



**SSAB
GRI REPORT
2016**





GRI REPORT



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SUSTAINABILITY REPORTING 2016

SSAB's GRI Report 2016 has been prepared in accordance with the "Core" option of the GRI (Global Reporting Initiative) G4 guidelines. It is comprised of information on SSAB's sustainability-related targets, activities and performance during 2016. SSAB's 2016 Annual Report consists of the Business review, Financial reports, GRI report and Corporate governance report. The GRI report is intended to be read together with the other sections of SSAB's 2016 Annual Report, where more information with regard to SSAB's business, strategy, financial performance and corporate governance is published. The other sections include some of the GRI G4 Disclosures according to GRI G4 guidelines.

The GRI report defines the scope and principles of SSAB's sustainability reporting, describes the selected material aspects, aspect boundaries and indicators. It includes the management approach of the selected material aspects and information on the GRI Disclosures, which are not reported elsewhere in the SSAB's 2016 Annual Report. The GRI content index at the end of this report specifies where the information for each aspect and indicator can be found and explains any omissions to the reported data. The 2016 Annual Report also constitutes Communication on Progress (CoP) reporting to UN's Global Compact, where activities and results related to Global Compact's principles are reported.

The information disclosed in this report focuses on material information and data, whereas more comprehensive sustainability information is available on SSAB's sustainability website. The GRI report is published in English in a pdf format that is available on SSAB's website. SSAB reports about its sustainability performance annually.

▶ [SSAB's Sustainability website](#)

MATERIALITY ANALYSIS PROCESS AND RESULTS

SSAB has conducted a materiality analysis to define its most relevant and material sustainability aspects. The materiality analysis defined 12 aspects that form the base for SSAB's sustainability strategy and work. These aspects were divided into three sustainability focus areas: sustainable offering, sustainable operations and responsible partner. Following the merger between SSAB and Rautaruukki in 2014, a renewed sustainability strategy and targets for SSAB were defined and published in 2015. The results of the materiality analysis formed a platform to define the sustainability strategy and targets as well as served as a tool to define the scope and boundaries of SSAB's GRI reporting.

G4-18: Process for defining report content and aspect boundaries

Material aspects were identified and prioritized in a process that involved external and internal stakeholders. The process is described briefly below.

INVENTORY AND MAPPING OF RELEVANT SUSTAINABILITY TOPICS AND IMPACTS

As a first step, SSAB conducted a background analysis to identify trends and global drivers. This analysis, combined with internal workshops, served to identify all relevant aspects throughout SSAB's value chain, both upstream and downstream. Against the background of the value chain, relevant sub-activities and related sustainability impacts from an environmental, economic and social perspective were identified.

STAKEHOLDER DIALOG AND PRIORITIZATION OF MATERIAL ASPECTS

As a second step, the aspects identified in the background analysis were evaluated and ranked according to importance from the perspectives of both SSAB and external stakeholders. This was done through interviews with external stakeholders (customers, suppliers, investors, NGOs and industry associations) and a web-based survey with key external and internal stakeholders to further prioritize the aspects. The results of the dialog with internal and external stakeholders were then evaluated in workshops with internal experts, and confirmed by SSAB's Group Executive Committee.

As a result of the materiality assessment, SSAB identified the following aspects as being material.

SUSTAINABLE OFFERING

Potential of SSAB's products and solutions, including high-strength steels

There are significant environmental benefits to be gained when upgrading to high-strength steels. Since high-strength steels are stronger than ordinary steels, less steel is needed to produce a specific steel application. This reduces the emissions from steel production. "Moving applications," such as vehicles, excavators and cranes made of high-strength steels, have less weight, which in turn cuts fuel consumption or increases their payload. Stronger steel also means extended product lifetime, thereby also reducing emissions.

Customer satisfaction

Customer satisfaction is a measure of how products and services supplied by a company meet or exceed customer expectations. In a competitive marketplace, customer satisfaction is a key differentiator and key element of business strategy. Today, various aspects of sustainability – product lifecycle approach, material- and energy-efficient processes, and a responsible value chain – are increasingly important parameters impacting overall customer satisfaction.

SUSTAINABLE OPERATIONS

Health and safety

Steel production includes exposed and dangerous environments. This is why it is extremely important to have a strong focus on health and safety to minimize the risks of accidents. This responsibility encompasses company employees and contractors, as well as visitors to SSAB sites.

Emissions from steel production

Coke and coal are used in blast furnaces to reduce iron ore in the production of crude iron/hot metal. Today, it is impossible to produce steel without generating CO₂ emissions. The process, which has been used for centuries, has been continually developed and improved to become highly efficient, and the residual energy is recovered in the form of district heating and electricity production. Scrap-based steel production emits significantly less CO₂. Since there is not enough scrap available for recycling to meet the demand for new steel, ore-based steel production using blast furnaces is still needed. Today, the scrap-based steel production meets 30% of the global demand for new steel.

Energy efficiency

Energy efficiency is aimed at reducing the amount of energy required to produce products and provide services. Steel companies can reduce costs by finding alternative energy sources that create less emissions, by using less purchased energy and by feeding surplus energy into the grid. From a lifecycle perspective, this also creates positive effects and saves natural resources, thereby reducing CO₂ emissions.

Financial and operational performance

SSAB believes that managing its business in a sustainable way will increase SSAB's possibilities to deliver strong long-term financial and operational results. That is why financial and operational performance is not included in one of the three focus areas, but rather should be seen as the outcome of performing well in all three areas.

Material efficiency

Material efficiency means making more out of less material, resulting in increased efficiency in the use of natural resources. The production of iron and steel creates a range of residuals. Recirculating ferrous material back into the steelmaking process reduces the need for virgin raw materials. This, in turn, reduces CO₂ emissions and saves costs. Material that cannot be recirculated internally can be processed and sold externally to create new revenue streams while reducing CO₂ emissions by substituting natural resources in other industries. For example, blast furnace slag enables the cement industry to significantly reduce their CO₂ emissions. Increasing internal recirculation of residuals and external sales of by-products will lead to reduced waste and less material will be sent to landfill.

Recycling

A critical element in reducing carbon emissions originating in the steel lifecycle is to optimize steel recycling. Steel is almost unique in its capacity to be infinitely recycled without loss of properties or performance. Steel is today the most recycled material in the world.

Competence and leadership development

It is critical for a company to attract, develop and retain people with the right competencies and mindset. To do this, it is important to work actively with performance dialogs between managers and employees, management reviews and succession planning, leadership training programs, employee development programs, and diversity training and inclusion.

Diversity

One of the most important challenges today is to engage, retain and attract employees with the right skill sets. The creation of a more diverse workforce with different competences, experiences and backgrounds, and a workplace where everyone has equal opportunities, will lead to a stronger company culture and help to achieve better results.

RESPONSIBLE PARTNER

Anti-corruption/Business ethics

In today's globalized world, anti-corruption and business ethics have become increasingly important for companies. Failure to address corruption, bribery and other issues related to business ethics will have negative impacts on the company's reputation and brand. Anti-corruption and ethics at SSAB are governed by SSAB's Code of Conduct and the SSAB Anti-Corruption policy.

Labor/human rights in the supply chain

Today, companies are increasingly expected to take responsibility, not only for labor and human rights in their own operations, but also within their supply chain. This includes evaluating supplier risks and suppliers' ability to address labor and human rights, including no use of child or forced labor, a healthy and safe work environment, etc. Conducting risk assessments and supply chain monitoring through self-assessment questionnaires, audits and other follow-up systems are important tools, in addition to the SSAB Supplier Sustainability policy.

G4-19–21: Identified material aspects and aspect boundaries

The material aspects included in SSAB's 2016 reporting are based on the process described earlier and are in line with the three sustainability focus areas and the aspects under each area. The GRI principles – stakeholder inclusiveness, sustainability context, materiality and completeness – were taken into consideration throughout the process. The aspects and indicators related to each focus area are presented in the ascending table, which also defines the aspect boundaries.

G4-19–21 IDENTIFIED MATERIAL ASPECTS AND ASPECT BOUNDARIES

MATERIAL SUSTAINABILITY ASPECTS DEFINED IN THE MATERIALITY ANALYSIS	MATERIAL ASPECTS IN GRI G4 REPORTING	ASPECT BOUNDARY WITHIN THE ORGANIZATION	ASPECT BOUNDARY OUTSIDE THE ORGANIZATION	REPORTED INDICATORS
Sustainable offering				
Potential of SSAB's products and solutions, incl. high-strength steels	G4-EN Products and services	SSAB Group	Customers	G4-EN27
Customer satisfaction	No relevant aspect in GRI, reported in Business Review			
Sustainable operations				
Health & Safety	G4-LA Occupational health and safety	SSAB Group	Contractors	G4-LA5, G4-LA6
Emissions from steel production	G4-EN Emissions	SSAB's production sites		G4-EN15, EN16, EN18, EN19, EN21
Energy efficiency	G4-EN Energy	SSAB's production sites		G4-EN3, EN5, EN6
Material efficiency	G4-EN Materials, G4-EN Effluents and waste	SSAB's production sites		G4-EN1, EN2, EN23
Recycling	G4-EN Materials, G4-EN Effluents and waste	SSAB's production sites		G4-EN1, EN2
Competence and leadership development	G4-LA Employment G4-LA Training and education	SSAB Group		G4-LA1, LA10
Diversity	G4-LA Diversity and equal opportunity	SSAB Group		LA12
Responsible partner				
Anti-corruption/Business ethics	G4-SO Anti-corruption	SSAB Group	Suppliers	G4-SO4
Labor/human rights in the supply chain	G4-LA Supplier assessment for labor practices G4-HR Supplier assessment for human rights		Suppliers	
Other aspects reported				
Category: Environmental	G4-EN Water	SSAB's production sites		G4-EN8

Reporting scope and data collection

The scope of SSAB's GRI reporting is the SSAB Group and it excludes associated companies and joint ventures as well as subcontractors and suppliers of goods and services, unless otherwise stated.

The financial information describing economic responsibility in this report is based on SSAB's consolidated financial statements and is subject to audit.

Information about personnel has been collected from the company's corporate-wide personnel information systems. Unless otherwise stated, the data referred to in this report covers the whole of SSAB.

SSAB merged with Rautaruukki in 2014 and in order to be able to report on the combined company's environmental performance, SSAB developed environmental data collection at the Group level in 2015. The new data system is used to collect and analyze data from all sites that contribute significantly to SSAB's environmental impacts. The following sites are included in the environmental reporting scope in 2016:

- SSAB Special Steels: Oxelösund in Sweden
- SSAB Europe:
 - Luleå, Borlänge, Finspång and Virsbo in Sweden
 - Raahe, Hämeenlinna, Kankaanpää, Lappohja, Oulainen, Pulkkila, Toijala in Finland
- SSAB Americas:
 - Mobile in Alabama and Montpelier in Iowa, US
- Ruukki Construction
 - Peräseinäjoki and Ylivieska in Finland
 - Järnforsen in Sweden
 - Gargzdai in Lithuania and Oborniki in Poland
 - Obninsk and Balabanovo in Russia
- Tibnor:
 - Köping in Sweden

These sites cover the following operations: all steel mills, all rolling mills, all coating lines and all tube mills. Also cut-to-length (CTL) lines are included, if they are located at the sites mentioned on the list above. The environmental data for 2012–2014 have been restated to include the same units as the 2015 and 2016 data.

