



SCIENCE  
BASED  
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

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## SBTi Criteria and Recommendations

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DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

PARTNER ORGANIZATIONS



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## 1. Introduction

All of the criteria listed below must be met in order for target(s) to be recognized by the Science Based Targets initiative (SBTi). In addition, companies will follow the [GHG Protocol Corporate Standard, Scope 2 Guidance](#), and [Corporate Value Chain \(Scope 3\) Accounting and Reporting Standard](#). SBTi recommendations are important for transparency and best practices, but are not required.

The [Target Validation Protocol](#) describes the underlying principles, process, and criteria followed to assess targets and to determine conformance with the SBTi Criteria. The SBTi strongly recommends that companies review the Protocol before target development.

**While every effort is made to keep companies informed of the latest criteria and recommendations, the initiative reserves the right to make adjustments as needed to reflect the most recent emissions scenarios, partner organization policies, and greenhouse gas accounting practices.**

The initiative also reserves the right to withdraw the validation of an approved target if it becomes apparent that incorrect information was communicated during the target validation process that results in any of the criteria existing during the assessment not being met, or if requirements following the approval of the target are not respected (i.e. target progress reporting and recalculations).

Unless otherwise noted (including specific sections), all criteria apply to scopes 1, 2, and 3.

## 2. Effective Dates of Updated Criteria

This criteria version 4.1 will be in effect as of July 15<sup>th</sup>, 2020. All submissions received by the SBTi prior to July 15<sup>th</sup>, 2020 can be assessed against the criteria version 4.0 or 4.1. Criteria, recommendations and best practices denoted with an asterisk (\*) are refinements and additions to/clarifications of pre-existing criteria and recommendations.

## I. GHG Emissions Inventory and Target Boundary

### **Criteria**

C1 — Scopes: The targets must cover company-wide scope 1 and scope 2 emissions, as defined by the GHG Protocol Corporate Standard.

C2 — Significance thresholds: Companies may exclude up to 5% of scope 1 and scope 2 emissions combined in the boundary of the inventory and target.<sup>1</sup>

C3 — Greenhouse gases: The targets must cover all relevant GHGs as required per the GHG Protocol Corporate Standard.

\*C4 — Bioenergy accounting: Direct CO<sub>2</sub> emissions from the combustion of biofuels and/or biomass feedstocks, as well as sequestered carbon associated with such types of bioenergy feedstock<sup>2</sup>, must be included alongside the company's inventory and must be included in the target boundary when setting a science-based target and when reporting progress against that target. If biogenic carbon emissions from biofuels and/or biomass feedstocks are accounted for as neutral, the company must provide justification of the underlying assumptions. Companies must report emissions from N<sub>2</sub>O and CH<sub>4</sub> from bioenergy use under scope 1, 2, or 3, as required by the GHG Protocol, and must apply the same requirements on inventory inclusion and target boundary as for biogenic carbon.

\*C5 — Subsidiaries: It is recommended that companies submit targets only at the parent- or group-level, not the subsidiary level. Parent companies must include the emissions of all subsidiaries in their target submission, in accordance with boundary criteria above. In cases where both parent companies and subsidiaries submit targets<sup>3</sup>, the parent company's target must also include the emissions of the subsidiary if it falls within the parent company's emissions boundary given the chosen inventory consolidation approach.

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<sup>1</sup> Where a company's scope 1 or 2 emissions are deemed immaterial (i.e. under 5% of total combined scope 1 and 2 emissions), companies may set their SBT solely on the scope (either scope 1 or scope 2) that covers more than 95% of the total scope 1 and 2 emissions. The company must continue to report on both scopes and adjust their targets as needed, in accordance with the GHG Protocol's principle of completeness and as per C23 and R12.

<sup>2</sup> Non-bioenergy related biogenic emissions must be reported alongside the inventory and included in the target boundary. GHG removals that are not associated with bioenergy feedstock are currently not accepted to count as progress towards SBTs or to net emissions in the inventory.

