

Scope 3 TWG

Phase 2

Meeting Minutes

Meeting 4

Date: October 30, 2025

Time: 09:00 – 11:00 AM ET

Location: Virtual

Attendees

Technical Working Group Members

1. Sahil Aggarwal, Siemens Healthineers
2. Zola Berger-Schmitz, Science Based Targets initiative
3. Lindsay Burton, Ernst & Young
4. Diane Buzea, WBCSD
5. Bin Chen, Fudan University
6. Leo Cheung, The Carbon Trust
7. Karis Choi, HSBC
8. Mathilde Crepy, ECOS
9. Dario Alessandro de Pinto, Banca D'Italia
10. Holly Emerson, Duke University
11. Hugo Ernest-Jones, Science Based Targets initiative
12. Talita Esturba, WayCarbon
13. Victor Gancel, Danfoss
14. Rene Garrido, Universidad de Santiago
15. Alasdair Hedger, Ellen MacArthur Foundation
16. Susanne Vedel Hjuler, Independent
17. Elijah Innes-Wimsatt, Conservation International
18. Tom Jackson, Loughborough University
19. Alexandre Kelemen, Mangué Tech
20. Meghan Kennedy, NetApp
21. Michael King, Cisco Systems, Inc.
22. Tim Letts, WWF
23. Alan Lewis, Smart Freight Centre
24. Ryan Maloney, Apple
25. Shannon McIlhone, Partnership for Carbon Accounting Financials (PCAF)
26. Christoph Meinrenken, Columbia University
27. Nadia Montoto, KPMG
28. Elliot Muller, CIRAI, Polytechnique Montreal
29. Nicola Stefanie Paczkowski, BASF
30. Vishwesh Pavnaskar, Indorama Ventures
31. Colin Powell, PwC
32. Verena Radulovic, Center for Climate and Energy Solutions (C2ES)
33. Benedicte Robertz, Umicore
34. James Salo, S&P Global Sustainable1
35. Julie Sinistore, WSP
36. Stacy Smedley, Eastern Research Group
37. Arundhati Srinivasan, Maersk
38. Carl Vadenbo, ecoinvent association
39. Ulf von Kalckreuth, Deutsche Bundesbank
40. Luhui Yan, Carbonstop

Guests

N/A

GHG Protocol Secretariat

1. Alexander Frantzen
2. Claire Hegemann
3. Allison Leach

Documents referenced

2. Scope 3 – Full Group – Meeting 4 - Presentation – 20251030 (“Presentation”)

Summary

Item	Topic and Summary	Outcomes
1	Attendance and housekeeping The Secretariat presented the meeting agenda, housekeeping rules, decision-making criteria, and timeline for phase 2	N/A
2	Crosscutting Series D The Secretariat presented crosscutting considerations, specifically regarding: <ul style="list-style-type: none"> • Cradle-to-date emission factors for fuel and energy • Inclusion of capital goods used by activities • Remaining optional boundary activities 	The Secretariat will share a survey to poll members.
3	Category 11 The Secretariat presented category 11 considerations regarding sold product annualization and metrics.	Will be discussed further at an upcoming meeting.
4	Category 2 and 8 <i>Skipped due to time constraints</i>	N/A
5	Category 15 Notes The Secretariat presented notes regarding commodities and undrawn commitments, to be moved from Category 15 to Category 16	N/A
6	A1. Disaggregation <i>Skipped due to time constraints</i>	N/A
7	Next steps The Secretariat presented the next steps.	The Secretariat will share the post-meeting survey.

Discussion and outcomes

1. Housekeeping

- Refer to Presentation slides 3 - 9
- The Secretariat presented the meeting agenda, housekeeping rules, decision-making criteria, and timeline for phase 2.

Discussion

- N/A

Outcomes

- N/A

2. Crosscutting Series D

- Refer to Presentation slides 10 – 30.
- The Secretariat presented crosscutting considerations, specifically regarding
 - Cradle-to-date emission factors for fuel and energy
 - Inclusion of capital goods used by activities
 - Remaining optional boundary activities

