ResponsibleSteel GHG Standard: Proposals (2022-02-17)

17th February 2022, 10.00am – 11.30am (GMT)
Antitrust statement

ResponsibleSteel™ is committed to complying with all relevant antitrust and competition laws and regulations. Failure to abide by these laws and regulations can potentially have extremely serious consequences for ResponsibleSteel™ and its members, including heavy fines and, in some jurisdictions, imprisonment for individuals. ResponsibleSteel™ has therefore adopted an Antitrust Policy, compliance with which is a condition of ResponsibleSteel™ membership and participation. You are asked to have due regard for this Policy today and indeed in respect of all other ResponsibleSteel™ activities.

1. Schedule
2. Progress and outstanding issues
3. Crude steel performance levels and thresholds
January and February: Members to review internally. ResponsibleSteel Secretariat to discuss the draft with members in 1:1 and small group calls, as requested.

ResponsibleSteel Secretariat to publish proposed revisions to Draft 2-1 on an ongoing basis through a ‘track changes’ document accessible through the internet

ResponsibleSteel Secretariat to convene discussions with broader membership to resolve issues as required

03 March: ResponsibleSteel Secretariat circulates final draft proposals to members and presents the proposals on an online webinar.

03 to 17 March: Members to carry out final review

From 17 March: ResponsibleSteel Board to review process in accordance with the ResponsibleSteel Standard Development Procedure v2-0 (June 2020) and determine whether the Standard should be submitted to membership for vote on approval

11 April: Final version circulated to ResponsibleSteel members for vote on approval.

30 April: Completion of membership vote

May: Board ratification, with decision to be announced at the ResponsibleSteel AGM (date to be announced)
Progress and outstanding issues

A, B: Determination of upstream Scope 3 emissions:
- Input materials list based on worldsteel CO₂ methodology. Upstream emissions average and default data to be provided
- Scope 1 + Scope 2 + Scope 3
- For steelmakers, GHG Protocol Scope 3 categories 1 & 3
- For mining companies, GHG Protocol Scope 3 categories 1, 3 & 7
- Default upstream emissions data may be used, we do not propose phasing in

C: Charcoal: FSC-certified plantations, upstream emissions default = zero, direct emissions in full

D: Pig iron, DRI, etc: treated on same basis as other ferrous input materials; TBD: crude steel input

E: Definition of crude steel: ‘saleable volume’ approach

F: Offsets: not recognised for crude steel performance thresholds now, but to review in context of ‘net zero’

G: Allocation to co-products: clarified that ‘embedded carbon’ not counted as emissions

J: Carbon Capture and Utilisation (CCU); exported energy (electricity, heat, steam); export of process gas for energy generation: to convene small technical working group to make proposals building on worldsteel CO2 methodology

K: Carbon Capture and Storage (CCS): operational emissions included, embedded carbon and construction excluded.
Progress and **outstanding issues**

Stainless and other high alloy steels

- propose to finalise after carbon steel standard completed
N. ResponsibleSteel Crude Steel GHG Emissions Intensity Performance Levels (C8-6)

• Basic threshold to be set at current average performance, taking account of scrap, as agreed
• Thresholds to be reviewed every 5 years
• By default (i.e. unless otherwise agreed by the membership) the ‘basic threshold’ level will be reduced every 10 years in line with the percentage reductions indicated by an agreed steel sector GHG emissions reduction pathway, to achieve ‘near zero’ level of emissions in 2050. Options for the sectoral GHG emissions reduction pathway to be considered include: MPP-TM, NZE RMI, NZE SBTi, NZE TPI (see following slide)
• The ResponsibleSteel performance levels will be aligned with the default values for 2030, 2040 and 2050
• As a consequence, four performance levels will be specified, rather than three
<table>
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<th>We have agreed:</th>
<th>We need to finalise:</th>
<th>Proposal</th>
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| • Basic threshold for certified steel set at current (+/- 2020) average performance, taking account of scrap | • What are the *quantitative* values of the ‘basic threshold’ level?                | • We have to agree the GHG accounting rules first  
• Then apply these, and demonstrate that the quantitative threshold reflects current global performance |
| • The objective (top level) is ‘near zero’ emissions (‘net zero’ = near zero, with the residual to be offset) | • What are the *quantitative* values for the ‘near zero’ threshold level?            | • Mission Possible Partnership (MPP) values for Scope 1 + Scope 2, with additional estimate for Scope 3 |
| • 1 [or 2] intermediate/ transition levels                                   | • 1 or 2 intermediate/ transition levels?                                           | • Propose 2 intermediate levels – see below  
• Performance levels aligned with transition to ‘near zero by 2050’          |
| • Thresholds will be reviewed (and may be revised) every 5 years             | • What are the terms of reference/ parameters for these regular reviews?           | • Objective is to achieve the fastest global transition to a near zero steel sector  
• Explicit consideration of data at time of each review                        |
| • Thresholds will be made progressively more demanding over time, in line with the objective of achieving the goals of the Paris Agreement | • How do we operationalize this today?                                              | • The basic threshold for ResponsibleSteel certified steel will be progressively withdrawn  
• Default is to withdraw every 10 years  
• Unless we agree this will not achieve the fastest transition  

