

# POWER SECTOR NET-ZERO STANDARD PUBLIC CONSULTATION

September 2025

## Introduction

Following the <u>Standard Operating Procedure for Development of SBTi Standards</u>, the Science Based Targets initiative (SBTi) is opening its first public consultation process for external stakeholders to provide feedback on its Power Sector Net-Zero Standard initial draft.

We welcome feedback from all stakeholders with an interest in the power sector's transition to net-zero. Whether you complete the entire survey or focus on the sections most relevant to you, your feedback is critical to the development of a Standard that is practical for businesses, scientifically robust and credible—helping accelerate climate action in line with net-zero goals.

The survey takes as little as 35 minutes, depending on the topics you choose to cover. Progress will be saved automatically as you complete the survey. You can return to provide input at any time.

# Survey objectives

This public consultation is open from September 2, 2025 until November 3, 2025.

The main goals of this consultation survey are to:

- Gather feedback from external stakeholders on the first consultation draft, and use it to inform the development of the second draft.
- Collect input on key topics identified through the development process, including:
  - Activities and emissions in scope of the Power Standard and its applicability.
  - o Applicability of the draft Corporate Net-Zero Standard V2 with this Standard.
  - o Metrics for determining base year performance.
  - Options proposed for power generation activities to set interim targets based on emissions and low carbon power generation.
  - Requirement for unabated fossil fuel capacity phase out and sustainable sourcing of biomass for power generation activities.
  - Metrics and targets for other value chain activities, including electricity losses for transmission and distribution, and storage activities; and technology share targets for trade and retail activities.
- Engage directly and indirectly with external stakeholders to build support and identify areas of improvement.



## What to expect from the survey

The survey starts with a brief section asking for contact information and some general introductory questions. This helps the SBTi to group and analyze the feedback accordingly.

The following questions are grouped according to the same chapters, sections and criteria they refer to in the Power Sector Net-Zero Standard, and will inform the further development of the Power Sector Net-Zero Standard.

Please note, you are not required to answer all the survey questions and you can skip questions, should you wish.

Results of this consultation will be made publicly available, but responses may be published at the stakeholder group level, not by individual or organization name. For example, companies may be identified as the stakeholder group "Company" rather than "ABC Corp".

All feedback will be analyzed and used to inform the next revision of the Power Sector Net-Zero Standard. When analyzing the data, it is helpful for the SBTi to know which responses are from which stakeholder group, so we kindly ask you to provide us with information about your organization.

Respondents are encouraged to provide their own original inputs to the survey. While we recognize that AI tools may be used for translations or refinements, responses that are entirely AI-generated or bot-generated without original input may be subject to further review and potential exclusion from the analysis. The SBTi reserves the right to exclude submissions that it reasonably deems to be entirely AI- or bot-generated from analysis.

For queries relating to this survey, please contact <a href="mailto:powersector@sciencebasedtargets.org">powersector@sciencebasedtargets.org</a>. Stakeholders are strongly encouraged to submit their feedback via the official public consultation survey, which is the primary channel through which submissions will be reviewed and analyzed. In cases where stakeholders are submitting consolidated or aggregated feedback that cannot reasonably be submitted through the online survey, these may be sent to <a href="mailto:powersector@sciencebasedtargets.org">powersector@sciencebasedtargets.org</a>. When providing feedback by email, please ensure that:

- Each comment clearly references the relevant section or criterion of the Standard, and
- It is specified whether the submission can be made public as part of the consultation summary report.

You can view the full survey before submitting your responses by downloading the <u>survey</u> <u>questions</u>.

Please note that feedback submitted outside the official consultation channels, as well as unclear or incomplete submissions may not be reviewed or considered as part of the consultation process.



# Disclaimer and data privacy

Please note that all submitted information and data will be treated with respect for your privacy in compliance with <u>SBTi's privacy policy</u> and all relevant and applicable data protection and data privacy regulations and legislation.

We collect, handle and safeguard the information provided within this survey in the following way:

- The data collected is used exclusively for the purpose of this consultation, which may
  include (i) the evaluation and analysis of submissions, and (ii) contacting you regarding
  your submission.
- Your personal data will be treated with the utmost confidentiality. We will not disclose your personal information without your explicit consent.
- We employ industry-standard security measures to protect your data against unauthorized access, disclosure, alteration or destruction. We are committed to maintaining the security and integrity of all data collected.
- We will retain your data only for as long as necessary to fulfill the purposes outlined in this consultation unless a longer retention period is necessary for legitimate research purposes.
- Any information or data that is published based on submissions will be anonymized.

