



Scope 3 TWG Phase 2 Meeting Minutes

Meeting 2

Date: September 19, 2025 Time: 04:00 - 6:00 PM ET

Location: Virtual

Attendees

Technical Working Group Members

- 1. Alissa Benchimol, Greenhouse Gas Management Institute
- 2. Zola Berger-Schmitz, Science Based Targets initiative
- 3. Lindsay Burton, Ernst & Young
- 4. Betty Cremmins, Independent
- 5. Mathilde Crepy, ECOS
- 6. Holly Emerson, Duke University
- 7. Tom Jackson, Loughborough University
- 8. Alexandre Kelemen, Mangue Tech
- 9. Meghan Kennedy, NetApp
- 10. Tim Letts, WWF
- 11. Alan Lewis, Smart Freight Centre
- 12. Ryan Maloney, Apple
- 13. Paola Martinez, Independent
- 14. Shannon McIlhone, Partnership for Carbon Accounting Financials (PCAF)

- 15. Christoph Meinrenken, Columbia University
- 16. Nadia Montoto, KPMG
- 17. Hetal Patel, Phoenix Group
- 18. Colin Powell, PwC
- 19. Verena Radulovic, Center for Climate and Energy Solutions (C2ES)
- 20. Benedicte Robertz, Umicore
- 21. James Salo, S&P Global Sustainable1
- 22. Fabiola Isabel Schneider, University College Dublin
- 23. Julie Sinistore, WSP
- 24. Michael Taptich, Amazon
- 25. Carl Vadenbo, ecoinvent association
- 26. Ronald Voglewede, Walmart
- 27. Ulf von Kalckreuth, Deutsche Bundesbank

Guests

N/A

GHG Protocol Secretariat

- 1. Alexander Frantzen
- 2. Claire Hegemann
- 3. Allison Leach
- 4. Dario de Pinto

Documents referenced

2. Scope 3 – Full Group – Meeting 2 - Presentation – 20250918 ("Presentation")





Summary

Item	Topic and Summary	Outcomes
1	Housekeeping, timeline and Series D. Contents The Secretariat presented the meeting agenda, housekeeping rules, decision-making criteria, timeline and revisions in Series D.	N/A
2	Consensus revisions The Secretariat presented the outcomes from the survey on Series D. boundary setting, split into tentatively recommended revisions and those revisions needing further consideration.	N/A
3	Revision considerations The Secretariat facilitated discussions on the Series D. revisions needing further considerations, namely regarding category 3, 4 & 9, 6 & 7, as well as cross-cutting issues.	The Secretariat will follow up with members who indicated their interest for a breakout group to work on Category 14 topics.
4	Next steps The Secretariat presented the next steps.	A follow up survey to finalize these boundary considerations will be circulated.

Discussion and outcomes

1. Housekeeping

- Refer to Presentation slides 2-12.
- The Secretariat presented the meeting agenda, housekeeping rules, decision-making criteria, timeline and revisions in Series D.

Discussion

N/A

Outcomes

N/A

2. Consensus revisions

- Refer to Presentation slides 14-23.
- The Secretariat presented the outcomes from the survey on Series D. boundary setting, split into tentatively recommended revisions and those revisions needing further consideration.

Discussion

N/A

Outcomes

N/A





3. Revision considerations

- Refer to Presentation slides 24 127.
- The Secretariat facilitated discussions on the Series D. revisions needing further considerations, namely regarding category 3, 4 & 9, 6 & 7, as well as cross-cutting issues.

Discussion

D2. Category 3 (NOTE ON INDEXING¹)

