Criterion	RS Member?	Level of Support	Comments	RS Response
Criterion 10.4, 10.4.7.d: Do you support the inclusion of a credit for the utilisation of recovered waste heat?	No	Strongly support	"Recovery and utilization of waste energy (e.g. waste heat, waste pressure, etc.) is an important energy and CO2 saving measure in the steel making process. We propose to replace the term ""waste heat"" with ""waste energy"". We propose that 10.4.7.d) be changed as follows ""and or/ where waste energy is recovered and utilized either on- or off-site for the generation of power (e.g. Top-pressure Recovery Turbine(TRT): Waste energy recovery facility that recovers the top pressure of a blast furnace as electric power.)"" With regards to the use of waste energy, credit should be given for not only power generation but also heat utilization (i.e. steam utilization). We propose to change 10.4.7.e. to ""Credit for the re-use or recycling of process gas or waste energy"" and revise the requirements accordingly. Add ""Coke Dry Quenching (CDQ): Waste energy recovery facility that recovers coke sensible heat as steam"" as an example of waste energy recovery facility. TRT and CDQ are both standard equipment in many countries."	Thank you for the suggestion to substitute 'waste energy' for 'waste heat' in order to extend the classification to include waste pressure and other waste byproducts. The wording throughout 10.4.4 and 10.4.7 will be updated accordingly, and TRT and CDQ units as examples will be incorporated into 10.4.7. To clarify, we do provide credits for steam generation as well as power generation. Please refer to the last bullet point of Guidance for 10.4.7.d.i.
Criterion 10.4, 10.4.7.d: Do you support the inclusion of a credit for the utilisation of recovered waste heat?	Yes	Generally disagree	Upstream inclusions are ok. Downstream inclusions can be seen as offsetting. We interpret this text as that the site can "discount" their CO2 emissions by claiming that the waste heat from the plant is used by another actor/site, and therefore displaces need for fossil energy at that other site. This is not a good idea as it: 1) difficult to prove the counterfactual scenario – would this other site really be using fossil fuel or would they be using e.g. bio-energy?, 2) It can make steel produced via BF-BOF look better than it "should", and therefore risks delaying the transition to low-emission steel. Using process gases in a similar way - down stream uses - can also be seen as offsetting in a similar way.	Although, the intention of this consultation was to look at the inclusion of waste heat with process gases, we understand your logic and want to address all offsetting-related concerns. I was wondering if we could organise a meeting to discuss further? Of note, I would like to understand how to fairly and credibly treat electricity produced using steel plant process gases if it is consumed offsite/downstream of the system boundary.
Criterion 10.4, 10.4.7.d: Do you support the inclusion of a credit for the utilisation of recovered waste heat?	No	Strongly support	Strongly support the inclusion of a credit for waste heat, as long as it is only to the extent that the energy crosses the system boundary and the benefit is not double-counted (e.g., TRT power generation is not used and accounted for in crude steel production.) Must demonstrate that the relevant emissions are transferred to the recipient process, either downstream or external, and accepted into their GHG accounts. Ensure that emissions are consistently allcoated so that they aren't 'lost' or double-counted. Calculation method: what if (A+B-C) is negative? Local grid factors should apply, not global averages. In general, the relevant emissions must be retained alongside the credit that is being transferred.	Regarding your comments on process gases, I was wondering if we could organise a meeting to discuss further? Of note, I would like to understand how other accounting methodologies treat electricity produced using steel plant process gases if it is consumed offsite/downstream of the system boundary, and common practice regarding use of local/regional/national grid factors. Currently we apply global average grid factor to not disproportionately advantage/disadvantage a steelmaker based on the external conditions of grid energy mix. If (A+B-C) is negative, no credit is considered, rather, scope 2 emissions are positive. This clarification will be
				added. Apologies, all references to Footnote 1 should have been deleted before publication.