"Science Based Targets initiative" and "SBTi" refer to the Science Based Targets initiative, a private company registered in England number 14960097 and registered as a UK Charity number 1205768.

© SBTi 2025

## About you

- 1. First name \*
- 2. Last name \*
- 3. Job title \*
- 4. Email \*
- 5. Confirm email \*
- 6. Organization name \*
- 7. In what sector does your organization operate? \*
  - Power generation



- Power transmission and distribution
- Power trade and retail
- Power storage
- o Other
- N/A
- 8. Type of organization \*
  - Corporate (Private Sector)
  - Financial Institution
  - Professional Services & Consultancies
  - Industry Association & Business Network
  - o Government & Public Sector
  - State-Owned Enterprise (SOEs)
  - Multilateral & International Organization
  - Academia, Research Institution & Think Tank
  - Civil Society & Advocacy NGO
  - Service-Oriented Non-Profit & Foundation
  - Standard-Setting Body
  - o N/A responding as an individual
  - Media & Journalism
  - Labor Union & Worker Organization
- 9. What country is your organization headquartered in? If you are responding in a personal capacity, please select the country where you are based. \*
- 10. In which regions does your organization have significant operations or value chain activities? \*
  - North America
  - South America
  - Europe
  - Africa
  - Asia
  - o Oceania
- 11. Are you responding to this survey based on your experience and understanding of: \*
  - Your own organization
  - A specific client
  - Your experience with a range of organizations
- 12. Results of this consultation will be made publicly available but may be anonymized to the stakeholder group level, for example "ABC Corporation" becomes "Company". Would you like your responses to be made anonymous? \*
  - Yes, I wish to remain anonymous
  - o No



**Note:** If you choose to remain anonymous, please ensure that you do not include any identifying information in your open-text responses. If you opt into anonymization, your name and company will be redacted from the data, but all open-text responses will remain verbatim. We will not alter or remove any identifying details you provide in those fields.

# **General introductory questions**

- 13. Are you a current or previous SBTi advisory or working group member?
  - o Yes
  - o No
- 14. If so, which group? (select as many as are relevant)
  - Scientific Advisory Group
  - Technical Advisory Group
  - Power Sector Expert Advisory Group
  - Corporate Net-Zero Standard V2 Expert Working Groups
  - o Beyond Value Chain Mitigation Expert Advisory Group
  - Measurement, Reporting and Verification Expert Advisory Group
  - Corporate Net-Zero Standard V1 Expert Advisory Group
  - Financial Institutions Expert Advisory Group
  - Other sector-specific advisory group

15. To what extent do you agree or disagree with the following statements?

	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
The Power Sector Net-Zero Standard is easy to understand					
The Power Sector Net-Zero Standard is ambitious enough to meaningfully take science-based climate action					
The Power Sector Net-Zero Standard is actionable					
The Power Sector Net-Zero Standard will assure the credibility of companies' climate action					
The Power Sector Net-Zero Standard strives for equity and does not compromise environmental sustainability					



# Chapter A. Introduction

## A.4 Intended users of the SBTi Power Sector Net-Zero Standard

The Standard is intended to address the main activities of the power sector that are required to decarbonize at a faster pace than the global economy. The intention of this question is to establish if this is being achieved with the current scope.

The activities defined align with those listed in widely acknowledged sectoral classification systems. Other activities in the supply chain are not included as their scope is too broad and the sectoral decarbonisation pathway is not directly relevant to these.

- 16. Do you think the scope of the Power Standard is clearly defined?
  - > Yes
  - No (please specify)
- 17. Do you think the list of activities and emissions in scope is comprehensive and appropriate?
  - Yes
  - No (please specify)

## Applicability of the SBTi Power Sector Net-Zero Standard

The Standard is intended to capture material sources of greenhouse gas (GHG) emissions and activity related to power generation and delivery to the end consumer. The intention of this section is to establish if this is being achieved with the current applicability criteria and thresholds.

The absolute emission threshold proposed (10.000 tCO₂e) is aligned with other references in SBTi resources. The SBTi aims to investigate further on this through the consultation process.

- 18. Do you think the applicability criteria and thresholds of the Standard are adequate?
  - Yes
  - No (please specify)
- 19. Do you think the absolute emission threshold (10.000 tCO<sub>2</sub>e) is too low? If yes, please explain why and suggest alternative thresholds. Feel free to include examples of companies types/structures that you believe should or should not be in scope based on these criteria.
  - Yes (please specify)
  - o No



## A.5.1 Definition of GHG emissions and activities covered by this Standard

The clarity of definition is important for companies to be able to determine whether the Standard is applicable to them.

