SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

SBTi POWER SECTOR NET-ZERO STANDARD

Version 1.0

Second Consultation Draft

July, 2026

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VERSION HISTORY

Version	Change/update description	Release date	Effective dates
Version 1.0	First Public Consultation draft	September 2, 2025	N/A
Version 1.0	Second Public Consultation draft ● Alignment with new sector standard template ● Revisions based on feedback from the first public consultation	July 15, 2026	N/A

CONTENTS

A. EXECUTIVE SUMMARY

Disclaimer: *This executive summary is intended to provide a summary of the Power Sector Net-Zero Standard Version 1.0 for stakeholders and does not constitute a normative part of this Standard. For the full scope of requirements, users should refer to the main body of the Standard. Any translation of this document is for informative purposes only. Users should refer to the original document in English in case of any inconsistency.*

Introduction

The mission of the Science Based Targets initiative (SBTi) is to accelerate science-based corporate climate action consistent with net-zero by 2050 or sooner, contributing to international efforts aimed at limiting temperature change to 1.5°C by the end of the century.

The power sector plays a key role in decarbonizing the global economy, being the largest source of global energy-related GHG emissions (nearly 40% in 2023, International Energy Agency, 2024). Simultaneously, it is an enabler of decarbonization of many other sectors, as other industries accelerate decarbonization through electrification, demand for clean power will continue to grow. Overall, electricity is projected to increase its share as a final energy consumption from 20% today (2023) to over 50% by 2050 (International Energy Agency, 2023). This makes the sector both a cornerstone of the global net-zero transition and a priority for ambitious climate action.

The SBTi Power Sector Net-Zero Standard (hereby referred to as “this Standard”) accompanies the SBTi’s Corporate Net-Zero Standard V2.0, providing a set of additional criteria that establish an ambitious and actionable approach to set and achieve near-term and net-zero targets for companies in the power sector.

This Standard builds on, and will replace the SBTi Quick Start Guide for Electric Utilities (2020). It aligns with the Corporate Net-Zero Standard V2.0 and incorporates best practices for decarbonization in the power sector. It lays out how companies in the power sector should use the latest version of the SBTi Corporate Net-Zero Standard V2.0, along with sector-specific criteria, to set targets covering all relevant activities and emissions.

Key elements of this Standard

The SBTi Power Sector Net-Zero Standard expands its scope to cover a more comprehensive list of sector activities and emission sources across the sector’s value chains and introduces new metrics, targets, and activity-based segmentation to reflect different operational realities. This second consultation draft was developed through extensive research and input from a dedicated Expert Advisory Group as well as incorporating feedback received during the first public consultation, conducted from September 2 to November 3, 2025 (feedback report available here). The most relevant changes in the second public consultation draft compared with the first public consultation draft are:

- **Alignment with SBTi Corporate Net-Zero Standard Version 2**: Updated structure and guidance on interoperability between cross-sector and sector-specific requirements, and alignment with Methods and Pathways documentation architecture.

- **Standard scope and applicability**: Separation of the transmission and distribution sub-sectors, exclusion of electricity trading activities, greater clarity on the treatment of emission from heat and power co-generation.
- **Metrics**: Revised definition of low-carbon power generation based on emissions intensity, distinction between technical and non-technical losses for transmission and distribution activities.
- **Target setting**: Two scope 1 near-term target setting options for power generation, including revised Asset Transition Plan option and updated method for scope 3 targets for retailers.
- **Pathways**: Updated pathways based on IEA WEO 2024 NZE scenario, used to derive emission intensity, low-carbon electricity trajectories and transition milestones for target setting, differentiated by region.

Publication of the second consultation draft marks a significant step in the development process and serves as an opportunity for all stakeholders to review and improve the proposed content, ensuring the final standard is robust and effective.

Next steps

In parallel with the period of second public consultation, the SBTi will hold a period of pilot testing on this draft Standard. Feedback from the second public consultation and pilot testing will be published in the Public Consultation Feedback Report, the Pilot Testing Feedback Report and inform final revisions to the draft.

B. STANDARD & SYSTEM OVERVIEW

B.1 Language & terminology

The working language for the Science Based Targets initiative (SBTi) is English. As necessary, the SBTi may arrange translations of SBTi Standards into languages other than English. Translated versions of a Standard are for information only. In case of doubt, the official English-language version shall be deemed definitive.