Criterion 10.4, 10.4.7.d: Do you support the inclusion of a credit for the utilisation of recovered waste heat?	No	Strongly support	There is no footnote 1. While we support the idea and believe that it aligns with the worldsteel methodology, it would be good to test some scenarios to check this assumption and to ensure there is no double counting, depending if the boundary is steelmaking or hot rolling. 10.4.7.d, 6th bullet - do you mean downstream instead of upstream? Do the proposed changes affect the thresholds? worldsteel data is CO2 and not GHG. Are emissions from generating process gases included (for reimported electricity generated with process gases)?	10.4.7.d, 6th bullet - we did mean upstream as the power consumed up to the production of crude steel should be deducted from any additional electricty generated. Net_P_generated = P_process_gases + P_waste_heat - P_consumed_upstream Net_P_generated = A + B - C Credit_scope? = Net_P_generated*global_grid_FE
Criterion 10.4, 10.4.7.d: Do you support the inclusion of a credit for the utilisation of recovered waste heat?	Yes	Generally support	In principle this is a good idea to encourage better process efficiency. However, the stated performance under the standard should be reported both including and excluding credits for transparency purposes. Downstream/upstream users of the carbon intensity reported via the Responsible Steel Standard, should be aware, that where credits are used for the (generated from) reductions that occur outside the system boundary of the standard, it may result in double counting of emissions reductions if no subsequent adjustments are made. For 10.4.7.d What is the reason for using the IEA's global grid intensity? Can a more accurate factor be used? Using global grid intensity may over-estimate the emissions credit that is received by the site. The factor should reflect the emissions intensity of the process gases (for electricity generation).	Whilst only one performance level will be assigned for each site which is inclusive of credits, we do require the declaration of the total emissions that would have been caused if all process gases were flared. This is detailed in 10.4.7.b: "The site determines and records the GHG emissions (CO2e) that would have resulted if process gases (e.g. coke oven gas, blast furnace gas, basic oxygen furnace gas) that are captured for utilisation, export or storage had instead been flared. This is referred to as the captured process gas baseline GHG emissions for the site." Regarding your comments on process gases, I was wondering if we could organise a meeting to discuss further? Of note, I would like to understand how to fairly and credibly treat electricity produced using steel plant process gases if it is consumed offsite/downstream of the system boundary.
Criterion 10.6, 10.6.3.b-c: Do you support the proposed change to the progress level 1 specification?	Yes	Strongly disagree	The thresholds/system must be neutral with regards to scrap, as the use of scrap is already incentivised (costs, GHG emissions). Neutral means that entry-level should be driven by current policy specification: 50% of sites above and below the threshold, for both low and high scrap sites. This would no longer be the case under the proposed changes: 50% for low-scrap sites vs. 62% for high-scrap sites. This means more sites would qualify for entry level in high scrap sites vs. low scrap sites, without any additional efforts, resulting in unequal treatment between routes. Therefore, the system could be accused of greenwashing / of giving high scrap sites an "easy ride" compared to low-scrap sites (cf. civil society open letter on GSCC standard of August 2023) High-scrap sites can progress with relatively simple measures (e.g. green electricity) compared to low-scrap sites which require technological shift. The proposed change would make it easier for high-scrap sites to progress (compared to low-scrap sites), while making the necessary technological shift in low-scrap sites relatively less attractive. The system must incentivize/reward technological shift in low-scrap sites, which is where the bulk of emissions reductions is required for the steel sector to get on a Paris compatible trajectory. Also, due to the limited amount of scrap available globally, incentivizing scrap uptake in RS certified sites means less scrap will be available for other sites, and therefore does not contribute to global decarbonisation. Last but not least, the thresholds in both the current RS system and the IEA defintion are a proportional multiple of the near-zero emission threshold (entry threshold is near-zero threshold factor 6 in IEA and factor 7 in current RS for both 0% and 100% scrap). This would no longer be the case under the proposed change, where entry level would be near-zero factor 7 for 0% scrap vs factor 10 for 100% scrap.	In response to your disagreement to Criterion 10.6's proposed adjustment, we completely understand your position on the importance of maintaining a level playing field between all steel producers regardless of scrap input. However, we would like to stress that we are not proposing a policy change – the original, current policy is to have a slightly shallower gradient in favour of high scrap sites to encourage increased recycling rates within the bounds of constrained end-of-life scrap availability. A 'slightly shallower' gradient should be optimal in terms of overall GHG emissions reduction for the sector, and in terms of being the 'least trade distorting' method to achieve the environmental objective of steel sector GHG reduction. Through the rigorous data analysis process that ResponsibleSteel went through last year to ensure high quality data on current steelmakers was obtained, we believe that 0.5 t CO2e/t steel at the 100% scrap end more accurately applies this policy specification. Within the Steel Standards Principles, we are also actively involved in working with IEA, among other actors, on aligning accounting methodologies and thresholds. In the context of multiple parties trying to align, there is unfortunately going to be a messy period while people tweak different things, but we'd hope to all end up in the same place.
