ASI Standards Committee Greenhouse Gas Emissions (SC-GHG) sub-committee Teleconference Minutes

2 December 2020



Antitrust Compliance Policy

Attendees are kindly reminded that ASI is committed to complying with all relevant antitrust and competition laws and regulations and, to that end, has adopted a Competition Policy, compliance with which is a condition of continued ASI participation.

Failure to abide by these laws can have extremely serious consequences for ASI and its participants, including heavy fines and, in some jurisdictions, imprisonment for individuals.

You are therefore asked to have due regard to this Policy today and in respect of all other ASI activities.





Acknowledgement of Indigenous People

ASI acknowledges Indigenous Peoples and their connections to their traditional lands where we and our members operate. We aim to respect cultural heritage, customs and beliefs of all Indigenous people and we pay our respects to elders past, present and emerging.





ASI Ways of Working



ASI is a multi-stakeholder organisation. Dialogue is at the heart of everything we do. It is critical to ensure that the organisation delivers on its mission. We welcome all participants and value the diversity of backgrounds, views and opinions represented in this meeting. We recognise that we have different opinions; that is the heart of healthy debate and leads to better outcomes. To ensure our meetings are successful, we need to express our views and hear the views of others in a respectful and professional way, protecting the dignity and safety of all participants and enabling full participation from all attendees.



Agenda: SC-GHG meeting #1

	Торіс	Lead	Time
1	 a. Introduction & Apologies b. Objectives c. Documents Circulated d. Previous Minutes 	ASI	5 mins
2	a. Scope of SC-GHG b. Stakeholders engaged to date	ASI	5 mins
3	 a. Criteria 5.2 and 5.3 – current b. IAI - IEA projected pathway to 2050 c. Criterion 5.2 reductions – GHGWG text 	ASI	10 mins
4	Criterion 5.2 a options	J. Kammüeller / ASI	~ 30 mins
5	Open discussion – Criterion 5.2a	ASI / J. Søreide	~ 60 mins
6	a. Agreed upon actions for Committee membersb. Agreed upon actions for the Secretariatc. Close	ASI	5 mins



1a Introduction & Apologies

Attendees:Annemarie Goedmakers (Chimbo)
Catherine Athenes (Constellium)
Guilia Carbone (IUCN)
Jessica Sanderson (Novelis)
Jostein Søreide (Hydro)
Justus Kammüeller (WWF)
Rosa Garcia Pineiro (Alcoa)
Steinunn Steinson (Nordural)

ASI: Cameron Jones (facilitator) Camille Le Dornat Marieke van der Mijn Kamal Ahmed

Alternatives: Proxies:



1b,c Objectives & Documents Circulated

b) Objectives

- 1. Recap on scope of this sub-committee
- 2. Review and discussion of potential scenarios / options for Criterion 5.2a

c) **Documents Circulated**

- 1. ASI SC Teleconference meeting minutes 12-20Oct20
- 2. ASI SCMemberApptProxyForm 2Dec20
- 3. ASI –SCMemberAlternateForm 2Dec20



1d Previous Minutes

d) Previous Minutes – 12-20 October 2020 – agreed by Standards Committee (includes relevant slides and discussion to todays session), on 1 December 2020.



2a Scope of SC-GHG

- Scope of the SC-GHG is restricted to the discussion, proposal and agreement to the text of the new Criterion 5.2, as put forward by the GHGWG.
- *Key* considerations include:
 - The setting of an upper threshold limit(s)
 - Alternative wording for the 1.5 t/t target for semi-fabrication (downstream) entities.
 - Variations on the pathway option, based on the scenarios put forward by J. Kammüeller and distributed in 12-20 October SC minutes (slides incorporated today).
- No requirement to use all three meetings scheduled. If decided today great!