We have to agree the GHG accounting rules first

• Outstanding issues:
  • Accounting of off gas, energy generation, CCU → small working group
  • Global average data for upstream emissions of input materials → populate with worldsteel data where available, will circulate with request for additional sources and circulate updates (with references)
  • Default data for upstream emissions of input materials → will populate with proposed defaults, circulate with request for additional sources and circulate updates (with references)

Then apply these rules, and demonstrate that the quantitative threshold reflects current global performance

• Compare our GHG accounting rules and global average data for upstream emissions with CRU
• Plug ResponsibleSteel rules and data into CRU model
• Review/ compare outcome with available data from steelmakers, with aim of understanding and resolving differences
• Share results with all ResponsibleSteel members prior to voting on the Standard
Near Zero

• Mission Possible Partnership (MPP) values for Scope 1 + Scope 2, with additional estimate for Scope 3

Mission Possible Partnership (MPP) values for Scope 1 + Scope 2:
• 100% primary production: 400kg CO2e/tonne crude steel
• 100% secondary production: 100 kg CO2e/tonne crude steel
• + factor for ‘near zero’ for Scope 3 tbd
Intermediate/ transition levels

Proposal:
• Two intermediate levels (four levels in all):
  • Level 1, Basic threshold
  • Levels 2 and 3: Transition levels
    • Level 4: Near Zero
  • Alignment with transition pathway to near zero by 2050

• Two transition levels allows for better differentiation of progress over time
• It allows for alignment with, and comparison with, with a global, sectoral transition towards ‘near zero’ in 2050
Illustration of four levels: these performance levels show linear transition – they are not aligned with global sectoral transitions for the steel sector.
5-yearly reviews

Proposal:

- Objective is to achieve the fastest global transition to a near zero steel sector
- Explicit consideration of data at time of each review

- *We do not know*, today, what the world will look like in ten years time, let alone 20
- *We do not know* how many steelmaking sites will be achieving levels 1, 2, 3 or 4 in five or ten years time, let alone 20
- *We do not know* how downstream steel users, policy makers, finance sector and others will use the ResponsibleSteel standard to support the transition
- *We do not know*, today, what the the best range of performance levels might be, in five or ten years time, to support the fastest transition to a near zero steel sector
- But, we can agree on our objective: we want to support the fastest possible transition, based on the best available knowledge at the time
Proposal:
• The basic threshold for ResponsibleSteel certified steel will be progressively withdrawn over time.
• Default is to withdraw every 10 years.
• Unless we agree this will not achieve the fastest transition.
Progress over time...

MPP-TM: Mission Possible Partnership – Tech Moratorium
(MPP)Linear: Linear transition to MPP 2050 end point
MPP-TM: Mission Possible Partnership – Carbon Cost
Conclusions, next steps

- **Update draft standard:**
  - Populate upstream emissions data table with average and default data

- **Ongoing issues: proposals to be developed and discussed before finalisation**
  - Convene technical working group to build on worldsteel CO2 methodology to develop proposals on: Carbon Capture and Utilisation (CCU); exported energy (electricity, heat, steam); export of process gas for energy generation
  - Develop and include a proposed approach for import of crude steel to a site
  - Develop proposals for GHG emissions for charcoal from reclaimed wood/ waste biomass/ waste plastic (for discussion of related ESG issues, please contact Dave Knight: dave.knight@oneplanet.biz)
  - Averaging of disclosed GHG performance across multiple sites in a group:
    - Finalise proposed constraints on the categories of sites/ steel products that can be averaged together
    - Averaging across performance levels: e.g. proposal that claims should be set at the lowest level within a group of sites, rather than (potentially) averaged up.
  - Threshold levels: on basis of discussion, propose to develop 4 levels based on equal steps from ‘average’ to ‘near zero’, and NOT to have levels that attempt to reflect an agreed steel sector transition to near zero. Further work needed to develop ‘terms of reference’ for the 5-yrly reviews of thresholds.

- **Stainless steel GHG thresholds:**
  - The stainless steels sub-ground hasn’t reached agreement on an approach to scrap for stainless steels, nor on a methodology to address the issue of multiple input materials (Cr, Ni, etc).
  - Aperam has developed a proposal to share with the membership – see next slide
  - GHG threshold levels for stainless (and other high alloy) steels will not be included in the standard at this point. The stainless steel working group will continue to develop options, including consideration of Aperam’s proposed approach, and bring a proposal back to discuss with the full membership prior to voting at a later date.
Outline proposal by Aperam for an approach to define GHG thresholds for stainless steel

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Mitigation

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**3-4 t/CO2 Stainless**

Recycling logo

X=? [70% in Stainless Taxonomy?]