

ENVIRONMENTAL PRODUCT DECLARATION

HOT ROLLED STEEL COIL

SSAB ALABAMA

SSAB IOWA



SSAB

SSAB is a specialized global steel company driven by close relationships with our customers. SSAB develops and markets high performance steels that are either high strength or products designed for better performance and sustainability.

SSAB is a leading producer in the global market for Steel Plate, Hot Rolled Steel Coil, and Advanced High Strength Steel (AHSS) Products.

SSAB's steel products are 100% recyclable and made from up to 97% recycled materials. SSAB leads the steel industry with some of the highest percentages of recyclable materials used in steelmaking. This reduces the environmental impacts associated with iron raw material extraction and processing, all while maintaining SSAB's strict quality standards.



ENVIRONMENTAL PRODUCT DECLARATION



Hot Rolled Steel Coil
Designated Steel Construction Product



According to ISO 14025
and ISO 21930:2017

EPD PROGRAM AND PROGRAM OPERATOR NAME, ADDRESS, LOGO, AND WEBSITE	UL ENVIRONMENT 333 PFINGSTEN ROAD NORTHBROOK, IL 60611	WWW.UL.COM WWW.SPOT.UL.COM
GENERAL PROGRAM INSTRUCTIONS AND VERSION NUMBER	Program Operator Rules v2.7 2022	
MANUFACTURER NAME AND ADDRESS	SSAB Enterprises, 11 North Water Street, Suite 17000, Mobile, AL 36602	
DECLARATION NUMBER	4790146803.103.1	
DECLARED PRODUCT & FUNCTIONAL UNIT OR DECLARED UNIT	Hot Rolled Steel Coil, one (1) metric ton	
REFERENCE PCR AND VERSION NUMBER	Part A: Life Cycle Assessment Calculation Rules and Report Requirements UL Environment (December 2018, Version 3.2) and Part B: Designated Steel Construction Product EPD Requirements UL Environment (August 2020, Version 2.0)	
DESCRIPTION OF PRODUCT APPLICATION/USE	Hot Rolled Steel Coil products in a wide range of commercial grades and sizes	
PRODUCT RSL DESCRIPTION (IF APPL.)	N/A	
MARKETS OF APPLICABILITY	North America	
DATE OF ISSUE	August 24, 2022	
PERIOD OF VALIDITY	5 Years	
EPD TYPE	Product-specific	
RANGE OF DATASET VARIABILITY	Site-specific, mean	
EPD SCOPE	Cradle to gate	
YEAR(S) OF REPORTED PRIMARY DATA	2019	
LCA SOFTWARE & VERSION NUMBER	GaBi v10.6	
LCI DATABASE(S) & VERSION NUMBER	GaBi 2021.2	
LCIA METHODOLOGY & VERSION NUMBER	TRACI 2.1, EN 15804	

The PCR review was conducted by:	UL Environment
	PCR Panel Review
	epd@ul.com
This declaration was independently verified in accordance with ISO 14025: 2006. <input type="checkbox"/> INTERNAL <input checked="" type="checkbox"/> EXTERNAL	Cooper McCollum, UL Environment <i>Cooper McC</i>
	Trinity Consultants
This life cycle assessment was conducted in accordance with ISO 14044 and the reference PCR by:	Thomas P. Gloria, Industrial Ecology Consultants <i>Thomas P. Gloria</i>

LIMITATIONS

Exclusions: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc.

Accuracy of Results: EPDs regularly rely on estimations of impacts; the level of accuracy in estimation of effect differs for any particular product line and reported impact.

Comparability: EPDs from different programs may not be comparable. Full conformance with a PCR allows EPD comparability only when all stages of a life cycle have been considered. However, variations and deviations are possible. Example of variations: Different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared.



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1. Product Definition and Information

1.1. Description of Company/Organization

SSAB is a leading producer in the global market for Steel Plate, Hot Rolled Steel Coil, and Advanced High Strength Steel (AHSS) Products. SSAB serves sectors such as heavy transport (rail & marine), material handling (including mining), construction machinery (including lifting), energy generation (wind), energy storage, and energy transmission. SSAB's steel and services help create lighter and better engineered end products, increasing their strength and lifespan.