- A TWG member stated that taking emission factors for electric energy technologies from a National Renewable Energy Laboratory (NREL) study from 2021, as the baseline for assessing whether to require the inclusion of the upstream (cradle-to-gate) emissions of manufacturing or constructing fuel extraction, production, refinement, and distribution equipment and/or the emissions from constructing energy generating facilities (e.g., solar arrays), is not ideal, given that stagnant numbers are not ideal. The member stated their desire to focus on tools to lower the numbers.
 - The Secretariat replied that data availability is a difficult issue, acknowledging that the NREL only
 publishes every few years and the dataset is not global.
- A TWG member agreed with the previous speaker, and that other members may agree with the concerns regarding data availability restrictions on fuels, which are diffuse compared to renewables.
- A TWG member stated that they take issue with the concept that renewable energy is not carbon-free. While yes, constructing renewables infrastructure such as windmills generates emissions, how will emissions actually be reduced if the narrative is that any consumption of electricity is bad. Fossil fuel plants also have a longer lifetime than renewables infrastructure, so what is being incentivized here?
 - The Secretariat acknowledged that it may affect incentives and reminded the membership that decisions should be considered using the decision-making criteria. For example, supporting decision making that drives ambitious global climate actions is one of five decision-making criteria, which are "... ranked in a hierarchy to aid in decision making."²
- A TWG member stated that there is a natural conflict between the scientific accuracy of a GHG inventory
 and incentivizing decarbonization action. The member acknowledged the decision-making criteria
 hierarchy, but expressed that they were not always helpful. The disconnect between GHG Protocol, SBTi,
 and ISO does not help either. More concrete guidance on how to tackle the emissions would be great;
 there are opportunities here, but the inventory-centric approach does not always lend itself to tackling all
 decision-making criteria nor harmonizing with SBTi and ISO.
- A TWG member asked if the group could at minimum agree that cradle-to-gate emissions should be handled the same way for both electricity and combustion fuels.
 - 8 members indicated agreement with this statement.
- A TWG member stated that assurance providers would interpret optionality differently. If a relevance
 criteria is met, it should be included. It would be unfortunate if at the end of this revision process,
 professional judgement was still needed to make the determination if something is required for inclusion
 or not. The member also stated that a lot of infrastructure in the US is fully depreciated and asked
 whether that would be reported as zero.
 - The Secretariat stated that in case of a requirement, guidance on how to depreciate would have to be provided. The NREL emission factors amortize emissions from constructing energy generating facilities over the lifespan of energy output (on a per kWh basis), which ensures that every unit of energy carries a physical emissions profile or emission factor. No unit of energy would be 'fully depreciated'.
- A TWG member stated that the current language implies that this applies to the procurement side versus the consumption of electricity for the grid, asking the Secretariat to confirm.

¹ NOTE: Category 3 revisions have been re-indexed as D3.1, D3.2, etc., from Meeting 03 onwards.

² Annex A: Decision-making criteria (https://ghgprotocol.org/sites/default/files/2024-09/Governance-Overview.pdf): (1A) scientific integrity; (1B) GHG accounting and reporting principles; (2A) Support decision making that drives ambitious global climate action; (2B) Support programs based on GHG Protocol and uses of GHG data; (3) Feasibility to implement.





- The Secretariat stated that the language is supposed to address purchased energy that is consumed, with upstream (cradle-to-gate) emissions pre-combustion being scope 3 category 3 and combustion-related emissions from purchased energy being accounted for in scope 2.
- The member asked how a reporter would know where the electricity is coming from if they are consuming from the grid.
- The Secretariat replied that companies currently rely on grid average emission factors for combustion-related emissions associated with generating electricity, and would have to estimate the emissions associated with the construction of energy generating facilities. The Secretariat asked whether this is a reason not to stipulate the inclusion of said emissions.
- A TWG member stated that, in the past, emission factors applied to consumed electricity in a mostly fossil-based system that may or may not have included emissions associated with the construction of extraction, refinement, distribution, and/or generating plants. The member noted that in a fossil-based system, when the Standard was originally drafted, it did not make a significant different in most reporting company's GHG inventories whether construction emissions were included or not. However, in the future, emissions associated with constructing renewable energy generating facilities will constitute the majority of emissions associated with global energy generation, in which case the feasibility argument would no longer apply (i.e., these emissions would need to be included). The member stated that what worked in the past, in a world reliant on fossil-based energy, would not work in the future, and the GHG Protocol should help support the transition to this future. The member also highlighted ambiguity in areas such as transmission loss and capital expenditures, noting that in the future, the answers to these questions will be very different for different types of non-fossil energy generating technologies.
- A TWG member commented on Category 3, stating that given its strong link to Scope 1 and Scope 2, the
 incentive to reduce it is already present. However, the member noted that Category 3 could play a more
 prominent role in a context where Scope 1 and Scope 2 emissions are minimized, in which case Category
 3 could serve as an incentive for energy optimization.
- A TWG member stated that there are many advantages to keeping emissions factors from capital equipment separate as an optional emissions source. The member noted that companies with such data, particularly those transitioning from primarily fossil-based portfolios to renewable energy, could optionally demonstrate reductions stemming from capital equipment improvements outside the minimum boundary. However, making it optional would ensure that emissions reductions in Category 3, which are directly linked to a company's Scope 1 and Scope 2 emissions from energy consumption, can still clearly be demonstrated, especially for energy-intensive sectors.