2b Stakeholders engaged to date

Stakeholders engaged on this topic so far include

- ASI Greenhouse Gas Working Group and its Members (multiple engagement with groups, Members, individuals etc.)
- International Aluminium Institute (IAI)
- World Economic Forum (Aluminium for Climate)
- Climate Champions (COP 26)
- Australian Aluminium Council
- Skarn Consulting
- Energia Potior
- Cargill Shipping



- One participant asked if we could look at a plan from an ASI certified smelter powered by coal to reach the 8t threshold by 2030. It was said that might give us some interesting insights.
- ACTION The Secretariat to look into the audit reports and come back to the group with this information.



3a Criteria 5.2/3 Reductions – current

- 5.2 **GHG emissions reductions.** The Entity shall publish time-bound GHG emissions reduction targets and implement a plan to achieve these targets. The targets shall cover the material sources of Direct and Indirect GHG Emissions.
- 5.3 **Aluminium Smelters.** An Entity engaged in Aluminium Smelting shall:
 - a) Demonstrate that they have put in place the necessary Management System, evaluation procedures, and operating controls to limit the Direct GHG Emissions.
 - b) For Aluminium smelters in production up to and including 2020, demonstrate that the Scope 1 and Scope 2 GHG Emissions from the production of Aluminium is at a level below 8 tonnes CO_2 -eq per metric tonne Aluminium by 2030.
 - c) For Aluminium smelters starting production after 2020, demonstrate that the Scope 1 and Scope 2 GHG Emissions from the production of Aluminium is at a level below 8 tonnes CO₂-eq per metric tonne Aluminium.



3b IAI – IEA projected pathway to 2050



3c Criterion 5.2 Reductions – GHGWG text

- GHGWG was not able to reach consensus on 5.2a.
- Criterion 5.2b recommended by the GHGWG.

5.2a GHG Emissions Reductions. The Entity shall

- i. Establish GHG emissions reduction targets that ensures a reduction pathway consistent to the achievement of 2050 average global aluminium sector intensities of 2.5^* tonnes of CO_2 eq per tonne of primary aluminium, or 1.5^* tonnes of CO_2 eq per tonne of semi-fabricated product. The Entity's reduction pathway must remain below the upper threshold limit of xx^A and include intermediate targets covering a period no greater than five years.
- ii. These targets shall address all emissions from mine to metal[#].
- iii. These targets shall be publicly disclosed.
- iv. Progress against these targets shall be publicly disclosed annually.
- b. Demonstrate that they have put in place the necessary Management System, evaluation procedures, and operating controls to achieve performance aligned to the targets developed in 5.2 (a).
- * To be revised, following release of 1.5c warming scenario (SDS, IEA etc.)
- To be determined post-consultation
- # Refer to IAI methodologies

Highlighted text was not agreed on.



Principles and Values for our GHG criteria

Inclusivity

Credibility

Auditability



We want to **include the relevant players** in the market. This particularly means making it possible for Chinese and Australian entities to join into the transformation efforts and be certified.



We want to maintain and expand the **credibility of our brand**, especially in relation to our eco-social targets. In relation to GHG emissions, this means setting criteria that are aligned with a 1.5° decarbonization scenario (towards (-> 2.5 / 1.5 t/t for ASI).



Whatever we design needs to be **auditable** in a reasonable manner. This means **transparency and clarity** on the one hand, and **credibility and believability of targets** on the other hand.

- ["] One participant raised not agreeing with the full inclusivity.
- A participant replied that inclusivity can mean different things, and it depends on how we define it.
- The Secretariat raised that we have to be careful with the inclusivity component: we should not be seen as exclusive because we risk facing anti-trust issues.
- A participant said that it is the case at the moment as we exclude coal-powered smelters going into activity after 2020. The participant said wanting to keep a line like this one.



Option 1: "Leave as is with 8t/t (ca. 12t for whole value chain)"



This solution is what we have now. 8t/t for new smelters, 8t/t for existing smelters in 2030 (shown here with 3-4t added for whole sector approach). No criteria for entities that are not smelters.

