



SBTi Corporate Net Zero Standard

Second public consultation ECOS responses on Environmental Attribute Certificates and Chain of Custody

Brussels, 11 December 2025

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Science Based Targets initiative (SBTi)

The [Science Based Targets Initiative](#) is the world's leading organisation developing standards to help companies set climate targets in line with the objectives of Paris Agreement. Over 2,000 organisations globally have committed to set net zero targets and over 9,000 already have their targets validated.

Revision of the Corporate Net Zero Standard

The Corporate Net Zero Standard (CNZS) is a sector-agnostic standard providing guidance on how organisations can reach net zero, meaning deep emission reductions (through near- and long-term targets) and neutralisation of the remaining emissions. The CNZS also provides guidance on Beyond Value Chain mitigation action.

For about a year, the CNZS has been under major revision. SBTi has published the [second draft](#) that is [open for public consultation](#) until 12 December 2025.

This is happening as the [International Organization for Standardisation \(ISO\)](#) is [developing its own standard](#) for defining how organisations are net zero aligned. Both standards aim to be finalised in 2026. Moreover, the GHG Protocol and ISO have [established a partnership](#) to merge three key greenhouse gas (GHG) accounting standards; corporate, products, and projects. These standards are the backbone of both SBTi and ISO's net zero standards and are to be finalised end of 2027.

Focus on Environmental Attribute Certificates (EACs) and Chain of Custody (CoC)

Commodity Environmental Attribute Certificates (EACs) have entered GHG accounting and net zero space quickly. The original purpose of EACs was to prove that a specific characteristic is in a product. For example, recycled content or renewable electricity; or show the commodity itself is environmentally better than its conventional counterpart, for example, organic versus conventional textiles. Tracking and showing the existence of these characteristics and the commodities they relate to along the value chain is based on the Chain of Custody (CoC) model used. According to the international standard ISO 22095, there are five different CoC models: identity, preserved, segregated, controlled blending, Mass Balance – 2 different methods, and Book and Claim.

Depending on which CoC is used, it will determine whether the specified characteristics are physically present in the commodity or not, and therefore, how much the claim associated with the commodity reflects its true content/environmental impact. For example, with Credit Mass Balance or Book and Claim, the specific characteristics are disconnected from the actual product and/or value chain.

The use of EACs has emerged in the GHG accounting and net zero space, as a way for organisations to establish a link between specific activities and to account for specific environmental characteristics within their value chains. Knowing the CoC method that underpins the EAC is crucial. When introducing commodity EACs into a net zero pathway, it requires meticulous and accurate guidance. Learn more in our [factsheet](#) on EACs.

ECOS is concerned with the current lack of guardrails, including clarity on the CoC models used and permitting physically disconnected (unbundled) EACs where it is inappropriate.

Key messages

- **Make the distinction between unbundled EACs and bundled EACs more clearly.** The difference in quality, traceability, credibility, reliability, and accuracy between and within unbundled and bundled commodity EACs is significant. If SBTi includes the use of EACs, it has a responsibility to provide proper guidance.
- Bundled EACs are underpinned by CoC models that physically connected to the characteristic. These models are identity preserved, segregated and controlled blending. This means, for example, an organisation that receives EACs alongside the product from its upstream supplier using identity preserved, segregated or controlled blending CoC models (bundled) can use this EAC to show emission reductions in its value chain and product.
- On the other hand, an organisation that is purchasing an EAC based on certain **unbundled EACs** cannot do this. Unbundled EACs are underpinned by the following CoC models: Rolling Average Mass Balance, Credit Mass Balance Method and Book and Claim.
- **SBTi needs to make the distinction between the Mass Balance methods.** They need to be clearly distinguished because the physical connection and credibility are very different between the two. Only Rolling Average Mass Balance (with strict rules) is appropriate for Scope targets because there is a physical connection. See our other [factsheet](#) for a clear example on the distinction and consequences of these two Mass Balance methods.
- We understand that it is not always possible for a company to do a Segregation or Identity preserved CoC models and instead use Rolling Average Mass Balance. However, SBTi should encourage companies to move away from Mass Balance towards better quality CoC models.
- If an EAC is based on Rolling Average Mass Balance, SBTi needs to provide a minimum set of requirements. We recommend SBTi to look at the European Commission's Technical Advisory Board for the Product Environmental Footprint (PEF) Working Document on 'Mass Balance approaches in the Environmental Footprint': <https://ec.europa.eu/transparency/expert-groups-register/core/api/front/document/122505/download>

Justification for the use of unbundled EACs

The justification for using unbundled EACs when low carbon alternatives are not available (question 60, CNZS-C20), ECOS strongly encourages SBTi to provide strict limitation to the use of unbundled EACs with Credit Mass Balance and Book and Claim CoC models.