D3. Category 4 & 9 (NOTE ON INDEXING³)

- A TWG member asked what the reason was for differentiating unladen hauls, stating that if they are part
 of the regular transport and distribution (T&D) process, they should simply be considered part of what is
 emitted during transportation. The member stated that unladen hauls are just part of the process and
 questioned why they should be treated differently.
 - o The Secretariat asked if empty hauls should therefore be required.
 - The TWG member replied that yes, necessary empty hauls should be included as well.
- A TWG member stated that all existing standards already include emissions from empty running. The member emphasized that for harmonization purposes, this needs to be required. They argued that empty running is embedded in many if not most transportation emission factors, as transportation often cannot occur without some empty running, and reducing it is one of the recognized levers for lowering transport emissions. Excluding it would remove from companies' GHG inventories concerning transportation and distribution: one of the five available levers for reduction. The member stated that, generally, fuel data is taken over a long period of time and associated with a certain amount of emissions, with both laden and unladen trips included. In existing data sources, such as DEFRA emission factors and SmartWay in the U.S., empty running is already built in, and it would require more effort to extract these emissions than to leave them in and require their disclosure.
 - A TWG member agreed, stating that they could be swayed by the previous argument and that there are incentives for shippers to minimize unladen trips.

³ NOTE: Category 4 and Category 6 revisions have been re-indexed as D4.1, D4.2, etc. and D9.1, D9.2, etc., respectively, from Meeting 03 onwards.

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- A TWG member commented that this is similar to buying electricity from the grid, where the emission factors used already account for the average lifespan of infrastructure such as windfarms. The member stated that it was good to have this validated for transport, noting that there is legacy thinking in the slides that suggest that given this tends to be quite small, if it adds feasibility burdens, then it should be kept optional. The member asked whether the concept of significance or materiality is still present in the standard.
- The Secretariat confirmed that 95% of required emissions must be reported, applying to any
 activity from which scope 3 emissions are required. Requiring more activities essentially increases
 the 95% of emissions that must be reported. For optional categories, companies may or should
 include them, subject to relevance.
- A TWG member asked why there is even a need for an optional category if the 95% threshold already exists.
- A TWG member stated that unladen trips clearly need to be included. If many data providers already
 build this into their datasets, then making it optional risks reducing comparability, which is an argument
 for requiring it.
- A TWG member commented on the options for using the payment principle to classify category 4 versus category 9 emissions, stating that option 2 (the Purchase principle) is closest to what is done in practice.
- A TWG member stated that many companies segment out shipping by spend, and that it is important to consider the results of making changes to category 4 versus category 9 classification. The member noted that most of the time freight is free on board (FOB) shipping, which defines when ownership and risk for goods transfer from the seller to the buyer during shipment, with upstream transport being paid for by the manufacturer and downstream transport being paid for by the customer. The member cautioned that there may be unintended consequences of changing the classification rule.
 - The Secretariat asked which option would be better.
 - The TWG member replied that initially they would prefer the gate principle (Option 3). They
 noted that there would be double counting in any case.
- A TWG member proposed that the best option would be consolidating the categories (i.e., accounting for all transport-related emissions in a single category).
- A TWG member stated that this would have a domino effect, potentially shifting a lot of emissions into a single category, which would then require recalculating baselines. The member noted that this could have unintended consequences. They emphasized that it is already difficult to explain to new practitioners that the classification rule is purchase-based, and that this principle has existed for decades. The member stated that changing it would cause disruption and would require a very strong rationale.
 - The Secretariat asked which option the member preferred.
 - The TWG member replied that they were indifferent between option 1 or 2 but reiterated that
 any change would be disruptive and therefore requires a very strong rationale.
- A TWG member asked why, under the current approach, if something is upstream and not paid for by the company, it goes into Category 9, questioning why this differentiation was designed in the first place.
 - The Secretariat stated that this differentiation is based on influence, specifically, a reporting company is presumed to have significantly more influence over services for which it pays.
 - A TWG member added that the only thing that should go into Category 9 is T&D services for which a reporting company has not paid, and that all other T&D services should go into Category 4. The member stated that this is the current status quo.
- A TWG member stated that they had no opinion yet between option 1 or 2, but that they were not in favor of a gate-based principle (Option 3). The member emphasized that companies that have been classifying emissions between Category 4 and Category 9 correctly, should not be penalized, and that the influence argument (from purchased services) is important.
- A TWG member agreed that option 2 (Purchase principle) is closer to what is done in practice. The member highlighted that when outbound transport is either 100% paid for by the company or 100% paid for by third parties, which is a less common situation, the positioning in the value chain becomes insignificant. The member also emphasized the importance of considering whether payment to the end customer is going to be required by the GHG Protocol. For companies producing intermediate products, Category 9 has often been used to capture transport and retail storage to the end consumer, but if this is no longer part of the minimum boundary, the implications would need to be considerable.
- A TWG member stated that at an SBTi workshop the previous week, the Corporate Net Zero Standard (CNZS) included a couple of paragraphs attempting to unpack the definitions of Category 4 and 9 in terms





of influence. The member noted that it is likely they will interpret this in a way that re-engineers the category classification using option 2 (Purchase principle).

