

SteelZero

Commitment Framework v1.1 | June 2024

Introduction

Steel is one of the world's most widely used materials – from buildings to bridges, scissors to saucepans, and cars to wind turbines, it's found in almost every aspect of our lives. Despite available decarbonisation technologies, steelmaking accounts for around 8% of all annual greenhouse gas emissions. Decarbonising steel production is critical for halving global carbon emissions by 2030 and to remain on track for a net zero world by mid-century.

Steel will continue to be the cornerstone of our modern lives, with demand expected to rise in line with increased urbanisation in developing countries. The need for climate-resilient infrastructure too will grow - as will the demand for the steel-containing electric cars of the future and wind turbines generating clean energy.

We stand at a critical juncture - now more than ever, steel users must take the lead in the transition to net zero. Organisations across the steel value chain need to prepare themselves for the transition to a low emission steel era and take advantage of the opportunity to build a green economy. Fast. Only then can they future proof their business by being a first mover - before the hammer of regulation strikes.

That's why Climate Group, in partnership with ResponsibleSteel, came together to establish SteelZero - a global initiative working with forward-looking organisations to speed up the transition to a responsible, net zero steel industry.

By harnessing their collective purchasing power and influence, SteelZero sends a strong demand signal to shift global markets and policies towards responsible production and sourcing of steel.

The commitment

Organisations that join SteelZero make a public commitment to transition to **100% net zero steel by 2050**.

Organisations are encouraged to commit to the most ambitious and credible target that fits within their strategy. Organisations have the option to review their commitments on an annual basis. They can adjust their commitment providing it always meets the minimum criteria and are encouraged to increase the ambition of their commitment where possible.

Organisations must commit to achieve a set of minimum commitment criteria, which have been designed to:

- Send a strong market signal to steel producers to transition to the production of net zero steel.
- Be adoptable by organisations across all steel-using sectors.
- Be globally applicable.

Minimum commitment criteria

1. Long-term commitment: Commitment to [procuring/specifying/stocking] 100% of steel requirement as net zero steel by 2050, at the latest.
2. Interim commitment: Commitment to [procuring/specifying/stocking] a minimum of 50% of steel requirement by 2030, meeting one or a combination of the following conditions:
 - a) Steel produced by a steelmaking site where the site's corporate owner has defined and made public both a long-term and a near-term emissions reduction target, validated by the Science-based Targets initiative (SBTi) or another quantitative, scientifically justified target of comparable ambition, quality and coverage.
 - b) Steel meeting the ResponsibleSteel Decarbonisation Progress threshold for **"Lower Emission Steel"** *, or equivalent

Commitment criteria may evolve over time to ensure that the SteelZero initiative is always calling for appropriate and ambitious low and net zero steel procurement and specifications from its members. Any update to the criteria will be discussed with SteelZero members in detail. Climate Group reserves the right to make alterations to the commitment criteria should changes be decided upon after such consultations.

Organisations will be required to annually disclose, to Climate Group, their progress towards meeting their SteelZero commitment. The data disclosed will include procured steel volume, mill of origin, greenhouse gas emissions intensity of crude steel and share of scrap as a percent of input materials in crude steelmaking, in alignment with the ResponsibleSteel International Production Standard. Additional information may be requested to clarify an organisation's progress towards their commitment.

The SteelZero commitment and annual disclosure is currently applicable to carbon steel only. As standards for high alloy and stainless steel develop, we'll review the commitment framework for setting ambitious commitments to decarbonise other types of steel.

For more information on SteelZero please contact

- Sameen Khan, Senior Manager – Steel, Climate Group. Skhan@climategroup.org
- Shiva Kumar, Director – Development & Innovation, ResponsibleSteel. Shiv@responsiblesteel.org

Appendix A - Definitions

Note: Throughout this document, we recognise carbon (C) is a key element in many steel alloys; however, in this context any reference to carbon or decarbonisation is related to greenhouse gas (GHG) emissions.

