EXPONENTIAL ROADMAP INITIATIVE

NET ZERO

UNIVERSITY OF OXFORD

Product Criteria

Climate Solutions Framework

Criteria for qualifying products as climate solutions

Version 2.0 | September 2026

The Climate Solutions Framework was developed by the Exponential Roadmap Initiative in collaboration with Oxford Net Zero and experts from business, NGOs and finance. First published in November 2024, the framework was updated in September 2026 and is now structured around two complementary sets of criteria: the Product Criteria, for qualifying products as climate solutions, and the Company Criteria, for qualifying climate solution companies.

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1. Introduction

Climate solutions that replace high-emitting activities with low- or zero-emission alternatives are essential for decarbonising the global economy. Many already exist, but need to scale rapidly to phase out fossil fuels and other high-emitting activities at the pace required.

Scaling these solutions requires capital, market demand and supportive policy. Yet investors, customers and policymakers lack credible signals for directing finance, procurement and other incentives towards their growth. Existing taxonomies identify categories of climate solutions, but do not qualify specific products or companies.

Companies scaling these solutions can also face barriers rather than incentives, as existing climate frameworks largely focus on reducing company emissions rather than recognising wider system impact.

The **Climate Solutions Framework (CSF v2.0)** addresses these gaps by establishing criteria based on science for qualifying climate solution products and companies. It aims to increase their recognition, supporting investment, procurement and wider corporate transformation. The framework consists of two complementary sets of criteria:

- **Product Criteria** for qualifying specific products as climate solutions.
- **Company Criteria** for qualifying climate solution companies.

Together, they provide a consistent and credible basis for identifying products and companies that can contribute significantly to the transition to a net-zero economy. They are designed to enable credible recognition and avoid greenwashing, while remaining practical across sectors and solution types.

2. Purpose of the Product Criteria

The Product Criteria establish requirements for qualifying specific products as climate solutions. For the purpose of these criteria, a “product” includes goods and services, consistent with the definition of “product” in ISO 14067:2018[1]. The criteria become progressively more stringent over time, reflecting the decarbonisation of relevant systems and value chains.

[1] ISO 14067:2018 Carbon Footprints of Products 3.1.3.1 defines “product” as “goods or services.”

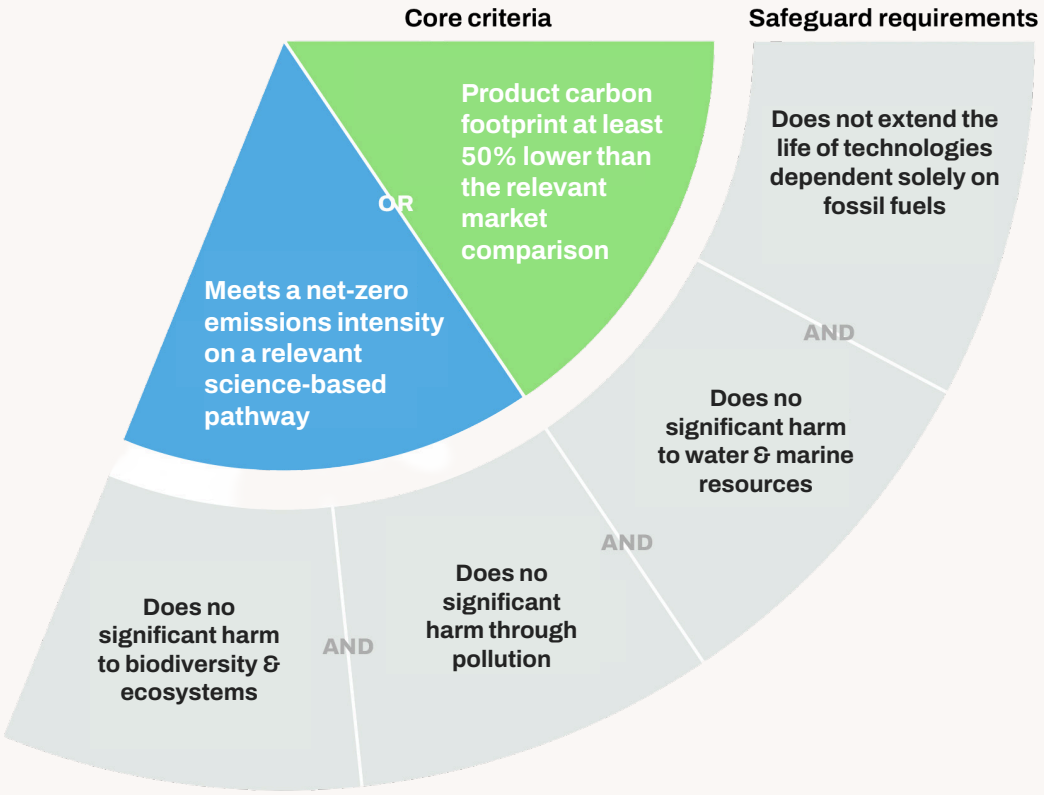
3. Definition of a climate solution

For the purpose of these criteria, a climate solution is a product that contributes to emissions reductions at a global level by delivering significantly lower emissions per functional unit[2] than current market alternatives. Climate solutions are compatible with the global 1.5°C ambition[3] and support the transition towards a net-zero economy by replacing higher-emitting products.