In this year's report some minor adjustments were made to the historical data. Some of the environmental data related to the scrap-based steel production in US was earlier given in short tons. In this report all data for mass was converted into metric tons. Regarding indirect CO₂ emissions (Scope 2, from the generation of purchased electricity), updated emission factors from the U.S. Environmental Protection Agency have been applied for Scope 2 emission calculations for the steel production in US in 2014 and onwards.

This GRI Report has not been verified by an external party. The data have been checked by comparing them with the data for previous years at both the site and corporate level. Any divergences have been analyzed. Figures in brackets refer to the comparison period 2015.

SUSTAINABILITY MANAGEMENT APPROACH (G4-DMA)

SSAB has had a Group-level sustainability function since September, 2014, with the mission to strengthen the coordination of sustainability efforts across the company. The aim is both to maximize the business value of sustainability initiatives and minimize the negative impact of SSAB's business and operations and to better mitigate risks related to sustainability.

SSAB'S SUSTAINABILITY ORGANIZATION

SSAB's Executive Vice President and Head of HR and Sustainability is responsible for coordinating and driving sustainability work at the Group level. She is a member of the Group Executive Committee and reports directly to the President & CEO of SSAB. SSAB's Sustainability Management Team consists of a network of people with expertise in critical sustainability areas, with the responsibility to coordinate and drive SSAB's sustainability initiatives. Sustainability issues are frequently on SSAB's Group Executive Committee's agenda to ensure the close involvement of top management in important sustainability issues.

In practice, sustainability is integrated into the day-to-day work at production sites, global divisions and support functions. Each member of the Sustainability Management team works closely with relevant people across the organization to ensure the involvement of key experts and divisional representation in the sustainability work.

To support work related to environmental issues, SSAB has an Environmental Council, which includes representatives from each division and the main production sites as well as SSAB's subsidiaries, Ruukki Construction, Tibnor and Merox. The council is chaired by SSAB's Head of Environmental Affairs, who is also a member of the Sustainability Management Team. In issues related to responsible sourcing, the Vice President and Head of Ethics and Compliance works together with the procurement department.

SSAB links sustainability issues, such as safety KPIs, to remuneration. For example, internal safety targets are part of bonus plans for selected employee groups and top management. Individual performance targets might also include targets for emissions reductions or other sustainability related topics for selected employee groups.

POLICIES AND GUIDELINES

SSAB's vision and values are the foundation for SSAB's company culture and form the basis for policies and governing guidelines. The Code of Conduct, the Environmental Policy and the Health & Safety Policy are the most important Group policies governing sustainability issues. Also the Anti-Corruption Policy and the Supplier Sustainability Policy govern the way SSAB operates. More information on policies and guidelines can be found in the Responsible Partner section in the Business Review part of the Annual Report.

Business review, Responsible partner

MANAGEMENT SYSTEMS AND TOOLS

Management systems and action plans ensure the Group systematically carries out its work on critical sustainability issues. Several different management systems and tools are used to effectively control operations in accordance with SSAB's Code of Conduct, Environmental Policy and Health & Safety Policy.

Systems developed in-house, as well as third-party certified systems, are in place. Safety management systems for systematic health and safety work have been implemented at all production sites. OHSAS 18001 is one of the systems used. Environmental and climate work takes place primarily within the scope of the ISO 14001 environmental management standard and through local energy management systems.

SSAB's internal risk control and internal audits also cover work environment and environmental risks. To encourage reporting on any irregularities and suspected unlawful activities, SSAB has implemented an Ethics Line tool and business ethics training for all employees. Working with a responsible supply chain, environmental aspects and social issues are integrated into purchasing systems.

EVALUATION OF THE MANAGEMENT APPROACH

The management approach of each aspect is assessed as part of SSAB's sustainability management process and policies, guidelines and processes are improved accordingly to ensure achievement of the targets and to continuously improve SSAB's sustainability performance.

STAKEHOLDER ENGAGEMENT (G4-24 -27)

SSAB has many different stakeholders, who are important in the work to define sustainability priorities. Key stakeholders are those who are impacted by SSAB's operations and activities, and who similarly impact SSAB.

The following groups are considered as the most important stakeholder groups:

- Existing and potential customers
- Existing and potential employees
- Shareholders, investors and financiers
- Suppliers
- Local communities near SSAB's production sites
- Public agencies and organizations

Other stakeholders SSAB interacts actively with include the media, analysts, regulators, various research bodies and partner organizations, research institutes, universities and vocational schools.

CONTINUOUS DIALOG WITH STAKEHOLDERS

SSAB aims for regular, honest and transparent interaction with its stakeholders. SSAB actively maintains and develops its stakeholder relations and draws on information obtained from stakeholders when developing its operations, products and services. Transparent and continuous dialog increases the trust in SSAB's ability to manage risks and utilize opportunities, which at the same time enhances the development of the company. Another aim of this dialog is to communicate the actions and measures taken within sustainability. At the same time, good communication is equally important from a stakeholder perspective so that SSAB can contribute to sustainability-related assessments from suppliers and customers, investors and sustainability rating agencies.

SSAB has close collaboration with its customers in application development and technical support. SSAB actively participates in trade fairs, seminars and invites customers to site visits and to the annual Swedish Steel Prize, a competition established by SSAB in 1999 to inspire and disseminate knowledge about high-strength steel and how it can be used to develop stronger, lighter and more sustainable products.

It is important for SSAB to have engaged, competent and motivated employees to create a high-performing organization. Annual performance dialogs between employees and managers are a key element in following up results, providing mutual feedback and setting targets for performance and individual development. SSAB also conducts regularly personnel surveys to measure the satisfaction and engagement of employees. The survey gives everyone the opportunity to be part of the discussion and give feedback.

SSAB engages its investors and analysts in dialog to ensure that the financial markets have correct and sufficient information to determine the value of the SSAB share. The dialog includes annual general meetings, financial reports, result conferences and webcasts, information on the company's website, press releases, investor and analyst meetings, seminars and site visits. In meetings with investors and analysts also sustainability related issues are discussed, such as SSAB's sustainability strategy and management, safety, climate change and energy.

SSAB's work in sustainability extends to the whole value chain and via regular meetings with suppliers and contractors and via supplier audits SSAB maintains a dialog with important suppliers on issues related to, among other things, contracts, social and environmental responsibility, quality and delivery accuracy.

SSAB actively engages with the local communities in which it operates and is often the largest employer and significant regional force. The way SSAB partners with local communities has been defined at a site level. Locally, in addition to the company's own employees, SSAB engages with politicians, regulators, the media and the general public, people living close to the production sites. SSAB aims to promote sustainable development of the local communities, participates in local initiatives, and sponsors selected local activities. In many places, SSAB works closely and organizes events with local universities and schools to engage potential future employees.

SSAB is involved in many research projects to drive technical developments and collaborates with industry associations on many topics such as emissions trading rights, as well as dealing with negotiations on permit matters related to environmental reporting.

Swedish Leadership for Sustainable Development (SLSLD) network

In 2016, SSAB joined the Swedish Leadership for Sustainable Development (SLSLD) network, which is a network of around 20 leading Swedish companies and NGOs with Swedish ties. The network was initiated in 2013 and is coordinated by the Swedish aid agency Sida. The UN's new global goals for sustainable development (Sustainable Development Goals, SDG) are the basis of the network's activities. In conjunction with the adoption of the SDGs, the network members agreed on a shared commitment to contribute to the achievement of these goals by reducing their environmental impact and using resources more efficiently, creating jobs with decent conditions and combating corruption and unethical conduct. The network's CEOs meet once a year to evaluate the work conducted during the year and to set frameworks and guidelines for the next fiscal year.

G4-16 Memberships of Associations and National or International Advocacy Organizations

The following table lists SSAB's key memberships by country or area.

AREA OR COUNTRY	ORGANIZATIONS
Globally	World Steel Association
Europe	Eurofer, Euroslag, European Coil Coating Association ECCA, Eurometal, European Convention for Constructional Steelwork (ECCS)
North America	American Iron and Steel institute (AISI), National Association of Manufacturers (NAM)
Sweden	Jernkontoret, Svenskt Näringsliv (Confederation of Swedish Enterprise), SKGS (Skogen, Kemin, Gruvorna och Stålet), Steel and Metal Wholesalers Association, the Swedish Institute of Steel Construction, Swedish Mineral Processing Research Association, Swedish Cement and Concrete Research Institute
Finland	Finnish Metal Producers, Confederation of Finnish Industries EK, Suomen ELFi (Finnish Large Electricity Consumers), Finnish Constructional Steelwork Association, Confederations of Finnish Construction Industries, the Federation of Finnish Technology Industries, Finnish Coal Info

SUSTAINABILITY DATA

ECONOMIC IMPACTS

SSAB is aiming for industry-leading profitability. Achieving this depends on the company's ability to satisfy the needs of its customers better than its competitors, but also on fulfilling the expectations of other stakeholders. These include building long-term partnerships with suppliers, offering employees a safe workplace, competitive remuneration and good opportunities for personal development, as well as contributing to the well-being of the local communities in which the company operates. Long-term growth, financial stability and profitability are a foundation on which to develop and successfully deliver in the other aspects of sustainability – social and environmental responsibility.

MATERIAL ASPECT: ECONOMIC PERFORMANCE

G4-EC1 Direct economic value generated and distributed

The economic added value SSAB creates is distributed to various stakeholders in society such as shareholders, financiers, suppliers, employees the public sector (through taxes) and communities through local community projects, sponsorship and donations. The economic value retained is reinvested in the company in strategic and maintenance investments, R&D and other investments to develop the company's ability to create value. The adjacent table illustrates how the direct economic added value created by SSAB was distributed to various stakeholders.

SEKm	STAKEHOLDER GROUP	2016	2015	2014	DESCRIPTION
Direct economic value generated					
Revenues	Customers	55,935	57,608	48,701	Net sales, other operating income, financial income, share of results in associated companies
Economic value distributed					
Payments to suppliers of raw materials, goods and services	Suppliers	41,423	44,292	37,857	Payments to suppliers of raw materials, goods and services
Employee wages and benefits	Employees	8,239	8,404	6,266	Employee Wages and Benefits (excl. employee social security taxes)
Payments to providers of capital	Shareholders and financiers	969	978	1,684	Dividends, interest payments and financial expenses
Payments to government	Public sector/Society	1,032	1,396	1,467	Corporate income taxes/gross taxes (incl. employee social security taxes)
Economic value retained		4,272	2,538	1,427	Calculated as 'Direct economic value generated' less 'Economic value distributed'

ENVIRONMENTAL IMPACTS

Steel production is resource intensive and generates carbon dioxide (CO₂) emissions. The most significant environmental impacts arise at SSAB's production sites in Luleå, Borlänge, Oxelösund, Raahe, Hämeenlinna, Mobile and Montpelier. However, the impact on the local environment in the vicinity of SSAB's production facilities has decreased significantly over time. SSAB is committed to continuous improvement aimed at minimizing the adverse environmental impacts from the company's operations.

ENVIRONMENTAL TARGETS

SSAB's sustainability strategy includes measurable environmental targets related to CO₂ emissions, energy and waste reduction to be achieved by the end of 2019.

