

# Scope 3 TWG

## Phase 2

### Meeting Minutes

Meeting 11  
Date: April 9, 2026  
Time: 09:00 – 11:00 AM ET  
Location: Virtual

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## Attendees

### Technical Working Group Members

1. Sahil Aggarwal, Siemens Healthineers
2. Alissa Benchimol, Greenhouse Gas Management Institute
3. Zola Berger-Schmitz, Science Based Targets initiative
4. Lindsay Burton, Ernst & Young
5. Stephanie Cap, WBCSD
6. Bin Chen, Fudan University
7. Leo Cheung, The Carbon Trust
8. Betty Cremmins, Independent
9. Dario Alessandro de Pinto, Banca d'Italia
10. Verena Ehrler, IESEG School of Management
11. Talita Esturba, WayCarbon
12. Victor Gancel, Danfoss
13. Atushi Inaba, ISO
14. Alasdair Hedger, Ellen MacArthur Foundation
15. Susanne Vedel Hjuler, Independent
16. Meghan Kennedy, NetApp
17. Michael King, Cisco Systems, Inc.
18. Aysegul Koseoglu, InterIKEA
19. Marion Kurdej, EcoAct
20. Tim Letts, WWF
21. Alan Lewis, Smart Freight Centre
22. Ryan Maloney, Apple
23. Shannon McIlhone, Partnership for Carbon Accounting Financials (PCAF)
24. Nadia Montoto, KPMG
25. Elliot Muller, CIRAI, Polytechnique Montreal
26. Nicola Stefanie Paczkowski, BASF
27. Colin Powell, PwC
28. Verena Radulovic, Center for Climate and Energy Solutions (C2ES)
29. Benedicte Robertz, Umicore
30. James Salo, S&P Global Sustainable1
31. Julie Sinistore, WSP
32. Carl Vadenbo,ecoinvent association
33. Ronald Voglewede, Walmart
34. Luhui Yan, Carbonstop

### Guests

N/A

### GHG Protocol Secretariat

1. Alexander Frantzen
2. Claire Hegemann
3. Allison Leach
4. Luke Jones

## Documents referenced

2. Scope 3 – Full Group – Meeting 11 - Presentation – 20260409 (“Presentation”)

## Summary

Item	Topic and Summary	Outcomes
1	<b>Attendance and housekeeping</b> The Secretariat presented the meeting agenda, housekeeping rules, decision-making criteria, and timeline for phase 2	N/A
2	<b>Quantification methodologies for durable products approaches</b> The Secretariat presented an exemplary case study, indicative survey results, and potential options for TWG consideration.	No outcomes established in meeting
3	<b>End-of-life quantification approach</b> The Secretariat presented the problem statement, options, indicative TWG voting results and decision-making criteria analysis	There was general consensus that, depending on the approach taken in category 11, the approach for end-of-life should be similar
4	<b>Additional reporting metrics</b> The Secretariat presented existing optional metrics and facilitated a discussion on the possibility of a requirement for additional metrics as well as the treatment of sector-specific metrics.	There was general consensus that none of the metrics should be required, and that more optional metrics could be added.
5	<b>Other survey results</b> The Secretariat presented indicative survey results concerning optionality of use-phase emissions, renaming classification and guidance, minimum boundary for category 10 and 11, and sector-specific examples.	N/A
6	<b>Next steps</b> The Secretariat presented the next steps.	The Secretariat will share a follow-up survey

## Discussion and outcomes

### 1. Housekeeping

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

#### Discussion

- N/A

#### Outcomes

- N/A

### 2. Quantification methodologies for durable products in category 11 and use of forward-looking emissions factors

- Refer to Presentation slides 10 – 17.
- The Secretariat presented an exemplary case study, indicative survey results, and potential options for TWG consideration.