Discussion

Cradle-to-gate emission factors for fuel/energy

- A TWG member noted that category 2 is not among their most material categories and that it is one of the few they still calculate using the spend-based method. They were uncertain whether the databases they use considers or includes the upstream cradle-to-gate emissions of fuel/energy used as per this proposed approach. They had fewer concerns about category 1, as most LCA databases do include this.
- A TWG member stated that, in principle, if the upstream cradle-to-gate emissions of fuels and energy are included for one category, then they should be included for all categories, for consistency. For example, if category 11 includes upstream cradle-to-gate emissions of fuels and energy due to long-term use-phase emissions, category 1 should as well. They added that the existing “should” language in the standard could be changed to “shall” for clarity.
- A TWG member commented that this approach would simplify accounting in the long term.
- A TWG member added that transitioning to include the upstream cradle-to-gate emissions of all fuels and energy used (e.g., through EEIO databases) would take time. However, it would benefit users in the long term (and reporting made easier) as more and more companies will include this information in their scope 1 and scope 2 emissions data shared with downstream clients/buyers (value chain partners).
- A TWG member expressed doubt regarding requiring the inclusion of the upstream cradle-to-gate emissions of fuels and energy used by value chain partners in category 1. While they appreciated the concept in theory, they cautioned that many reporters lack visibility into their supply chains. If the requirements become too complex or onerous, organizations may disengage from reporting entirely; they have observed similar reactions to the recent scope 2 guidance changes.
- A TWG member emphasized that consistency is important, though implementation timeframes will matter. With sufficient time for implementation, such a requirement should be manageable.
- A TWG member agreed that the question of rollout will be critical for all upcoming revisions.
- A TWG member added that the issue may be more material for category 1, depending on how much data could be missing if is required (“shall”). Since Product Carbon Footprints (PCFs) typically include this, companies basing category 1 estimates on their suppliers’ category 3 data could perform a quick sensitivity analysis to estimate the potential impact.
- A TWG member supported a phased rollout as data availability improves, describing it as a “pull mechanism” for industries to pursue better data. They noted that, in their opinion, some sectors (e.g., construction) currently exhibit sufficient data readiness while others (e.g., semiconductors) are further behind and not ready for implementation. Phasing in requirements or triggering them once a company reaches a specific threshold would make more sense than imposing immediate mandatory requirements.
- A TWG member suggested following an approach similar to the “accessibility clause” included in the draft scope 2 guidance.
- A TWG member questioned the practical impact of including cradle-to-grave emission factors for category 1 and category 2, noting that while total emissions would increase, relative hotspots would remain unchanged. They argued that companies are unlikely to invest significant effort in performing this data collection effort, especially if it doesn’t inform or improve decision-making.
- A TWG member pointed out that progress is already advancing in sectors like electronics, ICT, apparel, and food, and that including the upstream cradle-to-gate emissions of fuels/energy could accelerate this trend in other sectors.
- The Secretariat suggested allowing a permitted calculation method when primary data is unavailable, so that companies can comply and auditors can verify consistent methods.
- A TWG member requested clarification on whether the proposal would explicitly include electricity and purchased fuels/energy.

- A TWG member shared Microsoft's approach to hybrid calculation methods, referencing a published example: [Microsoft-RMI Methodology for Construction Scope 3 Reporting](#).¹
- A TWG member recommended that poll questions clearly distinguish between "should" and "shall" language, and include implementation options such as phased approaches or predefined calculation methods.
- A TWG member emphasized that companies will need clear guidance on how to ensure that the cradle-to-gate emissions of fuels are included when using spend-based methods. They suggested that hybrid approaches could help integrate well-to-wheel assumptions, though these may not be intuitive for all reporters.

Inclusion of capital goods used by value chain partners to perform activities

- A TWG member stated that they did not think the poll results on the slides were inconsistent. They noted that the category-specific polls were split 50% "require" and 50% "maintain optional", so it was not surprising that "all categories" would also be split 50/50.
- A TWG member asked, regarding option 3, if it could be explicitly stated which sectors would be included ahead of the survey.
 - The Secretariat responded that this could be done.
- A TWG member stated that it seems inconsistent, if some requirements are mandatory and others optional. They favored leaving the recommendation optional and naming some of the relevant sectors.
- A TWG member stated that in theory, everything is doable, but in practice, there is limited capacity for engaging with key suppliers. They emphasized pragmatism and noted it would be a pity if companies stopped doing scope 3 accounting and reporting because of complexity.
 - A TWG member added that they agreed and questioned the value-add or information-add provided by including the upstream cradle-to-gate emissions of fuels/energy (effectively ensuring that well-to-wheel emissions are included, and not only tank-to-wheel emissions), expressing doubts about category 11. The questioned whether it would support better decision-making.
 - A TWG member added that the focus should be on execution and moving to specific data over time, citing Microsoft-RMI's approach for construction (see above) as an example.
 - A TWG member said that the fact that emissions *can* be accounted for (or that databases exist), does not mean everything *should* be calculated and reported, warning that excessive complexity could result in a meaningless inventory and inflated emissions that companies cannot act on.
 - A TWG member agreed and emphasized that the purpose of calculating scope 3 inventories should be to identify decarbonization levers. They noted the need for balancing in weighing the effort of data collection with the actionability of derived insights.
 - A TWG member added that this issue is present throughout the document and relates to tensions in the hierarchy of decision-making criteria and the theory of change.
- A TWG member stated that pragmatism would be appreciated. They asked if the relevance framework could help, noting that adding small capital emissions may not significantly change overall emissions but could change the data classification from specific to unspecific. They referenced the GHG Protocol *Product Standard* regarding electricity from renewables.
- A TWG member emphasized that the goal of the accounting standard is to inform and encourage the changes that are needed in the economy to achieve net zero. They suggested focusing on sectors where inclusion encourages necessary transitions and cautioned that inclusion could be counterproductive if it reduces the difference between fossil fuel and green energy.
 - A TWG member agreed but noted that the proposed scope 2 revisions regarding hourly matching could make it expensive and complicated for organizations to transition to renewable energy.
 - A TWG member added that the hourly matching approach seems burdensome.
- A TWG member stated that the relevance framework has been valuable but, when applied broadly, allows companies to omit omissions in other categories. They emphasized the importance of developing quantitative scope 3 exclusion thresholds after calculating all emissions and ensuring minimum boundaries are consistent across categories, with decisions applied consistently.