<sup>3</sup> This criterion applies only to subsidiaries. Brands, licensees, and/or specific regions or business divisions of a company will not be accepted as separate targets unless they fall outside of a parent company's chosen consolidation approach.

## **Recommendations and additional guidance**

**\*R1 — Direct land use change emissions:** When relevant, companies are encouraged to account for direct land use change emissions and include them in their target boundary. Companies seeking to implement mitigation actions aimed at reducing land use change as part of their SBTs (e.g. through preventing deforestation from their supply chains) should include land use change emissions in their base-year inventory. Since methods to calculate land use change can differ widely, and there is currently no standardized method recognized under the GHG Protocol, companies should disclose the method used to calculate these impacts in their GHG inventory. Companies with indirect land use emissions can report these separately alongside the company’s inventory and similarly disclose the method used to calculate these impacts.

**\*R2 — Bioenergy accounting:** Assumptions of neutrality for bioenergy tend to overlook that there is a significant time-lag between the bio-based resource removal (wood/crop) and later regeneration. They also overlook possible differences in productivity among forest/crop systems used as bioenergy feedstock and the effects of long-term carbon storage in bio-based products and/or disposal. For these reasons, until a standardized method for bioenergy GHG accounting is developed under the GHG Protocol, the SBTi strongly recommends companies take into account the time of emissions (i.e. wood/crop removal) and sequestration (i.e. forest/crop regrowth) in their accounting methodologies.

## II. Timeframe

### **Criteria**

C6 — Base and target years: Targets must cover a minimum of 5 years and a maximum of 15 years from the date the target is submitted to the SBTi for an official validation.<sup>4</sup>

C7 — Progress to date: Targets that have already been achieved by the date they are submitted to the SBTi are not acceptable. The SBTi uses the year the target is submitted to the initiative (or the most recent completed GHG inventory) to assess forward-looking ambition. The most recent completed GHG inventory must not be earlier than two years prior to the year of submission.<sup>5</sup>

### **Recommendations and additional guidance**

R3 — Base year: The SBTi recommends choosing the most recent year for which data are available as the target base year.

R4 — Target year: Targets that cover more than 15 years from the date of submission are considered long-term targets. Companies are encouraged to develop such long-term targets up to 2050 in addition to mid-term targets required by C6. At a minimum, long-term targets must be consistent with the level of decarbonization required to keep global temperature increase to well-below 2°C compared to pre-industrial temperatures to be validated and recognized by the SBTi.

R5 — Consistency: It is recommended that companies use the same base and target years for all targets within the mid-term timeframe and all targets within the long-term timeframe.

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<sup>4</sup> For targets submitted for an official validation in the first half of 2020, the valid target years are 2024-2034 inclusive. For targets submitted in the second half of 2020, the valid target years are between 2025 and 2035 inclusive.

<sup>5</sup> For targets submitted for an official validation in 2020, the most recent inventory data submitted must be for 2018 at the earliest.

### III. Ambition

#### **Criteria**

C8 — Level of ambition: At a minimum, scope 1 and scope 2 targets must be consistent with the level of decarbonization required to keep global temperature increase to well-below 2°C compared to pre-industrial temperatures, though companies are encouraged to pursue greater efforts towards a 1.5°C trajectory. Both the target timeframe ambition (base year to target year) and the forward-looking ambition (most recent year to target year) must meet this ambition criteria.

C9 — Absolute vs. intensity: Intensity targets for scope 1 and scope 2 emissions are only eligible when they lead to absolute emission reduction targets in line with climate scenarios for keeping global warming to well-below 2°C or when they are modeled using an approved sector pathway applicable to companies' business activities.<sup>6</sup> Absolute reductions must be at least as ambitious as the minimum of the range of emissions scenarios consistent with the well-below 2°C goal, or aligned with the relevant sector reduction pathway within the Sectoral Decarbonization Approach (SDA).