- Clear distinction between low and high performers
- Credible target, as 8t/t is far better than the average sector performance
- Exclusive, doesn't do enough to include majority of smelting sector
- Doesn't provide incentives for the already high performers
- Not a whole-value chain approach
- Lack of clarity "beyond 2030"
- Auditability and credibility of 2030 targets questionable



Option 1: "Leave as is with 8t/t (ca. 12t for whole value chain)"



A participant raised that a smelter can be certified thanks to a failure in the auditing system. The auditing issue is not on the threshold but on how you get there: is the plan realistic enough?
 How do you judge and audit a plan? The participant expressed reserve on the auditability.



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4 Criterion 5.2a options

Option 2: "IEA B2DS + 25%"



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Option 3: "IEA B2DS + 25% until 2030"



- It was said that the middle curve represents the whole upstream sector up until the casthouse, only the smelters data are approximately minus 3t/t.
- One participant raised not understanding the difference between this option and the previous one. It was replied that option 3 is slightly more ambitious than option 2.
- It was raised that even when being rigorous in CO₂ accounting, there is always a margin of error. How can that be taken into account?
- It was also said that we need to be very clear on how to calculate these numbers, and that IAI has guidelines for that. It was said that this would be the next step.
- It was asked what was the tonnage for the whole primary sector if the smelter is at 8t/t. It was said that it should be around 12t/t, and that is displayed on this graph the line for 12t not 8t/t.



Option 3: "IEA B2DS + 25% until 2030"



This solution would rely on a IEA scenario (to be revised soon in accordance with 1.5°) and add a 25% (or X%, SC decision) upper limit which converges to the industry average until 2030. Anything below the line at a given time is certifieable.

- Connection to science
- Distinction between middle / higher performers and lowest performers
- Reduction mechanism in line with external science-based pathway
- More credible + auditable after 2030
- · Somewhat exclusive
- Difficult to audit in the first years for low performers
- % upper limit purely value-based, so mix of value + science-based decision
- No incentive for higher performers



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- Reduction mechanism in line with external science-based pathway
- More credible + auditable after 2030
- Somewhat exclusive
- Difficult to audit in the first years for low performers
- % upper limit purely value-based, so mix of value + science-based decision
- No incentive for higher performers



- It was raised that emissions today are a bigger problem than they will be in 10 years time. Thus, continuing on the same path for 10 years and start changing only then, or already having very low emissions today does not have the same effect on climate change. This raises the question: if you are a bad performer today, can you get a certificate? It was said that what is happening today is the challenge, and anti-trust arguments cannot challenge that.
- This was agreed to by another participant, arguing ASI's task is not to have companies behaving well only in the end, but to provide certification to companies that emit much less CO₂ than the others. It was reiterated that the starting point is extremely important.
- A participant raised the concern that with creating our own curve and not taking an existing model (IEA, SBT...), we become climate modelers – while we don't have this competence, and this is dangerous.
- ["] It was discussed whether it is ASI's job to invent a new model, or to include an external model that is in line with ASI ambitions.
- ["] It was said that IAI's models are currently the best models available.



It was said that here we are looking at the global mean while we are trying to make a rule for one smelter. How will a singular smelter follow a linear pathway? Can it actually reduce its emissions or is it only about the energy source choice? It was said the only thing we can do today is to have smelters changing their energy sources.



4 Criterion 5.2a options

Option 4: "IEA B2DS"



4 Criterion 5.2a options

Option 4: "IEA B2DS"



4 Criterion 5.2a options

Option 4: "IEA B2DS"



Option 5: "Model Pathway Step Change Reduction with Maximum Inclusivity"



Option 5: "Model Pathway Step Change Reduction with Maximum Inclusivity"



Option 5: "Model Pathway Step Change Reduction with Maximum Inclusivity"



Option 6: "Linear Reduction with Maximum Inclusivity"



" It was said that this is the SBTi 'absolute contraction' method.



Option 6: "Linear Reduction with Maximum Inclusivity"



Option 6: "Linear Reduction with Maximum Inclusivity"



Option 7: "8t/t or SBT when it becomes available"



This solution would use the 8t/t until the official and mandated SBTi methodology for the sector became available fully.