Different approaches exist for defining and identifying climate solutions, reflecting differences in purpose, scope and level of assessment. For the purpose of the Product Criteria, climate solutions are assessed at the level of specific products against the criteria set out below.

4. Criteria for qualifying a product as a climate solution

To qualify as a climate solution under the Product Criteria, a product shall meet one core qualification criterion and all applicable data and safeguard requirements.



[2] ISO 14040:2006, Environmental management - Life cycle assessment - Principles and framework. "Functional unit" is defined as the quantified performance of a product system for use as a reference unit.

[3] Exponential Business Playbook 5.1: 2026, p. 5. The "1.5°C ambition" is defined as keeping warming as close to 1.5°C as possible, limiting any overshoot, and returning to the safe operating space for humanity.

4.1 Core qualification criteria

Market-comparison criterion: Demonstrate a product carbon footprint[4] per functional unit that is at least 50% lower than the relevant market-weighted average footprint of the products currently being replaced.

Science-based pathway criterion: Meet or exceed an emissions intensity per functional unit for a net-zero world on a relevant science-based decarbonisation pathway.

4.2 Data requirements

In addition to meeting one core qualification criterion, products shall meet the following data requirements, as applicable.

Requirements for all criteria:

Life-cycle assessment - Product carbon footprints shall cover the full life cycle of the product and include all material value-chain emissions.

Methodological integrity - Product carbon footprints shall be quantified using recognised standards and best-practice methodologies, such as ISO 14067:2018 or equivalent.

Public disclosure - The product carbon footprint used for qualification and the reference standard or methodology used for its quantification shall be publicly disclosed.

Carbon credits and avoided emissions - Avoided emissions or carbon credits outside the product system boundary shall not be used to reduce the product carbon footprint or meet the qualification criteria.

Climate solution revenue disclosure - The share of total company revenue derived from qualifying climate solutions shall be disclosed as part of the qualification, using the following ranges: <5%; 5–<20%; 20–<50%; 50–<90%; ≥90%.

Companies deriving at least 90% of their revenue from qualifying climate solutions may qualify under the Company Criteria, provided they also meet the criteria for company-level climate targets and transition plans and wider sector transformation.

[4] ISO 14067:2018, Greenhouse gases - Carbon footprint of products - Requirements and guidelines for quantification.

Additional requirements for the market-comparison criterion:

Market comparison -The comparison shall use the latest available data that is sufficiently recent and relevant to represent the products being replaced. A summary of the data and methodology used shall be publicly disclosed, with detailed calculations and supporting evidence made available to the assessor.

Additional requirements for the science-based pathway criterion:

Selection of decarbonisation pathway - The pathway shall be appropriate to the relevant sectoral and regional context, independently developed and reviewed, based on climate science and credible assumptions regarding technological feasibility, and aligned with a carbon budget consistent with the global 1.5°C ambition. The underlying assumptions, methodologies and calculations shall be publicly available.

Example: The SBTi Steel Science-Based Target-Setting Guidance provides 1.5°C-aligned emissions intensity pathways expressed in tonnes of CO_2e per tonne of steel, differentiated by scrap input.

Alternative requirements for zero carbon footprint products:

A product with a verified zero carbon footprint across its full life cycle may qualify as a climate solution without meeting one of the core qualification criteria, subject to all other applicable data and safeguard requirements.

The product carbon footprint shall include all material emissions and removals within the defined product system boundary. Any removals used to achieve a zero carbon footprint shall occur within, be attributable to, and be accounted for as part of the product system.

4.3 Safeguard requirements

In addition to meeting one core qualification criterion and all applicable data requirements, a qualifying product shall:

Not contribute to extending the life of technologies that depend solely on fossil fuels.

Do no significant harm in relation to:

- sustainable use and protection of water and marine resources; and
- pollution prevention and control; and
- protection and restoration of biodiversity and ecosystems.

The environmental safeguard requirements are based on the Do No Significant Harm principles of the EU Taxonomy and aim to prevent significant adverse environmental impacts from qualifying climate solutions.

5. Qualification validity

Qualification is time-limited to ensure that claims remain valid over time.

Qualification period:

- Initial qualifications shall be valid for up to 24 months from the date of approval, expiring on 31 December of the following calendar year.
- Requalifications shall be valid for two years.
- The applicable validity period shall be stated in the qualification statement.

Validity of product carbon footprint data:

For initial qualification and subsequent requalification, product carbon footprint data used for qualification may be up to four years old at the conclusion of the qualification, provided no material change has occurred since the carbon footprint quantification was made that could significantly affect the data or basis for qualification. Companies shall notify the assessor of any material changes that could significantly affect the product carbon footprint data or basis for qualification.

All other supporting evidence shall be the latest available and sufficiently recent and relevant for its intended purpose.

Requalification:

Continued qualification shall be subject to review of all relevant data and confirmation that all applicable criteria remain fulfilled.

Requalification shall not require a complete reassessment unless warranted by material changes affecting the basis for qualification.

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