- A TWG member stated that data collection and access to information is important to consider. If the focus
 is on the purchase principle, a company can rely on its accounting data, which is accessible. What a
 company did not buy may also be important, but it requires a completely different way of obtaining
 information. The member noted that if the goal is to align financial accounting with carbon accounting, it
 is good to maintain that link, i.e., option 2 (Purchase principle).
- A TWG member agreed with the previous statement, adding that under option 2, Category 4 would or could most likely rely on primary data and Category 9 could or would most likely rely on secondary data. The member stated that the current definition leads to a mix of primary data for Category 4 and secondary data for Category 9, and cautioned against combining said activities in a single category.

D5. and D6. Category 6 & 7 (NOTE ON INDEXING4)

- A TWG member stated that SBTi uses the terms "within" and "outside" of the minimum boundary, whereas "indirect" and "optional" can mean many different things. The member questioned the need for additional categorizations in the employee context, suggesting instead a simpler distinction such as employees who meet a contractual status versus those who do not. The member stated that there are already many classifications and that having a definition encompassing what is inside and outside the boundary would create a binary distinction; this would be less ambiguous and simpler.
 - o The Secretariat stated that they would look at SBTi language for clarification.
- A TWG member stated that this is already covered through operational and financial control.
- A TWG member noted that in the sporting industry, a lot of emissions come from customer who travel to stadiums, which is not business travel, and asked whether this would be covered anywhere else.
 - The Secretariat replied that this could be considered from the perspective of the crowd being customers of the sporting event, and therefore optionally included in Category 9.
 - o A TWG member added that this would be similar to customer trips to stores.
 - A TWG member stated that they had seen customer travel to sporting events classified as optional in Category 9 for companies organizing events, such as Formula One teams.
 - A TWG member commented that the Category 9 definition is for the transport of products, and even if a product is interpreted as a service, the service itself is not being transported, so including customer travel in Category 9 would not seem appropriate.
 - A TWG member noted that the Category 9 language currently states that companies may (optionally) include emissions from customers traveling to and from retail stores, which can be significant for companies that own or operate retail facilities.
- A TWG member asked whether any guardrails had been built around what a reporting company can deem as "relevant" or "not relevant," or if it had been left entirely to the reporting company.
 - A TWG member responded that there is a size threshold, with 95% of total Scope 3 needing to be included as per revision proposed in Phase 1 of this TWG.
 - The Secretariat reminded TWG members that proposed revisions from Phase 1 state that companies should include optional emissions, if relevant.
- A TWG member commented on the process, asking whether it would be possible to drop comments
 directly in a paper to increase participation. The member suggested having a tool to highlight areas of
 uncertainty and provide another avenue for feedback.
 - The Secretariat replied that a document would be created with all comments consolidated for members to review and comment.
- A TWG member stated that under Category 7 (employee commuting) the reference to "other individuals" is too broad and should be tightened.
- A TWG member volunteered to help make the text clearer.

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⁴ NOTE: Category 6 and Category 7 revisions have been re-indexed as D6.1, D6.2, etc. and D7.1, D7.2, etc. from Meeting 03 onwards.





D15. and D16. Cross-category boundary consistency

- A TWG member asked why the group is suddenly switching to life cycle assessment (LCA) language. The
 member referred to the upcoming survey, noting that they had already stated a preference for everything
 to be required, but questioned whether there is inconsistency with earlier survey questions where some
 categories included capital equipment and some did not. The member stated that it would be easier to
 have capital equipment either included or excluded uniformly across all scope 3 categories.
- A TWG member stated that much more information is needed to consider the implications of including the cradle-to-gate emissions associated with constructing or manufacturing capital equipment used for all activities across all categories. The member noted that LCA is not consistent with the accounting requirements used in a number of industry standards, such as real estate, where embodied emissions are only required for first owners in Category 2. The member emphasized that embodied emissions cover only a portion of the LCA of a capital good, not the entire lifecycle. They also stated that whether a company is a first owner, a second owner, and so forth, is important in determining whether emissions from capital equipment and goods fall inside or outside the minimum boundary for Category 2 and Category 13.

Outcomes

- The Secretariat held a quick pulse check on whether TWG members preferred one long survey, one short survey, or a long survey broken up into multiple parts to be able to cover the topics in depth while facilitating participation. Members indicated a preference for the latter.
- The Secretariat will follow up with members who indicated their interest for a breakout group to work on Category 14 revisions.

6. Next Steps

- Refer to Presentation slides 128 130.
- The Secretariat presented the next steps.

Discussion

N/A

Outcomes

- A follow up survey to finalize these boundary considerations will be circulated.
- The next meeting is on October 9th, at the regular meeting time of 9-11am ET.

Summary of written submissions received prior to meeting

N/A