SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

SBTi Corporate Net-Zero Standard Expert Working Group (EWG) Meeting Minutes

Session V: Joint BVCM and CDR EWG session

15 July 2025

09:00 – 11:00 BST [Session A]

15.00 – 17.00 BST [Session B]

Virtual

DISCLAIMER

The meeting notes provided herein are intended to capture the discussions, decisions, and actions taken during the meeting to the best of the note-taker's ability. While efforts have been made to accurately represent the proceedings, it is essential to acknowledge that these minutes are a summary and may not capture every detail or nuance of the discussions held.

While every effort has been made to respect the confidentiality of sensitive information, please be aware that the meeting minutes may contain references to discussions or materials considered confidential or privileged. The unauthorized disclosure, distribution, or use of such information is strictly prohibited. If you believe any sensitive information has been improperly disclosed, please contact the SBTi.

Meeting minutes are subject to revision and amendment. The content may be updated or modified based on corrections, additions, or clarifications deemed necessary by the SBTi.

Session decisions which are deemed interim, unresolved items or confidential will not be shared publicly to protect the confidentiality of the Standard before publication and to prevent sending premature signals to the market.

As per clause 6 in the EWG Terms of Reference, members serve on the EWG in their individual capacity as technical experts.

Note on the format of these minutes: This meeting was held twice to accommodate the time zones of the Expert Working Group (EWG) members. The content presented by the SBTi team was consistent across both sessions, and participants in each meeting engaged with the same interactive exercises. To avoid duplication, these meeting minutes present the shared content (presentations and framing) once, followed by separate summaries of participant discussions from the Session A and Session B meetings.

Meeting participants

As per clause 6 in the EWG Terms of Reference, members serve on the EWG in their individual capacity as technical experts.

Expert Working Group Members present:

Option A

1. Daniel Schneiders, Bayer AG
2. Elijah Innes-Wimsatt, Conservation International
3. Eva Masa Pinto, Cemex
4. Eve Tamme, Climate Principles
5. Gilles Dufrasne, European Commission
6. Hilde Stroot, Oxfam
7. Lene Petersen, WWF
8. Louis Uzor, TBC (formerly Climeworks)
9. Mai Bui, Supercritical
10. Nicolas Kreibich, Wuppertal Institute
11. Omonigho Erigha, Persistent Energy Capital
12. Robert Höglund, Marginal Carbon AB
13. Shantanu Agarwal, Mati Carbon PBC
14. Silke Mooldijk, NewClimate Institute
15. Sunita Purushottam, Mahindra Lifespaces
16. Thea Lyngseth, ECOS – Environmental Coalition on Standards
17. Tim Clairs, Forest Integrity

Option B

1. Abigail Paris, As You Sow
2. Aisha Rodriguez, VCMI
3. Cindy Chiang, Netflix
4. Fabiola De Simone, Carbon Market Watch
5. Fiona Perera, Gold Standard
6. giulia carbone, WBCSD
7. Hannah Hunt, Heineken
8. Injy Johnstone, University of Oxford
9. John Dulac, Saint-Gobain
10. Morten Rossé, Lombard Odier Asset Managers
11. Nathan Truitt, American Forest Foundation
12. Noel Gurwick, University of Maryland
13. Ryan Maloney, Apple
14. Sarita Severien, Suzano
15. Sifa Kinoti, Octavia Carbon
16. Thuy Phung, PepsiCo
17. Toby Bryce, Yale Center for Natural Carbon Captur

SBTi members present:

Option A and Option B

1. Alice Farrelly (BVCM SME, SBTi)
2. Scarlett Benson (BVCM EWG Lead, SBTi)
3. Piera Patrizio (Head of Research, SBTi)
4. Humphrey Adun (SME Research, SBTi)
5. Emma Watson (Head of Corporate Standards, SBTi

Technical Council Observers:

Option A and Option B

1. Doreen Stabinsky

Meeting agenda

Welcome & Housekeeping	10 min
Context Setting: Ongoing and Residual Emissions in V2.0	10 min
Pre-read Recap: Residual Emissions & Removal Targets	20 min
Pre-read Recap: Ongoing Emissions & BVCM	20 min
Exploring Integrated Recognition Frameworks	90 min

Note: Please refer to the meeting slide deck for accompanying material

1. Welcome & Introductions

The SBTi Team opened both sessions with informal greetings, reminders on confidentiality and antitrust guidance, and housekeeping. No new conflicts of interest were raised.