SSAB has a cost-efficient and flexible production system, operating two steel manufacturing facilities in the United States – one in Axis, AL (SSAB Alabama) and the other in Montpelier, IA (SSAB Iowa). Both facilities utilize electric arc furnaces (EAFs) in a scrap-based production process. This EPD is based on site-specific data for Hot Rolled Steel Coil production at both SSAB Alabama and SSAB Iowa.

1.2. Product Description

Product Identification

SSAB provides high-quality Hot Rolled Steel Coil in a wide range of commercial grades and sizes with exceptional flatness and surface quality. SSAB's goal is to ensure that these superior quality products give customers the best value and performance for end use applications. The products are often customized to meet national and/or international standards as well as customer-specific or other Original Equipment Manufacturer (OEM) standards.

Product Specification

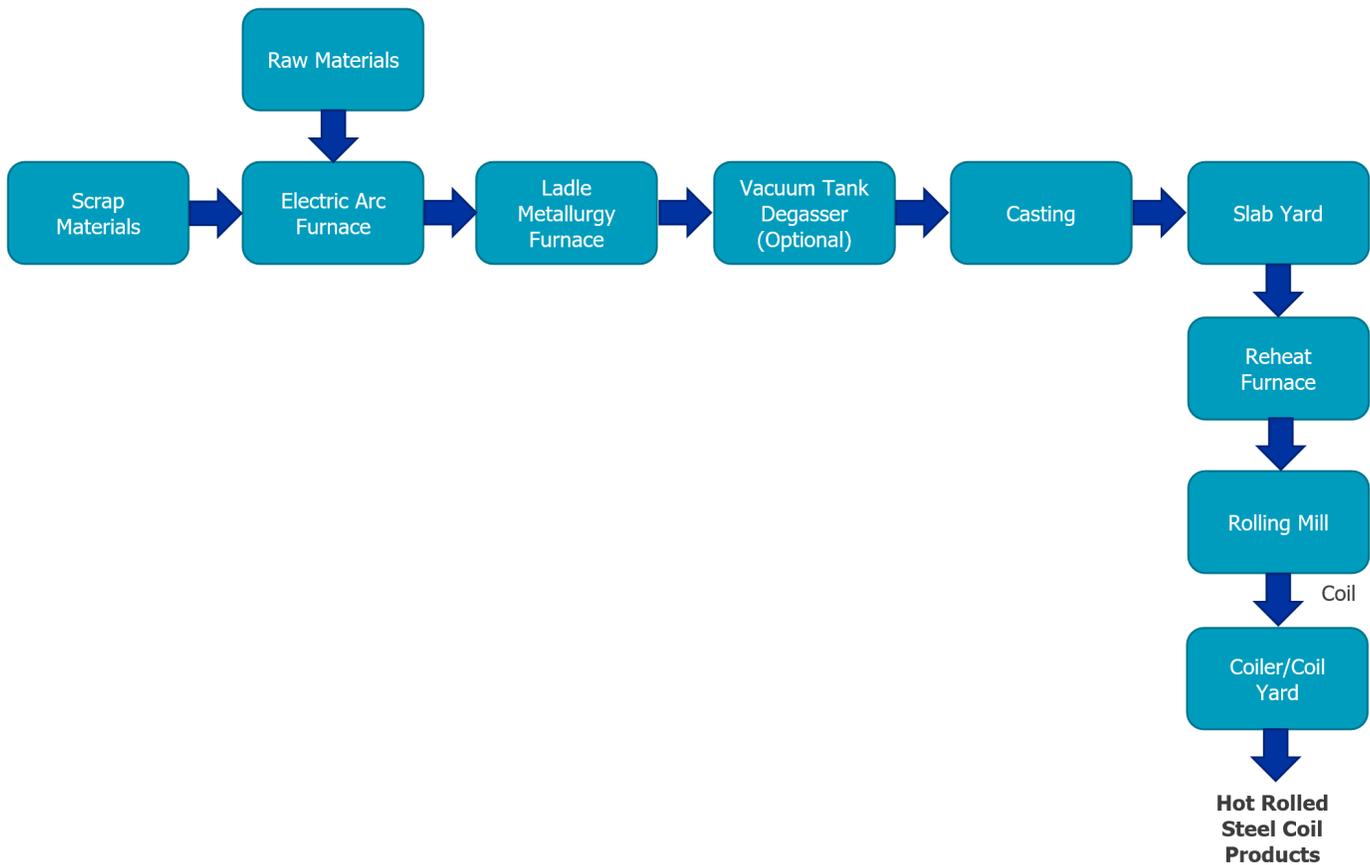
SSAB's steel products are designed to meet the specifications of a wide variety of commercial and industrial standards. Depending on product type, SSAB's products may be produced under one or more of the following steel standards:

