

Steel Criteria

Frequently Asked Questions

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Questions on Scope

What can be certified by these Criteria?

The Steel Criteria can certify:

1. Use-of-Proceed (UoP) bonds financing decarbonisation measures (e.g., retrofits) – see section 3 of the Steel Criteria.
2. Use-of-Proceed (UoP) bonds financing Steel production facilities (i.e., assets and activities) – see section 4 of the Steel Criteria.
3. Entities (Steel production companies) and Sustainability Linked Bonds (SLBs) – see section 5 of the Steel Criteria.

What assets and activities are within scope?

The Steel Criteria cover assets and activities involved in the production of steel, and companies that operate such assets or activities.

Potential assets and activities that might be certified (subject to meeting the eligibility criteria) include integrated, non-integrated steel production facilities and ironmaking facilities.

Facilities that are responsible for only one stage of production in the raw material preparation and downstream stages, for example a standalone coke oven, lime kiln, sinter or pellet plant, rolling or coating facility are not eligible.

A full description and examples of what is in scope can be found in section 2 of the Steel Criteria document.

Can stainless and high alloy steels production and production companies, be certified?

No, the boundary of the Steel Criteria does not include the production of stainless and high alloy steels. As such, only Steel production companies or facilities can be certified. This also means that a high alloy and Steel production company can only have its Steel production subsidiary certified.

Can iron ore mining and mining companies, be certified?

No, under these criteria an iron mine cannot be certified, however integrated steel plants which are directly connected to a mine can still apply for certification.

What emissions must be considered when determining whether a plant or company meets the thresholds?

Currently, steelmakers calculate their CO₂ emissions intensity according to their scope of production and in accordance with scopes 1, 2, and/or 3, as determined by the GHG Protocol. However, in the steel sector, there is a high degree of variability in the ownership structure and level of vertical integration of production facilities. This causes inconsistent emissions accounting, particularly for scope 3 and makes it difficult to compare steel companies equitably.

To ensure the emissions intensity values are comparable, the approach from the Sustainable STEEL Principles, where applicants quantify their emissions intensity within a Fixed System Boundary of activities (shown in Figure 1) applies.

How does the fixed system boundary compare to scope 1, 2, and 3 reporting. Will this increase reporting requirements?

When following the Greenhouse Gas Protocol's scope 1, 2, and 3 reporting standards, a company's emissions depend on its ownership of various steps within the steelmaking value chain and level of vertical integration. The emissions data required by the common system boundary would require steelmakers report on all emissions within the boundary (dotted line in Figure 1.), irrespective of ownership of various processes. This data is likely collected by steelmakers and would require only a change in the way emissions are reported. It does not preclude steelmakers from reporting on scope 1, 2, and 3 emissions.

Are coal and iron mining within the scope of emissions?

While all emissions resulting from ironmaking, steelmaking, and auxiliary processes fall within the Fixed System Boundary, emissions from iron and coal mining are considered out of scope. However, qualitative criteria have been set up to account for scope 3 emissions (including iron mining) and the use of coal (See section 6 of the criteria).

Which reporting standards are the emissions accounting (to calculate emissions intensity) based on?

The calculation procedure is adapted from and expanded, based on the ISO 14404 series, which is the standard used by the steel industry to calculate emissions at the Plant level. The Technical guidance was developed by the Rocky Mountain Institute for the Sustainable STEEL Principles¹, a of applicable topics can be found in the criteria document Box 1 and 2.

¹ Technical guidance regarding the scope of emissions and accounting is taken from Appendix XII.1 of the Sustainable STEEL Principles document: https://climatealignment.org/wp-content/uploads/2022/06/sustainable_steel_principles_framework

