

ResponsibleSteel Role of Standards in Decarbonization of the Steel

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Sector

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Mission

Our mission is to maximise the steel sector's contribution to a sustainable society

This means achieving net zero carbon emissions for the steel sector and enhancing the responsible sourcing, production, use and recycling of steel by

- Providing a multi-stakeholder forum to build trust and achieve consensus;
- Developing standards, certification and related tools;
- Driving positive change through the recognition and use of responsible steel.





Multistakeholder members across the value chain





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climate





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ResponsibleSteel Standard V2.0

- 13 principles, 61 criteria, >500 requirements
- Sites are audited against the requirements by approved and trained third party auditors

Governance Principles

- 1. Corporate Leadership
- Social, Environmental, Governance Management Systems
- 3. Responsible Sourcing
- 4. Decommissioning and Closure

Social Principles

- Occupational Health + Safety
- 6. Labour Rights
- 7. Human Rights
- 8. Local Communities
- 9. Stakeholder Engagement and Communication

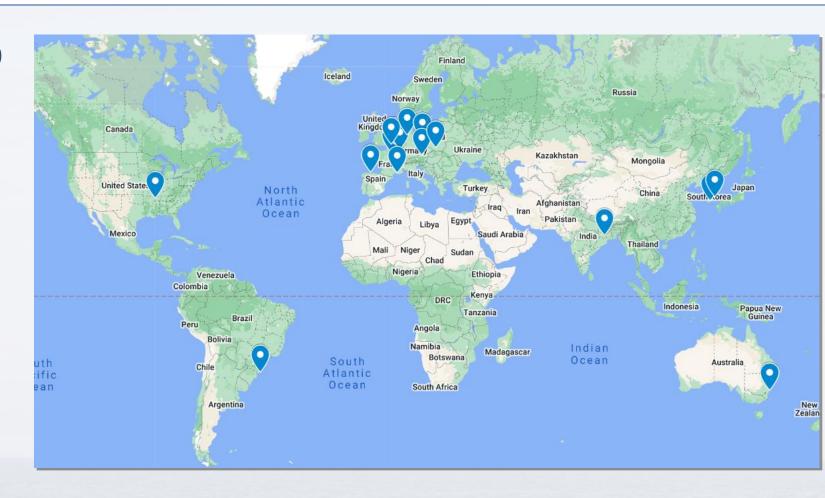
Environment Principles

- 10. Climate Change and Greenhouse Gas Emissions
- 11. Noise, Emissions,Effluentsand Waste
- 12. Water Stewardship
- 13. Biodiversity



ResponsibleSteel Certified Sites

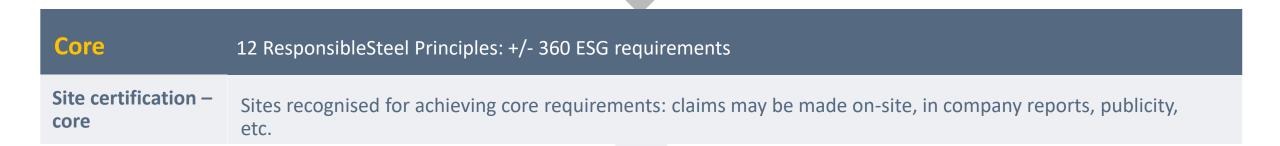
- Site standard launched Dec 2019
- First site certification, post lockdowns, in July 2021
- 54 sites certified across 5 continents
- >108Mt steel covered in site certifications by end 2022
- Ongoing site audits in Europe, Brazil, India, Rep. of Korea
- More in the pre-public stage.
- First 'certified steel' anticipated 2023





Steelmaker maturity model

Commit	Commitment to RS vision and mission, multi-stakeholder model and certification of at least one site
Membership	Company recognised as RS member: participation in RS processes, multi-stakeholder discussions and developments. Company commits to initiating site certification within one year.