Within the SBTi's criteria, the specific terms used draw a distinction between requirements and recommendations:

- "**Shall**" indicates criteria and sub-criteria that are required as conditions for companies that submit science-based targets to the SBTi for validation or that undergo an end-of-cycle assessment.
- **Recommendations** are expressly drafted as such. Recommendations are important as they reflect good practices, but are not required.
- "**May**" indicates an option that is permitted, allowed, or permissible.

The **criteria and sub-criteria** indicate the requirements that companies shall conform to, in order to be assessed by an SBTi-recognized validation body. Each criterion indicates the following elements:

- **Activity type:** Indicates to which of the activities in scope of the SBTi Power Net-Zero Standard the criterion applies.
- **Interaction rule:** Indicates how the relevant power sector criterion interacts with the SBTi Corporate Net-Zero Standard Version 2.0 criterion.
- **Assessment stage:** Indicates when the criterion is assessed.

Criteria may be accompanied by **recommendations** (**R#**), which indicate best practices that companies are encouraged to follow.

The term "**can**" indicates possibility or capability, referring to options or actions available to the user. "**Must**" denotes external constraints that are not requirements of this document but are provided for informational purposes. For instance, "must" could pertain to compliance with applicable laws in a user's country, region, or sector, while "can" might describe permissible actions that do not affect validation.

The SBTi Glossary provides a comprehensive list of terms, definitions, and acronyms used across the SBTi's technical resources.

B.2 Framework of SBTi Standards

The SBTi Standards are structured as a modular framework anchored by the Corporate Net-Zero Standard, which establishes the foundational cross-sector requirements for all companies in relation to scope 1, scope 2, and scope 3 emissions (categories 1 to 14), as defined by the GHG Protocol Corporate Standard. The framework also includes the Financial Institutions Net-Zero (FINZ) Standard, which provides requirements for financial institutions in relation to their financial activities (scope 3, category 15 as defined in the GHG

Protocol Corporate Standard), and multiple Sector Standards designed for high-emitting industries. The Sector Resources Summary provides an overview of the available and planned Sector Standards and resources.

All companies shall use the Corporate Net-Zero Standard V2.0 as the foundational standard, and determine if any SBTi Sector Standards, including the Financial Institutions Net-Zero Standard, also apply. Where another applicable SBTi Standard, specifies that certain Corporate Net-Zero Standard requirements are modified, superseded, or not applicable, companies shall follow that Standard's criteria. In such cases, the applicable SBTi Standard governs the relevant emissions sources or activities. Companies are not required to set duplicative targets (i.e., more than one target covering the same emissions sources) where those emissions are already addressed under the Corporate Net-Zero Standard or another applicable SBTi Standard, unless otherwise specified.

Transitional provision: *Companies applying Sector Standards or other sector-specific SBTi documents shall refer to the Guide For Companies In The Transition To Corporate Net Zero Standard Version 2.0 for details on applicable transitional arrangements, including how to apply existing resources and transition to the Corporate Net-Zero Standard V2.0.*

Structure

The SBTi Power Sector Net-Zero Standard is structured into two chapters:

1. **APPLICABILITY OF AND INTERACTION WITH SBTi CORPORATE NET-ZERO STANDARD VERSION 2.0 CRITERIA**
2. **ADDITIONAL POWER SECTOR CRITERIA**

Chapter 1 provides a holistic overview of all criteria from SBTi Corporate Net-Zero Standard Version 2.0 and how they interact with the power sector criteria. It includes the following forms of interaction with Corporate Net-Zero Standard criteria or structure:

- **Preserve [P]** - Companies shall apply the criterion and corresponding sub-criteria at entity level, including all activities (activities covered by the SBTi Corporate Net-Zero Standard V2.0 and SBTi Sector Standards).
- **Modify [M] -** Companies shall apply the criterion and corresponding sub-criteria for other activities not covered in this Standard, and for their activities covered by this SBTi Sector Standard, they shall apply the amendments to sub-criteria introduced by this Power Sector Standard.
- **Supersede [S] -** Companies do not have to apply this criterion from the SBTi Corporate Net-Zero Standard V2.0 to their power sector activities instead they have to follow the substituted criterion introduced in this Standard to their power sector activities.
- **Exempt [E] -** Companies do not have to apply this criterion from the SBTi Corporate Net-Zero Standard V2.0 to their power sector activities.
- **New [N] -** Companies shall apply this newly added criterion to their power sector activities.

The SBTi Assurance Model and SBTi Claims System, introduced with the publication of the SBTi Corporate Net-Zero Standard apply also for Sector Standards.