TARGET BY THE END OF 2019

A lasting reduction of 200,000 tonnes in CO₂ emissions

RESULTS IN 2016

By the end of 2016, SSAB achieved 89,000 tonnes or 45% of this target. The most important CO₂ saving measures were the following:

- Switched from heavy fuel oil to LNG in Borlänge, reaching full CO₂ reduction potential in 2015
- Started a new hot stove in Oxelösund in 2015, which increased blast temperature and led to reduced CO₂ emissions due to lower consumption of coke
- Reduced flaring of converter gas in Luleå due to improved control and planning, which was started in 2015 and there were further improvements made in 2016. CO₂ emissions have been reduced as a result of lower oil consumption at the power plant in Luleå, where more converter gas from SSAB is now used as fuel
- Decreased blast furnace fuel rate and CO₂ emissions through reduced moisture content of pellets in Raahe in 2016
- All energy savings resulting from reduced fuel consumption also reduce the CO₂ emissions

In 2016, SSAB's direct carbon dioxide (CO₂) emissions were 9,981 (9,448) thousand tonnes. Direct emissions from Nordic steel production were 9,315 (8,850) thousand tonnes, which was 5% more than in 2015. This was due to increased production. Crude steel production was up 5% compared to 2015. Direct emissions from scrap-based steel production in US were 644 (581) thousand tonnes, which was 11% more than in 2015. During the same time crude steel production was up 7%.



TARGET**BY THE END OF 2019**

A lasting reduction of 300 GWh in purchased energy (electricity and fuels)

RESULTS IN 2016

By the end of 2016, SSAB achieved 162 GWh (583 TJ) or 54% of this target.

The most important energy-saving measures were the following:

- Applied the principle of continuous improvement in developing energy efficiency at production sites
- Optimized media systems for compressed air and hydraulics, as well as furnace control systems at several SSAB sites
- Natural gas, supplied as LNG, replaced oil in Borlänge to fuel one of the reheating furnaces in the hot strip mill. The switch from oil to natural gas was completed in December 2014 and the main savings occurred in 2015
- Consolidated color-coated product production from four lines to three in 2015, increasing the energy efficiency of the Nordic production system
- Transferred metal-coated product production from Borlänge to Hämeenlinna in 2016 increasing the energy efficiency of the Nordic production system
- Made improvements in the galvanizing line in Hämeenlinna in 2015 in order to increase the stability of the heat recovery system. Also improved the furnace insulation in 2015
- Expanded implementation of oxygen lancing in a reheating furnace in Borlänge in 2016
- Upgraded the system of optimizing heating and processing of steel slabs in Iowa, US. Improvements were initiated in 2016 and further energy-saving potential will be investigated

TARGET**BY THE END OF 2019**

A lasting improvement of 30,000 tonnes in residual utilization

RESULTS IN 2016

By the end of 2016, SSAB achieved 36,000 tonnes or 120% of this target.

The most important measures to increase the utilization of residuals were the following:

- Basic oxygen steelmaking sludge turned into briquettes for use as a raw material instead of being landfilled in Luleå. Developed a new method for drying the sludge in 2014. This method involves taking the sludge from landfill and spreading it onto a large field to dry in the sun. Trials to produce briquettes from the dried material proved very successful in 2014-2015, and in 2016, the utilization of sludge has increased even further
- Utilization of ladle slag in the blast furnaces has been initiated in all steel works in the Nordics. In 2016, development was made mainly in Oxelösund and Raahе

*The base year for monitoring the targets referred to above is 2014



ENVIRONMENTAL POLICY AND MANAGEMENT

SSAB ensures continuous development by monitoring environmental performance against environmental targets and the environmental management system. SSAB's environmental management is based on the Group's Environmental Policy and the international environmental and energy management system standards, ISO 14001, and for some units, ISO 50001.

SSAB's Environmental Policy includes the following items:

- SSAB promotes sustainability and is committed to continuous improvement
- SSAB strives to integrate sustainability into its operations including the evaluation of environmental risks
- SSAB's high-strength steels and products come with added value, which contributes to environmentally responsible and sustainable materials for customers' products and solutions. By using high-strength steels, SSAB customers can reduce their steel consumption, and with stronger, lighter and more sustainable products, further reduce energy consumption and environmental footprints throughout their lifecycle
- SSAB employees work in a systematic, goal-oriented and proactive manner to reduce environmental impacts including pollution prevention and waste minimization
- SSAB is committed to interacting with stakeholders and evaluating stakeholder concerns, both internally and externally
- SSAB operations are subject to ongoing environmental audits. The company regularly establishes and reviews environmental objectives and targets. Environmental reports are provided routinely to the senior management team
- SSAB has implemented and maintains environmental management systems covering policies, practices and procedures at each operating location, is committed to meeting or exceeding its compliance obligations, and is certified to the ISO 14001 standard, where applicable

In 2016, all of SSAB's manufacturing sites had third party certification for the ISO 14001 standard. Divisions, subsidiaries and sites are responsible for putting environmental protection into practice. Each production site has an environmental team or manager responsible for monitoring compliance with legislation and handling permit matters. Each SSAB employee is responsible for complying with the Environmental Policy and for integrating environmental aspects into their everyday work.

Energy efficiency management is systematically promoted at production sites, either as part of an ISO 14001 system or through a certified ISO 50001 energy management system. Internal and external audits at sites ensure that everyday practices comply with set targets. Regular management reviews also drive the environmental work.

MANAGEMENT OF ENVIRONMENTAL RISKS

Environmental risks are included in the corporate risk management process. Risk management supports the company's strategy and ensures business continuity. Emissions from normal operating conditions are controlled and subject to environmental permit limits. Regular risk analyses cover possible emissions in the event of disruption or accident. The results of this analysis serve as the basis for preventive measures and corrective actions at various levels, both in corporate governance and ways of working locally on site.

ENVIRONMENTAL PERMITS AND LEGISLATION

SSAB's operations are subject to environmental permits containing numerous environmental conditions governing various parameters regarding production levels, air emissions, discharge water effluent, and waste management. All production sites comply with relevant local, state, and federal environmental requirements and the Group holds mandatory environmental damage as well as liability insurance covering damage to third parties. SSAB records all environmental damage and other environmental non-compliances and reports them to the appropriate authorities.

ENVIRONMENTAL LEGISLATION

SSAB operates globally and is subject to many international agreements and to regulation particularly in the EU and US. SSAB actively monitors climate, environmental and energy legislation, and proactively prepares for future changes. The most significant operations in terms of environmental impact are located in Sweden, Finland and the US. The most relevant issues from SSAB's perspective relating to environmental regulation are shown here.

Climate policy and legislation

PARIS COP 21 AND CLIMATE CHANGE NEGOTIATIONS

SSAB welcomes the global agreement concluded in December in Paris. The United Nations Climate Change Conference (COP21) is important in defining the future of climate change policies. The Paris conference is a starting point for nearly all UN members making their contributions to keep global warming below 2 °C and aiming for 1.5 °C. These contributions are estimated to limit the increase in global temperature to 2.7 °C, which means that further measures are needed. Since the national contributions made are not comparable to each other, the agreement lacks a level playing field that would protect the best performers in the steel industry.

EU CLIMATE TARGET 2030

In October 2014, the European Council summit set new more ambitious targets for greenhouse gas emissions, renewable energy and energy efficiency for 2030. To achieve the EU target of at least a 40% CO₂ reduction, the sectors covered by the EU Emissions Trading System must reduce their emissions by 43% compared to the 2005 baseline. Regardless of the result in Paris, the European Union is committed to significant emission reductions. The European Commission gave its proposal for the new Emissions Trading Directive in summer 2015 and the legislative process is now ongoing in the European Parliament and in member states.

The European Council summit agreed that the most efficient industrial operators exposed to international competition should not be subject to a direct or indirect cost disadvantage resulting from the EU's climate policy. For SSAB - and for all other steel producers in Europe - it is extremely important that the new directive of the EU Emissions

Trading Scheme for the period of 2021-2030 creates a level playing field for efficient performers within Europe and compared to our competitors outside the EU.

US CLEAN POWER PLAN

In 2015, the US Environmental Protection Agency (EPA) finalized new standards that aim to reduce carbon emissions from existing power plants. These standards are known as the Clean Power Plan and have been developed under the Clean Air Act. The EPA estimates that in 2030, the Clean Power Plan will result in a 32% reduction in CO₂ emissions from the electric power sector in the US compared to 2005 levels. The options for reducing emissions include investing in renewable energy, improving energy efficiency, increasing natural gas utilization, and use of nuclear power. The Clean Power Plan set different reduction targets for each individual state and each state was required to submit an individual state plan or multi-state plan, or request an extension, by September 2016. However, industry groups and 24 states filed lawsuits challenging the Clean Power Plan. Republican lawmakers introduced several legislative proposals in the US Congress to overturn or delay the regulation. On February 9, 2016, the US Supreme Court granted a motion to delay implementation of the Clean Power Plan while the courts determine its legality. The US Court of Appeals for the D.C. Circuit heard oral arguments in litigation challenging the Clean Power Plan on September 27, 2016..A decision is expected in early 2017. If the D.C. Circuit court rules in favor of the EPA, the case is expected to be appealed to the Supreme Court, which would likely not issue a ruling prior to 2018. If the petitioners prevail at the D.C. Circuit, the case would likely be remanded to the EPA for further action, which would allow the new Administration to revise the Clean Power Plan rule.

Separate litigation is also underway on the final rule for newly-constructed power plants, which will effectively require use of carbon capture and sequestration (CCS) technology. In that case, the D.C. Circuit ordered briefings to begin this fall, with oral arguments in the case on April 17, 2017. The EPA under the Obama Administration had hoped to conclude consideration of this case by the end of Obama's term, but the schedule will continue the process into the Trump Administration. EPA-mandated power plant emissions reductions would likely lead to higher electrical power costs for SSAB.

Environmental protection legislation

EU CIRCULAR ECONOMY

SSAB welcomes the EU Circular Economy Package, which was published in December 2015. The package sets out the objectives, tools and methodologies that should be used to ensure that steel products can be efficiently produced, used, reused, recovered and recycled in a constant loop. Steel is a 100% recyclable permanent material. The Package includes new measures encouraging the use of durable, resource-efficient and recyclable products in Member States. This should also expand the market of high-strength steels and wear-resistant steels provided by SSAB.

EU INDUSTRIAL EMISSIONS DIRECTIVE

SSAB's operations are subject to environmental permits with environmental conditions governing various parameters regarding production levels, air emissions, water effluent and waste management. Several SSAB production sites have operations that require environmental permits. SSAB's Nordic production facilities are subject to the European Industrial Emissions Directive (IED) and preparations to comply with these requirements are in progress primarily in Luleå and Oxelösund, Sweden and in Raabe, Finland.

In connection with the IED, the Best Available Techniques (BAT) Reference Documents are to be followed. The Iron and Steel Production (IS) BREF document was updated in 2012. Large Combustion Plants (LCP) will be finalized in 2017. Other steel industry specific documents, like Surface Treatment Using Organic Solvents (STS) and the Ferrous Metals Processing Industry (FMP) are under early stages of revision.

SULPHUR DIRECTIVE

Sulphur Emission Control Areas (SECA) for maritime traffic in the Baltic Sea, North Sea, English Channel and the Atlantic seaboard of the US mean that the sulphur content in fuels for vessels may not exceed 0.1%. The amended Sulphur Directive entered into force on January 1, 2015.

The Sulphur Directive is an important act toward achieving a sustainable environment. This includes, however, an increased cost for SSAB due to our location in the SECA area. That is why SSAB seeks ways to minimize the cost impact of the Sulphur Directive by route and transport mode optimization, transport efficiency management, minimizing empty runs, improving loading rates, subcontractor management and changes in contract structures, e.g., fuel and bunker efficiency clauses.