Criterion 10.6, 10.6.3.b-c: Do you support the proposed change to the progress level 1 specification?	Yes	Generally disagree	50% of average was the threshold for level 1, we don't see the value of raising it. The threshold was set as better than average and scrap supplies are limited. That said they will increase over time so incentivizing scrap use as part of a deeper decarbonization push (level 2, 3) is justifiable as it will be more relevant in the out years. Level 1 needs to be phased out quickly as it is becoming irrelevant from an emissions perspective.	We completely understand your position on the importance of maintaining a level playing field between all steel producers regardless of scrap input. However, we would like to stress that we are not proposing a policy change – the original, current policy is to have a slightly shallower gradient in favour of high scrap sites to encourage increased recycling rates within the bounds of constrained end-of-life scrap availability. A 'slightly shallower' gradient should be optimal in terms of overall GHG emissions reduction for the sector, and in terms of being the 'least trade distorting' method to achieve the environmental objective of steel sector GHG reduction. Through the rigorous data analysis process that ResponsibleSteel went through last year to ensure high quality data on current steelmakers was obtained, we believe that 0.5 t CO2e/t steel at the 100% scrap end more accurately applies this policy specification. We also agree that L1 needs to be phased out overtime as it is based on the current global average emissions intensity. In the near-term, this should not be the entry-level threshold.

Criterion 10.6, 10.6.3.b-c: Do you support the proposed change to the progress level 1 specification?	No G	Generally support	What is the definition of scrap (should be included in this section)? Should clarify that the % of sites > threshold is based on CRU data. 2020 and 2021 are referred to as the years being compared - which is it? Progress level 4 is based on IEA - but what method was followed? Q: why are total	For the purpose of determining the ResponsibleSteel GHG emissions intensity for crude steel, the quantity of scrap used in the annual production of crude steel includes end of life scrap, manufacturing scrap and home scrap, but excludes internal scrap (see glossary).	
			metallics included as the denominator given that not all metallics are added to end up in the steel?	CRU 2020 data was originally used, but the latest updates are based on CRU 2021 data.	
				Note the next comment: a data revision would form the basis for another threshold	The CRU methodology already included crediting from utilisation of both process gases and waste heat to
	riterion 10.6, 10.6.3.b-c: Do you support the proposed nange to the progress level 1 specification?	Yes S	Strongly support	Has the underlying data used for threshold regression been adjusted to reflect the proposed revisions to Principle 10? Our expressed support is conditional on that being affirmative. Our concern is that the emissions credits for surplus process gas utilisation will materially impact the data.	produce electricity/steam. The wording adjustment to include waste heat only causes an adjustment to the standard wording, not the thresholds.
d si	riterion 10.6, 10.6.5: Do you support the proposal to etermine the GHG emissions intensity of hot rolled eel for sites wishing to market or sell steel products, y-products, and co-products as	No		The text in 10.6.5 needs clarification as it creates a range of understanding. Especially, in 10.6.5.e, it should be clearly mentioned that hot rolled steel emissions intensity is calcuated by "crude steel intensity (tons-CO2/ton-slab) x amount of crude steel required to produce 1 ton of hot rolled coil (tons-slab/ton-hot rolled coil) + emissions intensity of hot rolling process (tons CO2/ton-hot coil)".	Mixed stakeholder support was evidenced on the inclusion of GHG emissions related to hot rolling, which prompted multiple discussions regarding the RS emissions boundary. Agreement within the Secretariat was eventually achieved that to maintain the integrity of ResponsibleSteel's position on the crude steel boundary, we should not collect additional data on hot rolling. It is an unnecessary requirement for sustainability outcomes of the standard and is potentially confusing. There may be value in extending to hot rolling to align with other methodologies (e.g. SBTi) and include a larger portion of the overall steel product emissions (especially for scrap-based EAF producers). However, there are clear advantages to maintain crude steel boundary (notably comparability across all steel products). The prospect of extending the hot rolling emissions boundary could be revisited in the future.
