

Stena Stål – summary of inventory according to the GHG Protocol

Stena Stål supplies a wide range of steel products to customers in Sweden and Norway. Its customers mainly consist of small and medium-sized companies in the construction and industrial sectors. As a complement to its wholesale business, it offers the adaptation and pre-treatment of steel products, based on customer-specific needs, either in-house or in collaboration with its partners. Among other services, cutting, abrasive blasting and painting is also offered.

Stena Stål uses the Greenhouse Gas Protocol to better understand the greenhouse gas emissions from their activities, both within their own operations and throughout the value chain, in order to develop the right targets and activities.

Greenhouse Gas Protocol is the world's most widely used framework for accounting and reporting greenhouse gas (GHG) emissions. It divides emissions into:

- Scope 1 - Emissions from combustion of fuels within the direct control of the company.
- Scope 2 - Emissions from purchased energy, heating and cooling. Reported as market- and location based.
- Scope 3 – Value-chain emissions and other indirect emissions split into 15 categories.

The emission inventory and report are developed in accordance with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standards follows the principles in Hagainitativet. The inventory is developed with a financial control approach, meaning that the scope 1 and scope 2 emissions that Stena Stål has limited influence over, is listed in scope 3. Based on relevance and data availability, scope 3 categories 7, 10, 11, 13, 14 and 15 are excluded. The reference year for the inventory is the financial year 2019/2020 (sept-aug).

As can be seen in Table 1, the major part of the emissions arises in Stena Stål's scope 3, where about 99% of the emissions occur. Scope 3 excluded, approximately three quarters of the emissions are in scope 1 compared to scope 2 when using the market-based¹ method for scope 2 emissions. The GHG emissions in scope 1 amount to 824 tonnes of CO₂-equivalents and are dominated by the emissions from trucks, that are used for transport of goods to customers, closely followed by emissions from the painting processes on site. These two categories make up about one third each of the total scope 1 emissions. The last third stem from company owned or leased cars and machines used on the sites. This means that the emissions in scope 1 depends to a very large extent on what activities Stena Stål perform within their own scope (e.g. painting) and the share of distribution performed with own vehicles compared with third-party companies. Overall, the distribution of emissions in the three scopes are dependent on amount and type of activities Stena Stål execute within their own control compared to what is done by suppliers.

Regarding scope 2, emissions presented here follow the market-based method as described in the Greenhouse Gas Protocol although both methods have been used in the full inventory (internal).

Table 1: Stena Stål's GHG emissions during the financial year 2019/2020, per scope and per scope 3 category

Scope and category	GHG emissions [tonnes CO ₂ e]
Scope 1	824
Scope 2	169
Scope 3	317 878

¹ Market-based method means that specific emissions for the purchased energy are used where available, in other cases the residual mix is used

Sum scopes 1 - 3	318 871
<i>Scope 3 per category:</i>	
- Category 1 - Purchased goods and services	306 597
- Category 2 - Capital goods	0
- Category 3 - Fuel- and energy-related activities	206
- Category 4 - Upstream transportation and distribution	9 424
- Category 5 - Waste generated in operations	8
- Category 6 - Business travel	57
- Category 8 - Upstream leased assets	17
- Category 9 - Downstream transportation and distribution	0
- Category 12- End-of-life treatment of sold products	1 570

In scope 3, the first category – emissions from purchased goods and services – makes up a majority of the scope. This is a result of the carbon-intensity of the products that Stena Stål purchases. For Stena Stål, category 1 entails various forms of steel, rebar, aluminum, and other metal products. Its size is due to the large turnover of products and their high environmental load. As a percentage of total emissions across scopes, this category accounts for 96,2% and 96,5% of the emission in scope 3. Over 50%, by mass, of the purchased products had existing environmental product declarations (EPD:s) providing accurate emission information specific to the product. In cases where specific information was not available, average emission data was used for remaining purchased products which is less accurate.

The second largest emission source is the fourth category of scope 3 which encompasses emissions originating from transportation activities. The category is approximately 3,0% of the total emissions in scope 3 and of total emissions across scopes. It includes both transports from Tier 1 suppliers and transportation of goods performed by freighting to customers and between branches. The category also includes volumes from direct orders that should be reported in category 9, downstream transport emissions.