There should be a clearer distinction between when a low carbon product/ characteristic that is not yet available to track in the value chain and not yet available in the value chain. An organization should not be able to purchase an unbundled EAC with a certain characteristic that is much lower than average, for example, the purchase of unbundled low carbon cement EACs, when the organization knows that it does not have any low carbon cement in its supply chain.

The justification for when low carbon alternatives are not available needs to be very clear. Low carbon cement and steel are often commodities that are referred to as not yet available. In the case of Europe, low carbon steel is widely available, with the use of recycled steel. There is currently a big hype towards hydrogen-based steel, however, this is still nascent and may never actually be viable at scale. Instead, an already existing solution is the move towards scrap-based steel and switching to electric arc furnaces. SBTi should provide clarity on what low carbon solutions are already available, aligning with the sector specific standards. An organization should not be able to justify purchasing unbundled low carbon steel certificates instead of purchasing physical low carbon steel to reach its volume alignment target because it is waiting for hydrogen steel, when recycled steel already exists in the region it operates in.

Public consultation

Scope 3 target setting

57. The Standard proposes the option of addressing emissions at the activity pool level for hard-to-trace emission sources in the value chain. How important do you believe the following guardrails are for addressing emissions at the activity pool level in a credible manner?

- a. Demonstration that traceability at the activity level cannot be established, in line with the Standard's conditions. **Very important**
- b. Accounting and reporting rules (e.g., to ensure companies don't claim emission reductions in their inventories when there's no clear physical or accounting link, in line with the GHG Protocol guidance). **Very important**
- c. Differentiated claims (e.g., prohibiting claims that suggest direct purchase or value chain decarbonization when the action only involves the purchase of an environmental attribute certificate, rather than the underlying physical commodity). **Very important**
- d. Quality criteria to ensure that interventions deliver a comparable transformation and climate impact to direct value-chain mitigation **Very important**

58. To what extent do you support or oppose the proposed quality criteria for activity pools set out in Box 3.

- a. Functional equivalence: Goods/services are substitutable and provide the same utility. **Strongly support**
- b. Physical connectivity: Demonstrable probability that purchases/services are physically served by the pool. **Strongly support**
- c. Geographic and operational clarity: Pools represent real sourcing regions, logistics routes, factory clusters or grids and avoid overly broad or overlapping pools. Boundaries must be disclosed. **Strongly support**
- d. Temporal relevance: Emissions factors (EFs) quantifying pool performance align to the reporting year. Where unavailable, use data ≤3 years old data with justification and update plans. Short-lived interventions (e.g., fuels) must align with the same reporting period. **Strongly support**

e. Emissions factors: Use the most representative, minimally disaggregated EF available, together with justification. **Strongly support**

f. Double-counting safeguards: Apply residual averages for non-participating actors and consider independent registries (or equivalent controls) to manage claims where multiple buyers share a pool. **Somewhat support**

g. Transparency & MRV: Public disclosure of pool boundaries, EF methodology, chain of custody models, allocation rules and reconciliation periods. Third-party verification is required for pooled claims. **Strongly support**

59. Are there any additional options for addressing emissions at the activity pool level that the SBTi should consider, and how could performance against these options be credibly demonstrated?

a. Functional equivalence: It is important to be as accurate with the functional equivalent, particularly when EACs are linked to multi-output processes (for instance in the context of chemical recycling, the pyrolysis oil will end up in a naphtha cracker producing many outputs, ranging from materials to fuels). In these instances, to avoid the overallocation of recycled content to materials instead of fuels, it is important to make sure that the characteristics are allocated proportionally to the various outputs (so if the output products from a naphtha cracker are 30% ethylene, 15% propylene, 5% butadiene, 10% BTX, 15% methane, and 25% pygas), the EACs related to the use of recycled plastics, should be proportionally attributed to these different output proportions (over the total EAC number, 30% can be allocated to ethylene production, 15% to propylene, etc.).

b. Physical connectivity: Remove the word “probability” in as it should be demonstrable that it comes from the relevant activity pool, this would make it in line with other requirements as geographic and operational clarity, emission factors and transparency and MRV.

e. Emission factors: There should be a clear distinction here between EFs that are representative enough for a specific material/product and when it is representative enough to be only for an activity pool.

f. Double counting safeguards: We strongly support provided that SBTi acknowledges that this does not entirely cancel the risk of double counting (which continues to exist as long

as companies can choose between market based and location-based accounting).

g. Transparency & MRV: it is not enough that a company discloses the Chain of Custody model used, there should be clear restrictions on what CoC models can be used to make sure the GHG accounting is the most representative and the quality criteria are maintained.