C10 — Method validity: Targets must be modeled using the latest version of methods and tools approved by the initiative. Targets modelled using previous versions of the tools or methods can only be submitted to the SBTi for an official validation within 6 months of the publication of the revised method or the publication of relevant sector-specific tools.

\*C11 — Combined scope targets: Targets that combine scopes (e.g. 1+2 or 1+2+3) are permitted. When submitting combined targets, the scope 1+2 portion must be in line with at least a well-below 2°C scenario and the scope 3 portion of the target must meet the ambition requirements outlined in C20. For sectors where minimum target ambition is specified for companies' scope 3 activities, C21 supersedes C11.

C12 — Offsets: The use of offsets must not be counted as emissions reduction toward the progress of companies' science-based targets. The SBTi requires companies set targets based on emission reductions through direct action within their own operations and/or their value chains. Offsets are only considered to be an option for companies wanting to finance additional emission reductions beyond their science-based targets.

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<sup>6</sup> For a list of all approved methods and sector pathways, please consult the Chapter 3 of the [Science Based Target-Setting Manual](#)

C13 — Avoided emissions: Avoided emissions fall under a separate accounting system from corporate inventories and do not count toward science-based targets.

**Recommendations and additional guidance**

R6 — Choosing an approach: The SBTi recommends using the most ambitious decarbonization scenarios that lead to the earliest reductions and the least cumulative emissions.



## IV. Scope 2

### **Criteria**

C14 — Approaches: Companies shall disclose whether they are using a location- or market-based approach as per the GHG Protocol Scope 2 Guidance to calculate base year emissions and to track performance against a science-based target. It is recommended that companies report scope 2 emissions in both approaches. However, a single and consistent approach shall be used for setting and tracking progress toward an SBT (e.g. using location-based approach for both target setting and progress tracking).

\*C15 — Renewable electricity: Targets to actively source renewable electricity at a rate that is consistent with 1.5°C scenarios are an acceptable alternative to scope 2 emission reduction targets. The SBTi has identified 80% renewable electricity procurement by 2025 and 100% by 2030 as thresholds (portion of renewable electricity over total electricity use) for this approach in line with the recommendations of RE100. Companies that already source electricity at or above these thresholds shall maintain or increase their use of renewable electricity to qualify.

### **Recommendations and additional guidance**

R7 — Purchased heat and steam: For science-based target modeling purposes using the SDA, it is recommended that companies model purchased heat and steam related emissions as if they were part of their direct (i.e. scope 1) emissions.

R8 — Efficiency considerations for target modeling: If companies are using a method that does not already embed efficiency gains for the specific sector, market, and the decarbonization projected for the power sector based on well-below 2°C scenario, it is recommended that these factors be taken into account when modeling electricity-related scope 2 targets.

## V. Scope 3

### Criteria

C16 – Scope 3 screening: Companies must complete a scope 3 screening for all relevant and mandatory<sup>7</sup> scope 3 categories in order to determine their significance as per the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

C17 – Requirement to have a scope 3 target: If a company’s relevant and mandatory scope 3 emissions are 40% or more of total scope 1, 2, and 3 emissions, a scope 3 target is required. All companies involved in the sale or distribution of natural gas and/or other fossil fuel products shall set scope 3 targets for the use of sold products, irrespective of the share of these emissions compared to the total scope 1, 2, and 3 emissions of the company.

C18 – Boundary: Companies must set one or more emission reduction targets and/or supplier or customer engagement targets that collectively cover(s) at least 2/3 of total scope 3 mandatory emissions in conformance with the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

C19 – Timeframe: Emission reduction targets must cover a minimum of 5 years and a maximum of 15 years from the date the company’s target is submitted to the SBTi for an official validation. Companies are encouraged to develop such long-term targets up to 2050 in addition to the mid-term targets as required by C19. Long-term scope 3 targets must comply with C20 to be considered ambitious.