20. Do you have any comments on the representation of activities and emissions in scope in A.5.1 and Annex C of the Standard?

## Applicability of criteria from the draft SBTi Corporate Net-Zero Standard V2

Each chapter of the Standard from 1 to 6, includes a table that references the different criteria from the SBTi Corporate Net-Zero Standard Version 2.0 and how they apply within the SBTi Power Sector Net-Zero Standard. SBTi is gathering feedback from stakeholders on the way SBTi Standards interoperability is explained to identify the best solution to provide clarity and efficiency to the Standards' users.

Please note that the intention with this question is not about providing feedback on the draft Corporate Net-Zero Standard V2. For information on opportunities to share comments on the draft, visit the SBTi website. Instead, this question is about the interoperability of the SBTi Power Sector Net-Zero Standard and the Corporate Net-Zero Standard V2 when used in parallel.

- 21. Do you think the way the draft Corporate Net-Zero Standard V2 criteria applicability is explained in each chapter is clear enough to enable an efficient applicability of both Standards in parallel? If not, do you have any suggestions to improve on this aspect?
  - Yes, it is clear enough
  - It's not clear enough (please specify)

[Section break]

## Chapter 2. Determining performance in the target base year

#### Criterion PS-C1

This criterion is for companies to determine the baseline performance in the target base year through sector-specific indicators.

- 22. Are the metrics for determining performance in the base year sufficiently comprehensive and representative?
  - Yes
  - No (please specify)
- 23. Do you consider the metrics on the technology share useful indicators to assess performance of companies with power generation activities?



- Yes
- No (please specify)
- 24. Do you consider the metrics on the technology share of electricity purchased and resold useful indicators to assess performance of companies with trade and retail activities?
  - > Yes
  - No (please specify)
- 25. Do you agree with the application of the technology share metrics with current binary categorization into low-carbon and unabated fossil fuel power generation technology? If not, would you suggest adding further granularity to the metrics?
  - o Yes
  - No (please specify)

[Section break]

# **Chapter 3. Target setting**

## 3.2.2 Targets for power generation activities

#### Criterion PS-C3

This criterion, intended for companies with power generation activities, provides more flexibility in the near-term in the means of achieving the emissions intensity benchmark in the net-zero year.

The SBTi is also exploring if the submission of an asset plan as defined in criterion PS-C4 can be an alternative approach for setting near-term targets instead of the options outlined in sub-criteria 3.2.1 and 3.2.2.

- 26. Do you agree with providing different options for setting targets in the interim years other than emission intensity reduction?
  - Yes
  - No (please specify)
- 27. Do you think an asset plan as defined in criterion PS-C4 could also be used as an alternative to the near-term target options defined in sub-criteria 3.2.1 and 3.2.2?
  - Yes
  - No (please specify)

On target setting methods on emission intensity for criterion PS-C3 (Please refer to Annexes D and E, the Synthesis Report on Metrics and Methods and Synthesis Report on Pathways for further background on these questions).



In order to adjust the Sectoral Decarbonization Approach (SDA) to accommodate the realities of low-intensity power generation companies, the Standard introduces the maintenance method for companies whose base year emission intensity is below the net-zero benchmark, and a linear convergence adjustment as an option for companies whose base year emission intensity is above, but near, the net-zero benchmark, as determined by the Power Sector Pathway.

- 28. Does the maintenance method suitably address the need for 100% renewables/low carbon power companies to have achievable targets?
  - Yes
  - No (please specify)
- 29. Does the SDA linear convergence adjustment suitably address the need for highly (but not fully) decarbonized power generation companies to have achievable targets, while maintaining the fundamental principles of the SDA?
  - Yes
  - No (please specify)
- 30. Are the physical intensity values in the low intensity threshold too low to serve the intended purpose, i.e., would power generation companies with physical intensity above the threshold still struggle to achieve near-term SDA targets?
  - Yes (please specify)
  - No
- 31. Is the level of accuracy required to calculate the intensity values in the threshold realistic for most power generation companies? If not, what is a reasonable level of accuracy that most companies are able to achieve?
  - Yes
  - No (please specify)

On target-setting methods on low carbon generation share for criterion PS-C3 (Please refer to Annexes D and E, the Synthesis Report on Metrics and Methods and Synthesis Report on Pathways for further background on these questions).