EU REACH

REACH, the European Union's regulation for chemicals, aims to improve the protection of human health and the environment against the risks of chemicals and to enhance the competitiveness of the EU chemical industry. SSAB manufactures, imports and uses substances and articles to which REACH applies. We provide information about our registrations of substances and of any hazardous substances in our supply chain. SSAB employs safety data sheet management systems to improve management and provision of up-to-date information about the safe use of chemicals. In addition, SSAB communicates with stakeholders about any requirements regarding REACH and SSAB's products when legal obligations change. SSAB works closely with the supply chain to replace substances of very high concern (SVHC) when possible. Any queries about REACH matters can be submitted to reach@ssab.com.

Energy and electricity market legislation

EU ENERGY UNION

The EU Commission issued its first package for implementing an EU-wide energy union in July 2015. The second package was launched in December 2016. The package includes, among other things, a proposal to redesign Europe's electricity market. The aim is to create an efficient electricity market by, for example, improving price signal steering. SSAB welcomes the Commission's point that the energy only market model is the best way to secure a well-functioning electricity market. Prices will reflect the scarcity of available transmission or production capacity in energy-only markets. SSAB also welcomes the Commission's point that subsidies and regulation disturbing the market should be removed and the possibility for consumers to actively participate in the market through the right price signals should be promoted.

EU'S ENERGY EFFICIENCY DIRECTIVE

The European Council summit has set a target to increase energy efficiency by at least 27% by 2030, based on the 2005 baseline. In the revised Energy Efficiency Directive the Commission increased the target to 30% and changed it to a binding target. In order for the EU to achieve this target, the industry needs to meet with the requirements that are implemented in the legislation at a national level. SSAB regularly carries out energy audits at sites and works systematically to continuously identify energy savings, which is in line with the European Energy Efficiency Directive.

MATERIAL ASPECT: MATERIALS

G4-EN1 Materials used by weight

Steel production requires large amounts of raw materials. The key raw materials needed in steelmaking include iron ore, coal, limestone, different alloys and scrap steel. Iron ore and coal are the main raw materials required for SSAB's steel production operations in Sweden and Finland. Scrap metal is the most important raw material for SSAB's steel production operations in the US. In 2016, SSAB used a total of 15.5 (14.5) million tonnes of raw materials.

EN1 – Materials used by weight (thousand tonnes)	2016	2015	2014	2013	2012
Iron ore pellets	7,325	7,016	6,991	6,717	6,663
Reducing agents ¹⁾	2,562	2,435	2,413	2,313	2,268
Scrap (external + internal)	3,644	3,434	4,016	3,800	3,514
Recycled materials	1,005	836	914	876	703
Slag formers ²⁾	765	637	671	595	589
Alloys	116	103	108	100	99
Metal and organic coatings	58	49	47	56	48
Non-renewable materials, total	15,477	14,511	15,160	14,456	13,884

¹⁾ Coke, coal and other reducing agents, such as oil

²⁾ Limestone, burnt lime, dolomite, carbide, etc.

G4-EN2 Percentage of materials used that are recycled input materials

SSAB promotes the use of materials originating from its production in its own processes. The production of iron and steel gives rise to a range of residuals. Recirculating material back into the steelmaking process reduces the need for virgin raw materials. This in turn, reduces CO₂ emissions and waste. Material that cannot be recirculated internally can be processed into by-products and sold externally, reducing CO₂ emissions by substituting natural resources in other industries.

In 2016, 3.6 (3.6) million tonnes of residuals from the iron ore-based steel production were utilized, internally or externally. This is about 90 (92) % of all residuals produced in the iron ore-based production. In 2016, 1.3 (1.4) million tonnes of by-products were sold externally.

This is how the residuals are utilized:

- Iron containing residuals are returned to the blast furnace or the steelworks to substitute iron ore
- Steel slag is utilized in the blast furnace to substitute lime
- Blast furnace slag is utilized in the cement industry to substitute lime
- Slags are sold for road construction to reduce the use of natural aggregates
- Certain slags are utilized as a soil conditioner in agriculture
- Benzene, sulfur and coal tar are utilized in the chemical industry as raw materials

ACTIONS TAKEN IN 2016 TO INCREASE THE UTILIZATION OF RESIDUALS

SSAB has set a target to increase the utilization of residuals by improving the internal recirculation of material and external sales of by-products. The target is to achieve a lasting improvement in residual utilization by 30,000 tonnes, reducing the amount of material being sent to landfill by the end of 2019, compared to the 2014 baseline. By the end of 2016, SSAB achieved 36,000 tonnes or 120% of this target.

The most important measures to increase the utilization of residuals were the following:

- Basic oxygen steelmaking sludge turned into briquettes for use as a raw material instead of being landfilled in Luleå. Developed a new method for drying the sludge in 2014. This method involves taking the sludge from landfill and spreading it onto a large field to dry in the sun. Trials to produce briquettes from the dried material proved very successful in 2014-2015 and in 2016 the utilization of sludge has increased even further
- Utilization of ladle slag in the blast furnaces has been initiated in all steel works in the Nordics. In 2016, development was made mainly in Oxelösund and Raahe

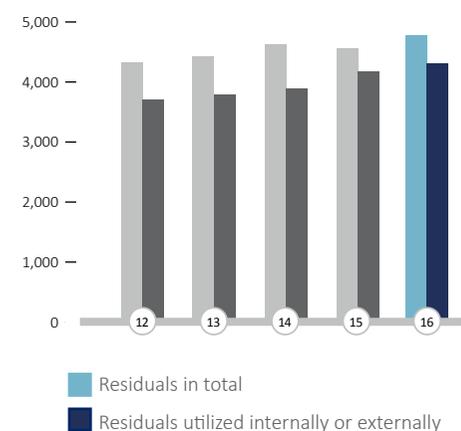
SCRAP USED IN STEEL PRODUCTION

Recycled steel has a big impact on reducing the environmental footprint of the product's lifecycle. It replaces the iron ore as input material in iron and steel-making. In 2016, SSAB used 2.6 (2.5) million tonnes of external scrap and 1.0 (0.9) million tonnes of internal recycled scrap, which equates to an average of 43% of recycled steel used in all of SSAB's steel production. SSAB uses approximately 20% of scrap metal in conjunction with steel production in the Nordics, and nearly 100% in the US.

Residuals from steel production, waste included (thousand tonnes)	2016	2015	2014	2013	2012
Residuals from ore-based steel production					
Residuals, total	4,045	3,875	3,913	3,726	3,616
Utilized internally or externally	3,648	3,568	3,277	3,158	3,086
Residuals from scrap-based steel production					
Residuals, total	718	676	721	685	693
Utilized internally or externally	659	617	632	628	618

Residuals from steel production and the amount utilized¹⁾

Thousand tonnes



¹⁾ Landfill disposal and changes in stock account for the difference between the total amount of residuals and the amount utilized internally and externally

MATERIAL ASPECT: WASTE

SSAB is continuously focusing on reducing the amount of material being sent to landfills. The key to waste reduction is to refine residuals from steelmaking processes into raw materials that can be reused as well as developing new by-products that can be sold outside of SSAB. There are waste products from the production processes for which there is currently no environmentally or economically justifiable application and which need to be removed from the processing cycle on environmental grounds. At SSAB, this type of waste is e.g. flue gas sludge that cannot be utilized due to its physical and chemical characteristics.

The management and monitoring of the company's landfill sites are strictly regulated by laws and governmental authorities. Deposited waste must be handled in such a way that these resources might again be utilized in the future.

SSAB Americas does not own or operate waste transportation equipment or landfills and deals only with government-approved landfills. Materials are tested and classified as waste before being sent to a landfill. Testing is conducted by a specialized third party contractor.

EN23 – Total weight of waste

Waste that originates from SSAB's operations and requires either being sent to landfill or to external recipients is processed in compliance with valid regulations. The recipients employed have been approved and have the necessary permits. SSAB's major production sites collaborate with partners who guide the choice of recipient to ensure maximum efficiency, both from the environmental and financial perspective, in removal. This means recipients may vary from time to time. The greatest focus is on hazardous waste, such as oily waste, including used oil, grease, sludge and emulsions, which are often disposed of through combustion and where energy recovery is sought.

EN23 – Total weight of waste by type (thousand tonnes)	2016	2015	2014	2013	2012
Industrial waste to landfill	399	306	392	410	418
Hazardous waste	48	46	50	48	50
Non-hazardous waste	292	285	239	226	255



MATERIAL ASPECT: ENERGY

SSAB's production processes are energy intensive. Systematic energy efficiency management and energy recovery at all sites, as well as production of electricity from process gases at steel mills, ensure efficient use of energy and lower emissions. SSAB has signed up for different official energy savings programs such as Motiva's energy efficiency agreement in Finland.

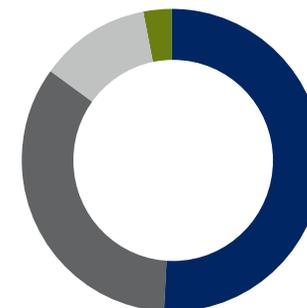
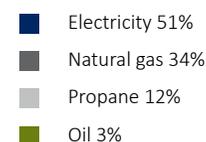
ENERGY SOURCES USED BY SSAB

The main fuels used at SSAB's production sites are process gases, natural gas, propane and, for the time being, also heavy fuel oil. Process gases from SSAB's coke oven plants and blast furnaces are used primarily to replace external fuels in ovens and secondarily to produce electricity in power plants. Natural gas, propane and oil are used to heat up furnaces.

To compensate for fossil fuel use, SSAB aims for a significant share of the electricity it buys from external supplies to come from renewable energy sources. Consequently, SSAB has purchased "guarantees of origin" (GoO) regarding renewable electricity for the share of electricity it buys externally in the Nordic countries. A GoO means that at least 50% of the electricity SSAB buys on the Nordic electricity market is derived from renewable electricity and that a minimum of 30% is hydroelectricity and a minimum of 20% is wind power.

SSAB is dependent on a steady supply of electricity at competitive prices throughout the year. This is why SSAB considers that nuclear power is needed on the Nordic electricity market. It is in this context and with this in mind that SSAB has a 3% shareholding in the Finnish Fennovoima project, which plans to build a nuclear power plant in northern Finland.

Energy sources



ENERGY RECOVERY AT STEEL MILLS

Process gases like blast furnace gas, coke oven gas and converter gas are generated in the iron- and steelmaking processes. Steam and hot water are also produced. These energy flows can be fully recovered to generate electricity and heat, thereby saving fuel resources. Also, the heat of flue gases is recovered and used to produce steam and heat. Recovered heat has been used to produce district heating in Luleå, Raahе and Oxelösund since the 1980s. This meets about 90% of local district heating needs.

The energy-rich gases which cannot be used in the steel production are used in local power plants, among other things, to supply SSAB with approximately 45 (43) % of the electricity needs of steel production in Sweden and Finland.



G4-EN3 Energy consumption within the organization

In 2016, SSAB's total energy consumption related to electricity and purchased fuels was 8,990 (8,381) GWh. Electricity accounts for 4,514 (4,357) GWh and fuels for 4,451 (4,001) GWh. During 2016, some 1,195 (1,114) GWh of electricity was produced from recovered energy. In 2016, SSAB delivered 1,101 (1,006) GWh of district heating.

