ResponsibleSteel GHG Requirements Finalisation
Meeting 5: 21st October 2021
Meeting starts at 11.00am (UK)
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. Progress and schedule

2. Issues for resolution:
   - Revisiting the threshold gradient
   - Single dynamic threshold vs multiple performance levels
Schedule

• Schedule: Thursdays from 11:00 to 12:30 UK time
  • 19 August – recap and review process, initial identification of key issues
  • 2 September – What is the basis for defining GHG emissions performance?
  • 16 September – Should the standard specify one, or more than one, performance level for crude steel GHG emissions intensity?
  • 16 September to 14 October: work with smaller group on stainless/high alloy threshold criteria
  • 14 October – Should the standard specify a single dynamic threshold for crude steel GHG emissions intensity for steel certification, or 3 performance levels?
  • 21 October – Should the standard specify a single dynamic threshold for crude steel GHG emissions intensity for steel certification, or 3 performance levels?
  • 28 October – issues to be decided
  • 4 November – issues to be decided: time brought forward to 10.00 to 11.30 UK time
• Secretariat to do further work on a consolidated draft Standard for Board Standards, Assurance & Claims Committee (SACC) review
• 18 November: target date for SACC approval for circulation of draft to ResponsibleSteel membership for ‘legal review’
1. Progress and schedule

2. Issues for resolution:
   - Revisiting the threshold gradient
   - Single dynamic threshold vs multiple performance levels
Possible modifications to encourage high scrap content / EAF steel

Options:
A. Current proposal: 50% of high iron ore-based production and 50% of high scrap-based production initially qualifies for RS certification of steel.
B. 'Shallower gradient': gradient adjusted to favour scrap use – e.g. 50% of 'high iron ore' sites and 75% of 'high scrap' sites can initially achieve RS certification.
C. (Or somewhere in between?) – not shown.
Possible modifications to encourage high scrap content / EAF steel

**Proposition:**
- In practice we are going to have to define a performance level to just one decimal place – i.e., the nearest 100 kg CO2e/tonne steel.
- We will not have data for 100% of the world’s EAF production sites.
- Even with clear GHG accounting rules, GHG measurement at the site level will be subject to error bars.
- The options (subject to detailed accounting rules and good data) are likely to be something like: 700 kg/tonne, 600 kg/tonne, or 500 kg/tonne (at 100% scrap level).
- We will have to take a pragmatic decision, including an element of estimation and acceptability.
- The membership should ask the RS Secretariat and Board to propose a level that is somewhere between its best estimate of 50% and 75% ‘pass’ for ‘very high scrap’ input production, to the nearest 100 kg CO2e/tonne of crude steel.
1. Progress and schedule

2. Issues for resolution:
   - Revisiting the threshold gradient
   - Single dynamic threshold vs multiple performance levels
Issues for resolution:

• Revisiting the threshold: double gradient to promote scrap
• Single dynamic threshold vs multiple performance levels
• Single dynamic threshold
• Multiple stable threshold
• Multiple threshold with mid-term revision
A: Single dynamic threshold, pass/fail model, threshold gets progressively lower
B: Three performance levels: stable option – no major changes to levels over time
(B2): Three performance levels: dynamic option: levels get progressively lower.
C. Revised proposal: three performance levels in place from 2022 to 2035

1. There are three specified performance levels:
   • RS certified steel
   • RS certified ‘lower embodied carbon’ steel
   • RS certified ‘Near Zero’ steel

2. The RS certified steel threshold is set to include 50% of ‘high iron ore content’ producers, and a somewhat greater proportion of ‘high scrap content’ producers based on current day performance data.

3. The ‘Near Zero’ threshold is set based on minimum practicable emissions for steelmaking: around 500 kg/tonne at 100% iron ore, and around 200 kg/tonne at 100% scrap. If this is offset, it would define ‘Net Zero’ steel.

4. The ‘Lower embodied carbon’ threshold is set to recognise the lowest current day GHG emissions intensity steel: around 1900 kg/tonne at 100% iron ore, and around 400 kg/tonne at 100% scrap.

5. The exact levels will be discussed with our members and with other initiatives, such as SteelZero and the ‘Net Zero Steel Initiative’.
Basis for the revised proposal

- The basic 50% threshold represents an acceptable compromise between civil society and business, balancing incentive (certification, claims) with disincentive (inability to meet RS certified steel customer specs).
- A shallower gradient is proposed, recognizing the arguments that have been put forward to favour the low GHG emissions associated with high scrap-based steelmaking.
- The ‘Near Zero’ threshold establishes the level of emissions that we are all aiming to achieve, before offsetting is taken into account. ‘Net Zero’ can then be defined as steelmaking that achieves this level of performance, with any remaining emissions offset in accordance with recognised standards. These terms need to be defined to recognise and reward the leadership of the first steelmaking sites to achieve this level of performance.
- The ‘RS low embodied carbon steel’ threshold recognises and rewards today’s lowest emission steelmakers. It will also reward steelmakers for introducing technologies such as carbon capture and storage, whose introduction is critical to proposed transitions to net zero by 2050.
- All levels are eligible for promotion using a ‘ResponsibleSteel certified steel’ logo. Downstream programmes and specifiers will be encouraged to recognise the different levels of performance but are not obliged to if they prefer not to.
C: Revised proposal: mid-term revision to be applied in 2035

1. Thresholds will be reviewed and revised mid-way to 2050:
   2032: In 10 years time the thresholds are reviewed
   2033: New thresholds are finalized
   2035: New thresholds are applied after a transition period

2. As a default proposition for consideration at the time:
   • The ‘Net Zero’ steel threshold would remain the same
   • The RS certified steel threshold would be changed to the same level as the ‘old’ ‘Low embodied carbon’ threshold
   • A new ‘Lower embodied carbon’ threshold would be introduced between the new RS certified steel and the ‘Net Zero’ threshold

3. The exact levels will be agreed by the ResponsibleSteel membership at the time together with the detail of the transition arrangements
Basis for the mid-term revision

1. Reducing the basic threshold as proposed would be in line with the earlier ‘Option A’, for a dynamic reduction of a single threshold, supporting progress in line with the 2050 objective.

2. If it is not revised, over time the ‘basic’ threshold for ResponsibleSteel certification will allow continued participation in the ResponsibleSteel programme for sites which are significantly behind the curve in relation to the level of GHG emissions needed to reach net zero by 2050.

3. The timing of the proposed mid-term revision will be known well in advance, and together with the associated transition period this allows steelmakers as well as their customers to plan on this basis. In contrast if thresholds are subject to change every 5 years performance thresholds would be in a near continual state of transition.

4. The revised option continues to differentiate, encourage and reward leadership on the journey towards net zero
1. We do not know what the world, and steelmaking, will look like in 2050.
2. If we are close to achieving our goals for emissions reductions for the steel sector we should need just one threshold: all ResponsibleSteel certified steel will be ‘Near Zero’ and ‘Net Zero’.
3. We do not need to debate this decision now. It will be for our successors to consider at the time.
Next meetings

28 October
Criterion 8.7: GHG emissions disclosure and reporting

4 November
How can the preferred approach be applied or modified for application to high alloy/ stainless steels?