2. Meeting Objectives

The session aimed to:

- Clarify the purpose and distinct roles of the frameworks for addressing ongoing and residual emissions.
- Recap insights and refinements from the prior EWG discussions on removals and BVCM.

- Discuss overlaps between the frameworks and refine the design options for incentivizing appropriate mitigation actions.

3. Agenda Overview

1. Welcome & Housekeeping
2. Context Setting: Ongoing and Residual Emissions in V2.0
3. Pre-read Recap: Residual Emissions & Removal Targets
4. Pre-read Recap: Ongoing Emissions & BVCM
5. Exploring Integrated Recognition Frameworks

4. Topic 1: Context Setting regarding Ongoing and Residual Emissions in V2.0

- The SBTi team introduced the session's framing by describing the three related targets within CNZS V2.0:
    1. Ongoing Emissions Responsibility: Encourages companies to take action today to reduce temperature overshoot by taking responsibility for the emissions they continue to emit into the atmosphere today that contribute to climate change.
    2. Interim Removal Targets: Aim to prepare the market and system for future durable removals to avoid supply shocks at the net-zero date.
    3. Neutralization at Net-Zero: A hard requirement to ensure remaining emissions are removed to validate the net-zero claim.
- Both interim removal targets and neutralization at net-zero address residual emissions, while ongoing emissions responsibility deals with the emissions a company continues to emit on its journey to its net-zero year.
- The team explained that these targets differ in objective, timeframe, logics of responsibility and contribution to system change, and that understanding their interactions is key to building robust frameworks.

5. Topic 2: Residual Emissions & Removal Targets Pre-read Recap

The SBTi team recapped the discussions from the CDR EWG, highlighting the three consultation topics within the CNZS draft:

- Whether and how interim removal targets are required
- What minimum durability thresholds should apply
- What quality and integrity standards are needed for removal credits

They presented three options for addressing residual emissions:

- Option 1: Mandatory removal targets using removals only
- Option 2: Recognition-based targets using removals only

- Option 3: Mandatory targets using either removals or additional abatement

The team summarized feedback from EWGs and public consultations:

- Option 1 scored highest for ambition and scientific alignment but faced challenges around feasibility and cost – especially for hard-to-abate sectors.
- Option 3 received support for flexibility and accounting for technological uncertainty but was more difficult to communicate.
- Option 2 scored lowest across most principles and stakeholder groups.

They presented a cost assessment comparing “like-for-like” durability with a “gradual transition” approach:

- The former was significantly more expensive (35% higher), particularly for hard-to-abate sectors.
- A cumulative scaling approach was seen as more affordable than linear scaling.
- An SBTi Corporate survey also revealed 56% of respondent companies with targets validated by the SBTi self reported to voluntarily purchase carbon credits, and 50% of these credits are removals, but these tend to be from sectors with lower residual emissions.

The SBTi team concluded by outlining a possible phased recognition framework – initially optional, later mandatory – to balance climate goals with feasibility and avoid market disruption.