EN3 - Energy consumption within the organization (GWh/TJ)					
	2016	2015	2014	2013	2012
	GWh/TJ	GWh/TJ	GWh/TJ	GWh/TJ	GWh/TJ
Fuels					
Natural gas	3,073/11,063	2,754/9,914	2,596/9,345	2,574/9,266	2,349/8,455
Propane	1,099/3,956	1,043/3,756	1,034/3,722	934/3,361	971/3,496
Fuel oil	279/1,003	204/733	635/2,288	785/2,824	741/2,667
Total non-renewable fuels	4,451/16,023	4,001/14,404	4,265/15,355	4,292/15,451	4,061/14,618
Electricity, heat and steam					
Electricity, purchased ¹⁾	3,319/11,948	3,243/11,677	3,469/12,490	3,475/12,510	3,324/11,965
Heat, purchased	26/93	23/83	24/87	27/98	28/100
Electricity generated from process gases	1,195/4,302	1,114/4,010	1,033/3,720	974/3,506	1,030/3,709
Gross energy consumption	8,990/32,366	8,381/30,172	8,792/31,652	8,768/31,565	8,442/30,393
Electricity and heat sold					
Heat, sold	1,101/3,965	1,006/3,620	1,081/3,893	1,086/3,910	1,149/4,138
Net total energy consumption²⁾	7,889/28,400	7,376/26,552	7,711/27,759	7,682/27,655	7,293/26,255

¹⁾ Including external companies within the industrial area

²⁾ The figure excludes the fuels used in transportation and vehicles, nor does it include employee travel and transportation

EN5 – Energy intensity

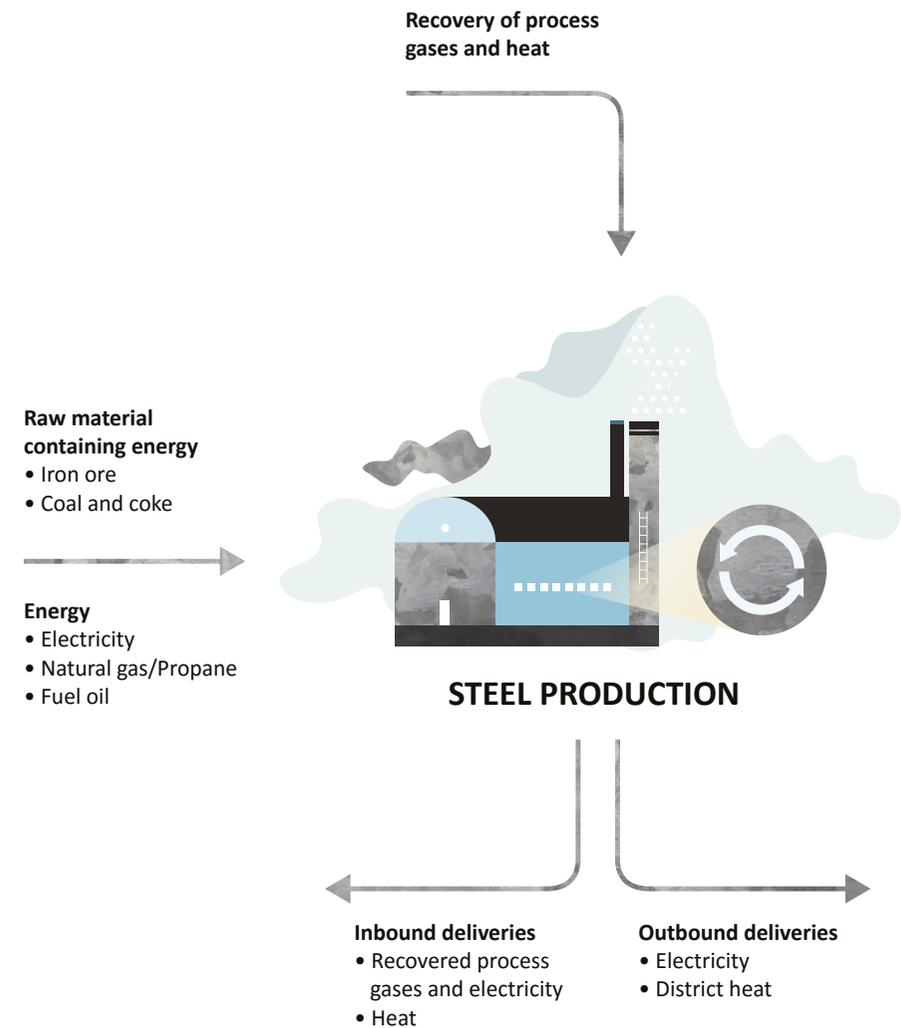
SSAB's energy intensity in 2016 was 1,122 (1,101) kWh/tonne crude steel when including the total energy consumption (electricity and purchased fuels) from the iron and steel production sites and rolling mills.

EN6 – Reduction of energy consumption

SSAB has set energy savings target to reduce the use of purchased energy by 300 GWh by the end of 2019. This energy saving is equal to approximately 3.5% of SSAB's total amount of purchased energy in 2014. By the end of 2016, SSAB achieved approximately 162 GWh (583 TJ) or 54% of this target.

The most important energy-saving measures were the following:

- Applied principle of continuous improvement in developing energy efficiency at production sites
- Optimized media systems for compressed air and hydraulics, as well as furnace control systems at several SSAB sites
- Natural gas, supplied as LNG, replaced oil in Borlänge to fuel one of the reheating furnaces in the hot strip mill. The switch from oil to natural gas was completed in December 2014 and the main savings occurred in 2015
- Consolidated color-coated product production from four lines to three in 2015, increasing the energy efficiency of the Nordic production system as a whole
- Transferred metal-coated product production from Borlänge to Hämeenlinna in 2016, increasing the energy efficiency of the Nordic production system
- Improved the galvanizing line in Hämeenlinna in 2015 in order to increase the stability of the heat recovery system. Also improved furnace insulation in 2015
- Expanded implementation of oxygen lancing in a reheating furnace in Borlänge in 2016
- Upgraded the system of optimizing, heating and processing steel slabs in Iowa, US. Improvements were initiated in 2016 and further energy saving potential will be investigated



ASPECT: WATER

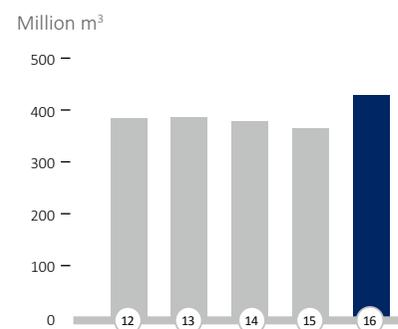
Plentiful access to water is crucial for steel production, particularly in quenching, where water is used for the direct cooling of hot-rolled steel. Most of the water used in SSAB's production processes is recirculated in cooling systems. Steel production or upgrading sites are not situated in groundwater areas. SSAB's operations are located in areas where there is currently no scarcity of water, and no water sources that are significantly affected by water withdrawal by SSAB's operations. All operations are subject to environmental permits and guidelines regarding discharged water.

EN8 – Total water withdrawal

SSAB uses surface water at all of its production sites, including both sea water and fresh water. Water is used mostly in processing, cooling and in scrubbing flue gases at the steel works and rolling mills. Water is also needed for electricity production and in slag granulation.

In 2016, SSAB consumed 429 (365) million cubic meters of water. Out of all of the water used during the year, approximately 99% was used for cooling purposes. A large share of the water used in production passes water treatment to be re-used and millions of cubic meters of water used in the steel production process are recycled annually.

EN8 – Total water withdrawal by source (million m ³)	2016	2015	2014	2013	2012
Surface water (inlands)	203	160	179	180	173
Surface water (sea)	225	204	199	205	210
Municipal water	1	1	1	1	2
Total water withdrawal	429	365	379	386	385

Water consumption**Effluent discharge into waterways**

All SSAB's sites take actions to prevent the risk of contaminating local water resources and to reduce the effluent discharge into the waterways. Discharges of effluent into the waterways consist of suspended solids, which contain calcium, magnesium and silicon compounds, and originate from the steel plants and blast furnaces. Oily emissions originate from the rolling processes. There are also some discharges of nitrogen and iron into the waterways. The following table shows suspended solids and oil discharge into the waterways.

Effluent discharge into waterways, (tonnes)	2016	2015	2014	2013	2012
Suspended solids	286	228	616	423	288
Mineral oil	6	9	12	18	14

MATERIAL ASPECT: EMISSIONS

The process of producing steel from iron ore is carbon-intensive and the raw materials used in production are the main source of carbon dioxide (CO₂) emissions, along with CO₂ emissions generated from energy usage. In addition to CO₂, there are also other emissions into the air being formed during the steel making process and in other processing operations (rolling, coating, etc.).

As a result of the continuous development of processes, SSAB's blast furnaces in Sweden and Finland are among the most efficient in the world in terms of minimizing CO₂ emissions from steel production. SSAB's use of coke and coal as reducing agents is close to the theoretical minimum for a blast furnace. There is no technology available today that can replace coal as raw material for blast furnace steel production, which means totally new technology would be needed in order to achieve significant emission reductions.

Therefore, in 2016, SSAB, LKAB and Vattenfall jointly announced a long-term breakthrough emissions reduction project, HYBRIT (Hydrogen Breakthrough Ironmaking Technology). Together, the companies involved in the project, have initiated work to develop a steel production process that emits water instead of carbon dioxide. The initiative is split into three phases beginning with a pre-feasibility study, which will analyze all the conditions and which will continue until the end of 2017. This will be followed by a more concrete research and development program in a pilot study, which will last until 2024 before finally progressing to demonstration plant trials, which will continue until 2035.

CO₂ emissions from blast furnace-based steel production can be controlled and reduced to some extent by improving efficiency in the production processes. The production of iron and steel

gives rise to a range of residuals and recirculating material back into the steelmaking process, as well as maximizing the use of recycled scrap as raw material, reduces CO₂ emissions and waste. Material that cannot be recirculated internally can be processed into by-products and sold externally, which also reduces CO₂ emissions by substituting natural resources in other industries.

Emissions related to energy consumption in production can be reduced by improving energy efficiency and increasing the use of renewable energy sources. Systematic energy efficiency management and energy recovery, as well as production of electricity from process gases at steel mills, improves energy efficiency and decreases emissions. However, as CO₂ emissions from energy usage are only a small share of SSAB's total CO₂ emissions, the total effect of energy efficiency improvements has a relatively small impact on SSAB's total CO₂ emissions.

SSAB Americas' production sites make steel using two electric arc furnaces. CO₂ emissions are substantially lower than the emissions generated in conjunction with iron ore-based steel production since less coal is used in the production process. Additionally, much of the coal used in production is derived from recycled coal residual. In scrap-based production, improving energy and material efficiency is the key to reducing emissions.

Industry-wide cooperation is important to identify new technical solutions that can further decrease the impacts of steelmaking processes. In the Nordics, SSAB is collaborating with KTH Royal Institute of Technology in Stockholm, Luleå University of Technology, Dalarna University, Swerea, Oulu University, Aalto University, Åbo Akademi University and VTT Technical Research Centre of Finland. In SSAB Americas, the American Iron and Steel Institute and the Association for Iron and Steel Technology are important partners.



