Environmental Claims Explanatory

Evidence supporting the use of "Green Steel", "lower emissions", "recycled metallic input", "Climate+" and related terminology

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"Green Steel", "Lower emissions", etc.

At Swiss Steel Group, we produce steel primarily using electric arc furnace (EAF) technology and recycled metallic materials. This production route differs fundamentally from conventional blast furnace / basic oxygen furnace (BF/BOF) steelmaking, which relies predominantly on iron ore and coking coal.

On average, approximately 92% of the metallic input materials used across Swiss Steel Group's production originate from recycled sources. This calculation includes all major categories of recycled steel scrap, including post-consumer scrap recovered at the end of product life, pre-consumer scrap generated during manufacturing processes, internal process scrap and home scrap recycled within steel production operations. The use of recycled metallic inputs supports a circular economy by retaining valuable material resources in productive use and reducing the need for primary raw material extraction. Selection of our suppliers for recycled raw materials is subject to prior supplier scrutiny and due diligence to ensure legally compliant origin of our raw materials and, to the extent possible, selection of raw materials which foster our sustainability endeavors.

As a result of our production route and raw material mix, the greenhouse gas emissions intensity of our steel production is lower than that of conventional BF/BOF steelmaking. Based on Swiss Steel Group's reported emissions, the combined Scope 1 and Scope 2 emissions intensity amounts to approximately 0.172 tCO_2e per ton of crude steel using a market-based Scope 2 approach and 0.227 tCO_2e per ton of crude steel using a location-based Scope 2 approach. This compares with industry benchmarks of approximately 1.8-2.1 tCO_2e[3,4,5] per ton of crude steel for conventional BF/BOF production. Depending on the methodology applied, this corresponds to an emissions intensity that is approximately 90% lower than conventional blast furnace-based steelmaking. BF/BOF production remains the dominant global steelmaking route and accounts for approximately 70% of global crude steel production[5].

For customers seeking to further advance their sustainability ambitions, Swiss Steel Group also offers Green Steel Climate+. These products are manufactured exclusively using electricity sourced from renewable energy sources such as wind, solar and hydropower. As a result, Green Steel Climate+ achieves an even lower reported Scope 1 and Scope 2 carbon footprint and can deliver up to 95% lower emissions intensity compared with conventional BF/BOF steelmaking benchmarks[3,4,5].

	Scope 1 [tCO2/t crude steel]	Scope 2 [tCO2 /t crude steel]	Sum Scope 1 + 2 [tCO2/t crude steel]	Delta
Benchmark 1: Reference plant BF/BOF[3]	-	-	1.799	-
Swiss Steel Group Green Steel (market-based Scope 2) [1,2]	0.098	0.074	0.172	**90%**
Swiss Steel Group Green Steel Climate+ [1,2]	0.098	0	0.098	**95%**
Benchmark 2: World average weighted BF/BOF [4,5]	-	-	2.070	-
Swiss Steel Group Green Steel (location-based Scope 2) [1,2]	0.098	0.129	0.227	**89%**
Swiss Steel Group Green Steel Climate+ [1,2]	0.098	0	0.098	**95%**

Scope 3 emissions represent a significant share of the steel industry's overall greenhouse gas footprint and account for approximately two thirds of Swiss Steel Group's total reported emissions[1,2,6]. Swiss Steel Group measures and reports its Scope 3 emissions and has established Scope 3 reduction targets validated by the Science Based Targets initiative (SBTi). Scope 3 emissions are not included in this specific comparison because they are influenced by a broader range of factors, such as the steel grade portfolio, raw material sourcing, supply chain structures, transportation distances and end-use applications. In addition, methodologies vary across companies, and the availability of directly comparable data is often limited. As a result, direct comparisons are generally less robust than for Scope 1 and Scope 2 emissions. The comparison therefore focuses on Scope 1 and Scope 2 emissions, where production-related emissions can be compared on a more consistent and transparent basis.

Our commitment extends beyond our current performance. Swiss Steel Group was the first steel producer worldwide to receive validation of its greenhouse gas reduction targets by the Science Based Targets initiative (SBTi)[7] and has established a comprehensive decarbonization roadmap to further reduce emissions across its operations and value chain. Through continuous improvements in energy efficiency, low-carbon electricity sourcing, process optimization, resource efficiency and value-chain collaboration, we are working towards our ambition further reducing our emissions while continuing to supply high-performance specialty steels to our customers.

We use terms such as “Green Steel”, “lower emission steel”, because it reflects measurable environmental characteristics of our products and production process:

- High recycled content
- Electric Arc Furnace (EAF) based production route
- Substantially lower Scope 1 and Scope 2 emissions than conventional primary steelmaking
- Science-based pathway for further decarbonization

The usage of these terms does not imply that steel production is emission-free or without environmental impact. Rather, they are intended to describe steel produced with significantly lower greenhouse gas emissions intensity than conventional primary steelmaking routes, based on the methodologies and benchmarks referenced above.

Sources:

[1] Swiss Steel Group DNV Assurance Statement: https://swisssteel-group.com/content-media/documents/DNV-Assurance-Statement.pdf

[2] Swiss Steel Group Emissions Reporting Principles: https://swisssteel-group.com/content-media/documents/Emissions-Reporting-Principles.pdf

[3] Annex to the LESS-Rulebook, Annex II-b: Reference plant integrated steelworks, excluding hot-rolling: https://www.wvstahl.de/wp-content/uploads/20240422_Annex_LESS-Rulebook.pdf

[4] JRC Technical Report - Greenhouse gas intensities of the EU steel industry and its trading partners: https://publications.jrc.ec.europa.eu/repository/handle/JRC129297

[5] World Steel in Figures 2026: https://worldsteel.org/wp-content/uploads/World-Steel-in-Figures-2026.pdf

[6] Swiss Steel Group Sustainability Report 2025: https://swisssteel-group.com/content-media/documents/Sustainability-Report_2025.pdf

[7] Science Based Targets initiative (SBTi) dashboard: Target dashboard - Science Based Targets Initiative