### Discussion

- A TWG member stated that the top right chart is misleading, as it suggests that the stock-based approach results in lower total emissions, which cannot be correct. The totals should be equal, indicating an issue with the chart.
  - The Secretariat replied that this is likely because the chart was truncated at the year 2030.
  - A TWG member acknowledged that this makes sense.
  - A TWG member added that truncation was also an issue in the spreadsheets that were shared.
  - The Secretariat stated that if the values in the graphs are summed, they are identical and do match up.
  - A TWG member stated that this is clearer with the updated charts.
  - A TWG member added that the updated charts are better representations.
- A TWG member stated that it would be useful to understand the basis for the assumption for 3.5 kWh/yr energy consumption, to ensure it is based on reliable data.
  - The Secretariat mentioned that sources were references in the accompanying spreadsheet and are based on real-world data were possible
- A TWG member stated that the bar charts shared in the spreadsheet were a better representation than the line charts.
- A TWG member stated that companies are already required to estimate emissions over a product lifetime, and questioned why tracking annualized data would be more difficult.
- A TWG member stated that the objective of calculating product- or service-related emissions is to understand responsibility beyond an organization's own activities, but that the current approach mixes emissions from producing a good with emissions from its use. They emphasized that these are distinct and should not be combined in the same calculation, and asked whether this fundamental approach can be reconsidered.
  - A TWG member stated that they second this reasoning, noting that Scope 3 inventories and product carbon footprints serve different purposes.
  - The Secretariat stated that this topic would be revisited shortly.
- A TWG member stated that it is more important to them that the same data can be used, and is then applied appropriately for each use.
- A TWG member stated that most users want to understand whether product assortments are improving year over year. Using existing emission factors versus projections better measures this, improves comparability, and separates it from external factors such as grid decarbonization, which is largely outside company control.
- A TWG member stated that while different accounting approaches can be debated, companies are concerned about implications for existing targets if methodologies change. They emphasized the need for clarity on what counts as a reduction in this category, including the role of future versus static emission factors, residual versus location-based or market-based factors, and whether customer use of green electricity can be accounted for.
  - The Secretariat responded that the current assumption would be to use location-based emission factors, given the direction of the multi-statement approach, while acknowledging interest in market-based approaches. Additional discussions may address related topics.
- A TWG member stated support for the current approach, noting that Category 11 should mirror Category 1 and Category 2 for consistency, and that the approach aligns with financial accounting and external standards such as those in Europe.
- A TWG member stated that current comparisons may disadvantage companies developing more durable products compared to those producing less durable products, and that this raises fairness concerns.
- A TWG member stated that there are valid arguments on both sides, but that maintaining continuity is important. They suggested that additional disclosures, such as product carbon intensity metrics, could complement the current approach without requiring a full methodological change.
  - The Secretariat noted that a discussion on additional reporting metrics is forthcoming.

- A TWG member asked what would happen under an annualized approach if a company goes out of business and its products are not acquired.
  - A TWG member stated that they had the same question.
  - A TWG member responded that this is not a major concern relative to the potential benefits, as disclosures are voluntary or informational and not used in national inventories.
- A TWG member stated the concern that corporate greenhouse gas inventories are too demanding, and supported maintaining relatively simple accounting rules, with other metrics used to demonstrate performance.
  - A TWG member responded that companies are increasingly evaluated based on inventories, and that separate indicators are fine but unless accompanied by plans for rewarding them, do not incentivize action
- A TWG member cautioned against overemphasizing comparability, noting that current methodologies across scope 3 generally allow significant deviation already. They stated that an annualized approach would better reflect actual product use and allow companies to update assumptions over time. They provided an example illustrating how the current approach could create inefficient investment incentives.
- A TWG member stated support for the current approach, noting the difficulty of estimating impacts in a given year for all products still in use.
- A TWG member stated that efficiency improvements after sale cannot currently be credited, limiting the ability to showcase innovation, and supported making both approaches available.
- A TWG member shared experience from developing SBTi's automotive standard, noting that quantifying impacts such as electrification depends heavily on assumptions about grid decarbonization, and that approaches do exist to address this in complex sectors.
- A TWG member suggested keeping options open and providing examples, such as for internet-enabled or networked products.
- A TWG member stated that an annualized approach may not be feasible for companies without centralized systems to track products in use, and that it raises challenges for target-setting and interoperability. They supported retaining the current approach with optional additional disclosures.
- A TWG member suggested that a simpler supplementary metric, such as a weighted average lifetime of products sold in a given year, could improve transparency.
- A TWG member stated that Category 11 can be robustly managed primarily by final product manufacturers, while intermediate manufacturers lack sufficient data and influence over use-phase emissions.
- A TWG member cautioned that focusing on connected products may overlook factors such as degradation and customer use/misuse, and suggested that performance metrics could capture efficiency without complicating inventories.
  - A TWG member asked whether similar challenges already exist under the current approach when estimating future emissions.
- A TWG member stated a preference for more explicit guidance on applying the current approach, including assumptions such as product lifetimes, potentially aligned at the sector level.
- A TWG member stated that carbon accounting is inherently a modeling exercise, and supported optional reporting approaches. They added that if category 11 is annualized, category 12 should also be annualized.
- A TWG member stated that while the annualized approach aligns with the physical timing of emissions, it complicates estimation and does not clearly improve decision-making within inventories.
- A TWG member stated that a survey of suppliers showed that only a small proportion were able to correctly calculate downstream emissions, even with simplified methodologies.
- A TWG member stated that comparability between companies is already difficult, but remains important, particularly from an investor perspective.
- A TWG member stated support for having both approaches available.
- A TWG member stated that there appears to be strong support for retaining the current approach as required, while recognizing that annualized approaches provide additional insight but raise feasibility and comparability concerns.
- A TWG member stated that the annualized approach should be enabled.
- The Secretariat stated that ongoing discussions aim to ensure alignment between the product and corporate suite of standards, including engagement with other standard-setting bodies.