Additional note: To make the use of activity pools more credible, SBTi certified companies should be required to prove they are also directly interacting with their own suppliers and their value chain actors despite their potential reliance on EACs to leverage their procurement power.

60. The Standard proposes interventions at the sector level (e.g., unbundled procurement of commodity or energy EACs from sources that cannot be traced to the company's value chain) as an option when a low-carbon alternative is not yet available in the value-chain of the company. How important do you believe the following guardrails are for addressing emissions at the sector level?

a. Justification for addressing emissions at the sector level. **Very important**

b. Eligibility criteria defining which sectors and activities qualify as hard-to-abate. **Very important**

c. Limits on the portion of emissions addressed through sector-level interventions. **Very important**

d. Accounting and reporting guardrails (e.g., not deducting mitigation outcomes from sector-level interventions from the company's GHG emissions inventory). **Very important**

e. Differentiated claims (e.g., disallowing claims that imply direct value-chain mitigation, such as "low-carbon procurement"). **Very important**

f. Quality criteria to ensure that interventions contribute to sectoral transformation consistent with 1.5°C pathways. **Very important**

Annex E: Integrity principles for substantiating progress on Scope 1, 2, and 3 targets using EACs

82. To what extent do you agree or disagree that the integrity principles for energy and commodity environmental attribute certificates (EACs) presented in Annex E provide sufficient guardrails to ensure the certificates meaningfully convey the desired attribute and are transacted in a manner that ensures robust and credible demonstration of performance against targets:

For Scope 1

Strongly agree;
Somewhat agree;
Neutral;
Somewhat disagree;
Strongly disagree

For Scope 2

Strongly agree;
Somewhat agree;
Neutral;
Somewhat disagree;
Strongly disagree

For Scope 3

Strongly agree;
Somewhat agree;
Neutral;
Somewhat disagree;
Strongly disagree

83. Are there any key gaps or missing principles that could strengthen the proposed integrity principles for energy and commodity EACs?

Certain type of unbundled commodity EACs should not be permitted for Scope 1. To apply unbundled EACs in Scope 1 does not make sense, it is counterintuitive to what SBTi aims to do. Companies upstream, in particular hard to abate sectors often have very high Scope 1 emissions, such as cement and steel. For companies downstream to have access to low carbon products and/or materials, companies upstream need to change their production methods. By permitting all types of unbundled EACs in Scope 1, SBTi would permit a carbon intensive production company purchase an EAC from a low carbon competitor and apply it to its own material. This is not only misleading but removes the incentive for the company to actually make changes.

Stricter CoC requirements when using EACs. SBTi does not distinguish between rolling average and Credit Mass Balance. This is

a key distinction that needs to be clarified because the physical connection and credibility are very different between the two. See ECOS [factsheet](#) comparing the two Mass Balance methods.

ECOS also questions what entails low carbon solution at scale. In the current draft, an organization can use unbundled certificates if it justifies that the low-carbon products are not yet commercially available at scale (C20.5). ECOS would strongly encourage SBTi to provide more clarity here as the vagueness may disincentivise the direct investment in low carbon solutions and instead purchase unbundled EACs. Furthermore, SBTi should explain what is considered a low carbon alternative in each relevant sector.

84. For companies that purchase energy and commodity environmental attribute certificates (EACs) or stakeholders that have awareness or experience of EAC markets, to what extent do you consider the principles outlined in Annex E to be reasonable and practicable for guiding the credible use of EACs toward achievement of science-based targets?

Note: Please do not consider carbon credits within the context of this question. (Select one)

a. Very reasonable – The principles reflect current market realities, align with established best practices, and can be readily implemented by companies.

b. Reasonable – The principles are broadly appropriate and feasible, though some clarification or minor adjustments may be needed.

c. Somewhat reasonable – The principles are directionally appropriate but may be difficult to apply in practice or require further technical development.

d. Not reasonable – The principles are impractical, inconsistent with how EAC markets currently function, or could lead to unintended consequences.

e. Unsure / Not applicable – I do not have sufficient information or experience to assess the reasonableness of the principles.

85. For “somewhat reasonable” or “not reasonable”, please explain

- Double counting risks in weak systems (e.g. electricity claimed twice)
- Lack of additionality
- Potential continued investment through EACs on technology lock-in of fossil-based production
- No scale-up of real clean supply
- Disconnect between demand & supply
- Theoretical decarbonisation (on paper only)
- Less pressure on suppliers to change operations
- Abuse of CoC methods to make misleading claims
- It does not provide clear distinction between organization's that achieve volume alignment target through direct physical purchase and those organization's that just purchase unbundled EACs