EN15 - Direct greenhouse gas (GHG) emissions (Scope 1)

In 2016, SSAB's direct carbon dioxide (CO₂) emissions were 9,981 (9,448) thousand tonnes. Around 90% of SSAB's total CO₂ emissions are generated in iron ore-based steel production at the company's sites in Luleå, Oxelösund and Raabe, and 98% of these CO₂ emissions are related to metallurgical processes, i.e. to the use of coke and coal as reducing agents. In 2016, direct emissions from Nordic steel production were 9,315 (8,850) thousand tonnes, which was 5% more than in 2015. This was due to increased production. Crude steel production was up 5% compared to 2015. The greenhouse gases produced in Nordic steel production are within the scope of the European Emissions Trading System.

In 2016, direct CO₂ emissions from the scrap-based steel production in the US were 644 (581) thousand tonnes, which was 11% more than in 2015. During the same time crude steel production was up 7%.

The direct CO₂ emissions are calculated in accordance with the procedures in the WBCSD GHG Protocol, together with additional guidelines from the EU and/or national authorities.

EN16 - Energy indirect greenhouse gas emissions (Scope 2)

Indirect GHG emissions occur from the generation of purchased electricity, heating and steam. For electricity, indirect CO₂ emissions are calculated using grid average emission factors. Specific emission factors are used for the generation of the purchased heat and steam. Due to the guarantees of origin for renewable energy sources related to SSAB's electricity consumption, SSAB's actual Scope 2 emissions factor is lower than the grid average factor used in the Nordics. However, the guarantees of origin have not been taken into account and the reported emissions are based on the grid average factor without any further reductions.

EN15, EN16 - Greenhouse gas emissions¹⁾ (thousand tonnes)

	2016	2015	2014	2013	2012
Direct greenhouse gas (GHG) emissions (Scope 1)²⁾					
Iron ore-based steel production in Nordics	9,315	8,850	8,910	8,643	8,648
Scrap-based steel production in US	644	581	651	651	640
Other reported sites	22	18	17	17	20
Total	9,981	9,448	9,578	9,311	9,308
Indirect emissions from the generation of purchased electricity, heating and steam (Scope 2)					
Iron ore-based steel production in Nordics	185	182	193	194	191
Scrap-based steel production in US	964	934	1,009	1,234	1,158
Other reported sites	17	17	18	18	18
Total	1,166	1,133	1,220	1,447	1,367

¹⁾ Only CO₂ is included in the calculation

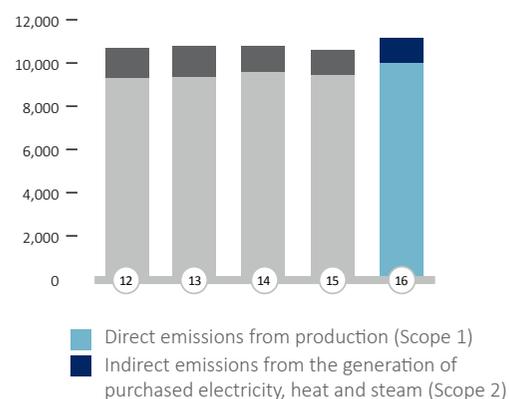
²⁾ Generation of electricity from process gases is included in the direct emissions (Scope 1)

EN18 – Greenhouse gas emission intensity

SSAB's greenhouse gas (GHG) emission intensity in 2016 was 1.4 (1.4) tonnes of CO₂ emissions/tonne crude steel. The GHG intensity is reported as product emission intensity (metric tonnes of CO₂ emissions per tonne of crude steel produced). It is calculated as the sum of Scope 1 and Scope 2 emissions for all SSAB's iron and steel production sites and rolling mills, divided by the total crude steel production in tonnes.

Carbon dioxide emissions

Thousand tonnes



EN18 - Greenhouse gas emissions intensity (tonnes of CO₂ emissions/tonne crude steel)

	2016	2015	2014	2013	2012
Iron ore-based steel production in Nordics	1.7	1.7	1.6	1.7	1.7
Scrap-based steel production in US	0.7	0.7	0.7	0.8	0.8
Average	1.4	1.4	1.3	1.4	1.4

EN19 – Reduction of greenhouse gas emissions

SSAB has set a target to reduce direct CO₂ emissions from its operations. The target is to achieve a lasting reduction of 200,000 tonnes in CO₂ emissions by the end of 2019, compared to the 2014 baseline. This CO₂ emissions reduction is equal to approximately 2.1% of SSAB's total CO₂ emissions in 2014.

CO₂ emissions can be reduced by recirculating scrap and residuals back into the steelmaking process, optimizing the use of reducing agents (coke and coal) in iron production and by improving the energy efficiency of fuels.

By the end of 2016, SSAB achieved 89,000 tonnes or 45% of this target.

The most important CO₂ saving measures were the following:

- Switched from heavy fuel oil to LNG in Borlänge, reaching full CO₂ reduction potential in 2015
- Started a new hot stove in Oxelösund in 2015, which increased blast temperature and led to reduced CO₂ emissions due to lower consumption of coke
- Reduced flaring of converter gas in Luleå due to improved control and planning, which was started in 2015 and there were further improvements made in 2016. CO₂ emissions have been reduced as a result of lower oil consumption at the power plant in Luleå, where more converter gas from SSAB is now used as fuel
- Decreased blast furnace fuel rate and CO₂ emissions through reduced moisture content of pellets in Raabe in 2016
- All energy savings resulting from reduced fuel consumption also reduce the CO₂ emissions

EN21 – Other significant air emissions

In addition to CO₂ emissions, there are also other emissions into the air being formed during the steelmaking process. Other significant air emissions deriving from SSAB's operations are particulate matter (PM), sulfur oxides (SOx) and nitrogen oxides (NOx). SSAB monitors the emissions arising from its operations both at production sites and in their vicinity to ensure compliance with emissions limits and to improve local air quality.

The combustion processes and the fine material used in iron and steel production give rise to particulate emissions into the air. In 2016, particulate emissions, excluding fugitive particulate emissions, totaled 718 (931) tonnes. Particulate emissions contain metals, which originate mainly from the iron ore pellets, coking coal and from residuals and processing the steel products. SSAB is continuously working to reduce the particulate emissions.

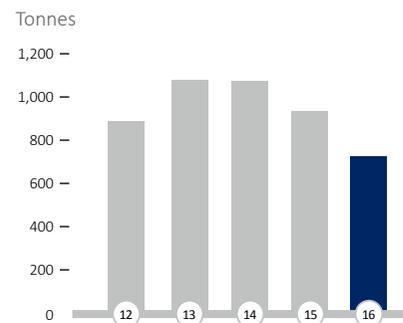
In 2016, around 2,345 (2,699) tonnes of sulfur dioxide emissions originated from the sulfur containing raw materials and fuels. At the Raahe site, the closure of the sinter plant and the switch to using iron ore pellets has resulted in a significant reduction in sulfur dioxide and particulate emissions after 2011.

Nitrogen oxides emissions are mainly formed in the combustion processes in the coke plants and rolling mills. In 2016, nitrogen oxides emissions amounted to 3,668 (3,763) tonnes.

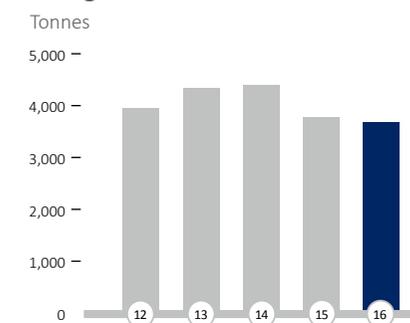
Emissions of volatile organic compounds (VOC) mainly occur on the coating lines when using solvents in the paints. In 2016, these emissions totaled 221 (255) tonnes.

EN21 – Other significant air emissions (tonnes)	2016	2015	2014	2013	2012
Particulate matter (PM)	718	931	1,072	1,082	893
Sulfur dioxide emissions (SOx)	2,345	2,699	2,632	3,531	2,978
Nitrogen oxides emissions (NOx)	3,668	3,763	4,388	4,331	3,956
Emissions of volatile organic compounds (VOC)	221	255	295	315	373

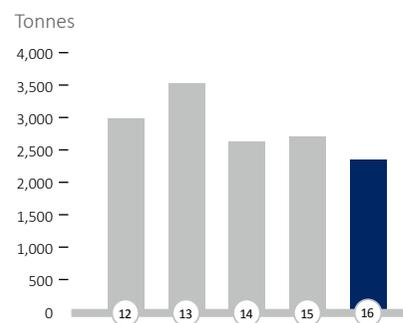
Particulate emissions



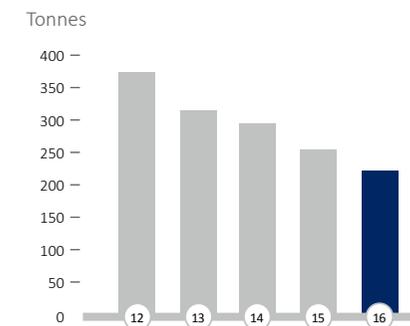
Nitrogen oxides emissions



Sulfur dioxide emissions



Volatile organic compounds (VOC) emissions



SOCIAL IMPACTS

One of the key elements in SSAB's strategy is a high-performing organization, which is essential enabler for achieving SSAB's ambitious strategic targets. SSAB strives to be the safest steel company in the world, with an objective to achieve zero accidents, work-related injuries or illnesses. At SSAB, social responsibility not only applies to HR practices related to employees, it also incorporates engagement with people in neighboring communities and social

responsibility in the supply chain. SSAB is a signatory to the UN's Global Compact initiative and its principles are also applied when working with suppliers and subcontractors.

Social responsibility targets

SSAB's sustainability strategy includes the following social responsibility targets:

ANNUALLY SSAB WILL HAVE ACHIEVED THE FOLLOWING SOCIAL RESPONSIBILITY TARGETS

Annual performance dialogs between managers and all employees

Compliance with SSAB's Code of Conduct and behavior in accordance with the company's core values

Training all employees in business ethics through e-learning by the end of 2016

Completion of a self-assessment questionnaire regarding social and environmental conditions for all suppliers registered in SSAB's purchasing system as medium- or high-risk

Reaching an employee engagement score that exceeds the global average

By the end of 2019, SSAB will have achieved the following gender diversity target:

Women holding 30% of the top management positions in the company by the end of 2019

RESULTS IN 2016

More than 90% of office employees conducted performance dialogs with their managers in 2016¹⁾

SSAB held training in business ethics for sales organization during 2016

At the end of 2016, 90% of SSAB's employees had completed the training in business ethics

At the end of 2016, 3,730 (3,456) of SSAB's 20,000²⁾ active suppliers were registered in SSAB's purchasing system, of which 1,033 (902) were risk classified and had CSR³⁾ status. 66 (51) suppliers have been identified as medium-risk suppliers and 111 (81) as high-risk suppliers, and have also completed the self-assessment questionnaire regarding their social and environmental conditions

Overall the Employee Engagement Index (as measured in Voice, SSAB's global employee survey) was in line with the external global norms.

SSAB: 70

External norm: 72

At the end of 2016, women held 27 (23)% of SSAB's top management positions

¹⁾ Currently SSAB is able to follow only office employees regarding conducted performance dialogs

²⁾ Those parts of the organization that do not have access to the purchasing system evaluate their suppliers and follow up on suppliers' performance through other internal systems

³⁾ CSR status = Supplier has a CRS status, if it has a CSR risk classification



MATERIAL SOCIAL ASPECTS AND SCOPE OF DATA

SSAB's material social aspects were defined in the materiality analysis process conducted at the end of 2014 and they are as follows: occupational health and safety, employment, training and education, diversity and equal opportunity, anti-corruption, supplier assessment for labor practices and supplier assessment for human rights.

