The future of steel: sourcing in a net zero economy

FAQs

What is SteelZero?

SteelZero, led by the Climate Group in partnership with ResponsibleSteel, is a global initiative that brings together forward-looking organisations to speed up the transition to a net zero steel industry. Organisations that join SteelZero make a public commitment to use, procure and specify 100% net zero steel by 2050. 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.

Why is it important to address the future of steel?

Steel is the world’s most widely used material – from buildings to bridges, scissors to saucepans, cars to wind turbines, it’s found in almost every aspect of our lives.
But unfortunately, steelmaking is currently one of the biggest emitters of CO2 globally, despite the fact that technologies exist for its production to be decarbonised. Total greenhouse gas emissions from the steel sector alone account for around 7% of global annual emissions, and this is projected to rise in line with increasing demand.

Given we have less than 10 years to halve global carbon emissions to get the world on track to reach net zero by mid-century, decarbonising steelmaking needs to be a critical part of the journey. And we have to start today.

Why join SteelZero?

Corporate and public sector demand for low emissions steel has a particularly critical role to play in reducing emissions: encouraging new low emissions steel production technologies as well as driving lower emissions from recycled steel and the re-use of steel-based products.

SteelZero is the first initiative which focusses on driving a powerful demand signal for net zero steel. The platform enables leading organisations, their peers and suppliers to come together and address key barriers currently faced in their steel supply chains. Working groups and/or roundtables will assist organisations in developing a roadmap to fulfil their commitment to net zero steel - agendas will be driven by the needs of members and co-ordinated by SteelZero.

SteelZero members are climate leaders

- They’re the front-runners of a new, global initiative focused on driving demand for net zero steel – the first initiative of its kind.
- They’re at the forefront of addressing supply chain emissions, including embodied emissions in the production of the world’s most widely used material.
- They’re taking responsibility and holding themselves accountable by making an ambitious public commitment to transition to 100% net zero steel by 2050.

SteelZero members are driving change

- They’re using their purchasing power and influence to send a powerful demand signal to steel producers, investors and policymakers to speed up widescale production of net zero steel.
- They’re raising ambition and giving their supply chain confidence to transition to 100% net zero steel.
- They’re working together with their peers, other leading organisations and suppliers, to address decarbonisation barriers facing the steel supply chain.

SteelZero members are future-proofing their organisation

- They’re getting ahead and preparing for inevitable changes across their supply chains to remain economically competitive in the transition to a low carbon world.
What do organisations commit to?
Organisations that join SteelZero must be willing to make a public commitment to procuring, specifying or stocking 100% net zero steel by 2050. The full criteria is set out in the SteelZero Commitment Framework, however a summary of the minimum commitment criteria includes a long term commitment to procure 100% net zero steel by 2050; and an interim commitment to procure 50% of its steel requirement by 2030, meeting one or a combination of:

- ResponsibleSteel™ Certified Steel, or equivalent
- Steel produced by a steelmaking site where the site’s corporate owner has medium-term, quantitative science-based GHG emissions target for the corporation
- Low Embodied Carbon Steel, with a defined specific emissions intensity which takes into account the proportion of end of life scrap

Organisations are encouraged to commit to the most ambitious, credible target that fits with their strategy and may go beyond the minimum commitment criteria.

Who are the current members?
The first organisations signed up to SteelZero during October and November 2020 and SteelZero held a public launch event on 1st December 2020. The list of committed organisations can be found here.

Can steel producers join SteelZero?
SteelZero is a demand side initiative which will send a powerful signal to steel suppliers that key users of steel are willing to procure net zero steel. Steel producers would not sign up to the SteelZero commitment however SteelZero will engage steel producers directly to share the message from demand side businesses and steel producers may be involved in complementary working groups to support the transition to net zero steel.

Why sign up to SteelZero when we already have a broader net zero commitment?
A growing number of organisations are setting net zero commitments, some of which include the emissions from their supply chain. A broad net zero commitment is important, however specific attention needs to be channelled towards the decarbonisation of certain materials, especially those such as steel which are an essential input to many sectors across the global economy. As total greenhouse gas emissions from the steel sector alone account for around 7% of annual global emissions and global end-use demand for steel is projected to grow by almost 40% by 2050, it is crucial that users of steel send a clear message that they ultimately wish to procure net zero steel.

Signing up to the SteelZero commitment complements existing net zero commitments, particularly as the ongoing working groups can assist organisations in developing a roadmap to fulfil their overarching net zero targets with the opportunity to share best practices to achieve the highest and most robust standards of sustainability.
Is the commitment achievable?

The commitment is designed to strike the most appropriate balance between being ambitious for leading companies to demonstrate their commitment to transition to net zero steel, whilst also being practical to achieve. Whilst there is limited supply of steel that meets both the interim and long-term commitment, SteelZero commitments are designed to demonstrate and amplify the aggregate demand for low and net zero carbon steel providing a strong message to producers to accelerate their transition and ensure the supply is there to meet rapidly growing demand.

Why does SteelZero focus on decarbonisation of crude steel? What about other emissions and wider sustainability issues?