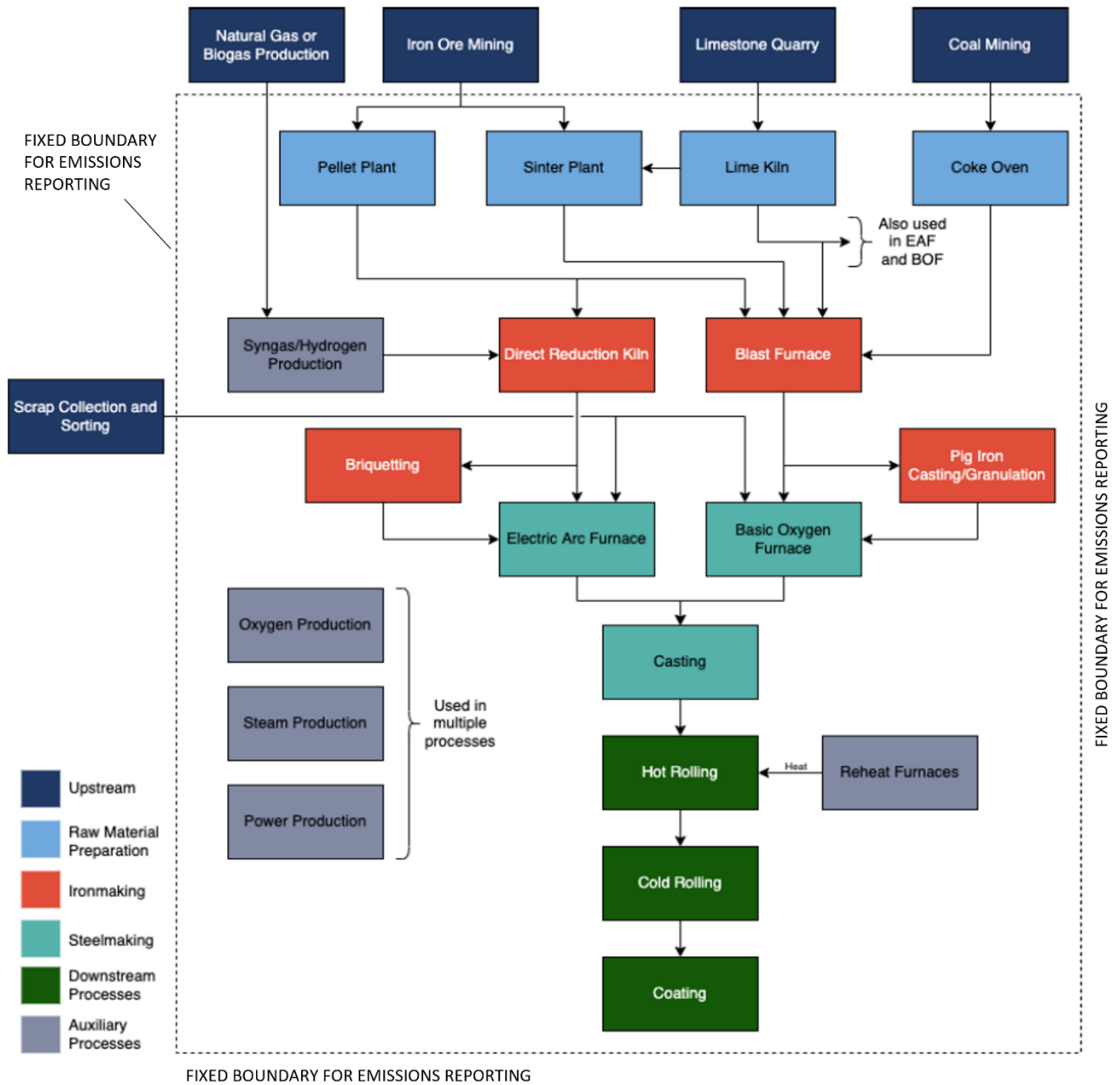


Figure 1. Fixed System Boundary for reporting steelmaking emissions².

² Source: RMI’s elaborations based on ISO 14404, the Net-Zero Steel Pathways Methodology Project, the World Steel Association, and ACT - Assessing Low Carbon Transition.

Questions on Market and Finance

Are these criteria likely to be used by the bond market?

As a significant source of global emissions, providing Steel investment with clear transition pathways will be crucial to meeting decarbonisation targets in line with limiting global warming to no more than 1.5-degrees Celsius. Climate Bonds expects sustainable labelled debt to be a large part of this.