The transition for companies towards net-zero might need very different near-term actions at the asset level that might not fully conform to the assumptions underlying the average emission intensity pathway for the sector. Asset-level alignment target-setting approaches may enable an equitable phaseout of high-emitting assets and ensure that a growing share of assets is aligned with relevant carbon budgets. The technology share metric introduced allows to better track the make up of the electricity generation asset portfolio.

32. Do you think the low-carbon technology share is an appropriate alternative for emission intensity reduction targets for the interim target years?



- Yes
- No (please specify)
- 33. Do you agree with proposed differentiation in technology share between low carbon and unabated fossil fuel power generation?
  - Yes
  - No (please specify)
- 34. Would you prefer additional granularity in the technology share metrics to further distinguish between power generation technologies?
  - Yes
  - No (please specify)
- 35. Do you think the low carbon generation target should follow a different method and trajectory (e.g., linear)?
  - Yes (please specify)
  - o No

[Section break]

#### Criterion PS-C4

A phase out plan would provide transparency and additional guardrails to ensure the transformation needed at the asset level, as companies will need to detail how and when they plan to phase out unabated fossil fuel power generation, including clear milestones (minimum 5 years timeframe).

Please refer to Annexes D and E, the Synthesis Report on Metrics and Methods and Synthesis Report on Pathways for further background on these questions.

- 36. Do you agree with the inclusion of a mandatory requirement for companies to disclose an asset plan to phase out unabated fossil fuel power generation capacity?
  - Yes
  - No (please specify)
- 37. Do you think criterion PS-C4 should be a mandatory requirement or is an appropriate alternative to the near-term target-setting approaches presented in sub-criterion C3.2? If yes, in which circumstances?
  - Yes (please specify)
  - o No
- 38. Do you agree with the milestones proposed for OECD and non-OECD countries?
  - o Yes
  - No (please specify)



- 39. Do you agree with the requirement to include maximum 5-years interim milestones in the plan?
  - o Yes
  - No (please specify)
- 40. Do you think more flexibility should be provided for unabated coal capacity for security purposes or retrofit planning?
  - Yes (please specify)
  - No

To acknowledge the different roles of power generation assets and need to maintain non-baseload capacity for either regulatory requirements or grid stability, this Standard proposes an exemption for unabated natural gas assets when intended to serve as non-baseload capacity. Establishing a unique definition and/or quantitative threshold for non-baseload capacity is challenging, as it may vary significantly depending on local regulations and grid operating conditions. This will be further investigated through the consultation process.

- 41. Do you agree with the exemption of non-baseload capacity from unabated natural gas phase out requirements?
  - Yes
  - No (please specify)
- 42. Do you think the requirements in sub-criterion C4.3.4 to demonstrate exemption of non-baseload capacity are appropriate? If not, what relevant supporting documentation should be provided by companies?
  - Yes
  - No (please specify)
- 43. Do you agree with the definition of non-baseload capacity included in Annex A of this Standard? If not, should a more quantitative definition be included for the exempted capacity and what is the suggested value/approach?
  - Yes
  - No (please specify)

[Section break]

#### Criterion PS-C5

There is a difference between how the IEA and IPCC treat biogenic emissions from bioenergy in modelled decarbonization pathways. Although the IEA Net Zero scenario reports positive emissions from bioenergy through 2030, these emissions are excluded from the emissions intensity calculation. This adjustment reflects the IPCC convention of treating biogenic CO<sub>2</sub> as carbon neutral at the point of combustion, assuming sustainable sourcing and separate accounting of land-use impacts. However, this convention risks masking value chain emissions



if upstream impacts are not accounted for. To preserve the environmental integrity of the SDA, guardrails are proposed in the Power Standard.

Please refer to Annexes D and E, the Synthesis Report on Metrics and Methods and Synthesis Report on Pathways for further background on these questions.

- 44. Do you agree with the inclusion of a criterion for biomass for power generation being 100% sustainably sourced by 2030?
  - Yes
  - No (please specify)
- 45. Do you agree with the disclosure requirements around certification schemes and assurance?
  - Yes
  - No (please specify)
- 46. Do you think we should specify additional reporting requirements on forest, land and agriculture (FLAG) emissions other than those specified in the SBTi FLAG Guidance and the GHG Protocol?
  - o Yes
  - No (please specify)
- 47. In your opinion, what are the criteria that the SBTi should set up to endorse biomass certification schemes? (Free text)

[Section break]

## 3.2.3 Targets for transmission and distribution, and storage activities

#### Criterion PS-C6

Transmission and distribution, as well as storage, play a key role in decarbonization of the power sector, however, improving efficiency of these systems might not always be technically or economically feasible, and as the electricity mix reaches full decarbonization, reducing electricity losses becomes less relevant in the longer term.