d si	riterion 10.6, 10.6.5: Do you support the proposal to etermine the GHG emissions intensity of hot rolled eel for sites wishing to market or sell steel products, y-products, and co-products as	Yes G	Generally support	It is positive to include the hot rolling step. More guidance might however be needed to clarify which standards should be used for determining the footprint of this process step, to make it more clear and easier for us end-consumers to compare the data.	Mixed stakeholder support was evidenced on the inclusion of GHG emissions related to hot rolling, which prompted multiple discussions regarding the RS emissions boundary. Agreement within the Secretariat was eventually achieved that to maintain the integrity of ResponsibleSteel's position on the crude steel boundary, we should not collect additional data on hot rolling. It is an unnecessary requirement for sustainability outcomes of the standard and is potentially confusing. There may be value in extending to hot rolling to align with other methodologies (e.g. SBTi) and include a larger portion of the overall steel product emissions (especially for scrap-based EAF producers). However, there are clear advantages to maintain crude steel boundary (notably comparability across all steel products). The prospect of extending the hot rolling emissions boundary could be revisited in the future.
d si	riterion 10.6, 10.6.5: Do you support the proposal to etermine the GHG emissions intensity of hot rolled eel for sites wishing to market or sell steel products, y-products, and co-products as	Yes N	No opinion	We neither support or disagree with the current proposal and its wording. We support transparency on emissions. If inclusion of hot rolled steel was come to changing the progress level thresholds then we would advocate for it to require further consultation.	Mixed stakeholder support was evidenced on the inclusion of GHG emissions related to hot rolling, which prompted multiple discussions regarding the RS emissions boundary. Agreement within the Secretariat was eventually achieved that to maintain the integrity of ResponsibleSteel's position on the crude steel boundary, we should not collect additional data on hot rolling. It is an unnecessary requirement for sustainability outcomes of the standard and is potentially confusing. There may be value in extending to hot rolling to align with other methodologies (e.g. SBTi) and include a larger portion of the overall steel product emissions (especially for scrap-based EAF producers). However, there are clear advantages to maintain crude steel boundary (notably comparability across all steel products). The prospect of extending the hot rolling emissions boundary could be revisited in the future.
d si	riterion 10.6, 10.6.5: Do you support the proposal to etermine the GHG emissions intensity of hot rolled eel for sites wishing to market or sell steel products, y-products, and co-products as	No S	itrongly disagree	The standard is about certifying steel products, not specifically about developing a database of numbers to compare differences in rolling emissions. What if the site's product is HRC - they could report 2 numbers as the site based calculation and the product based. Need to consider how the process gases/waste heat part is done to avoid double counting or inconsistencies. How is 'significant' defined? How does this approach align with other existing schemes that use hot rolling as the boundary? How do you define a hot rolled product (coil, plate, rebar, sections, wire rod etc)?	Mixed stakeholder support was evidenced on the inclusion of GHG emissions related to hot rolling, which prompted multiple discussions regarding the RS emissions boundary. Agreement within the Secretariat was eventually achieved that to maintain the integrity of ResponsibleSteel's position on the crude steel boundary, we should not collect additional data on hot rolling. It is an unnecessary requirement for sustainability outcomes of the standard and is potentially confusing. There may be value in extending to hot rolling to align
d si	riterion 10.6, 10.6.5: Do you support the proposal to etermine the GHG emissions intensity of hot rolled eel for sites wishing to market or sell steel products, y-products, and co-products as	Yes G	Generally disagree	If hot rolled steel is included then emissions intensity should be calculated with a similar approach to crude steel, or if a reduction in reporting burden is desired, materiality thresholds may be a better way to allow the hot rolled steel production process to capture the actual data for the most material emissions sources and estimate the rest.	Mixed stakeholder support was evidenced on the inclusion of GHG emissions related to hot rolling, which prompted multiple discussions regarding the RS emissions boundary. Agreement within the Secretariat was eventually achieved that to maintain the integrity of ResponsibleSteel's position on the crude steel boundary, we should not collect additional data on hot rolling. It is an unnecessary requirement for sustainability outcomes of the standard and is potentially confusing. There may be value in extending to hot rolling to align with other methodologies (e.g. SBTi) and include a larger portion of the overall steel product emissions (especially for scrap-based EAF producers). However, there are clear advantages to maintain crude steel boundary (notably comparability across all steel products). The prospect of extending the hot rolling emissions boundary could be revisited in the future.