- Inclusive to all entities after the methodology is available
- Credibility always given
- Best available science
- Setting an industry best-practice, positioning aluminium as the sustainable material in the market
- Incentive for all entities to change after the methodology is there
- Lower performers have a some time to adjust and respond to new reality
- Incentive for all industry players to support the development of the aluminium SBT method quickly
- Burden of auditing greatly reduced
- Possibility to include step change logic in SBTi target and strategy



Option 7: "8t/t or SBT when it becomes available"



New criteria as per possible Option 7

5.2a GHG emissions reductions. Every Entity shall

- i. Set a GHG reduction target approved and monitored by the Science-based Targets Initiative (SBTi)
- ii. The targets developed in (i) shall be publicly disclosed.
- iii. Progress against the targets developed in (i) shall be publicly disclosed annually.
- iv. Demonstrate that they have put in place the necessary Management System, evaluation procedures, and operating controls to achieve performance aligned to the targets developed in 5.2a i.
- v. In the absence of an appropriate target setting method for the aluminum sector, the entity shall develop, publicly disclose, and annually report on progress towards an ambitious GHG reduction target.

5.2b Aluminium Smelters. An entity engaged in Aluminium Smelting shall adhere to the performance criteria set in 5.a i-iii. In the absence of an appropriate target setting method for the aluminum sector, the entity shall

- i. For Aluminium smelters in production up to and including 2020, demonstrate that the Scope 1 and Scope 2 GHG Emissions from the production of Aluminium is at a level below 8 tonnes CO2-eq per metric tonne Aluminium by 2030.
- ii. For Aluminium smelters starting production after 2020, demonstrate that the Scope 1 and Scope 2 GHG Emissions from the production of Aluminium is at a level below 8 tonnes CO2-eq per metric tonne Aluminium.

Summary and conclusion

Inclusivity

Credibility

Auditability

As can be seen in the slides thus far, **no approach is perfect**. The approach that scores "best" (this is up for discussion) on all three aspects is option 6, which means going for maximum inclusivity and then using a linear "3" % reduction pathway.

The question on the table is still: **are we fulfilling our role as ASI** with such an approach which, in any case, is highly dependent on a lot of very good and time consuming auditing, and extensive justification of targets.

One proposal which we had on the table in the very first WG meetings could be reconsidered: transferring the weight of the auditing to the organizations that set the methods and mandate for SBTs (e.g. SBTi), and simply state in our criteria that we require a science-based target mandated and monitored by the Science-based Targets Initiative. As this is not (perfectly) possible at the moment, but will be so in the coming 1-2 years, we could simply leave the 8t/t and add "or a SBT mandated by the SBTi". That way organizations are incentivized to push the SBT development, the ASI is relieved of the bulk of the auditing and monitoring, the criteria is extremely credible, never needs to revised again, and it is inclusive to the right point: science.

5 Open discussion – Criterion 5.2a

5.2a GHG Emissions Reductions. The Entity shall

- i. Establish GHG emissions reduction targets that ensures a reduction pathway consistent to the achievement of 2050 average global aluminium sector intensities of 2.5^* tonnes of CO_2 eq per tonne of primary aluminium, or 1.5^* tonnes of CO_2 eq per tonne of semi-fabricated product. The Entity's reduction pathway must remain below the upper threshold limit of xx^ and include intermediate targets covering a period no greater than five years.
- ii. These targets shall address all emissions from mine to metal[#].
- iii. These targets shall be publicly disclosed.
- iv. Progress against these targets shall be publicly disclosed annually.
- b. Demonstrate that they have put in place the necessary Management System, evaluation procedures, and operating controls to achieve performance aligned to the targets developed in 5.2 (a).
- * To be revised, following release of 1.5c warming scenario (SDS, IEA etc.)
- ^ To be determined post-consultation
- # Refer to IAI methodologies