- ASTM
 - A36, A131, A283, A514, A572, A573, A633, A656, A709, A945, A1011, A1018, A242, A588, A606, A871, A285, A387, A455, A516, A517, A537, A612, A738, A829, A830
- American Bureau of Shipping
- API Line Pipe Steels
- API Offshore Structural Steel Grades
- CSA G40.21.13
- Det Norske Veritas
- Lloyds Register
- EN 10025-3
- EN 10149-2
- ST100XF
- AAR TC 128/AAR A516





Figure 1. Flow Diagram (Modules A1, A2, and A3)



Product Average

This EPD is based on site-specific data for Hot Rolled Steel Coil production at both SSAB Alabama and SSAB Iowa. Certain impact categories for Hot Rolled Steel Coil are presented on both a site-specific and weighted average basis. The weighted average results provide the impact of an average product from SSAB Alabama and SSAB Iowa by weighting impacts considering production volume at each site.

1.3. Application

SSAB specializes in materials for demanding applications where high strength and formability are needed for weight savings, improved performance, and increased durability. SSAB’s Hot Rolled Steel Coil products are used in many industries and applications, including heavy construction equipment, automotive, heavy equipment / machinery, energy, and other various infrastructure applications.

1.4. Declaration of Methodological Framework

The scope of the EPD is cradle-to-gate, including raw material extraction and processing, upstream transportation, and product manufacture (Modules A1, A2, and A3).





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1.5. Technical Requirements, Properties of Declared Product as Delivered, and Material Composition

Steel is typically an alloy of mainly iron and carbon and may contain other alloying metals and trace elements. These alloying elements improve the chemical and physical properties of steel, such as strength, ductility, durability, and corrosion resistance. The alloying elements of steel are physically bonded to the steel’s inherent crystalline structure.

The exact composition of Hot Rolled Steel Coil manufactured by SSAB depends on the requirements of the product. These requirements arise from national and/or international standards, customer-specifics, and/or other OEM standards. Technical specifications for the various SSAB Hot Rolled Steel Coil Products are available at the manufacturer’s website; www.ssab.us.

Table 1. General Composition of Hot Rolled Steel Coil Products

CHEMICAL NAME	CONTENT (% W/W)	CAS NUMBER
Iron (Fe)	99.8	7439-89-6
Chromium (Cr)	3	7440-47-3
Manganese (Mn)	2.2	7439-96-5
Nickel (Ni)	2.0	7440-02-0
Carbon (C)	1	7440-44-0
Copper (Cu)	1	7440-50-8
Silicon (Si)	1	7440-21-3
Molybdenum (Mo)	1	7439-98-7

- a. Physical state: solid
Odor: odorless
Color: black gray
Boiling point: 2,900 °C
Melting point: 1,530 °C
Steel density: 7,860 kg/m³
- b. All Hot Rolled Steel Coil products contain small amounts of various elements in addition to those specified. These small quantities frequently referred to as “trace” or “residual” elements generally originate in the raw materials used and vary in concentration by weight, and may include: aluminum, titanium, vanadium, niobium, tin, sulfur, boron, and phosphorus.
- c. Element weight percentage shown represent concentrations possible over all product ranges. These do not represent actual steel specification limits for any SSAB steel grade produced.

1.6. Manufacturing and Disposal

Hot Rolled Steel Coil is manufactured at both SSAB Alabama and SSAB Iowa. Production is based on the use of scrap steel as a raw material, and the steel is made from up to 97% recycled materials. The use of all raw materials and energy have been optimized in the steel production process for sustainability and quality.