SSAB'S EMPLOYEES

At the end of 2016, SSAB had a total of 14,980 (16,045) permanent employees. Temporary personnel accounted for about 2.4 (3.3)% of all employees. Full-time employees accounted for 97.7 (97.7)% and part-time employees for 2.3 (2.8)% of all permanent employees. SSAB has employees in more than 50 countries, with 73% of employees located in Sweden and Finland and 8% in the US.

G4-10 Number of employees

Number of employees by employment contract and gender						
	2016		2015		2014	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Women	2,775	90	3,004	128	3,180	207
Men	12,205	275	13,041	415	13,707	543
Total	14,980	365	16,045	543	16,887	750

Permanent employees by employment contract type and gender						
	2016		2015		2014	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Women	2,689	86	2,906	98	3,067	113
Men	11,949	256	12,697	344	13,253	454
Total	14,638	342	15,603	442	16,320	567

Number of employees and managers by gender ¹⁾						
	2016		2015		2014	
	Employees	Managers	Employees	Managers	Employees	Managers
Women	2,865	247	3,132	302	3,387	295
Men	12,480	1,214	13,456	1,381	14,250	1,385
Total	15,345	1,461	16,588	1,683	17,637	1,680

¹⁾ Permanent and temporary



Number of employees by region and gender ¹⁾		2016	2015	2014
Sweden	Women	1,250	1,368	1,412
	Men	4,980	5,433	5,594
	Total	6,230	6,801	7,006
	% of total workforce	41%	41%	40%
Finland	Women	708	764	871
	Men	4,134	4,335	4,614
	Total	4,842	5,099	5,485
	% of total workforce	32%	31%	31%
USA	Women	158	157	157
	Men	1,143	1,153	1,211
	Total	1,301	1,310	1,368
	% of total workforce	8%	8%	8%
Other Europe	Women	653	745	837
	Men	1,919	2,218	2,456
	Total	2,572	2,963	3,293
	% of total workforce	17%	18%	19%
Rest of the world	Women	96	98	110
	Men	304	317	375
	Total	400	415	485
	% of total workforce	3%	3%	3%

¹⁾ Permanent and temporary

G4-11 Employees covered by collective bargaining agreements

The majority of SSAB's employees in Sweden and Finland are represented by labor unions (approximately 84% of the total number of employees). Other countries have different arrangements according to country-specific practices, traditions and labor legislation. SSAB respects its employees' right to organize in accordance with the legislation and provisions in each country in which it operates. SSAB provides channels for employees to engage in the company's activities and express their opinions. Local management in each country is responsible for creating opportunities for employee engagement. The company also encourages direct interaction between supervisors and their teams.



ASPECT: EMPLOYMENT

SSAB's ability to continue to maintain and grow its business as well as provide high-quality products to customers depends, to a large extent, on the contributions of its management and key personnel. SSAB's success also depends on its ability to attract, retain and motivate qualified employees throughout the organization.

New employee hires	2016		2015	
	Number of employees	% of total workforce	Number of employees	% of total workforce
Total	572	3.7%	695	4.2%
<30 years	249	1.6%	346	2.1%
30–50 years	269	1.7%	57	0.3%
>50 years	54	0.3%	292	1.8%
Women	107	0.7%	147	0.9%
Men	465	3.0%	548	3.3%
Sweden	155	1.0%	300	1.8%
Finland	189	1.2%	147	0.9%
Russia	30	0.2%	66	0.4%
USA	58	0.4%	39	0.2%
Other Europe	92	0.6%	113	0.7%
Rest of the world	48	0.3%	30	0.2%

LA-1 Total number and rates of new employee hires and employee turnover by age group, gender and region

In 2016, 572 (695) new employees joined SSAB and 1,556 (1,537) employees left the company for different reasons. Employee turnover in 2016 was 10.1 (9.4)%.

Employee turnover	2016		2015	
	Number of employees who have left the company	% of total workforce ¹⁾	Number of employees who have left the company	% of total workforce ¹⁾
Total	1,556	10.1%	1,537	9.4%
<30 years	147	1.0%	206	1.3%
30–50 years	663	4.3%	589	3.6%
>50 years	746	4.8%	743	4.5%
Women	323	2.1%	324	2.0%
Men	1,233	8.0%	1,213	7.4%
Sweden	620	4.0%	425	2.6%
Finland	330	2.1%	489	3.0%
Russia	337	2.2%	257	1.6%
USA	53	0.3%	231	1.4%
Other Europe	170	1.1%	50	0.3%
Rest of the world	46	0.3%	85	0.5%

¹⁾ Permanent employees who have left the company/average number of permanent employees during the period

MATERIAL ASPECT: OCCUPATIONAL HEALTH AND SAFETY

SSAB strives to be the safest steel company in the world, with an objective to achieve zero accidents, work-related injuries and illnesses. Ensuring a safe and secure environment for SSAB's employees, contractors and visitors is the company's highest priority. The management approach of occupational health and safety is described in the [Business Review \(BR\)](#), p. 65–66.

G4-LA5 Percentage of total workforce represented in formal joint management-worker health and safety committees

SSAB applies occupational health and safety programs as required by local legislation in each of the countries where it operates. Safety programs are normally developed by occupational health and safety committees consisting of representatives of the local management and employees. In Sweden and Finland, SSAB has health and safety committees at all workplaces where more than 50 employees are working on a regular basis. In the US, SSAB has a variety of safety committees, which provide employees an opportunity to participate in worker health and safety issues.

G4-LA6 Total number of injuries, Lost Time Injury Frequency and fatalities

SSAB's own employees' lost time injury frequency resulting in an absence of more than one day (LTIF) was 6.7 (6.2). Including also contractors LTIF was 7.0 (6.3). In 2016, a total of 173 (166) injuries (LTIs) occurred for SSAB's employees and 36 (31) for contractors. SSAB Europe and SSAB Americas improved their safety performance, while in the other business areas the progress was the opposite.

In Luleå, a fatal accident occurred on April 27, 2016. One SSAB employee tragically died when two SSAB employees were carrying out regular safety checks on a crane for slab handling in the cooling bay area of the continuous casters. Indications are that the deceased person was squeezed between parts of the crane and the building. The police and the Swedish Work Environment Authority are investigating the accident.

In addition to continuous safety management procedures, many additional activities have been launched to prevent serious and fatal incidents since the fatal accident in Luleå. These activities include inspection and revision of maintenance and functional testing procedures at all sites, and improved shop floor safety management to speed up the implementation of risk mitigation plans and targets. In addition, in Luleå, a safety culture assessment with corrective actions was carried out. Normal safety audits and hazard assessments have continued to mitigate the risks of the main causes of serious incidents in the steel industry: cranes, working at heights, moving machinery, asphyxia, falling objects and lock out/tag out procedures. Risks also will be reduced by further improving information sharing about serious incidents within the company.

All divisions of SSAB run safety development programs. These programs focus on leadership, training and the involvement of all employees in observing risks and executing corrective and preventive actions. Safety work is also being enhanced by aiming to improve incident data collection and tracking, as well as by utilizing a more systematic approach to analyzing the root causes of incidents. Safety campaigns focusing on a particular risk area have been organized at different sites. Special emphasis is given to contractor safety.

SSAB employees recorded numerous proactive safety observations, which help the company to reduce and eliminate the risks in the work environment. In 2016, the safety observation frequency was 1,073 (764) per million working hours. A total of 27,830 (20,139) such observations were reported. The reporting and fast implementation of corrective actions is the most important tool toward SSAB's goal of becoming an accident-free working environment.



**LA6 - Total number of injuries,
Lost Time Injury Frequency and fatalities**

	2016	2015	2014
Total number of injuries	209	197	188
SSAB's employees	173	166	188
Contractors ¹⁾	36	31	
Lost Time Injury Frequency (LTIF) ²⁾ ³⁾	7.0	6.3	
SSAB's employees	6.7	6.2	6.9
Sweden	7.8	7.6	
Finland	8.6	8.8	
Russia	0.6	0.5	
USA	2.2	2.6	
Other Europe	4.7	2.3	
Rest of the world	8.5	3.5	
Total number of fatalities	1	1	1
Employees	1		
Contractors		1	1

¹⁾ The data for contractors is not available for 2014

²⁾ Number of injuries resulting in an absence of more than one day per million working hours. Lost time injury (LTI) is any work-related injury, resulting in the employee not being able to return to work for the next calendar day

³⁾ The breakdown of LTIF by region is not available for 2014, nor for contractors

MATERIAL ASPECT: TRAINING AND EDUCATION**LA10 – Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing their careers**

SSAB's success largely depends on the dedication and skills of its employees, both as individuals and as part of a global team. To ensure both individual and company success, SSAB is committed to the constant development of its workforce.

New employees learn and advance through on-the-job training, mentoring, engaging in challenging work tasks and projects together with diverse teams, gaining experience and expanding their knowledge. All employees participate annually in performance dialogs with their managers to ensure continuous development and communication. These ongoing discussions provide a forum for mutual feedback, workload prioritization and improved performance and engagement.

In addition, SSAB continually looks for opportunities to develop the skills and experience of talented employees. Managerial candidates are offered development opportunities through on-the-job learning such as challenging projects and tasks and meetings with senior management. SSAB also runs an internal mentoring program and participates in consortium programs with other global companies to develop strategic skills of talented managers. Other group-wide initiatives include the business ethics e-learning program, the business development program to expand participants' business skills and networks within the company, and a technical development trainee program which aims to help employees quickly learn technical knowledge about the business. For senior specialists, there is a Technical Specialist program to identify specialists within the company with key core competencies.

Regarding continuous learning and improvement, SSAB has training sessions to familiarize all employees with the SSAB One management philosophy and encourage them to apply company values and continuous improvement principles in their daily work. It is implemented through a train-the-trainer concept: SSAB's managers involve their teams to SSAB One learning modules, each of which consists of a workshop, on-the-job learning and evaluation of progress. The aim is to continuously improve the work flow based on customer needs, and it involves all employees to participate in the improvement efforts. Over the coming years, SSAB's ambition is to successfully introduce all eight modules across all work teams within the organization.

As described above, SSAB invests in a few strategic development initiatives. However, much of the responsibility for training and education is at the divisional and local level, as each business unit has the best knowledge of their specific needs and circumstances. An example of a divisional program is new managers' training, and local examples include introductory and orientation training for a new employees, including topics such as health and safety, use of information technology, and company policies and practices.

G4-LA11 Percentage of employees receiving a regular performance appraisal and career development review

Aligning individual performance with SSAB's strategic direction is a central element in being a high-performing organization. Clarity concerning objectives and performance expectations, as well as regular feedback, are key elements and enablers to effectively manage SSAB's change journey, implement the business strategy and achieve results. Annual performance dialogs between employees and managers are a key element in following up on results, providing mutual feedback, discussing workplace culture and planning future performance and individual development. SSAB's target is for annual performance dialogs between managers and employees to occur with all employees. SSAB continuously reviews and aligns reward structures to ensure performance management processes are effectively supported. In 2016, the annual rate of conducted performance dialogs was 91%.

MATERIAL ASPECT: DIVERSITY AND EQUAL OPPORTUNITY

The management approach of diversity and equal opportunity is described in the Business Review (BR) in the High-performing organization section, [p. 63](#).