d si	riterion 10.6, 10.6.5: Do you support the proposal to etermine the GHG emissions intensity of hot rolled eel for sites wishing to market or sell steel products, y-products, and co-products as	No S	Strongly support	All efforts are to be made to include SCOPE-3 emissions as soon as possible and thus also be able to fully integrate the production of high-alloy steels (> 8%).	Development of a high alloy and stainless steel (HASS) threshold is a priortity for this year.
C p	riterion 10.7, 10.7.2: Do you support the proposal to	No		"Is current 10.7.2.a.v. ""the ResponsibleSteel crude steel GHG emissions intensity performance level (1, 2, 3 or 4) as specified in 10.6.3.c that has been achieved by the site"" going to be replaced by ""v. the hot rolled steel GHG emissions intensity performance of the site (metric tonnes of CO2e/metric tonne hot rolled steel), as determined in conformity with the requirements of 10.6""? "	Mixed stakeholder support was evidenced on the inclusion of GHG emissions related to hot rolling, which prompted multiple discussions regarding the RS emissions boundary. Agreement within the Secretariat was eventually achieved that to maintain the integrity of ResponsibleSteel's position on the crude steel boundary, we should not collect additional data on hot rolling. It is an unnecessary requirement for sustainability outcomes of the standard and is potentially confusing. There may be value in extending to hot rolling to align with other methodologies (e.g. SBTi) and include a larger portion of the overall steel product emissions (especially for scrap-based EAF producers). However, there are clear advantages to maintain crude steel boundary (notably comparability across all steel products). The prospect of extending the hot rolling emissions boundary could be revisited in the future.
p re	riterion 10.7, 10.7.2: Do you support the proposal to ublicly report the GHG emissions intensity of hot olled steel for sites wishing to market or sell steel roducts, by-products, and co-produ	Yes S	strongly support	The higher the transparency the better. It is strange today that the values do not need to be disclosed openly or at least to other paying members	Mixed stakeholder support was evidenced on the inclusion of GHG emissions related to hot rolling, which prompted multiple discussions regarding the RS emissions boundary. Agreement within the Secretariat was eventually achieved that to maintain the integrity of ResponsibleSteel's position on the crude steel boundary, we should not collect additional data on hot rolling. It is an unnecessary requirement for sustainability outcomes of the standard and is potentially confusing. There may be value in extending to hot rolling to align with other methodologies (e.g. SBTi) and include a larger portion of the overall steel product emissions (especially for scrap-based EAF producers). However, there are clear advantages to maintain crude steel boundary (notably comparability across all steel products). The prospect of extending the hot rolling emissions boundary could be revisited in the future.

