General Proposal Engineer in Borlänge. He's attracted by the opportunity to participate in driving forward development in the industry by being able to offer customers the combination of thin and strong steels. During his seven years within the Group, Gani has experienced working within production driven by the aspiration is to achieve the highest quality, and has also served customers together with his dedicated colleagues at the Knowledge Service Center. These experiences have made him the right person, within the Shape concept, to develop products tailored to the customers' specifications.









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