Progress	Additional requirements for Responsible Sourcing and Decarbonisation through 4 levels of increasing progress
Site certification - further levels of progress (1-4)	Market rewards for increasingly high levels of achievement +/- 240 requirements: Sites recognised for four further increasing levels of achievement, and will be able to market their steel as 'RS certified steel'

















'Certified Steel': Responsible sourcing overview

- Clear roadmap for the responsible sourcing journey for steel companies and their suppliers
- Rewards good ESG practice by input material suppliers → drives certification and transparency
- Builds on existing standards and ESG programmes for responsible mining and forestry
- Responsible sourcing of scrap addressed separately driving progress





'Certified Steel': Responsible sourcing overview



- Levels in criteria 2 and 4 provide roadmap for the future
- Allow certification when milestones are achieved
- Address reliance on suppliers when it comes to ESG issues in supply chains
- Recognise front runners
- No fixed timeline to move to next level





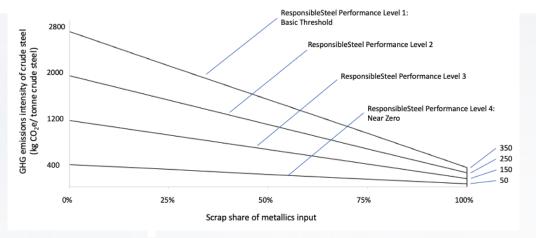
RS V2.0 enables customer to review GHG intensity of steel in two forms

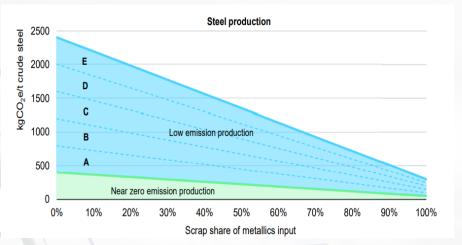
1. Embodied GHG intensity value

Offers:

- 4 levels of decarbonisation
- Level 1 designed to represent 'global average'
- Level 4 'near zero'

Defines decarbonization progress made by steel makers towards net-zero production of steel.





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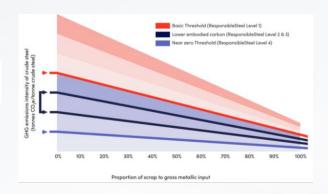
Rewards and drives decarbonization across global industry



RS V2.0 enables customer to review GHG intensity of steel in two forms

1. ResponsibleSteel V2.0 embodied GHG intensity value

- Enables customers to first compare decarbonisation progress of all steel suppliers on a like for like basis, using a model designed to drive decarbonisation globally, not only in local market
- Required disclosure of % scrap input informs customer on level of circularity.



2. Product Carbon Footprint: provides embodied GHG value of product by category

• Enables customers to compare product level emissions of one producer with another for same product

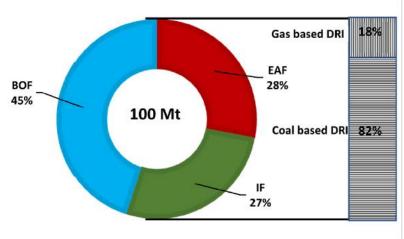
Used together, these two forms of GHG intensity data enable the customer to make informed and responsible procurement choices for decarbonization.



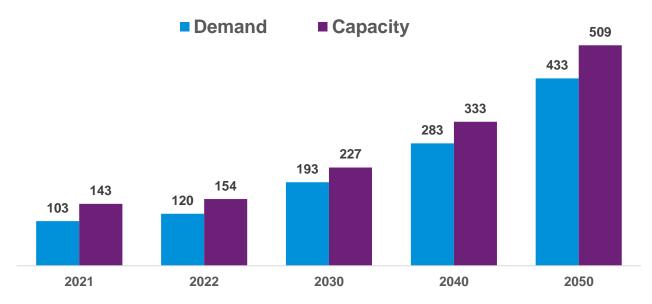
Indian Steel lindustry



Source: Mallett, A., & Pal, P. (2022))



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Source: KPMG Analysis (average of different approaches)



Indian Steel Industry- Challenges and Opportunities

Policy

- PAT
- NMEEE
- PLI
- Steel Scrap Recycling Policy
- National Steel Policy
- Green Hydrogen Policy

Technology

- CCU/CCUS
- H-DR

Challenges

- CBAM
- Energy Intensive

Finance



US\$ 200 billion US\$275-300

■SDS billion

Source: IEA 2020

ResponsibleSteel Standard – Key component of the Indian decarbonisation strategy