¹ <https://esgnews.com/microsoft-rmi-launch-methodology-to-refine-scope-3-emissions-reporting-in-construction/>

Remaining optional boundary activities

- The Secretariat stated that they may provide a document for members to comment live on Revision 20.1
- The Secretariat stated that a survey about capital goods would be run in December, and an additional survey for members to submit their ideas would be circulated as part of the meeting follow-up.
- A TWG member stated that every sector has a list of the highest supply chain impacts (e.g. cement/concrete for construction or polyester/nylon for apparel). If a hybrid approach is used, then including the upstream cradle-to-gate emissions of fuels/energy used for such high impact supply chain materials or activities, this could encourage impact (emissions) reduction by suppliers. This has already been catalyzed and begun to happen for cement and concrete producers, thanks to Environmental Product Declaration (EPD) data being available.

Outcomes

- The Secretariat will share a post-meeting survey to poll members.

3. Category 11 (use of sold products)

- Refer to Presentation slides 31 – 41.
- The Secretariat presented category 11 considerations regarding sold product annualization and metrics.

Discussion

- A TWG member stated that the Ellen MacArthur Foundation (EMF) recently published guidance on this topic and suggested that it should be considered.
- A TWG member stated that assessments should include the fact that, once a product is sold, use-phase emissions are out of a company's control.
- A TWG member stated that they were in favor of less optionality and more concrete directives.
- A TWG member stated that intensity metrics should only be allowed as additional information and should not replace absolute values nor be stipulated as requirements.
 - A TWG member agreed and added that when optionality is used, it should be reported separately.
- A TWG member stated that their company uses current-year emission factors (e.g., the current GHG-intensity of grid electricity) for all future lifetime emissions of their products (despite the fact that, in many countries, grid electricity has consistently become less GHG-intensive over the past few decades).
- A TWG member stated that re-baselining should be discussed because there is an unfair comparison between companies producing less durable versus circular products.
- A TWG member stated that retroactive adjustments would not be useful for incentives, as companies are not assessed based on past performance.
- A TWG member stated that with over 100,000 unique product references, they were uncertain how this would apply to their company.
- A TWG member stated that renewable electricity procurement for the use of sold products was proposed by the U.S. Environmental Protection Agency (EPA) in 2024, recommending annual emissions accounting based on products currently in operation.
- A TWG member asked if a sensitivity analysis had been conducted for product lifespans.
- A TWG member stated that accounting depends on what levers are available for a product and company, and asked whether there are key levers or approaches that should be incentivized here.
 - A TWG member responded that for electrified products, the main levers are renewable electricity, energy efficiency, and grid greening (decarbonization).
 - A TWG member added software updates as a lever.
 - A TWG member added that extended life, energy efficiency improvements, GHG intensity reductions, and replacement by more efficient alternatives or upcycling are also relevant.
 - A TWG member asked whether software updates are already included under energy efficiency.
 - A TWG member clarified that certain updates, such as clean energy charging, are not captured by energy efficiency alone and gave examples of time-delayed operations to reduce emissions.

