

Chain of custody approaches in the steel sector

The role of GHG reduction certificates

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Introduction

In the context of this document, chain of custody approaches are methods for pooling incremental reductions in GHG emissions (expressed as CO₂eq) achieved through projects implemented by steel manufacturing companies, and thereafter selling emission reduction certificates alongside the sale of products. The certificates can subsequently be used by customers to reduce their upstream scope 3 emissions on an organisation level.

The approaches have three steps. First, calculate the GHG emissions intensity of the specific steel product. Second, identify GHG emission reduction projects and determine the GHG emission reductions achieved. Third, issue reduction certificates, not exceeding the total GHG emission reduction achieved through these projects, and supply steel products with reduction certificates. All steps must be described by the organisation and verified by an independent third party.

The role of the World Steel Association (worldsteel)

Chain of custody approaches are currently being developed and increasingly used by the steel industry as well as other sectors. There are also efforts ongoing to standardise these approaches and methodologies and an increasing number of international initiatives are considering what role they can play in procurement policies. It is crucial to develop these schemes with maximum transparency and from a cross-sectoral perspective.

worldsteel has been working with its members for some time with the goal of increasing knowledge about these approaches and to formulate a joint view and guidelines for consistent application on the most important aspects of them.

The role of GHG reduction certificates in the steel supply chain

worldsteel and its members support the goals of the Paris Agreement and the transition of the industry is ongoing. These efforts are contributing to reducing global GHG emissions. However, many of the technologies for decarbonising the steel manufacturing process are still under development and it will take time to significantly reduce the industry's GHG emissions.

At the same time, steel industry customers are working to decarbonise their own supply chains, and steel companies are expected to respond to their needs. Given the significant investment required to fund the industry's transition, customers can help support and even accelerate the transition by purchasing GHG reduction certificates and thereby paying a premium.

Therefore, during the transition period of the steel industry, GHG reduction certificates can play an important role:

- allowing steel companies to meet rising customer demand for low carbon products today by pooling their incremental GHG reductions from defined projects for specific customers,
- allowing steel companies to be recognised for their decarbonisation efforts,
- creating a mechanism for customers to invest in GHG reductions in the steel industry and the direct value chain to reduce their scope 3 emissions.

As a response, many steel companies are implementing their own GHG reduction certificate schemes. Important aspects have to be addressed to work towards alignment of schemes and to ensure stakeholder trust in the steel sector, as outlined in the following Principles. worldsteel is also developing guidelines which will provide further detail on some of these key aspects.

worldsteel's principles

These principles aim to align the basic conditions for the use of certificates for GHG emissions reduction in the steel industry.

1. The method should be transparent and the details of how the scheme operates be readily available from the steel producer. This in particular relates to fully defining and justifying:
 - if and how the method is consistent with established relevant standards,
 - the boundary within which the emission reductions are generated,
 - how the emission reduction certificates are generated,
 - how the certificates are linked to the products sold, and
 - how the emission reduction project meets additionality requirements.
2. The calculation of the GHG emission intensity of steel products, the emission reductions from the project, and the application of any emission reduction certificates should be recorded and independently verified (Principle of Impartiality*).
3. Where GHG emission reductions from projects are made available through certificates, it should be ensured that no more certificates are issued than are made available from projects (Principle of Accuracy*).
4. Certificates can only be purchased alongside the purchase of steel products and cannot exceed the total GHG emissions related to the production of the purchased steel products. Certificates can only pass through the value chain once and should not be traded on the open market (Principle of Accuracy*).
5. The certificate should include a rationale for the reduction in emissions. The emission reductions achieved must be included as net emission reductions (Principle of Transparency*).
6. The scheme should ensure that there is no double accounting of GHG emission reductions, i.e. projects should not contribute emissions savings, for the purpose of creating GHG reduction certificates, where the project benefits are included in a published EPD (Principle of Accuracy*).
7. The LCA-based product carbon footprint of the steel product itself remains the same until a new carbon footprint is calculated and published. The emission reductions achieved in the meantime are reported separately in the form of certificates. These certificates can be used by customers to reduce their organisational level upstream scope 3 emissions.

* GHG Protocol Corporate Standard - Chapter 1, page 7.