*****WORKING TEXT ABOVE FOR EDITING AS REQUIRED*****



- One participant said that the focus is currently on setting a threshold, and expressed not wanting to go too far from that, but that at the same time there are mechanisms that can promote changes, like transparency of reporting, etc.
- It was said that it is different to manage the performance of a particular smelter and of the whole industry. Different smelters will make the transition at different moments. It is not a smelter specific 'roadmap' that needs to be developed, but ASI should focus on where it has leverages. There are a lot of other drivers (customers demand, pricing...) that can be tackled to implement change.
- ["] The Secretariat noted that the opacity of the current criteria has been addressed with the public disclosure addition, now requiring all Members to become far more transparent in their progress which is a supporting feature for change.
- It was said that this is at the same time a danger: if it becomes clear that CO₂ emissions are high, ASI certificates might lose credibility for external stakeholders.
- It was said that with that risk also comes great opportunities: after several years of reporting we should see some reductions. This approach is consistent with the ASI Theory of Change.



[%] A participant raised that the general public is not interested in the mechanisms but only in how much CO₂ is emitted, which means we need to decide if we want to go for low credibility and high inclusivity, or not.



Projected pathway to 2050

(provided and discussed by Jostein)



- It was said that we know the starting point and the end point, determined by external sources, which is a good start.
- First was shown the typical curve of Hydro's Norwegian smelters, which are now close to 4-5t/t. Following the previous options discussed, this would mean no change needed to reduce emissions until 2025, and that's not a good option – those smelters need to be close to 0 t/t in 2050. They are already powered with renewables so nothing can be done regarding electricity and energy efficiency. However, the technologies can still be optimised (zero carbon technologies, carbon storage, etc.) Though, the industry has been looking into that for decades, and it won't happen tomorrow. Having these technologies ready in 10 years is very ambitious, as it is a massive investment that will take time.
- Then was presented the curve of the Middle East smelters, which are also approaching their technology limitations. But improvements are possible: natural gas electricity could be replaced by solar power, though this would require massive solar power farms and solar energy is not stable enough to run a smelter, so only part of this energy can be replaced.



- It was raised that these investments are so important that companies need to have the strategies in place now if they want to reach the objectives in 2050, they cannot wait.
- " It was said that the curves show the total upstream emissions up to the casthouse.
- It was said that the limitations we are currently approaching relate to smelters, but improvements can be made in alumina refining, which could allow to break this curve. But in 10 years all potential from current technologies will be extracted, so hopefully new technologies will have been identified in 2030.
- It was raised that the discussions regarded the balance between inclusivity and credibility, and that going forward we needed to discuss who is certifiable and who should be included. There is a desire to be more inclusive and have more impact on the industry, and on the other side to not reduce credibility. Many industry 'actors' do not want to see the signal that it is now easier to get ASI certified, and would prefer to see a stricter Standard.



- Including worst performers, who have ambitious plans and have made progress over the last years, was discussed. It was said that on the other side, ASI should not make it easier to join. It was suggested to reshape the criteria to capture those that are really improving and are outside of the 8t threshold, certifiable by showing historical performance and improvement, and ambitious plans going forward, to motivate them.
- This was agreed to, but it was raised that the question is still open regarding the method.
- ["] It was said that if we have the starting and end points, the method is not made up.
- It was said this is the option 7: if you are above the limit, you follow the path between the start and end points, and if you are below you implement step change technologies.
- A participant asked where ASI stands 'vis a vis' SBTi's official process, and if the methodology was already available, would we have these discussions.
- The Secretariat answered that based on the previous GHGWG and SC discussions, if it was the case we would go with the SBTi methods. The reluctance of the WG is based on the fact that methodology that would work for the aluminium sector does not exist yet and there is still some time before that happens.



- It was raised that competition between different models and systems creates dilution and confusion. It should be clear to new players coming in what the ASI model is, 'vis a vis' SBT for example. The more we can harmonize and align the better. It was thus suggested to wait for SBT methodologies to be ready.
- Another participant said that we already know the starting and end points, and every company has to decide how it reaches the end point. ASI only needs to define what is an acceptable path to get to the end point, and who is included - do we start with the yellow line, the blue line, or the straight blue line?
- A participant responded that it is not that simple and that the journey also makes a difference.The question is also how do we expect to assess a plan.
- A participant said that there is mathematical confusion because the grey area is an average of many smelters, therefore only one smelter following the grey line will not influence enough. To get the average to go down you need to have individual smelters moving faster. We could somehow approve the worst performers to get in the system, but they would have to move steeper than the green line otherwise the grey area will not follow the desired pathway.