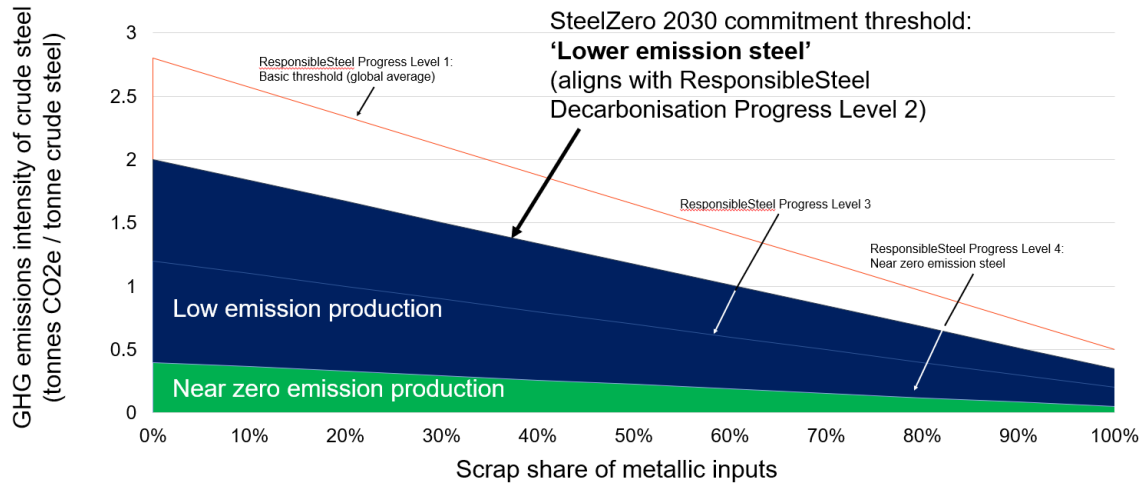
Crude steel is defined as steel in the first solid state after melting, suitable for further processing or for sale. Synonymous with raw steel (adopted from The World Steel Association).

Equivalent or equivalency, in this context, refers to the condition of being equal or equivalent in value to a foundational reference point. Through our partnership with ResponsibleSteel and via the Steel Standards Principles, SteelZero is working towards greater alignment and interoperability between different standards, in order to facilitate claims on lower emission steel equivalent to ResponsibleSteel Decarbonisation Progress Level 2. **Interoperability** is the compatibility between different systems, often reciprocal, that allows us to compare the two in a harmonised manner.

GHG Offsets are discrete GHG reductions used to compensate for (i.e., offset) GHG emissions elsewhere, for example to meet a voluntary or mandatory GHG target or cap. Offsets are calculated relative to a baseline that represents a hypothetical scenario for what emissions would have been in the absence of the mitigation project that generates the offsets. To avoid double counting, the reduction giving rise to the offset must occur at sources or sinks not included in the target or cap for which it is used (adopted from The Greenhouse Gas Protocol).

GHG Emissions Intensity is measured in metric tonnes of CO₂e (CO₂ equivalent) per metric tonne of crude steel and includes direct GHG emissions from steelmaking sites (scope 1), the indirect GHG emissions associated with energy generation (scope 2), and the indirect emissions from upstream value chain of steelmaking (scope 3). Scope 1, 2 and 3 emissions are as referred to in The Greenhouse Gas Protocol. The GHG emissions intensity will be calculated in accordance with the requirements of an applicable, recognised international and/or regional standard.

Lower Emission Steel is described as the GHG emissions intensity threshold of ≤ 2000 to ≤ 350 kgCO₂e/tonne of crude steel dependent on 0-100% scrap share of metallic inputs. Lower emission steel aligns with the quantitative threshold of ResponsibleSteel Decarbonisation Progress Level 2. Two values are required to assess the site-level progress towards achieving near-zero emission: the GHG emissions intensity (on a cradle-to-crude basis) and the scrap percentage (as proportion of metallic inputs to steelmaking). SteelZero uses the ResponsibleSteel International Production Standard (second version) to determine these values, specifically the accounting rules under Criterion 10.4, and the scrap equation under Criterion 10.6. Other equivalent routes undertaken by steelmakers when making claims on their lower emission steel qualifications, will be assessed.



Net Zero Steel is defined as steel with a GHG emissions intensity minimised to be as close as operationally possible to zero metric tonnes of CO₂e / metric tonne crude steel, and any remaining emissions offset as a last resort using a recognised offsetting framework.

ResponsibleSteel-Certified Steel covers steel from steelmaking sites that have achieved at least Progress Level 1 for both Decarbonisation and Materials Sourcing, in addition to meeting the core environmental, social and governance (ESG) requirements of the ResponsibleSteel International Production Standard. ResponsibleSteel Certified Steel includes the disclosure of GHG emissions intensity performance and the disclosure of product carbon footprint for all ResponsibleSteel certified products. For further information about the ResponsibleSteel International Production Standard see <https://www.responsiblesteel.org>.

Steel Requirement, as covered by the SteelZero commitment, refers to steel or products containing steel that are central to business operations and steel that is used in the production and delivery of final products or projects. The scope of the SteelZero commitment, i.e., the steel requirement, can be prioritised by the member company of SteelZero as the steel products of most strategic value for the organisation to decarbonise. It highlights the key areas with the most crucial need to send the decarbonisation demand signal to steelmakers and supply chains. For example, for the construction of a building, the steel requirement would cover structural steel, significant architectural metalworks and may be expanded to specified products such as elevators and HVAC units.