Scrap steel along with raw materials such as charge/inject carbon, lime, and other additives are added to an Electric Arc Furnace (EAF). In the EAF, electricity is used to melt the batch and make molten steel. From the EAF, the molten steel goes to the Ladle Metallurgical Furnace (LMF) for further processing. The molten steel is cast into slabs and cut to the required length. The steel slabs are cooled outdoors prior to going to the natural gas fired Reheat Furnace. The steel slabs are then reheated and processed into coils in the Rolling Mill. Once cooled again, these Hot Rolled Steel Coil products are finished and shipped to customers. Natural gas and electricity are used throughout the process.

When scrap steel and scrap tires (both as secondary materials) are used instead of virgin raw materials in steelmaking, the relevant impact category indicators from Module A1 (raw material extraction and processing)





decrease accordingly. Steelmaking at SSAB utilizes scrap material from SSAB's own production processes, material sourced on the scrap steel market, and scrap tires diverted from landfill. Once steel has been made, it can be recycled an indefinite number of times.

At SSAB, steelmaking processes have been continuously advanced and improved. As a result, SSAB's EAFs are among the most advanced in the world. Most of the energy used in scrap-based steel production comes from electricity and natural gas. The materials generated from SSAB's steel production processes such as slag (co-product), mill scale, and EAF Baghouse Dust are recycled as industrial raw materials or materials to replace virgin resources. A high percentage of the dust and steel scrap originating in various on site processes is recycled to reduce waste and improve material efficiency.

Various waste streams are produced as part of the steel production process. Non-recycled materials were modeled in the Life Cycle Assessment (LCA) for this EPD for transportation and end-of-life treatment in a landfill. The type of landfill decomposition was chosen to match the waste stream. No credit was taken for recycled product, and transport to the recycling facility was included in this model. Waste classification per the Resource Conservation and Recovery Act (RCRA), Subtitle 3.

1.7. Packaging

Products are labeled to be easily identifiable and traceable. The packaging and protection of SSAB steel products is usually determined by customer requirements when ordering. Steel or plastic straps, wood props, corner protection, and other accessories supporting packaging are used as appropriate and according to customer requirements.

Hot Rolled Steel Coil products are delivered fastened with or without a base and, depending on the order, wrapped with plastic film and/or wrapping paper and may include cardboard wall protection, with plastic or metallic end rings. SSAB uses steel, plastic, and/or cardboard as corner protection for all steel products.

This subsection of the EPD is for information purposes only. The packaging materials are not included in the LCA for this EPD as these materials fall below the cut-off criteria.

2. Life Cycle Assessment Background Information

2.1. Functional or Declared Unit

The declared unit, and reference flow, for the product system is one (1) metric ton of Hot Rolled Steel Coil. Impacts are normalized to the production tonnage of Hot Rolled Steel Coil.

2.2. System Boundary

The scope of this EPD includes cradle to the mill gate for one (1) metric ton of steel including raw material extraction and processing, transportation, and product manufacture. The system boundary applied in this study extends from Module A1, the mining and processing of raw materials, such as coal, coke, and lime; Module A2, transport to the manufacturing site; and Module A3, on-site steel manufacturing and ancillary service operations up until the exit gate of the manufacturing site. The system boundary also includes manufacture of other required input materials, transport between processing operations, the production of external services such as natural gas, process water, and the production of by-products within the steelmaking process. Product delivery, installation and use, and product disposal (modules A4 – A5, B1 – B7, C1 – C4, and D) have not been included as allowed by the Product Category Rule (PCR).



2.3. Data Sources, Estimates, and Assumptions

The LCA for this EPD was conducted using the GaBi software utilizing the datasets available in the 2021 Professional Database and the Extension Database XVII: Full US 2021. Site-specific information for raw materials, raw material transportation, energy use, resource use, and emissions was used to the extent possible and represent an annual average. In some cases, Life Cycle Inventory (LCI) data was not available for some raw materials. In these cases, surrogate materials were chosen that have readily available LCI data. Additionally, LCI data for certain processes were acquired via the GaBi software's regional datasets as appropriate.