The SteelZero commitment focuses on the decarbonisation of crude steel production to send a clear message to steel producers and policymakers that crude steel production needs to accelerate towards net zero. We recognise that there is great scope to tackle wider emissions within the steel supply chain and broader sustainability issues. The SteelZero working groups provides the opportunity to address these issues and may include topics such as efficient design practices, fabrication, the shift towards the circular economy and improving the quality of emissions data that flows through the supply chain. Working groups will be driven by the potential for driving emissions reductions and the needs of members, and will be co-ordinated by SteelZero.

How does SteelZero fit in with the work of ResponsibleSteel?

SteelZero is led by the Climate Group in partnership with ResponsibleSteel. It’s a separate initiative to the development of the ResponsibleSteel standard, however the SteelZero commitment references the procuring/specifying of ResponsibleSteel™ Certified Steel as one of the options for the interim commitment.

What is ResponsibleSteel Certified Steel?

The ResponsibleSteel Standard V1.0 was launched in December 2019, covers 12 principles of sustainability and can be applied to steel producing sites. ResponsibleSteel Certified Steel is steel which is produced by a ResponsibleSteel Certified Site and in addition meets the performance requirements for ResponsibleSteel steel product certification, including the applicable threshold performance level for GHG emissions. These requirements are being developed by ResponsibleSteel throughout 2020 in consultation with ResponsibleSteel members and other stakeholders, with the expectation that they will be finalised and approved in early 2021.

What scope of emissions are included within the net zero 2050 commitment and low embodied carbon steel definition?

Direct GHG emissions from steelmaking sites (scope 1), the indirect emissions of GHGs associated with energy generation (scope 2), as well as other upstream (scope 3a) indirect GHGs of steelmaking are included. Scope 1, 2 and 3 emissions are as referred to in The Greenhouse Gas Protocol.
Why does the SteelZero Commitment Framework reference the ResponsibleSteel Certified Steel and the Science Based Targets initiative?

Within the SteelZero commitment framework, we recognize the need for businesses to demand steel with a low CO2 footprint whilst also recognising the value in supporting producers who have committed to long term decarbonization through the likes of the ResponsibleSteel standard and the Science Based Targets initiative. These are useful tools to contribute to the message for producers to reach net zero which is supported by the long term commitment to procure 100% net zero steel.

How was the definition of Low Embodied Carbon Steel developed?

SteelZero recognises it is important that all steelmaking production methods are decarbonized. The Low Embodied Carbon Steel threshold is designed so it is technology neutral, however the calculation of the threshold takes into account the proportion of end of life scrap as we recognise that steel produced with greater levels of end of life scrap as an input material will characteristically have a lower footprint than steel with lower levels of end of life scrap. This encourages steel with both high end of life scrap content and steel with low end of life scrap content to be decarbonised.

What is SteelZero’s view on scrap steel?

We also acknowledge that whilst increasing the percentage of steel that is recycled at the end of its life can play an important role in assisting the steel industry to reach net zero, it is not the sole answer. A significant proportion of steel is already recycled at the end of its life and current projections show that even with increasing circularity and recycling of steel, demand for primary steel will continue to increase so it is important that all steelmaking production methods are decarbonised which is why within the SteelZero commitment framework the Low Embodied Carbon Steel threshold ensure that both steel with high end of life scrap content and steel with low end of life scrap content needs to be decarbonised.

Why should steel producers accelerate their transition to supplying net zero steel?

According to a report from CDP in 2019, on average 14% of steel companies’ value is at risk from rising carbon prices. Steel producers should take action now to ensure they remain competitive in the decades to come with increasing demand for low CO2 and net zero steel and an increasing regulatory environment.

What reporting is required?

Organisations are required to report to the Climate Group annually on their progress towards their SteelZero commitment. Information reported will include summaries of the quantity and embodied carbon of steel procured and will be aligned with existing standards. Additional information may be requested to clarify an organisation’s progress towards their commitment.
Is there a fee for joining SteelZero?

Organisations who join SteelZero in 2021 will be offered free membership throughout the calendar year.

From 1st January 2022, organisations may be requested to contribute a fee to support the running of the initiative and associated working groups, depending on other funding streams secured by SteelZero. Any fee would be mutually agreed with continuing members of SteelZero.

Has SteelZero considered competition laws?

We have developed a SteelZero Competition Law Compliance Guidelines to ensure all SteelZero work and participants act in compliance with applicable antitrust and competition laws in respect of all SteelZero activities. Please contact us for more information on this.

Who are the Climate Group?

The Climate Group drives climate action. Fast. Our goal is a world of net zero carbon emissions by 2050, with greater prosperity for all. We focus on systems with the highest emissions and where our networks have the greatest opportunity to drive change. We do this by building large and influential networks and holding organisations accountable, turning their commitments into action. We share what we achieve together to show more organisations what they could do. We are an international non-profit organisation, founded in 2004, with offices in London, New Delhi and New York.

Who are ResponsibleSteel?

ResponsibleSteel is an international, not for profit membership organisation. Its mission is to maximise steel’s contribution to a sustainable society. ResponsibleSteel is the industry’s first global multi-stakeholder standard and certification initiative.

With members from every stage of the steel supply chain, ResponsibleSteel is developing an independent certification standard to ensure businesses and consumers can be confident that they steel they use as been sourced and produced responsibly at every stage.

For more information on SteelZero please contact:

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