Chapter 2 contains the additional sector criteria and sub-criteria that apply to companies in scope of the Power Sector Standards, including:

- Sector-specific criteria (PS-C#) and sub-criteria (C#.##) that indicate the requirements that companies shall conform to to be validated by the validation body.
- Recommendations (R#) that indicate best practices that companies are encouraged to follow, but that are not validated.

The chapter is structured over six paragraphs, covering the same topics from the SBTi Corporate Net-Zero Standard Version 2.0 (1. Net-Zero Governance, 2. Target Base Year Assessment, 3. Target Setting, 4. Target Implementation, 5. Reporting and Assessing Target Progress, and 6. Ongoing Emissions Responsibility), outlining a journey for companies applying the Power Sector Standard in conjunction with the Corporate Net-Zero Standard Version 2.0.

Annexes and supporting documents

This Standard also includes a number of annexes to support the use and assessment of conformance against this Standard and a set of complementary documents on Methods and Pathways that support the implementation of targets for activities in scope of the Power Standard.

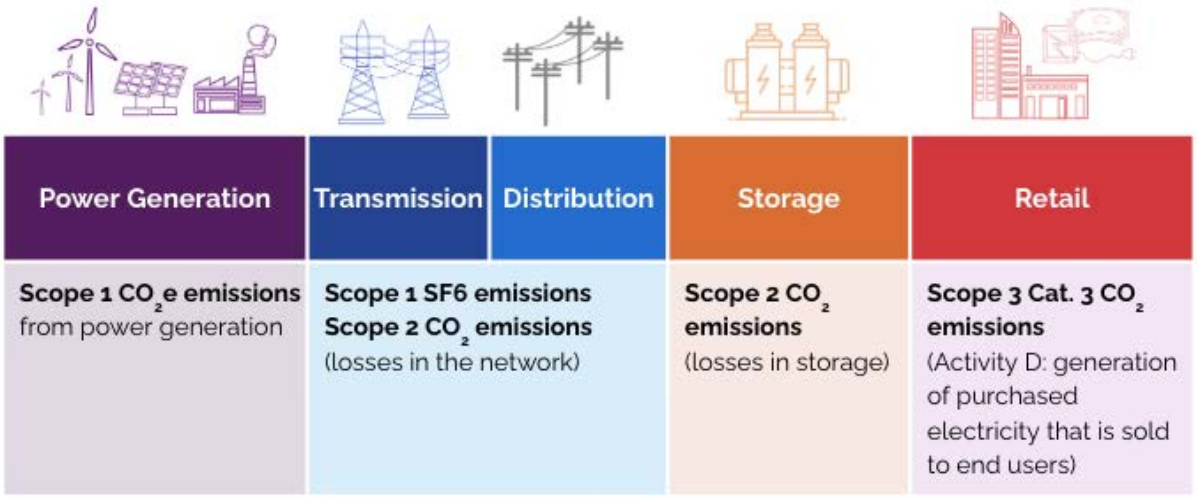
Table B.1. Description, classification and status of annexes and complementary documents to the SBTi Power Sector Net-Zero Standard

Document or Annex	Description	Classification (normative or informative)	Status
Key terms	Key terms and acronyms introduced in this version of the Standard that are not already included in the SBTi Glossary.	Normative	Draft for public consultation
ANNEX A: Activities and emissions in scope	Detailed description of the activities within scope of the SBTi Power Sector Net-Zero Standard.	Normative	Draft for public consultation
ANNEX B: Metrics, Methods & Pathways	Describes the set of sector-specific metrics and SBTi applicable methods and pathways for targets in scope of the Power Standard.	Normative	Draft for public consultation
MMP specification sheets	Provides the technical details for setting targets within the Power Standard.	Normative	Draft for public consultation
Pathway derivation document	Provides relevant background on the derivation of power pathways from eligible scenarios.	Informative	Draft
Power Sector Net-Zero Standard Target-Setting tool	To support companies in developing their targets based on the activity-specific pathways and methods described in this document.	Informative	Draft

B.3 Scope of the SBTi Power Sector Net-Zero Standard

The SBTi Power Sector Net-Zero Standard (hereby referred to as “this Standard”) is intended for companies globally, with economic activities associated with power generation, electricity transmission, distribution, storage and sales. The figure below provides an overview of the power sector value chains’ activities and emission sources in scope of this Standard (relevant for the calculation of the applicability thresholds).

Figure B.1 Illustrates the activities and emissions in scope of the Power Sector Standard.