Bondholders have a key role to play in decarbonising the Steel industry as, bonds represent the second most used source of funding for steel companies after loans. Moreover, there are already considerable and tangible prospects of certification. This might be SLBs, but equally the Use-of-Proceeds (UoP) model of bonds should be considered by Steel producers and investors. The upcoming updates to the Climate Bonds Standard means that both types of bond will eventually be certifiable.

Remember, the CBI Standard and Certification scheme is an additional layer of information which gives investors an indication of whether an entity's transition strategy or bonds proceeds are aligned with the Paris Agreement. The inclusive nature of the Criteria means there are many opportunities for certification.

Can Sustainability Linked Bonds (SLBs) be certified?

No, but this will soon change. Climate Bonds has put out a revised overarching Standard v4.0 that is currently being finalised following public consultation and will be released shortly. Please see [here](#) for updates.

The Standard v4.0 includes new, non-sector specific requirements that entity and SLB certifications will need to comply with in addition to the steel-sector specific-criteria.

Having the Steel sector criteria component for certifying entities or SLBs means that, once the v4.0 is published in 2023, certification will be possible.

What does it mean to certify an entity?

If an entity (in this instance a Steel production company) meets the entity-level sector criteria as outlined in section 5 of the Steel Criteria document, all debt issued by that company will, by extension, be certified by Climate Bonds. This certification is effective for five years from that point, after which the entity cannot use the certification mark without reapplying for certification.

Currently, the only entities that will be able to get certified (following update to the overarching Standard) will be non-financial corporate entities. Note, similar to SLBs (see above) entities will not be certifiable until the latest update to the Climate Bonds Standard is finalised. Please see [here](#) for updates.

Does CBI view securitisation as green if the backed assets are green and/or the proceeds from the securitisation are used for green purposes?

It is our view that the actual use of proceeds should be green, not necessarily the securitised assets. In other words, it is the projects and assets which the proceeds are allocated to that have to pass the requirements of the Standard. While we encourage the use of green receivables for securitised bonds, it is not a prerequisite.

Can covered bonds be certified?

Yes, covered bonds can be certified. Provided that the assets to which the proceeds will be used are compliant with their respective thresholds. However, we do not require that the pool of assets used as collateral in the covered bond are compliant with the respective threshold.

Questions on alignment with other initiatives

How do the Steel Criteria correspond to the EU Taxonomy on Sustainable Finance?

The Steel Criteria's alignment with the requirements for the corresponding economic activities in the EU Taxonomy³ is as follows:

- DRI: not included in the EU taxonomy but covered by the Steel Criteria.
- EAF:
 - New facilities: EU taxonomy is more stringent, we ask for a minimum of 70% of scrap, EU ask for 90%. CBI lowered this threshold due to the variability of scrap availability globally, in order to make the criteria applicable in a wider geography.
 - Existing facilities: EU taxonomy is more stringent, they ask for a threshold to be met, we request for a plan to use renewable energies
- BF-BOF: The metrics are the same (tCO₂ /ton of steel) but the scope considered by the EU is different, they divide the thresholds by manufacturing process steps, whereas our criteria considers all the process together as "steel manufacturing" (from raw material preparation until coating). Our criteria is more stringent, because the EU only uses a threshold, does not prevent investment in relining thus risking locking in emissions. This means that if your bond is financing Steel production related to this type of facilities and is certified under these Criteria, that investment would be defined as green under the EU Taxonomy.

As the EU Taxonomy works at the scale of Steel production *as an activity*, being certified under section 3 (decarbonisation measures) or section 5 (entities or Sustainability Linked Bonds) of the Steel Criteria would not indicate compliance with the EU Taxonomy definitions for Steel.

Can the Responsible Steel Standard be used as a proxy for the Steel Criteria?

At the moment the Steel Criteria and the Responsible Steel Standard are not equivalent, however there is interoperability possible.

The Responsible Steel (RS) Standard covers 13 principles in the environmental, social and governance domain, these are the basis for their 'Certified Site' and 'Certified Steel' certification. We fully support the work that Responsible Steel has done in convening an industry response and we are committed to collaborate and work towards consistency.

A part of RS requirements focuses on greenhouse gas (GHG) emissions which is also the focus of the Climate Bonds Initiative (CBI) Steel Criteria, but each standard has a different approach to GHG mitigation.