Q&A session

[Option A]

- An EWG member asked if the cumulative scaling approach means that over the pre-2050 period a company would be required to deliver the same amount of removals as in the net-zero target year. The SBTi team confirmed this was correct and acknowledged concerns raised about this approach and that the linear scaling alternative had been proposed as an alternative, but that costs under this linear scaling approach are significantly higher.
- An EWG member asked whether learnings from the current optional interim removals (in CNZS V1) recommendation were being applied. The SBTi team noted that SBTI does not validate companies against the recommendation around neutralization milestones in V1.2 and therefore there is a lack of visibility on whether companies are adopting this recommendation or not. A 2023 survey on the topic of BVCM suggested that companies would be incentivized to deliver BVCM if SBTi were to validate actions and enable claims. This insight could be transferable to removal targets, where recognition could drive ambition.
- An EWG member proposed sector-specific ambition standards due to differing financial capacities. The SBTi team explained that current frameworks already reflect sectoral differences in residuals and that ability to pay adjustments had been previously discussed in the BVCM EWG; the idea was not widely supported due to complexity and comparability challenges. The SBTi team noted the concept is

complex but could be reflected in dashboards or reporting, as opposed to requirements.
- An EWG member questioned how "hard to abate" is defined and who determines it. The SBTi team stated residual emissions are based on sectoral outputs in climate scenarios, but acknowledged future uncertainties and offered option 3 per box 1 in the draft Corporate Net-Zero Standard V2.0 (i.e. additional abatement) to provide flexibility.
- Another EWG member highlighted that the current SBTi framework does not recognize sectoral interactions, which may be relevant in addressing disparities in decarbonization costs. They proposed creating a mechanism to acknowledge linkages between sectors, particularly where more profitable sectors could accelerate decarbonization by purchasing low-carbon products from harder-to-abate sectors. For example, they noted that recognition of both an electricity provider deploying BECCS and its corporate customers purchasing the low-carbon electricity could incentivize greater investment in carbon dioxide removal by both parties.
- An EWG member asked a clarification question on whether option 3 (additional abatement) would count towards value chain abatement or beyond the value chain. SBTi clarified option 3 is additional scope 1 abatement. The EWG member noted that for certain sectors that are vertically integrated, like FLAG, limiting to scope 1 seems arbitrary. They question why the SBTi would choose to preclude additional scope 3 abatement. .

[Option B]

- A member raised concern that “like-for-like” rules could reduce demand for short-term removal credits. SBTi said thesuite of SBTi standardscould still support various removal types, including through BVCM and FLAG pathways.
- Another member warned overlapping frameworks (removals, BVCM)s) could become confusing and hard to compare, with unclear temporal implications.
- A member said that uncertainty over accounting rules is limiting investment in near-value chain nature projects; resources are focused on meeting 1.5°C within value chains.
- One member proposed creating a term for projected future residuals to unify communication and support integrated emissions planning.
- Clarification was requested on whether removal targets are cumulative or linear. SBTi said both pathways have been explored.
- The scope 1-only focus for interim removal targets was flagged as unfair across sectors, as some sectors have much higher scope 1 residual emissions compared to other sectors and therefore will face higher costs. Alternative approaches that might make it farrier and less dramatically challenging across sectors were encouraged - for example applying the removal target to the highest emissions scope.
- A member emphasized the need for clarity to avoid confusion amongst users. They suggest if the two frameworks are merged that needs to be made very clear, and if the frameworks are kept separate then there needs to be very distinct rules. As an example the member suggests the removal target could focus on high durability CDR, while BVCM could cover reduction and lower durability CDR.

- A question was raised on whether overachievement in interim removals could roll over into BVCM. SBTi responded that this still needs to be worked out as part of the target design.
- A member asked whether CDR discussions included a wide range of actions like in BVCM. SBTi clarified CDR discussions focused solely on removals and that we're looking to define minimum durability thresholds.
- A member questioned whether any proposed targets genuinely lead to 1.5°C, or if they risk enabling greenwashing. They suggested either updating the target or aligning actions to realistically meet it. SBTi acknowledged the dilemma, noting limitations of voluntary frameworks and the need to rethink claims around 1.5°C versus transition ambition.
- A final comment stressed the need for practical, simple standards that corporates can apply, or there is a risk of low adoption and declining engagement.