- A TWG member added that the technology to forecasts and use marginal emissions data to shift energy loads already exists today.
- A TWG member asked why option 1 in the decision-making criteria analysis on slide 37 is considered more transparent, noting that in their opinion, not much should be in green.
- A TWG member stated that comparability will be a problem with optionality, and that one method should be chosen, while additional optional metrics could be helpful.
 - A TWG member agreed that additional metrics make sense and could be standardized within industries to enable comparability.
 - A TWG member added that comparability should be prioritized, and that optionality, where used, should not impact it.
 - A TWG member agreed with prioritizing comparability as long as it does not compromise incentivizing key transitions.
 - A TWG member stated that option 2 could dis-incentivize transitions because reporting cumulative lifetime category 11 emissions is used to identify levers and to demonstrate changes (e.g., new, more efficient products) year-over-year when they are introduced; reporting only use-phase emissions in the year that they occur (the reporting year) and not cumulative lifespan emissions from products use, may reduce visibility of impacts.
 - A TWG member added that both options have problems and asked if a third alternative could be considered.
- A TWG member stated that company-to-company analysis would be helpful, as well as looking at what happens to legacy machines designed for 5 years of use versus 20 years of use.
- A TWG member stated that while gasoline has a short shelf life (approximately three months) it could be combusted in a future year (not the year it was sold).
 - A TWG member added that stabilizers could allow for longer storage.
 - A TWG member stated that it needs to be made clear that energy sold is assumed to be used in the same year.
- A TWG member added that annualized accounting would align with proposals for category 2.
- A TWG member stated that the GHG Protocol should align with the various metrics proposed in the SBTi Draft Corporate Net Zero Standard v2, and not re-invented.
- A TWG member stated that the GHG P is a quantification standard, not a target-setting standard.
- A TWG member stated that per functional unit accounting may be more relevant than annualized emissions.
 - A TWG member agreed.
 - A TWG member added that per functional unit is more complicated, harder to disclose, and potentially harder to compare; ideally, both approaches could be used as complementary metrics.
- A TWG member stated that the current category 11 accounting approach is ideal because it captures cumulative emissions after product sale and enables industry partnerships. They added that disclosure of additional intensity metrics could address disincentives for long product lifetimes, and noted alignment with SBTi Corporate Net-Zero Standard target options.
- A TWG member stated that uncertainty around product lifetimes is real and that option 2 is clearer regarding emission factors. They suggested that the options be referred to as "lifetime emissions" versus "annualized emissions" to avoid affecting net zero commitments.
- A TWG member stated that the location of product use is not known, specifically, in most cases; averages may be known regionally.
- A TWG member stated that under option 2, future data may show increased emissions, whereas under option 1 this would not necessarily be captured, highlighting the difference between "year-of-sale" and "year-of-use."
- A TWG member asked whether allowing different companies to use different options poses a major comparability risk.
- A TWG member stated a preference for requiring option 2, to incentivize more action.
- A TWG member added that option 2 provides more opportunities for reductions.
- A TWG member asked whether boundaries for category 11 have changed during the revision process or if they still only cover direct use-phase emissions of products.
 - The Secretariat clarified that this is the first time the Scope 3 TWG has considered boundaries for category 10 and category 11, and that this consideration will continue next year.

- A TWG member stated that emissions should be normalized per unit and per year, noting that knowing product lifespan and sales allows for normalization in most cases.
- A TWG member stated that while a limited number of metrics is useful, they cautioned against creating an overly long list, and noted that some companies already use forward-looking emission factors.
- A TWG member stated that category 11 emissions could be depreciated or amortized over the product's lifespan, similar to financial asset accounting, allowing for annual reassessments of expected lifetime emissions.
- A TWG member added that durable products might be amortized by the customer purchasing them (e.g., air compressors, HVAC systems).
- A TWG member stated a preference for reporting both annualized emissions and expected lifetime emissions of sold products.
- A TWG member stated that category 11 is a tricky topic, noting that some subsectors such as ICT are more ready for option 2 reporting than others. They added that for other sectors, uncertainty arises in estimating which products are still in circulation, and company-to-company comparisons are always challenging.
 - They suggested that, for relevant sectors, sector-specific guidance could improve reporting. On balance, they recommended keeping category 11 as is and introducing an additional optional category 11 (year-of-use) metric that companies may report. They noted that how companies can claim targets or achievements under this option remains an open question, and that some sectors adopting it could influence other target-based parties to use category 11 for target setting.

Outcomes

- N/A

4. Category 2 and 8

- Refer to Presentation slides 42 – 50.
The Secretariat skipped this topic due to time constraints.

Discussion

- N/A

Outcomes

- N/A

5. Category 15 Notes

- Refer to Presentation slides 51 – 52.
- The Secretariat presented notes regarding commodities and undrawn commitments, to be moved from Category 15 to Category 16, for discussion in the next Meeting (05).

Discussion

- A TWG member asked how this would work for agriculture commodities traders, whether this would remove all they buy and sell from their GHG inventory?

Outcomes

- N/A

6. Disaggregation

- Refer to Presentation slides 53 – 56.
- The Secretariat skipped this topic due to time constraints.

Discussion

- N/A

Outcomes

- N/A

6. Next Steps

- Refer to Presentation slides 57 – 59.

Discussion

- N/A

Outcomes

- The Secretariat will share the post-meeting survey

Summary of written submissions received prior to meeting

N/A