CBI's science-based criteria, designed for binary certification of capital investments, facilities and whole entities focuses on setting CO₂ emissions thresholds, aligned with a 1.5°C decarbonization pathway, that need to be met at facility or entity level. Fossil fuel-based facilities that don't meet the thresholds or that are at risk of locking-in emissions beyond 2030 cannot be certified under the CBI Steel Criteria.

While the RS approach to biomass procurement and scope 3 emissions is consistent with CBI's (and can be used as proxy), RS requirements specify four performance levels for GHG emissions that are based on a different pathway and scope than CBI's. To address CBI certification requirements applicants need to meet the thresholds from CBI's pathway.

Questions on Criteria requirements

Can retrofits of equipment or infrastructure improvements be certified?

Yes. A bond may be financing capital investments in specific retrofits or improvements to existing infrastructure. These might be eligible under the criteria for decarbonisation measures (section 3 of the criteria document).

There are specific mitigation criteria that the measures should meet, depending on the type of facility where the measure will be implemented. If the measure will be implemented in a primary production facility (i.e. BF or DRI) the measures need to reduce the facility's emissions intensity (tCO₂/t steel) by a certain percentage (see Table 4 in the criteria document). Mitigation measures implemented in EAF facilities are automatically eligible, this means that the measure has no climate downside and does not lock in technology that prevents decarbonisation further down the line.

Additional criteria apply for specific decarbonisation measures or retrofitting activities involving CCS or CCUS and the use of hydrogen or biomass.

³ https://eur-lex.europa.eu/resource.html?uri=cellar:d84ec73c-c773-11eb-a925-01aa75ed71a1.0021.02/DOC_2&format=PDF

[How can decarbonisation measures be bundled together to count the cost of the whole facility in the bond?](#)

As mentioned above, eligible decarbonisation measures do not necessarily mean the whole facility is also eligible. Normally this means that only the cost of the measures can be included in certification. However, the issuer may be implementing a bundle of measures within a Steel plant. If these measures *collectively* deliver emissions reductions equivalent to the emissions decrease in the plant-level pathway for the same period, the whole plant can be considered. For a 5-year bond, for example, the bundle of measures would have to deliver the same emissions percentage decrease as witnessed in the plant-level criteria between the bond starting year, and its maturity year.

[How frequently must verification take place for meeting the criteria?](#)

Issuers have two options for showing compliance:

1. **Gradual improvement over the bond's term:** applicant shall set the performance improvement targets such that the required end performance shall be achieved over the bond term. Progress against the decarbonisation targets to be assessed every 36 months showing evidence that the decarbonization targets are being met.
2. **Front-loaded improvement in initial years:** the required end performance is achieved in the initial years of the bond term and on following assessments evidence shows performance is maintained.

[Why are there different criteria for new \(becoming operational in 2022 or thereafter\) and existing \(operational prior to 2022\) Steel plants?](#)

The Technical Working Group (TWG) considered that given the fact that the technology already exists, and steel production facilities can operate for many years, new steel facilities should be already in alignment with the deep decarbonization of the sector.

On the other hand, when looking at existing facilities, we aim at avoiding investments that would lock-in heavy emitting technologies (e.g. relining of old BFs), without overlooking those producers that will make credible efforts to reduce their current emissions. The TWG acknowledges that around 71% of steel's global coal-based capacity will require reinvestment by 2030, which presents the opportunity for steel producers to either invest in relining and risking locking-in assets that are not compatible with a 1.5°C pathway or switching to alternative technologies aligned with decarbonizing the industry⁴.

[Why are there different Adaptation & Resilience requirements for decarbonisation measures and Steel plants?](#)

When evaluating the climate credentials of an asset, in light of the Climate Resilience Principles (CRP), all system boundaries and interdependencies within them must be identified. This ensures that all relevant climate risks and impacts on system resilience are managed by the issuer. When the scope of evaluation is a Steel plant, this is naturally a more complex and larger list of interdependencies than a single piece of equipment. When a single decarbonisation measure is being financed, it is clearly unfair to require the issuer to consider all possible climate risks that would exist for an entire plant. As such, the A&R checklist for measures is considerably smaller than for plants. This reflects the narrower scope of assessment.

