



Scope 2 TWG Meeting Minutes

Meeting number 11

Date: 02 April 2025

Time: 9:00 – 11:00 EDT Location: "Virtual" via Zoom

Attendees

Technical Working Group Members

- 1. Simone Accornero, Flexidao
- 2. Enam Akoetey-Eyiah, I-TRACK Standard Foundation
- 3. Avi Allison, Microsoft
- 4. Priya Barua, CEBA
- 5. Matthew Brander, The University of Edinburgh
- 6. Charles Cannon, RMI
- 7. Yenhaw Chen, Taiwan Institute of Economic Research
- 8. Jules Chuang, Mt. Stonegate Green Asset Management Ltd.
- 9. Jessica Cohen, Constellation Energy Corporation
- 10. Killian Daly, EnergyTag
- 11. Abhilash Desu, Science Based Targets Initiative (SBTi)
- 12. Stuti Dubey, The D-REC Organization (Global Energy Equity & Climate Action Foundation)
- 13. Neil Fisher, The NorthBridge Group
- 14. Andrew Glumac, CDP
- 15. Matthew Gray, TransitionZero
- 16. Svend Brun Fjendbo Hansen, Ørsted

- 17. Hannah Hunt, Heineken
- 18. Peggy Kellen, Center for Resource Solutions
- 19. Emma Konet, Tierra Climate
- 20. Matthew Konieczny, Watershed
- 21. Stephen Lamm, Bloom Energy
- 22. Erik Landry, GRESB
- 23. Lissy Langer, Technical University of Denmark (DTU)
- 24. Kelly Lichter, PepsiCo
- 25. Alain Mahieu, ENGIE
- 26. J. Andrea Méndez Velásquez, Atmosphere Alternative
- 27. Gregory Miller, Singularity Energy
- 28. Alex Perera, WRI
- 29. Yiwen Qiu, Independent
- 30. Henry Richardson, WattTime
- 31. Wilson Ricks, Princeton University
- 32. Devon Swezey, Google
- 33. Kae Takase, Renewable Energy Institute
- 34. Linda Wamune, Energy Peace Partners
- 35. Sophia Wang, Gilead Sciences

Guests

None present

GHG Protocol Secretariat

- 1. Kyla Aiuto
- 2. Chelsea Gillis

- 3. Michael Macrae
- 4. Elliott Engelmann

Documents referenced

1. Mentimeter polling





Item	Topic and Summary	Outcomes
1	Welcome and goals of meeting The Secretariat welcomed attendees and reviewed the agenda and goals for the meeting.	N/A
2	Feedback from ISB The Secretariat updated the working group on feedback from a recent meeting with the ISB. The ISB was generally supportive of the direction the working group is headed with content development.	N/A
3	Market-based issue 3: Estimated vs. actual activity data The Secretariat presented issue 3, on the use of estimated vs. actual activity data. The working group discussed pros and cons of each approach and polled on four questions related to the use of estimated data.	N/A
4	Market-based issue 4: Treatment of residual mix in market-based method The Secretariat presented issue 4: the treatment of residual mix in the market-based method. The working group discussed several proposals for how residual mix emission factors should be used in the market-based method alongside standard supply service and grid-average emission rates. The working group was polled on four questions related to residual mix.	N/A
5	Next steps The Secretariat recapped next steps, including the next meeting date of April 16 th , and market-based consolidated draft revisions due April 11 th .	N/A

Summary of discussion and outcomes

1. Welcome and goals of meeting

- The Secretariat welcomed attendees, reviewed logistics, and confirmed that minutes and resources would be shared post-call.
- The Secretariat welcomed two new TWG members, Alain Mahieu and Hannah Hunt.
- The Secretariat reviewed the agenda.
- Goals for the meeting include sharing key feedback from the ISB, and to align on issues 3 and 4 for the market-based method.

Summary of discussion

N/A

Outcomes (e.g. recommendations, options)

N/A

2. Feedback from ISB

Summary of discussion





- The Secretariat noted that feedback from the ISB at this stage is not binding, and to view feedback as directional.
- The Secretariat reviewed outcomes from the March 27th ISB meeting, including topics on time matching, deliverability requirements, and standard supply service (SSS).
- The ISB was largely supportive of the TWG's direction on all key issues presented to them.
- Specific feedback from the ISB included:
 - o Feasibility questions concerning time matching and deliverability in all markets globally.
 - o Request to "pressure test" proposed rules for SSS to clarify rules and ensure global feasibility.
 - o Interest for maintaining options for non-inventory claims in situations where companies are not able to influence the GHG inventory due to limited local clean energy resources.
- Members asked for clarity on the exact questions asked to the ISB, the Secretariat clarified.