2.4. Cut-off Criteria

According to the PCR, processes or flows contributing less than 1% of the total environmental impact indicator for each impact or mass input to the system may be excluded from the LCA for this EPD. Cumulatively, these exclusions may not exceed 5% of total impacts or total mass inflow.

For purposes of applying the cut-off rules, raw materials were distinguished from process materials, where “raw materials” refers to scrap metal, alloys, and other materials that physically enter the final steel product. “Process materials” refer to chemical species that are consumed during the process but may not physically enter the final steel product, including argon, nitrogen, oxygen, refrigerants, electrodes, and cooling water. Process materials are included in the LCA model for this EPD, and the cut-off rules are conservatively only applied to the raw materials.

No known processes, activities, or flows contributing more than 1% of the total environmental impact for each indicator or total mass flow are excluded.

2.5. Data Quality

Time-Related Coverage

The most recent available data are used in the LCA for this EPD, based on other considerations such as data quality and similarity to the actual operations. Manufacturer-supplied data (primary data) are based on annual production for 2019. Of the datasets used, the majority of these are less than 5 years old and best available data was used to represent each process.

Geographical Coverage

The data used in the LCA for this EPD provide the best possible representation available with current data. Surrogate data used in the assessment are representative of global or US and North American operations. Data representative of global operations are considered sufficiently similar to actual processes.

Technology Coverage

Data used in the LCA model for this EPD are considered representative of the actual technologies used for processing, transportation, and manufacturing operations.

Completeness

No known processes, activities, or flows contributing more than 1% of the total environmental impact for each indicator or total mass flow are excluded.

Representativeness

Data used in the assessment represent typical or average processes as currently reported from multiple data sources and are therefore generally representative of the range of actual processes and technologies.





Consistency

The consistency of the assessment is considered to be high. Data sources of similar quality and age are used. Different portions of the product life cycle are equally considered.

Uncertainty of the Information

Uncertainty related to materials in the product is low. Actual supplier data for upstream operations was not available for all suppliers and the study relied upon the use of existing representative datasets as is typical practice. These datasets contained relatively recent data and generally were geographically specific to the country of origin.

2.6. Period under Review

The LCA for this EPD is based on 2019 production.

2.7. Allocation

No allocation using system expansion was performed. The LCA for this EPD considered all the environmental burdens associated with the production of Hot Rolled Steel Coil and by-products as belonging to the production of Hot Rolled Steel Coil products.

3. Life Cycle Assessment Results

Table 2. Description of the System Boundary Modules

	PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARY
	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
	Raw material supply	Transport	Manufacturing	Transport from gate to site	Assembly/Install	Use	Maintenance	Repair	Replacement	Refurbishment	Building Operational Energy Use During Product Use	Building Operational Water Use During Product Use	Deconstruction	Transport	Waste processing	Disposal	Reuse, Recovery, Recycling Potential
EPD Type	X	X	X	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND

- a. X = Module declared
MND = Module not declared

3.1. Life Cycle Impact Assessment Results

LCIA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks.





Table 3. North American Impact Assessment Results – Weighted Average – per Metric Ton of Hot Rolled Steel Coil

TRACI v2.1	A1	A2	A3	TOTAL (A1-A3)
GWP 100 [kg CO ₂ eq]	1.91E+02	3.42E+01	6.63E+02	8.88E+02
ODP [kg CFC-11 eq]	4.17E-07	2.89E-11	5.30E-10	4.18E-07
AP [kg SO ₂ eq]	9.76E-01	2.32E-01	2.94E+00	4.15E+00
EP [kg N eq]	2.30E-02	1.66E-02	8.23E-02	1.22E-01
SFP [kg O ₃ eq]	1.01E+01	6.12E+00	1.99E+01	3.61E+01
ADP _{fossil} [MJ, LHV]	1.45E+02	6.39E+01	7.04E+02	9.13E+02

Table 4. Facility-Specific Global Warming Potential Results – SSAB Alabama – per Metric Ton of Hot Rolled Steel Coil