Questions on the Pathways

[How was the Steel Criteria company pathway \(for entities and SLBs\) produced?](#)

The Steel Criteria adopted the RMI's Sustainable STEEL Principles split trajectory approach⁵. We adopted the lower of the two scenarios used by the principles which is a modified version of the "Net Zero by 2050" scenario (from now on IEA NZE) published by the International Energy Agency (IEA) in 2021. The IEA NZE models the transition needed for the global energy sector to achieve net-zero CO₂ emissions by 2050 in a way that is consistent with a 50% probability of limiting global temperature rise to 1.5°C, without overshoot⁶.

⁴ Agora Industry, Wuppertal Institute and Lund University (2021): Global Steel at a Crossroads. Why the global steel sector needs to invest in climate-neutral technologies in the 2020s.

⁵ More information can be found here: [Sustainable STEEL Principles Framework](#)

⁶ International Energy Agency, Net Zero by 2050, IEA, 2021

The IEA NZE was adjusted to meet the scope of the fixed system boundary as follows: Yearly emissions and scrap utilization data was interpolated using the decadal emissions and scrap utilization data published by the IEA in the “Net Zero by 2050” report; Scope 1 emissions were taken directly from the IEA’s “Net Zero by 2050” report, while scope 2 emissions were estimated using the technology shares of total production included in the report paired with the corresponding emissions factors included in the Mission Possible Partnership (MPP) model.

The Steel TWG determined this the most suitable pathway for adoption, being robust and aligned with the scope of emissions considered by the group.

[Does that mean if I am a company whose targets have been validated by SBTi, I can be automatically certified?](#)

No, being SBTi verified does not necessarily fulfil the requirements of the Steel Criteria. This is because the Steel Criteria have additional requirements that must be met. Also, at the moment of issuing these criteria, SBTi had not developed a pathway for the steel sector, thus the pathway adopted is not based on SBTi’s. The Steel Criteria require all certified companies to either be on the pathway already (Tier 1 certification), or to reach the pathway by 2030 at the latest (Tier 2 certification).

[How were the Steel Criteria facility’s emissions intensity \(tCO₂/t steel\) reduction targets produced?](#)

At facility level, the decarbonization pathway is not used directly. This is due to the fact that, the current emissions intensity levels in the pathway are high, because these reflect the current overall emissions level of the sector. On the other hand, the pathway represents a sectoral average decrease, but when it comes to the facility, the target needs to be more ambitious and represent the best performing assets.

To test if facilities that are currently operating are making credible efforts to decarbonize, the TWG looked first at the current CO₂ intensity of the main production routes around the world, including benchmarking of the CO₂ intensities for the BF-BOF process (which is responsible for most emissions in the sector) and the average CO₂ intensities for EAF production around the world. These data were compared to the IEA NZE decarbonization trajectory to see how much the average emissions intensity in the industry needed to decrease, also the scrap share used in EAF in each country was considered. Another aspect the TWG looked at is to promote the lock-in of technologies that may impede keeping the global warming limit of 1.5°C. Finally, we looked at the technology that is currently available or at high technology readiness level (TRL)⁷. Based on these points, the reduction targets show what facilities need to achieve to be part of an economy that is in-line with a net zero by 2050 pathway, but also considering what is feasible.

[Steel production is regionally specific. Are regional pathways acceptable demonstrations of compliance?](#)

No, regional pathways cannot be used to replace the pathways set out in the criteria. One of the trade-offs of the Steel Criteria was that regional coverage had to be sacrificed to ensure usability. Firstly, verifying each regional pathway would be extremely challenging and time consuming. At the same time, many such pathways simply do not have the level of ambition necessary for meeting 1.5°C targets. Secondly, regional pathways exist for some, but not all, regions. It creates a more level playing field to apply the same requirements to all issuers. Lastly, even regional pathways create inconsistencies across countries. Regions will always have countries or sub-regions that will be favoured or disfavoured by that pathway. As such the same issues exist for setting a global pathway.

⁷ IEA, October 2020, Iron and Steel Technology Roadmap, available at: www.iea.org/reports/iron-and-steel-technology-roadmap