Outcomes (e.g. recommendations, options)

N/A

3. Market-based issue 3: Estimated vs. actual activity data

Summary of discussion

- The Secretariat presented issue #3, the use of estimated versus actual activity data, and updated members on previous conversations concerning the topic.
- The Secretariat presented examples of estimated activity data (load profiles).
- The Secretariat recapped past polling on this topic in the context of the location-based method, which indicated a slight majority of the working group members supported a "may" or "should" for the use of estimated load profile data where actual data was not available.
- The Secretariat presented options for implementing estimated load profiles, with several different applications of "shall" "should" and "may" language in a hierarchy.
- Members asked for clarifications on research cited about load profiles.
 - One member involved in the research noted that the loss of accuracy in moving from more specific to less specific hourly load profiles (including use of a flat profile) was minimal in the context of matching EACs to load, and that matching EACs to any hourly profile, regardless of specificity, offers significantly greater accuracy than matching to an annual aggregate total.
 - Members asked whether flat load profiles, which support feasibility, are preferable over more precise load profiles which may be more difficult to implement by companies.
 - Members discussed whether it makes sense to require the same requirements on estimated data for the location- and market-based methods and asked if using a flat load profile for location-based is mathematically the same as using annual data.
 - Members stressed the important differences between using hourly vs. annual data for the purpose of matching EACs to load and noted that load profiles help make hourly matching of EACs more accessible and practical.
- The Secretariat polled the TWG on the use of estimated activity data
 - Question 1: Should the revised scope 2 standard include guidance to enable the use of estimated hourly activity data profiles when actual hourly activity data is unavailable?
 - Yes 25
 - No 3
 - Need more information 3
 - Question 2: If guidance is included, in general how should the use of estimated hourly profiles be treated when available under the MBM?
 - It should be allowed ("may") as an option for reporters 13
 - It should be recommended ("should") when hourly emission factors are available 7
 - It should be required ("shall") when hourly emission factors are available 10
 - It should not be allowed, the most precise actual activity data available should set the accounting interval used - 0
 - Need more information 1





- Question 3: If use is *required* or *recommended*, should exemptions exist for reporters that meet specific characteristics (e.g. total load or consumption level)?
 - Yes 17
 - No, all reporters should follow the same requirement − 8
 - NA, use of estimated profiles should not be required or recommended 3
 - Need more information 2
- Question 4: If use of estimated activity data profiles is allowed, required or recommended, should a hierarchy of types of estimated activity data profiles be established to guide their use?
 - Yes 29
 - No 1
 - NA, use of estimated activity data profiles should not be allowed 1
 - Need more information 2

Outcomes (e.g. recommendations, options)

N/A

4. Market-based issue 4: Treatment of residual mix in market-based method

Summary of discussion

- The Secretariat presented issue 4 on treatment of residual mix, and recapped prior conversations on the topic, including the order of operations for applying standard supply service (SSS) fossil and carbon-free electricity (CFE), voluntary procurement, and the residual mix.
- The Secretariat presented 3 options for treatment of residual mix:
 - Option A: SSS > voluntary procurement > residual mix > grid average fossil only
 - Option B: SSS > voluntary procurement > fossil only residual mix > grid average fossil emission factor
 - Option C: SSS > voluntary procurement > residual mix (SSS CFE removed) > residual mix (SSS CFE included) > grid-average emission factor
- Members asked whether Option C creates double-counting. The proposal author noted that as described in the slide, it does, but that the proposal was different than what has been presented on the slide.
- One member noted that the uniform application of a residual mix globally is not possible currently due to differences in data quality and attribute tracking.
- Members discussed the three options presented:
 - One member noted that Option A is the most accurate, but that Option B may drive the most clean energy procurement.
 - Members discussed whether accuracy or ambitious climate action is more relevant to prioritize.
 - One member noted that this issue represents a core question about how to claim renewable energy, and whether the presence of EACs is required to do so.
- The Secretariat polled the working group on four questions related the treatment of residual mixes:
 - Question 5: Should residual mix factors used in MBM accounting explicitly exclude any carbon-free electricity that is allocated under standard supply service or claimed through voluntary procurement?
 - Yes Residual mix should include only electricity not allocated through SSS or claimed through voluntary procurement. - 27
 - No Residual mix may still include publicly shared or compliance-based generation not directly claimed through certificates. - 3
 - Needs more information 0
 - Question 6: Which overall structure should be adopted for residual mix emission factors in the updated Scope 2 Guidance?





- Single updated RMF definition Maintain current residual mix approach but clearly remove SSS and voluntary claims. - 1
- Fossil-only RMF Use a fossil-only emission factor for any unmatched electricity, assuming all CFE is allocated elsewhere. - 15
- RMF hierarchy Define and apply a tiered structure (e.g., Type A, Type B, grid average) based on data and regulatory context. - 10
- Other (please specify in chat). 3
- Needs more information 2
- Question 7: If a residual mix (updated or fossil-only) is not available in a given region, which fallback approach should be used?
 - Fossil-only grid-average EF (e.g., eGRID non-baseload, Defra fossil average, IEA fossil). 22
 - Default fossil EF from IPCC or government sources (e.g., coal plant EF). 16
 - Location-based grid-average EF. 8
 - Leave to reporter discretion with required disclosure. 0
 - Needs more information.- 2
- Question 8: Should residual mix factors (RMFs) be required to align with the Scope 2 Quality Criteria (e.g., deliverability, time matching)?
 - Yes RMFs should meet the same Quality Criteria as MBM certificate-based claims, including considerations like deliverability and time matching. - 11
 - No RMFs may be calculated based on available data, even if they do not fully align with MBM Quality Criteria. - 9
 - Needs more information. 8

Outcomes (e.g. recommendations, options)

N/A

5. Next Steps

Summary of discussion

- The Secretariat recapped next steps, which include:
 - Next meeting is April 16th
 - $_{\odot}$ Location-based TWG review period of draft final location-based recommendations will run through May 2^{nd}
 - Market-based revisions due April 11th

Summary of written submissions received prior to meeting

N/A