G4-LA12 Composition of governance bodies and breakdown of employees per employee category according to gender and age group

Percentage of individuals within the organization's governance bodies in the diversity categories gender and age group	2016		2015	
	Board of Directors ¹⁾	Group Executive Committee	Board of Directors ¹⁾	Group Executive Committee
Total number	8	9	11	10
Women	37.5%	22%	18%	20%
Men	62.5%	78%	82%	80%
<30 years	0%	0%	0%	0%
30–50 years	12.5%	33%	18%	60%
>50 years	87.5%	67%	82%	40%

¹⁾ Alternate members (6) not included

Percentage of total number of employees per employee category and diversity categories gender and age	2016			2015			2014		
	Front-line workers	Office employees	Total	Front-line workers	Office employees	Total	Front-line workers	Office employees	Total
Women	10%	33%	19%	9%	33%	19%	10%	32%	19%
Men	90%	67%	81%	91%	67%	81%	90%	68%	81%
<30 years	12%	6%	10%	12%	6%	10%	13%	8%	11%
30–50 years	52%	61%	56%	53%	62%	56%	54%	62%	57%
>50 years	35%	33%	35%	35%	32%	34%	33%	31%	32%

MATERIAL ASPECTS: SUPPLIER ASSESSMENT FOR LABOR PRACTICES HUMAN RIGHTS

SSAB systematically identifies the risks relating to the Group's suppliers. SSAB does this by placing suppliers in various risk categories depending on the countries in which they operate. Classification is based on Maplecroft's Human Rights Risk Index and Transparency International's Corruption Perceptions Index. Classification in this way illustrates the risks relating to, for example, human rights, labor conditions and corruption. Suppliers who are placed in the medium- or high-risk group are required to complete a self-assessment questionnaire containing questions about their business such as their social conditions and environmental credentials. Unsatisfactory answers are investigated.

SSAB also conducts regular visits to major suppliers of raw materials around the world, including high-risk suppliers. On these visits, purchasers and quality managers visit production sites and conduct quality inspections. SSAB updated its on-site protocols during 2016 and monitoring of suppliers social conditions and environmental performance will be subject of greater focus during future visits. The procurement organization was also trained during the year to evaluate information gathered during site visits regarding the supplier's social and environmental performance.

SSAB has a target related to supplier evaluation: "All suppliers registered in SSAB's purchasing system and identified as medium- or high-risk suppliers must complete a self-assessment questionnaire regarding their social and environmental conditions." SSAB seeks to classify country risks in the same way as Maplecroft's Human Rights Risk Index and Transparency International's Corruption index, so that the company adheres to an international standard in the risk assessment of suppliers.

Work is underway to evaluate SSAB's purchasing system. SSAB's sustainability target for the responsible supply chain refers to the purchasing system used by part of SSAB prior to the merger with Rautaruukki.

At the end of 2016, 3,730 (3,456) of SSAB's 20,000 active suppliers were registered in SSAB's purchasing system, of which 1,033 (902) were risk classified and had CSR¹⁾ status. 66 (51) suppliers have been identified as medium-risk suppliers and 111 (81) as high-risk suppliers, and have also completed the self-assessment questionnaire regarding their social and environmental conditions. Those parts of the organization that do not have access to the purchasing system evaluate their suppliers and follow up on suppliers' performance through other internal systems.

Suppliers registered in SSAB's purchasing system	CSR status ¹⁾	CSR risk status	Completed self-assessments
3,730	Approved for purchasing: 1,033	High: 111 Medium: 66 Low: 3,553	High: 111 Medium: 66

¹⁾ CSR status = Supplier has a CSR status, if it has a CSR risk classification.

More information about sourcing can be found in the Business Review in the Responsible sourcing section on [p. 73–75](#).

GRI CONTENT INDEX

SSAB's GRI report is prepared in accordance with the GRI G4 Core option. The report also constitutes Communication on Progress (CoP) reporting to UN's Global Compact.

BR = Business review
GRI = GRI report

CGR = Corporate governance report
FR = Financial reports 2016

GENERAL STANDARD DISCLOSURES			
Code	Description	Page in the report	Comments and omissions
STRATEGY AND ANALYSIS			
G4-1	CEO's statement	BR 9–10	
ORGANIZATIONAL PROFILE			
G4-3	Name of the Organization	See comments	SSAB AB
G4-4	Primary Brands, Products and Services	BR 26–54	
G4-5	Location of the organization's headquarters	See comments	Stockholm
G4-6	Number of countries where the organization operates	BR 3, 56	
G4-7	Nature of ownership and Legal Form	See comments	SSAB AB is a public company. SSAB is listed on the Nasdaq OMX Stockholm and Nasdaq OMX Helsinki exchanges.
G4-8	Markets served	BR 12, FR 4, 74	
G4-9	Scale of the organization	BR 3, 56, FR 24	
G4-10	Number of employees	GRI 27	SSAB does not hold information about external staff/contractors in its global reporting system.
G4-11	Employees covered by collective bargaining agreements	GRI 28	
G4-12	Description of the organization's supply chain	BR 7–8, 73–75	
G4-13	Significant changes during the reporting period	See comments	No significant changes during the reporting period.
G4-14	Precautionary approach	FR 16–22	
G4-15	Externally Developed Economic, Environmental and Social Charters, Principles, or Other Initiatives to Which the Organization Subscribes or Which It Endorses	BR 69–72	
G4-16	Memberships of associations	GRI 8	



Code	Description	Page in the report	Comments and omissions
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES			
G4-17	Entities Included in the Organization's Consolidated Financial Statements	FR 56–59	The entities included in SSAB's Consolidated Financial Statements are listed in Note 8 to the Consolidated Financial Statements.
G4-18	Process for Defining the Report Content	GRI 2, 5	
G4-19	Material Aspects	GRI 3–4	
G4-20	Entities or Groups of Entities Within the Organization for Which the Aspects Are Material	GRI 4	
G4-21	Entities or Groups of Entities Outside of the Organization for Which the Aspects Are Material	GRI 4	
G4-22	Effect of any Restatements of Information Provided in Previous Reports, and the Reasons for Such Restatements	GRI 5	
G4-23	Significant Changes from Previous Reporting Periods in the Scope and Aspect Boundaries	GRI 5	
STAKEHOLDER ENGAGEMENT			
G4-24	Stakeholder Groups Engaged by the Organization	GRI 7	
G4-25	Basis for Identification and Selection of Stakeholders	GRI 7	
G4-26	Organization's Approach to Stakeholder Engagement	GRI 7	
G4-27	Key Topics and Concerns that Have Been Raised through Stakeholder Engagement	GRI 7	
REPORT PROFILE			
G4-28	Reporting Period	See comments	January 1, 2016 – December 31, 2016
G4-29	Date of Most Recent Previous Report	See comments	March 15, 2016
G4-30	Reporting Cycle	See comments	Annual
G4-31	Contact Point for Questions Regarding the Report or its Contents	See comments	Liisa-Maija Seppänen, Investor Relations Manager: liisa-maija.seppanen@ssab.com
G4-32	GRI content index	GRI 34–38	SSAB's GRI Report 2016 is prepared in accordance with the Core option of the GRI G4 Guidelines.
G4-33	Policy and Current Practice with Regard to Seeking External Assurance	GRI 5	This GRI Report has not been verified by an external party.
GOVERNANCE			
G4-34	Governance Structure, Including Committees	CGR	
ETHICS AND INTEGRITY			
G4-56	Organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	BR 6, BR 69–72	



SPECIFIC STANDARD DISCLOSURES

Code	Description	Page in the report	Comments and omissions
ECONOMIC IMPACTS			
Economic performance			
G4-DMA	Generic Disclosures on Management Approach	BR 16–21 , BR 23 , CGR	
G4-EC1	Direct economic value generated and distributed	GRI 9	SSAB is currently unable to report on community investments (donations) at a Group level.
ENVIRONMENTAL IMPACTS			
Materials			
G4-DMA	Generic Disclosures on Management Approach	GRI 6 , GRI 11 , GRI 15-16	
G4-EN1	Materials used by weight or volume	GRI 15	
G4-EN2	Percentage of materials used that are recycled input materials	GRI 15–16	
Energy			
G4-DMA	Generic Disclosures on Management Approach	GRI 6 , GRI 11 , GRI 18	
G4-EN3	Energy consumption within the organization	GRI 19	
G4-EN5	Energy intensity	GRI 20	
G4-EN6	Reduction of energy consumption	GRI 20	Partly reported
Water			
G4-DMA	Generic Disclosures on Management Approach	GRI 6 , GRI 11 , GRI 21	
G4-EN8	Total water withdrawal	GRI 21	
Emissions			
G4-DMA	Generic Disclosures on Management Approach	GRI 6 , GRI 11 , GRI 22	
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	GRI 23	
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	GRI 23	
G4-EN18	Greenhouse gas (GHG) emissions intensity	GRI 23-24	
G4-EN19	Reduction of greenhouse gas (GHG) emissions	GRI 24	Partly reported
G4-EN21	NO _x , SO _x , and other significant air emissions	GRI 24–25	
Effluents and waste			
G4-DMA	Generic Disclosures on Management Approach	GRI 6 , GRI 11 , GRI 17	
G4-EN23	Total weight of waste by type and disposal method	GRI 17	At Group level information on disposal methods is not available

Code	Description	Page in the report	Comments and omissions
Products and services			
G4-DMA	Generic Disclosures on Management Approach	BR 16–21	
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	BR 47–52	
SOCIAL IMPACTS			
LABOR PRACTICES AND DECENT WORK			
Employment			
G4-DMA	Generic Disclosures on Management Approach	BR 62–64	
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	GRI 29	
Occupational health and safety			
G4-DMA	Generic Disclosures on Management Approach	BR 65–67 , GRI 30	
G4-LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	GRI 30	
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	GRI 31	Partly reported. Incident data is also collected for contractors at main production sites. Incident frequency reporting regarding contractors was added to the reporting in 2016. Data on occupational diseases rate and absence rate is not available for the whole group at the moment. The global reporting is being developed and harmonized.
Training and education			
G4-DMA	Generic Disclosures on Management Approach	BR 62–64 , GRI 25	
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	GRI 31	
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	GRI 32	Partly reported
Diversity and equal opportunity			
G4-DMA	Generic Disclosures on Management Approach	BR 62–64	
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	GRI 32	
Supplier assessment for labor practices			
G4-DMA	Generic Disclosures on Management Approach	BR 72–75 , GRI 33	

Code	Description	Page in the report	Comments and omissions
G4-LA14	Percentage of new suppliers that were screened using labor practices criteria	See comments	SSAB is currently unable to report about this indicator according to GRI guidelines. However, SSAB reports about the policies applied in the work with suppliers as well as the processes in place to identify and evaluate risks related to suppliers and their responsibility performance.
HUMAN RIGHTS			
Supplier human rights assessment			
G4-DMA	Generic Disclosures on Management Approach	BR 72–75 , GRI 33	
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	See comments	SSAB is currently unable to report about this indicator according to GRI guidelines. However, SSAB reports about the policies applied in the work with suppliers as well as the processes in place to identify and evaluate risks related to suppliers and their responsibility performance.
SOCIETY			
Anti-corruption			
G4-DMA	Generic Disclosures on Management Approach	BR 70–72 , GRI 6 , GRI 26	
G4-SO4	Communication and training on anti-corruption policies and procedures	BR 70–72 , GRI 6 , GRI 26	



SSAB AB

Box 70

SE-101 21 Stockholm, Sweden

Tel. +46 8 454 5700

Fax. +46 8 454 5725

Visitors:

Klarabergsviadukten 70, D6

www.ssab.com

SSAB