publicly report the GHO	Do you support the proposal to G emissions intensity of hot shing to market or sell steel and co-produ	Strongly disagree	Do you intend to report this as the hot rolling process? or the hot rolled product? What about yield losses - 1 tonne of hot rolled product uses more than 1 tonne crude steel? Should different hot rolled products be combined if coming from the same crude steel? I imagine a site would need to publish one crude steel number for their annual production and then on top of that you are proposing hot rolled products - this could be multiple, depending what products a site makes - and then on top of this the product carbon footprint. This seems unnecessary and potentially confusing. How to maintain consistency between hot rolled values at site level (e.g. with replacement value etc) and the hot rolled product CFP? Only if that is the product being certified and then it should be the product carbon footprint.	Mixed stakeholder support was evidenced on the inclusion of GHG emissions related to hot rolling, which prompted multiple discussions regarding the RS emissions boundary. Agreement within the Secretariat was eventually achieved that to maintain the integrity of ResponsibleSteel's position on the crude steel boundary, we should not collect additional data on hot rolling. It is an unnecessary requirement for sustainability outcomes of the standard and is potentially confusing. There may be value in extending to hot rolling to align with other methodologies (e.g. SBTi) and include a larger portion of the overall steel product emissions (especially for scrap-based EAF producers). However, there are clear advantages to maintain crude steel boundary (notably comparability across all steel products). The prospect of extending the hot rolling emissions boundary could be revisited in the future.
publicly report the GHO	Do you support the proposal to G emissions intensity of hot shing to market or sell steel and co-produ	Strongly disagree	This may help to harmonise with other standards that include HRC, but our view is that crude steel should be the prevailing basis for site-level reporting as it is the most inclusive and comparative basis for site-level emissions across the industry. Finished steel basis such as HRC but not limited to HRC, are more appropriately confined to product certification rather than site certification.	Mixed stakeholder support was evidenced on the inclusion of GHG emissions related to hot rolling, which prompted multiple discussions regarding the RS emissions boundary. Agreement within the Secretariat was eventually achieved that to maintain the integrity of ResponsibleSteel's position on the crude steel boundary, we should not collect additional data on hot rolling. It is an unnecessary requirement for sustainability outcomes of the standard and is potentially confusing. There may be value in extending to hot rolling to align with other methodologies (e.g. SBTi) and include a larger portion of the overall steel product emissions (especially for scrap-based EAF producers). However, there are clear advantages to maintain crude steel boundary (notably comparability across all steel products). The prospect of extending the hot rolling emissions boundary could be revisited in the future.
publicly report the GHO	Do you support the proposal to G emissions intensity of hot shing to market or sell steel and co-produ	Strongly support	The expansion of the boundary condition from crude steel to hot-rolled steel has advantages: i) The transformation activities of secondary steel producers can be strongly rewarded and thus incentivize decarbonization investments in the second route. Note, in addition to the use of green electricity, the decarbonization challenges on the EAF side lie in the downstream processing of crude steel to hot rolled steel. ii) It gives a chance to account also for, Scope 3 emissions (alloying agents), which are responsible for a high share of emissions. Therefore, it would be reasonable to generally expand the boundary condition from crude steel to hot rolled steel while including scope1, scope2 and scope3 emissions. If Scope3 emissions will be included in the future, there must be adjustment of the decarbonization level thresholds.	Mixed stakeholder support was evidenced on the inclusion of GHG emissions related to hot rolling, which prompted multiple discussions regarding the RS emissions boundary. Agreement within the Secretariat was eventually achieved that to maintain the integrity of ResponsibleSteel's position on the crude steel boundary, we should not collect additional data on hot rolling. It is an unnecessary requirement for sustainability outcomes of the standard and is potentially confusing. There may be value in extending to hot rolling to align with other methodologies (e.g. SBTi) and include a larger portion of the overall steel product emissions (especially for scrap-based EAF producers). However, there are clear advantages to maintain crude steel boundary (notably comparability across all steel products). The prospect of extending the hot rolling emissions boundary could be revisited in the future.