C20 – Level of ambition for scope 3 emissions reductions targets: Emission reduction targets (covering the entire value chain or individual scope 3 categories) are considered ambitious if they fulfill any of the following:

- Absolute: Absolute emission reduction targets that are consistent with the level of decarbonization required to keep global temperature increase to 2°C compared to pre-industrial temperatures. Absolute targets can be expressed in intensity terms based on units that are consistent and representative of companies’ activities.
- Economic intensity: Economic intensity targets that result in at least 7% year-on-year reduction of emissions per unit value added.<sup>8</sup>

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<sup>7</sup> For a definition of mandatory emissions for each scope 3 category, please see column “minimum boundary” in Table 5.4 (page 35) of the [Corporate Value Chain \(Scope 3\) Accounting and Reporting Standard](#). In this instance, the SBTi use of “mandatory” is synonymous with “minimum boundary” in Table 5.4.

<sup>8</sup> Per the Greenhouse gas emissions per unit of value added (GEVA) method as outlined in Chapter 3 of the [Science-Based Target Setting Manual](#).

- **Physical intensity:** Intensity reductions aligned with the relevant sector reduction pathway within the SDA; or targets that do not result in absolute emissions growth and lead to linear annual intensity improvements equivalent to 2%, at a minimum.

**C20.1 – Supplier or customer engagement targets:** Company targets to drive the adoption of science-based emission reduction targets by their suppliers and/or customers are considered acceptable when the following conditions are met:

- **Boundary:** Companies may set engagement targets around relevant and credible upstream or downstream categories.
- **Formulation:** Companies shall provide information in the target language on what percentage of emissions from relevant upstream and/or downstream categories is covered by the engagement target or, if that information is not available, what percentage of annual procurement spend is covered by the target.<sup>9</sup>
- **Timeframe:** Companies’ engagement targets must be fulfilled within a maximum of 5 years from the date the company’s target is submitted to the SBTi for an official validation.<sup>10</sup>
- **Level of ambition:** The company’s suppliers/customers shall have science-based emission reduction targets in line with SBTi resources.

**C20.2 – Fossil fuel sale, transmission and distribution:** Companies that sell, transmit, or distribute natural gas or other fossil fuel products shall set emission reduction scope 3 targets for the “Use of sold products” category that are at a minimum consistent with the level of decarbonization required to keep global temperature increase well-below 2°C compared to pre-industrial temperatures. Customer engagement targets as described in C20.1 are not applicable for this criterion.

### **Recommendations and additional guidance**

**R9 – Supplier engagement:** Companies should recommend that their suppliers use the SBTi guidance and tools available to set science-based targets. SBTi validation of supplier science-based targets is recommended but not required.

**R10 – Indirect use phase targets:** Targets to influence the behavior of end-users (e.g. education campaigns) or to drive the adoption of science-based targets on customers (e.g. customer engagement targets) to reduce indirect use-phase emissions are not required, but are encouraged when these emissions are significant. Companies may include indirect use-phase emissions in the scope 3 target boundary but these cannot count towards the ⅓ threshold defined in C18 for mandatory scope 3 emissions (i.e., these targets are above and beyond the company’s scope 3 targets). Refer to page 48 in

<sup>9</sup> If measuring coverage by spend, the company should provide an estimate of the emissions coverage associated with that spend for validation purposes to demonstrate that criterion C18 has been met, by the supplier or customer target alone or together with other scope 3 target(s).

<sup>10</sup> For targets submitted for an official validation in the first half of 2020, the valid target years are up to 2024 inclusive. For those submitted in the second half of 2020, valid target years are up to 2025 inclusive.

the GHG Protocol Scope 3 Standard for a list of products that generate direct and indirect use-phase emissions.