TRACI v2.1	A1	A2	A3	TOTAL (A1-A3)
GWP 100 [kg CO ₂ eq]	2.59E+02	5.37E+01	7.08E+02	1.02E+03

Table 5. Facility-Specific Global Warming Potential Results – SSAB Iowa – per Metric Ton of Hot Rolled Steel Coil

TRACI v2.1	A1	A2	A3	TOTAL (A1-A3)
GWP 100 [kg CO ₂ eq]	1.71E+02	2.83E+01	6.49E+02	8.49E+02

Comparability

Comparisons cannot be made between product-specific or industry average EPDs at the design stage of a project, before a building has been specified. Comparisons may be made between product-specific or industry average EPDs at the time of product purchase when product performance and specifications have been established and serve as a functional unit for comparison. Environmental impact results shall be converted to a functional unit basis before any comparison is attempted.

Any comparison of EPDs shall be subject to the requirements of ISO 21930. EPDs are not comparative assertions and are either not comparable or have limited comparability when they have different system boundaries, are based on different product category rules or are missing relevant environmental impacts. Such comparison can be inaccurate, and could lead to erroneous selection of materials or products which are higher-impact, at least in some impact categories.





3.2. Life Cycle Inventory Results

Table 6. Resource Use – Weighted Average – per Metric Ton of Hot Rolled Steel Coil

PARAMETER	A1	A2	A3	TOTAL (A1-A3)
RPR _E [MJ, LHV]	1.13E+02	1.80E+01	3.72E+03	3.86E+03
RPR _M [MJ, LHV]	--	--	--	--
RPR _T [MJ, LHV]	1.13E+02	1.80E+01	3.72E+03	3.86E+03
NRPR _E [MJ, LHV]	2.02E+03	4.79E+02	8.47E+03	1.10E+04
NRPR _M [MJ, LHV]	5.88E+02	--	--	5.88E+02
NRPR _T [MJ, LHV]	2.61E+03	4.79E+02	8.47E+03	1.16E+04
SM [kg]	1.18E+03	--	--	1.18E+03
RSF [MJ, LHV]	--	--	--	--
NRSF [MJ, LHV]	--	--	--	--
RE [MJ, LHV]	--	--	--	--
FW [m ³]	4.23E-01	7.68E-02	1.86E+00	2.36E+00

Table 7. Output Flows and Waste Categories – Weighted Average – per Metric Ton of Hot Rolled Steel Coil

PARAMETER	A1	A2	A3	TOTAL (A1-A3)
HWD [kg]	6.60E-08	3.65E-08	3.77E-01	3.77E-01
NHWD [kg]	2.82E-01	4.15E-02	3.35E+01	3.39E+01
HLRW [kg]	3.96E-05	1.48E-06	3.95E-04	4.36E-04
ILLRW [kg]	3.39E-02	1.25E-03	3.30E-01	3.65E-01
CRU [kg]	--	--	1.78E+02	1.78E+02
R [kg]	--	--	1.74E+01	1.74E+01
MER [kg]	--	--	--	--
EE [MJ, LHV]	--	--	--	--