publicly report the GHO	Do you support the proposal to G emissions intensity of hot shing to market or sell steel and co-produ	Strongly support	Emissions of hot rolling should over time be included in the boundary, and the progress level thresholds should be adjusted accordingly. Doing so would incentivize decarbonisation of the hot-rolling process which is common to a vast majority of steel products, and would reward efforts to decarbonize hot-rolling.	Mixed stakeholder support was evidenced on the inclusion of GHG emissions related to hot rolling, which prompted multiple discussions regarding the RS emissions boundary. Agreement within the Secretariat was eventually achieved that to maintain the integrity of ResponsibleSteel's position on the crude steel boundary, we should not collect additional data on hot rolling. It is an unnecessary requirement for sustainability outcomes of the standard and is potentially confusing. There may be value in extending to hot rolling to align with other methodologies (e.g. SBTi) and include a larger portion of the overall steel product emissions (especially for scrap-based EAF producers). However, there are clear advantages to maintain crude steel boundary (notably comparability across all steel products). The prospect of extending the hot rolling emissions boundary could be revisited in the future.
publicly report the GHO	Do you support the proposal to G emissions intensity of hot shing to market or sell steel and co-produ	Strongly support	Good proposal. Increasing transparency is great. I am cautious of how companies might "cluster" sites to avoid transparency though.	Mixed stakeholder support was evidenced on the inclusion of GHG emissions related to hot rolling, which prompted multiple discussions regarding the RS emissions boundary. Agreement within the Secretariat was eventually achieved that to maintain the integrity of ResponsibleSteel's position on the crude steel boundary, we should not collect additional data on hot rolling. It is an unnecessary requirement for sustainability outcomes of the standard and is potentially confusing. There may be value in extending to hot rolling to align with other methodologies (e.g. SBTi) and include a larger portion of the overall steel product emissions (especially for scrap-based EAF producers). However, there are clear advantages to maintain crude steel boundary (notably comparability across all steel products). The prospect of extending the hot rolling emissions boundary could be revisited in the future.
revise the replacement	you support the proposal to tvalue from the GHG emissions onisation progress level 1 at 0% s input to the	Strongly disagree	We believe that the generic value should be inline with an average value for nonferrous or ferro alloys. This value for cold iron ignores the extra footprint of the alloying elements. A too low value will not stimulate identifying the true value. It will also not stimulate decarbonization of alloying element production.	For the replacement value for non-ferrous metal and ferro-alloy additives, I would like to clarify the need to adjust the value to the cold iron value. In a theoretical case in which a site consumes 100% FA/NFM (no scrap, iron ore, or DRI), emissions related to energy and mass consumption during steelmaking (electricity, NG, fluxes, graphite electrodes, etc.) are still accounted for, as well as upstream emissions (iron ore mining, NG extraction, etc.) hence the total emissions would sum to approx. 2.8 t CO2e/t steel (L1 threshold for 0% scrap). The average EF of these alloying elements is too uncertain for it to be applied given the large range of EFs for different alloying elements. Since we want to maintain comparability across all carbon steels, we effectively null the effect of ferroalloys. For steels with high alloy content (> 8%) we acknowledge that it becomes essential to consider the upstream emissions from FA/NFM production and we plan to work on the High Alloy and Stainless Steel (HASS) Threshold development this year. If successful, we could then apply the same thinking to carbon steels. We will be creating a Working Group to support HASS threshold development and we would really appreciate your inputs - would you like to join this group?
revise the replacement	you support the proposal to tvalue from the GHG emissions onisation progress level 1 at 0% S input to the	No opinion	I have a technical resource who is on leave at the moment, who could provide an opinion next week if needed. Please email me if you would like me to consult her on GWP emission factor estimates for alloys.	Thank you for the resource offer. During the development of high alloy and stainless steel (HASS) thresholds, which is a priortity for this year, we will reach out to liaise with your technical resource.
revise the replacement	you support the proposal to tvalue from the GHG emissions onisation progress level 1 at 0% Yes input to the	No opinion	Before we can provide our opinion, we would like to see some worked examples to demonstrate the effect and the rationale behind the proposed approach.	In a theoretical case in which a site consumes 100% FA/NFM (no scrap, iron ore, or DRI), emissions related to energy and mass consumption during steelmaking (electricity, NG, fluxes, graphite electrodes, etc.) are still accounted for, as well as upstream emissions (iron ore mining, NG extraction, etc.) hence the total emissions would sum to approx. 2.8 t CO2e/t steel (L1 threshold for 0% scrap).