- A TWG member stated that retaining the current approach while allowing optional annualized reporting would improve transparency and reflect practices already used internally by some companies, encouraging broader adoption.
  - A TWG member asked how this differs from the current approach and whether it would be a “should.”
  - A TWG member responded that it should be a “should,” noting that voluntary enhanced reporting is often not disclosed without clearer encouragement, particularly due to lack of alignment across sectors.
- A TWG member stated that their main issue with forward-looking emission factors is the uncertainty as to whether it will actually materialize and how that will impact the company’s actions. There is the concern that they may mask the year-over-year changes in a company’s actions. That risk always exists with emission factors, but a forward-looking emission factor may be more uncertain and volatile. The member voiced concern that because there is an assumption that the emission factor will decrease over time the company will not take action, whether investment in renewable fuels or policy advocacy.
- A TWG member stated that the investment that is required to get that renewable input also happens over a number of years, and without some form of indication that follows on from the grid decarbonization that has already been demonstrated, you’re basically giving a green light to not decarbonize the transport sector. The member cautioned about a big uproar from those in the transport sector that want to decarbonize, if there isn’t an allowance for future year electricity emission factors. There is a level of uncertainty in any projection going forward.
- A TWG member stated that they are fine with both approaches.
- A TWG member agreed that companies shouldn’t be encouraged to lean back and expect the grid to fix thing. The solution should include framing for what kind of forecasting or predictions can be used, to increase consistency.
- A TWG member stated that their company had tried both approaches, and had experienced a lot of problems with forward looking emission factors, and ultimately did not see the reward in using them.

#### Outcomes

- The Secretariat will share a follow-up survey.

### **3. Annualized approach for end-of-life treatment (category 12)**

- Refer to Presentation slides 18 – 30.
- The Secretariat presented the problem statement, options, indicative TWG voting results and decision-making criteria analysis.

#### Discussion

- A TWG member commented that it looks like the TWG slightly favors moving away from the current approach
- A TWG member stated that the end of life approach should be consistent with the approach that will be chosen for the use of sold products calculation, e.g. maintaining the current approach for both; or annualized for use and year of disposal for end of life.
- A TWG member agreed that approaches in category 11 and 12 should be consistent

#### Outcomes

- TWG generally agreed at the approaches should align between category 11 and 12

### **4. Category 11 metrics**

- Refer to Presentation slides 31 – 34.
- The Secretariat presented existing optional metrics and facilitated a discussion on the possibility of a requirement for additional metrics as well as the treatment of sector-specific metrics.

### Discussion

- A TWG member asked if some of the metrics should come from the Global Circularity Protocol
- A TWG member stated that the existing list is helpful, and that all are of relevance for stakeholders from different industries. Nevertheless, none of the existing metrics should be a requirement, and some definitely shouldn't be. The member was in favor of adding additional metrics to allow companies to report progress, but would disagree with making any of them a requirement.
- A TWG member agreed with the previous speaker, stating that as a large range of companies use the standard, it would be difficult to require any of the metrics. The member suggested pointing to sector-specific guidance.

### Outcomes

- The TWG generally agreed that none of the metrics should be required, and that more optional metrics could be added.

## **5. Other survey results**

- Refer to Presentation slides 35 – 41.
- The Secretariat presented indicative survey results concerning optionality of use-phase emissions, renaming classification and guidance, minimum boundary for category 10 and 11, and sector-specific examples.

### Discussion

- N/A

### Outcomes

- N/A

## **6. Next Steps**

- Refer to presentation slides 42 – 44.
- The Secretariat presented the next steps.

### Discussion

- N/A

### Outcomes

- The Secretariat will share a follow-up survey, and distribute a case study template to use to collect information for category 11 drafting.

## **Summary of written submissions received prior to meeting**

N/A