4. LCA Interpretation

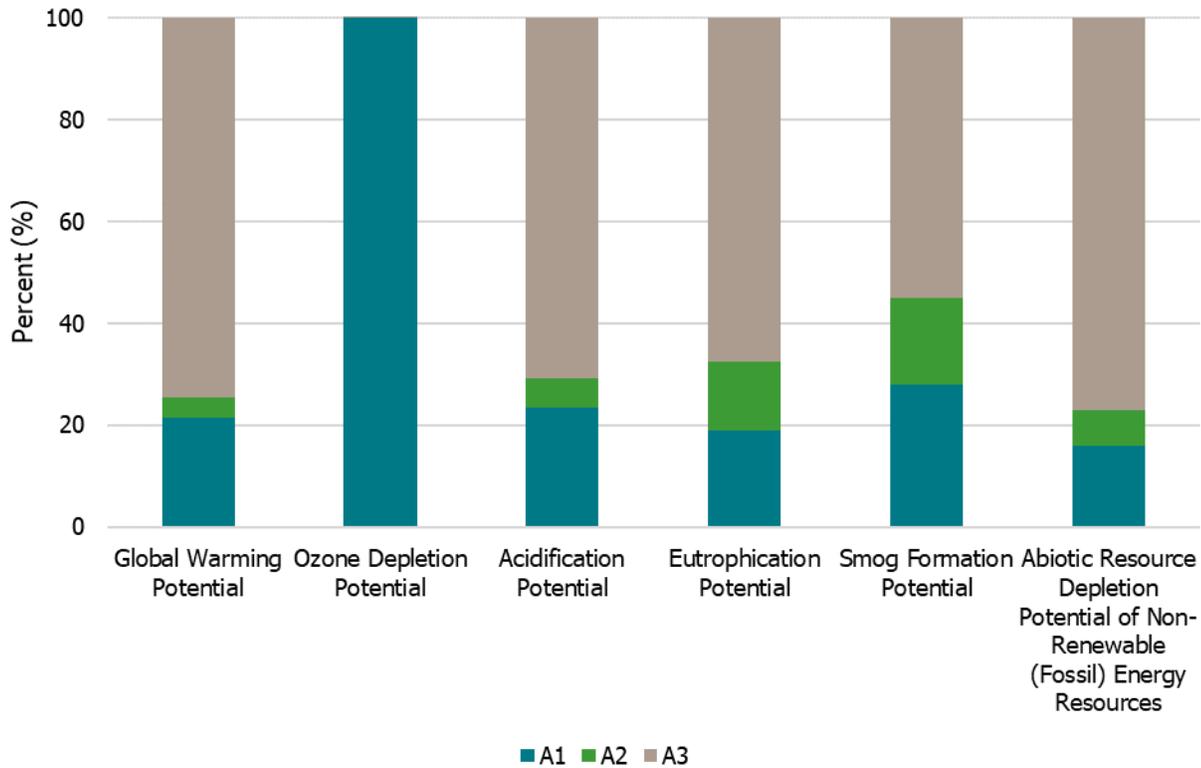
The impact assessment results indicate that Module A3, i.e. manufacturing, which includes purchased electricity generation, on-site natural gas combustion, and facility emissions is the key contributor to the potential environmental impact of Hot Rolled Steel Coil products for all impact categories except Ozone Depletion Potential (ODP). Module A2, i.e. transport to manufacturer, is not the most significant contributor to any impact category.

For Hot Rolled Steel Coil products, a significant portion of the impact associated with ODP can be attributed to Module A1 (raw material extraction and processing), and more specifically to lime production, which is used as a raw material.





Figure 2. Hot Rolled Steel Coil Dominance Analysis – Weighted Average



5. Additional Environmental Information

5.1. Health and Safety

Refer to the specific SSAB product Safety Data Sheet (SDS) for health, safety, and proper handling information.

Safety

SSAB is ranked as one of the leaders in safety among its peers according to the Steel Manufacturers Association’s injury statistics. In 2020, SSAB was the lowest on record for recordable injuries throughout the steel industry. One way SSAB accomplishes this is by providing unique training programs to all 1,300 employees. These programs focus on developing awareness of the personal states (like rushing or fatigue) that lead to critical errors. This holistic approach to safety drives awareness for employees both on and off the job, even involving their families in the learning process. SSAB safety performance has improved consistently and is dedicated to future safety improvements.

5.2. Environmental Activities and Certifications

Certain additional environmental activities and certifications are discussed in the following subsections. More information on SSAB’s certifications and environmental initiatives can be found at www.ssab.us.





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ISO 14001:2015 Environmental Management System

SSAB is assertive in supporting environmental management systems that focus on enhanced compliance, independent and management responsibility, and measurable targets, which result in elevated environmental performance. SSAB was the first EAF steel producer in North America to successfully certify all production facilities' environmental management systems to the ISO 14001 standard. SSAB remains committed to ISO 14001 certification and dedicates funding annually for ISO 14001 Continuous Improvement projects.

Recycled Materials Content

Hot Rolled Steel Coil produced at SSAB is 100% recyclable and made from up to 97% recycled materials (including scrap steel and scrap tires). SSAB leads the steel industry with some of the highest percentages of recyclable materials used in steelmaking. This reduces the environmental impacts associated with iron raw material extraction and processing, all while maintaining SSAB's strict quality standards.