revise the replacement	o you support the proposal to t value from the GHG emissions onisation progress level 1 at 0% s input to the	No opinion	The proposal to change to hot metal seems to be better, but this would then cause deviation from the site based actual GHG emissions. This is not a measure of the actual emissions, but a way to use the threshold values. In harmonisation projects, this should be outlined to show why the numbers for RespSteel certified sites will be lower than other approaches to measure site based emissions. So the site could produce both levels - with and without replacement values, to ensure CFP of alloys etc is included. The proposal has a potential typo - should by 0% scrap and not 0% iron ore. Where does the value 2.623 come from? 2nd paragraph of discussion - assume you mean non-ferrous and ferro alloys? Again, what about other things added such as aluminium - why should this be given a replacement value of hot metal, or anything else? A hypothetical plant using 100% non-ferrous metals could not make steel. It should also be made clear that the actual emissions would be higher than those produced with the replacement values.	Agreed that we need to provide tools on how to interpret the threshold values in combination with the product carbon footprints. This harmonisation work falls under the Steel Standards Principles which will continue to work on this year. The typo has been corrected, thank you for spotting this. The value 2.623 t CO2e/t cold iron comes from CRU data, with a conservative factor of 1.2 applied to the global average. To remove the effect of this conservative factor, the proposed replacement value has now been reduced to 2.186 t CO2e/t steel. The development of high alloy and stainless steel (HASS) thresholds is a priortity for this year. Once the methodology is determined, applicability to carbon steels will be assessed. The following clarification has been added: "The actual emissions would be higher than those produced with the replacement values; the desired effect is to null scope 3 emissions from ferroalloys (with highly variable emission factors) and ensure comparability across carbon steels."
revise the replacement	you support the proposal to tvalue from the GHG emissions onisation progress level 1 at 0% s input to the	Generally support	Suggest using 'cold iron, generic' as an interim measure and revisiting this once the decarbonisation process levels for high alloy and stainless steels have been finalised, at which time the default should be updated with more accurate measurements where available. Suggest using primary data as a first preference if available, and using default if primary is not available or is too onerous to collect. "If primary data shows that the upstream embodied GHG value for a non-ferrous metal or ferro-alloy is higher than the replacement value, the replacement value shall still be used. If primary data shows that the upstream embodied GHG value for a non-ferrous metal or ferro-alloy is lower than the replacement value, the lower value may be used."	The development of high alloy and stainless steel (HASS) thresholds is a priortity for this year. Once the methodology is determined, applicability to carbon steels will be assessed.

than the replacement value, the lower value may be used."

Finally! Please leave any overarching comments you would like to make. And thank you for your time!	No	Since the electricity consumption of an oxygen plant is relatively large in a steel mill, we would like to ask the following question: Responsible Steel's default emissions value for oxygen and nitrogen are defined as worldsteel's emission factors x 1.2, but what is the basis for the 1.2?	Simply, a slight increase above the global average is applied as a conservative factor that takes into consideration uncertainty and encourages members to seek out primary data. A factor of 1.6 is applied to metallurgical coal and natural gas to consider the additional uncertainty of methane emissions in these supply chains.
Finally! Please leave any overarching comments you would like to make. And thank you for your time!	Yes	Regarding general transparency, as members we would like to be able to access information regarding key audit findings and GHG values for steel producing sites. The same would be good with recycled content (pre- and post-consumer, as well as % home scrap used).	Required disclosure includes emissions intensities and recycled content for progress levels. Recycled content is currently not split (conversation to be had during CoC consultation).
Finally! Please leave any overarching comments you would like to make. And thank you for your time!	Yes	Re Q9 - We would like to see greater clarity on the accounting methodology to understand the alignment of the proposed methodology with internationally recognised LCA standards. We would be concerned if it created confusion in the market with LCAs.	As part of our work under Steel Standards Principles, we are working with other bodies to standardise GHG accounting methodologies, including LCAs, and where standardisation is not possible at least ensure interoperability. For ResponsibleSteel's site-based crude steel thresholds, there are differences in purposes when compared to product-based LCAs, however a level of harmonisation has already been achieved across the methodologies and will continue to be strengthened.