Using absolute emissions as a metric here was considered less appropriate due to the lack of control of the networks over the emissions intensity of the electricity transported/stored in the system. Using share of losses is an alternative that network operators have control over and can reduce through efficiency improvements.

Please refer to Annexes D and E, the Synthesis Report on Metrics and Methods and Synthesis Report on Pathways for further background on these questions.



- 48. Do you agree with the proposed approach to address reduction of electricity losses?
  - Yes
  - No (please specify)
- 49. Do you agree with the benchmark values proposed? If not, please suggest an alternative approach.
  - Yes
  - No (please specify)
- 50. Do you agree with limiting the requirement within the near-term?
  - Yes
  - No (please specify)
- 51. Do you think targets for storage losses (sub-criterion C6.2) should only be a recommendation?
  - Yes
  - No (please specify)

#### Criterion PS-C7

SF6 is a powerful greenhouse gas and may be a significant source of emissions in transmission and distribution networks. However, mitigation levers are constrained by market limitations and technology availability. A commitment criterion is proposed to allow flexibility in planning phase out/mitigation of SF6 emissions taking into account the different levers for mitigation companies might have.

- 52. Do you agree with the inclusion of a criterion to address SF6 emissions from transmission and distribution activities, and its content?
  - Yes
  - No (please specify)
- 53. Do you agree with the proposed framing of SF6 mitigation requirement?
  - Yes
  - No (please specify)

[Section break]

# 3.2.4 Targets for trade and retail

#### Criterion PS-C8

The primary decarbonization lever for scope 3 category 3 emissions from the sale of electricity is changes made to the generation portfolio mix of electricity purchased and sold to the end user, therefore the technology share metric and target is proposed for companies with trade and



#### retail activities.

Please refer to Annexes D and E, the Synthesis Report on Metrics and Methods and Synthesis Report on Pathways for further background on these questions.

- 54. For trade and retail activities, do you think the technology share convergence is an appropriate method?
  - Yes
  - No (please specify)
- 55. Would you prefer additional granularity in the unabated fossil fuel technology share to distinguish also between unabated coal, oil and natural gas?
  - Yes
  - No (please specify)

## Annex A. Key terms and acronyms

- 56. Do you think Annex A provides a comprehensive and clear set of the definitions for terms used in this Standard?
  - Yes
  - No (please specify)

Establishing a unique definition and/or quantitative threshold for non-baseload capacity is challenging, as it may vary significantly depending on local regulations and grid operating conditions. This will be further investigated through the consultation process.

- 57. Do you agree with the definition proposed for non-baseload capacity?
  - Yes
  - No (please specify)

There is extensive and varying literature on definitions for unabated/abated fossil fuel power generation and consideration of power generation equipped with carbon capture and storage. For the purpose of this Standard, the SBTi is proposing a minimum threshold of 95% for fossil fuel power generation to be considered abated and seeking for feedback from stakeholders during consultation (reference for figure proposed:

https://www.sciencedirect.com/science/article/pii/S2666278725000303).

- 58. Do you agree with the definition for low carbon and unabated fossil fuel power generation?
  - Yes
  - No (please specify)
- 59. Do you agree with the minimum threshold for carbon capture to be included in the low-carbon technology category to be set at 95%?



- Yes
- No (please specify)

# **Closing section**

- 60. Do you have any other feedback on the draft Standard that wasn't addressed in this survey? Please share.
- 61. How accessible did you find this survey?
  - a. Extremely accessible
  - b. Somewhat accessible
  - c. Neutral
  - d. Not so accessible
  - e. Not at all accessible
- 62. How did you find out about this public consultation? (Select all that apply)
  - Bluesky
  - o Directly from SBTi staff
  - LinkedIn
  - News
  - SBTi event or webinar
  - Other event or webinar
  - SBTi newsletter
  - SBTi website
  - Search engine
  - Word of mouth
  - o **X**
  - Other (please specify)
- 63. If you do not already receive the SBTi newsletter, would you like to sign up to stay informed with the latest news from the SBTi?
  - Yes
  - o No
- 64. The SBTi would like to keep you updated on the development of the Power Sector Net-Zero Standard and other SBTi projects. Please let us know if you consent to SBTi contacting you this way.
  - Yes
  - No