Scrap Tire Programs

SSAB Alabama utilizes recovered scrap tires as a raw material substitute for carbon in the production process. SSAB recycles on average 400,000 tires a year and has recycled more than 7.3 million scrap tires to date. The increased use of secondary materials such as scrap tires reduces the environmental impacts associated with raw material extraction and processing of carbon sources (such as coal) and prevents these tires from ending up in landfills.

Water Recycling and Reuse

SSAB reveres water as a critical natural resource and continually evaluates and optimizes water use within the production processes. Several advanced techniques are utilized to reduce water consumption while maintaining production equipment functionality and superior product quality. SSAB is dedicated to capital investments in new technologies, which provide more efficiency in cooling towers, advanced dissolved air flotation systems, and enhanced water filtration units. In addition, SSAB recycles water numerous times by cascading the water from one system to another system to use the water as efficiently as possible.

Waste Recycling and Reuse

SSAB recycles the majority of its largest waste stream, EAF Baghouse Dust to recycling facilities that recover zinc and other valuable metals for beneficial use in new products such as paint, ceramics, animal feed, cosmetics, and others.

SSAB emphasizes waste minimization efforts and is active in enhanced general trash sorting activities that, to date, have recovered the following valuable materials from general process waste streams:

- Scrap Steel - 2.8 million lbs
- Stainless Steel - 73,000 lbs
- Cardboard - 123,000 lbs
- Copper/Copper Wire - 200,000 lbs
- Electric Motors - 58,000 lbs
- Aluminum - 40,000 lbs

SSAB also actively recycles used oil, used oil absorbents, used fluorescent bulbs, used ballasts, batteries, office paper, office ink, and other materials.

Clean Energy

SSAB actively engages in projects to reduce the environmental impact associated with energy use throughout the steel making process. SSAB works with its utility partners to encourage the reliable delivery of electricity while





minimizing its environmental impact. Additionally, SSAB Iowa's utility provider is committed to providing 100% renewable energy to its customers in the near future, primarily through the use of non-emitting energy sources such as wind.

Environmental Awards

SSAB has won the 2015, 2017, 2018, 2020, and 2021 American Metal Market (AMM) Award for Steel Excellence in the category of Environmental Responsibility.

SSAB received the 2021 John Deere Sustainability Award for Direct Suppliers in Region 4 (North America and Australia).

The Steel Manufacturers Association (SMA) awarded SSAB with the 2012 and 2019 Achievement in Environmental Stewardship and Recycling Award. SMA recognized SSAB's extensive recycling program and a number of other projects such as waste minimization, lime recycling, and energy efficiency improvements.

SSAB Iowa was named the winner of the GE Return on Environmental Leadership Award in 2009. The site identified an alternative solution of water use that resulted in saving approximately 40 million gallons of supply water per year and reducing discharge water by the same amount.

Environmental Communication

In 2016 SSAB developed EcoSmart, which has become a well-recognized symbol of our environmental stewardship throughout the industry. The combination of the data, using continuous improvement and leveraging our position as a market leader gives us a competitive advantage. The EcoSmart imprint is on customer products and is customized on documentation such as test reports and invoices.

6. References

UL Environment

UL Environment General Program Instructions March 2022, version 2.7

Part A: Life Cycle Assessment Calculation Rules and Report Requirements (December 2018, UL 10010, Version 3.2)

Part B: Designated Steel Construction Product EPD Requirements (August 2020, UL 10010-34, Version 2.0)

Sustainability Reporting Standards

EN 15804:2019-04 – Sustainability of construction works – Environmental Product Declarations – Core rules for the product category of construction product

ISO 14025:2006 – Environmental labels and declarations – Type III environmental declarations – Principles and procedures

ISO 14040:2006 – Environmental management – Life cycle assessment – Principles and framework

ISO 14044:2006 – Environmental management – Life cycle assessment – Requirements and guidelines

ISO 21930:2017 – Sustainability in building construction – Environmental declaration of building products

LCA Software and Datasets

GaBi v10.6, Sphera

GaBi 2021.2, Sphera