6. Topic 3: Ongoing Emissions & BVCM Pre-read Recap

The SBTi team explained the evolution of BVCM from a recommendation to a recognition-based approach in V2.0. Recognition would be voluntary, but validated against defined criteria, enabling companies to make claims on responsibility for ongoing emissions.

Four building blocks for this framework were outlined:

1. What Counts: Eligible activities, outcomes, and mechanisms
2. How Much: Volume or financial thresholds (e.g., % of emissions or carbon pricing)
3. Who is Eligible: Performance against abatement targets
4. What to Demonstrate: Reporting and evidence for claims

They introduced the concept of a science-based "Ongoing Emissions Responsibility Ratio", derived from IPCC C1 scenarios. This ratio (median 0.4) is grounded in a temperature overshoot based methodology and indicates that companies should be responsible for at least 0.4tCO_2 of mitigation per 1tCO_2 of ongoing emissions.

Implementing this ratio within the standard necessitates consideration regarding:

- Implications for what counts: Due to its temperature overshoot based methodology, the ratio inherently limits the scope of "what counts" is to focus exclusively on measurable, additional, timely, and durable mitigation outcomes that reduce the cumulative atmospheric concentration of greenhouse gases and excludes a broader set of transformational actions that may be indirect, enabling, or longer-term in nature – i.e. "BVCM Goal 2".
- Economic feasibility: Implementing a 0.4 responsibility ratio (i.e. 40% of ongoing emissions) has cost implications. Cost analysis undertaken by the SBTi team indicates that the estimated cost of implementing the ongoing emissions responsibility ratio is far greater than what companies spend on carbon credits today, suggesting that cost could be a barrier to uptake.

To reconcile this ratio with broader BVCM goals, and encourage broad uptake, the SBTi team proposed a tiered recognition framework, with:

- A requirement for all companies to report on whether or not they are taking responsibility for any of their ongoing emissions, and if not why not.
- A tiered framework for optional recognition of corporate responsibility for ongoing emissions, structured to drive broad participation while distinguishing leadership. While the specific details are being ironed out we anticipate this will comprise:
  - **Entry-Level recognition**: Designed as a deliberately low barrier to entry to enable wide uptake across sectors. The threshold (i.e., the minimum carbon price and emissions coverage) will be calibrated to be achievable for most companies. Recognition at this tier is contingent on third-party verified, ex-post mitigation outcomes. It offers a clear and credible on-ramp for participation, without requiring alignment with full scientific responsibility.
  - **An "open ladder of ambition**:" The framework accommodates a range of starting points and ambition levels. The space between tiers allows companies to scale their **contributions** in terms of emissions coverage, carbon pricing, and types of climate action. These differentiated contributions will be disclosed via a public dashboard, creating transparency without formal ratings. This design is intentional: by avoiding rigid scoring between tiers, the framework maintains flexibility while leveraging transparency to catalyze ambition. All reported contributions must still meet minimum quality and disclosure standards to be included on the dashboard. The theory of change is that the broader climate accountability ecosystem (investors, civil society, and customers) will reward ambition and drive a race to the top.
  - **Full Responsibility recognition**: A high-ambition benchmark aligned with climate science (linked to reducing temperature overshoot) and the polluter-pays principle. Companies must apply a science-based carbon price to [100%] of their ongoing emissions and use this budget to deliver ex-post and verified mitigation outcomes equivalent to at least 40% of emissions (on a ton-for-ton basis). Remaining funds may be used for additional mitigation or other high-quality climate contributions, such as adaptation or loss and damage finance.

Survey results from the BVCM EWG showed strong support for public disclosure and tiered recognition, but mixed views on specific thresholds and what should count across tiers.