## VI. Sector-specific guidance

C21 — Requirements from sector-specific guidance: Companies must follow requirements for target setting and minimum ambition levels as indicated in relevant sector-specific methods and guidance at the latest, 6 months after the sector guidance publication. A list of the sector-specific guidance and requirements is available in the [Target Validation Protocol](#) and Chapter 3 of the [Target Setting Manual](#).

## VII. Reporting

### **Criteria**

C22 — Frequency: The company shall publicly report its company-wide GHG emissions inventory and progress against published targets on an annual basis.

### **Recommendation and additional guidance**

R11 — Where to disclose: There are no specific requirements regarding where the inventory should be disclosed, as long as it is publicly available. Recommendations include annual reports, sustainability reports, the company's website, and/or CDP's annual questionnaire.

## VIII. Recalculation and Target Validity

### **Criteria**

**C23 — Mandatory target recalculation:** To ensure consistency with the most recent climate science and best practices, targets must be reviewed, and if necessary, recalculated and revalidated, at a minimum every 5 years. The latest year in which companies with already approved targets must revalidate is 2025. Companies with an approved target that requires recalculation must follow the most recent applicable criteria at the time of resubmission.

**C24 — Target validity:** Companies with approved targets must announce their target publicly on the SBTi website within 6 months of the approval date. Targets unannounced after 6 months must go through the approval process again, unless a different publication time frame has been agreed with the SBTi.

### **Recommendation and additional guidance**

**R12 — Triggered target recalculation:** Targets should be recalculated, as needed, to reflect significant changes that could compromise relevance and consistency of the existing target. The following changes should trigger a target recalculation:

- Scope 3 emissions become 40% or more of aggregated scope 1, 2 and 3 emissions;
- Emissions of exclusions in the inventory or target boundary change significantly;
- Significant changes in company structure and activities (e.g. acquisitions, divestitures, mergers, insourcing or outsourcing, shifts in goods or service offerings);
- Significant adjustments to the base year inventory or changes in data to set targets such as growth projections (e.g. discovery of significant errors or a number of cumulative errors that are collectively significant);
- Other significant changes to projections/assumptions used in setting the science-based targets.

**R13 — Validity of target projections:** The SBTi recommends that companies check the validity of target-related projections annually. The company should notify the SBTi of any significant changes and report these major changes publicly, as relevant.

### 3. Annual Timeline for Revising Criteria

Target validation criteria will be updated on an annual basis as per the timeline below, starting in 2021. For further information on the target validation process and CDP’s scoring of science-based targets in its climate change questionnaire, please see the [Call to Action Guidelines](#).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Revised Criteria, Submission Form, and Call to Action Guidelines published	Grace period for revised criteria	CDP Scoring Season					Results provided to non-CDP responders who submitted during or shortly before CDP scoring season		SBTi assesses how to improve the criteria and seeks <a href="#">Technical Advisory Group</a> feedback on revisions		
		Revised criteria go into effect one day after submission deadline for CDP scoring (May 15th for 2021).	Results provided to CDP responders by climate change questionnaire response deadline								



## 4. Document History

Version	Change/update description	Date finalized	Effective Dates
1.0	Original version of Science Based Targets initiative Criteria and Recommendations	May 2015	May 2015 to April 16, 2017
2.0	Updated version of Criteria and Recommendations to reflect current best practice and latest experience.	February 24, 2017	From February 24, 2017
3.0	Updated version of Criteria and Recommendations to provide greater clarity and reflect current best practices.	May 23, 2018	From May 23, 2018
Guidance for 3.0	Supplementary guidance and clarifications to V3.0.	February 28, 2019	From May 23, 2018
4.0	Updated version of Criteria and Recommendations to reflect current developments of climate science and best practices. This version integrates clarifications to relevant criteria included in Guidance for 3.0.	April 17, 2019	From October 15, 2019
4.1	Updated version of Criteria and Recommendations to provide greater clarity and reflect current best practices. Updates denoted with an asterisk (*).	April 15, 2020	From July 15, 2020