- ["] This was agreed to, saying that those close to the top of the grey area need to move faster and that this would be auditable.
- It was said that taking a step back, there are two weaknesses in the current criteria: it does not incentivize those already below the limit, and it does not give options to improve for those above. The question is how can we improve those aspects without making the criteria less ambitious. The challenge is designing a criteria that will fit in 2050, and there will be at least 6 Standard revision rounds before then. We have more knowledge now than 5 years ago, and it will be the same in 5 years from now. The important thing is thus to have a criteria that sets the industry on the right direction for 2050.
- ⁷ It was raised that today there is no model for the downstream part and that IAI 1.5 t/t is a very high-level figure that was not thoroughly evaluated. It is based on absolute numbers and does not provide for how much more recycling would be needed, which is huge. It also means the electrification of the whole downstream part while it is uncertain how much electricity will be available.



- It was said that the group first needs to agree on some key principles for the upstream part, and then it will be easier to discuss the downstream part.
- ["] The Secretariat added that IAI and IEA are constantly working on refining this number and that it should be updated in the next 6 months.
- ["] It was said that at the moment the only ASI GHG requirements concern smelters, but there are opportunities to also improve alumina refining and bauxite mining practices.
- ["] It was asked if we could have separate targets for electrolysis electricity and steps taken to transition, and for efficiency on the rest (PFCs, etc.), with downstream actors having some responsibility for circularity.
- The Secretariat said that the efficiency suggested is already undertaken and there's not much more room left on that side. This was agreed to by a participant, saying there is still some optimization possible for PFC but at some point there will need to be a step change.
- It was said that IAI numbers on global average show a 6t difference outside of electricity, while a lot of claims are around 4t. This means there is opportunity within that space to improve.



- This broader view on how you source your alumina and bauxite was supported by a participant. It was said that the aluminium industry has focused a lot on smelters' emissions but there is still a huge potential for improvement on alumina refineries.
- It was added that alumina refineries need energy for calcination, burning the bauxite (fuel) and for producing steam (electricity) and these are 'low hanging fruit'.
- ["] It was said that this contributes to global reduction but that is not enough.
- A participant raised that investing in energy efficiency will only reduce by a certain amount, but the real change is about bringing in recycled material.
- A participant suggested a proposal with an 8t threshold, OR a pathway, OR an SBTi approach, if available, that beats the linear pathway. This means having a very clear pathway to get certified.
- It was said that the group agreed to refer to science-based target methodologies, not linked to the SBTi methodology which is only one approach. If we link the criteria to the SBTi it is a problem because we commit to something without yet knowing the result.
- The Secretariat said that SBTi can fall under science-based targets as one option, and that under the 8t/t there still needs to have some performance requirements.



- A participant asked whether we could set an absolute minimum (e.g. above 18 or 19 t you cannot certify).
- A participant said being reluctant to that idea, arguing that a company starting from a high point and showing ambition should not be excluded based on a number. It was added that from a company perspective, that has several smelters, you may want to prioritise the worst performers and bring them in first, then taking the small steps on the best performers.
- The SBTi was discussed and a participant said it was not wise to go back to this discussion that was finalized, the group agreed to science-based targets but not SBTi because we don't know the content.
- Another participant contested and said the group never said made a decision on including SBTi but only concluded that they didn't finalise their model.
- ["] A participant raised the need to define what "historically" means.



6 Agreed Upon Actions & Close

- a. Agree actions
- b. Secretariat thanks to all participants and close of meeting
- c. Upcoming Meetings for GHG-SC:
 - ➢ 10 December
 - 7 January
 - > 13 January: PS 5. All decisions made by this date.
 - > 21 January: Final Review and All documents Approved for Consultation
 - February: Review of consultation documents and planning for SC process for post consultation
 - March: Benchmarking/Indicators/Verifiers Discussion



Thank you