Q&A session

[Option A]

- An EWG member asked whether the proposed ratio is the only option considered for BVCM, recalling earlier debates about "money-for-ton." The SBTi team said they're testing multiple approaches: the proposed Full Responsibility tier follows an TfT integrated in a MFT approach – similar to the Above and Beyond Report – requiring 100% of emissions to be covered with a science-based carbon price, and using the financial budget to fund ex-post mitigation equivalent to 40% of ongoing emissions, with the rest of the budget used to fund wider categories of climate action. Whereas the entry level proposed was 5% of scope 1 emissions at \$50/tCO_2e. This design aims to balance flexibility with transparency.

- An EWG member asked for clarity on the Ongoing Emissions Responsibility methodology. The SBTi team explained it's a global ratio of cumulative emissions to removals (2020–2100) based on the median ratio across a filtered set of IPCC AR6 C1 scenarios.
- Another EWG member warned the ratio may be misleading since it spans a century, while SBTi guidance focuses on pre-2050 action. The SBTi team responded that using a long timeframe - extending to 2100 - is necessary to reflect the role of removals in the latter half of the century, which is to counterbalance the accumulated emissions in the atmosphere prior to 2050.
- An EWG member asked whether the framework includes only removals or other actions too. The SBTi team confirmed reductions and removals are included to 2050; only removals are relevant post-2050 for ongoing emissions, as ongoing emissions after the net-zero date essentially become residual emissions.
- An EWG member asked whether all beyond value chain actions – like nature protection and CDR – are treated equally. The SBTi team said that if the Entry Level bar is set very low then it could be limited to ex-post mitigation and then above that Entry Level it would be more open. It was noted that this is still being debated with the BVCM EWG, particularly regards to eligibility of ex-ante investments which are important in particular for higher durability removals given lack of supply.

[Option B]

- An EWG member asked if the percentage referred to in the proposal (starting at 5%) was the same as the Ongoing Emissions Responsibility Ratio discussed earlier. SBTi confirmed this and clarified that the threshold at the Full Responsibility level of the proposal reflects the Ongoing Emissions Responsibility Ratio, whereas the 5% is not linked to the ratio; it is simply a threshold that was selected to illustrate a low-bar Entry Level.

7. Topic 4: Exploring Integrated Recognition Frameworks

The SBTi team presented five potential **design options** to manage the interaction between the removal and ongoing emissions responsibility recognition frameworks, and mitigate risks like double counting, confusion, and undermining the scaling of more durable removals:

1. Distinct targets with overlap – Removal activities could count under both, raising double-claiming risks.
2. Partially split targets – Only high-durability removals allowed for residuals; low-durability for ongoing emissions.
3. Fully split targets – No removals under ongoing emissions responsibility.
4. Merged single target – Combine both into one framework, with subcomponents.
5. Phased approach – Recognition now, mandatory durable removal targets in future (e.g., post-2035).

[Option A]

- An EWG member preferred separate targets saying that there is a clear distinction between addressing residual emissions post-2050 and the urgent need to address ongoing emissions today. The member said keeping separate targets can help emphasize the need to address ongoing emissions.
- Multiple EWG members expressed concern that the frameworks are becoming too complex, possibly deterring company participation. Simpler models, such as merging targets were suggested.
- An EWG member suggested that the targets could be merged, and transparency communication on the SBTi dashboard could indicate what actions had been taken e.g. removals or other kinds of BVCM.
- An EWG member expressed concern that limiting the removal targets to scope 1 puts the responsibility on companies that typically have lower ability to pay resulting in a standard that is infeasible for these companies, whilst also lowering the ambition for companies that have the ability to do more. The EWG member suggested a minimum requirement for removal targets across all scopes.
- Clarification was requested on whether actions such as investing in the establishment and scale up of CDR projects (not credit retirement) would count. The SBTi team indicated that these could be recognized via financial claims, separate from impact claims.
- An EWG member highlighted the need to address social factors, including just transition and historic North-South equity, in future iterations.
- An EWG member questioned whether companies that are willing to address their ongoing emissions should also be held responsible for scaling the CDR market. They suggested an approach for merging the frameworks could be to require 50% of the Ongoing Emissions Responsibility Ratio to be removals.
- An EWG member suggested that the SBTi could require companies to report on their carbon budget overshoot to highlight the difficulty companies will face when they have to pay to neutralize this overshoot. Another EWG member suggested this could be done at the sectoral-level or across the universe of SBTi companies to avoid pointing out individual companies.

The session concluded with strong interest in simplification and clear allocation rules, along with transparent communication and tiering to reflect ambition and feasibility. The SBTi team welcomed all feedback and indicated that a survey would be shared shortly to gather more structured input.

[Option B]

- EWG members discussed whether making removals targets mandatory would eliminate confusion between recognition and requirement pathways.
- Concerns raised about quality criteria and how setting high durability thresholds (e.g. 1,000 years) for removals could sideline valuable, less durable removal types and impact the scale up of these solutions if they only count under the BVCM recognition framework. The EWG member mentions that their conversations with external stakeholders indicate that companies do what is required of them, but will only do BVCM for recognition if they have the resources.
- In response to the point made on companies only addressing ongoing emissions for recognition if they have the resource to do so, the SBTi team highlighted the need to

articulate clearly why addressing ongoing emissions is helping companies to manage their transition risk rather than relying purely on claims-based motivations.

- An EWG member pointed out that the differing purposes for addressing residual emissions compared to addressing ongoing emissions would make it challenging to combine them into a single target. Noting that the former is about long-term financial preparedness for neutralization, while the latter is about immediate operational concerns. The EWG member supports identifying synergies between the two frameworks and understanding where the two actions can support each other.
- A member drew a parallel with the Paris Agreement, which emphasized collective action and allowed countries flexibility based on their unique circumstances, capacity and priorities - with integrity ensured through transparency. They noted that SBTi's proposed approach feels more rigid and overly complex by contrast. The member recommended a framework that allows companies similar flexibility to act according to their business context and requires transparency on actions taken. For example, some companies could address emissions through long-term R&D actions, while others might focus on supply chain resilience.
- In response, another EWG member mentions that companies want clarity on what counts and what does not count, but still appreciate some flexibility so that they can choose actions best suited to their business needs. They highlighted that ambiguity is considered risky by companies.
- The group discussed setting a "minimum viable" framework. They suggested three elements would be needed in an MVP framework (1) a minimum requirement - for example a minimum disclosure requirement on their plan for addressing ongoing emissions, or a minimum amount of required mitigation; (2) clear goal post e.g. 2050 with permanent storage and (3) safe guards and quality criteria, e.g. point to ICVCM.
- The SBTi team responded that a 2050 goal post with permanent storage is already consistent with V1.2 of the CNZS, and noted that companies still request further guidance on e.g. what is considered permanent
- Multiple members warned that too much complexity risks losing momentum, especially among early adopters or smaller companies.
- A shared theme was balancing simplicity and ambition: enough structure to be credible, but not so demanding it deters participation.
- Several members supported a tiered or laddered approach (e.g. entry-level + full responsibility) to allow for varied ambition while maintaining transparency.
- Another EWG member stressed the importance of flexible frameworks that let them optimize investments and respond to internal budget constraints.
- One participant noted that only required actions are realistically prioritized by companies – i.e., claims-based recognition alone does not drive consistent investment.
- Concerns were raised about unequal market signals: removals currently receive more emphasis in the CNZS and clearer recognition than emissions reductions beyond the value chain.
- Some called for clearer signals and minimum requirements for both removals and reductions to guide budgets and actions more predictably.
- There was general support for SBTi's proposed "entry-level requirement + open ambition ladder + full responsibility tier" model – though members acknowledged more work is needed on the details (e.g. required percentages, what counts).

- SBTi emphasized the challenge of setting ambitious yet feasible expectations that won't cause companies to disengage altogether.

6. Actions & Next Steps

- SBTi team will follow up in a week or so with a survey.
- Members were asked to respond to the invite for the in-person workshops in September.