When a company falls in scope of this Standard, it shall apply the criteria within this Standard in addition (or occasionally instead) of what is laid out in the SBTi Corporate Net-Zero Standard to enable the company to seek validation.

Further detail on activities within scope and how these align to different sector classification systems is provided in Annex A.

Definition of activities and GHG emissions covered by this Standard

Companies with any of the activities included in the following list[1] shall assess whether they meet the applicability threshold(s):

- Power generation[2] for commercial purposes from fossil and non fossil sources including, but not limited to: coal, oil, gas, renewables (solar, wind, hydro, geothermal), biomass, biogas from waste, nuclear, hydrogen.
- Power generation for own electricity consumption with excess electricity sold to the market.
- Transmission of electricity.
- Distribution of electricity.
- Retail of purchased electricity.
- Storage of electricity.

[1] Further detail on activities within scope and how these align to different sector classification systems is provided in Annex A.
[2] Including heat and power cogeneration in CHP plants. Stand alone heat generation activities are not in scope.

Definition of activities and emissions outside the scope of this Standard

The following activities related to the power sector value chain and the associated emissions are beyond the current scope of the SBTi Power Sector Net-Zero Standard. Companies shall refer to the SBTi Corporate Net-Zero Standard for target setting guidance for these activities, where applicable.

- Production, transmission and distribution of energy carriers other than electricity (e.g., natural gas, hydrogen, stand-alone heat).
- Manufacture of equipment for use in the power sector, e.g., manufacture of renewable power generation technologies, manufacture of electricity transmission and distribution assets.
- Activities related to the use of electricity, such as provision of energy efficiency services.
- Trade of electricity such as activities of brokers or agents that arrange the sale of electricity via power distribution systems operated by others.
- Activities that involve the use of electricity for the production of other goods or other energy carriers, such as hydrogen production.
- Companies with power generation activities solely for their own electricity consumption.

Applicability threshold

This Standard is intended for any company worldwide, with operations in one or more of the above activities, irrespective of them being the core business activities. Companies shall follow all applicable criteria within this Standard when either of the following applies:

a. The company's aggregated GHG emissions from any of the power sector activities and sources in scope combined (see metrics for applicability in Table B.1.1) represent at least 5% of the company's overall GHG inventory or are above 10,000 tCO2e.
b. The company's annual revenue from electricity generated[3] represents at least 5 % of the total annual revenue.

Companies operating in other sectors but with power generation for their own electricity consumption, are not included in the scope of this Standard[4] unless they sell the excess electricity to the market. In this case they shall follow applicable requirements set in this Power Sector Standard.

B.4 Development process

This Standard is being developed through a formal and transparent multi-stakeholder process in accordance with the Standard Operating Procedure for Development of SBTi Standards. The Project Terms of Reference is available here.

[3] Revenue from the sales of electricity generated by assets within the ownership or control of the company.
[4] These emissions would already be covered by the related sector-specific standard, where applicable, as industrial process emissions or covered by the cross-sector standard.

The SBTi Power Sector Net-Zero Standard project was initiated in May, 2024 with the objective to review, revise and update SBTi's resources for the power sector[5]. When completed, the Power Sector Net-Zero Standard will replace the Quick Start Guide for Electric Utilities and provide comprehensive target-setting methods for companies with applicable business activities.

This Standard draft was developed through extensive research and input from a dedicated Expert Advisory Group as well as incorporating feedback received during the first public consultation, conducted from September 2 to November 3, 2025 (feedback report available here). The most relevant changes in the second public consultation draft compared with first public consultation draft are:

- **Alignment with SBTi Corporate Net-Zero Standard Version 2.0:** Updated structure and guidance on interoperability between cross-sector and sector-specific requirements, and alignment with Methods and Pathways documentation architecture.
- **Standard scope and applicability**: Separation of the transmission and distribution sub-sectors, exclusion of electricity trading activities, greater clarity on the treatment of emission from heat and power co-generation.
- **Metrics**: Revised definition of low-carbon power generation based on emissions intensity, distinction between technical and non-technical losses for transmission and distribution activities.
- **Target setting**: Two scope 1 near-term target setting options for power generation, including revised Asset Transition Plan option and updated method for scope 3 targets for retailers.
- **Pathways**: Updated pathways based on IEA WEO 2024 NZE scenario, used to derive emission intensity, low-carbon electricity trajectories and transition milestones for target setting, differentiated by region.
- **Biomass sustainability**: Criterion for the sustainable use of biomass removed as now addressed by Corporate Net-Zero Standard Version 2.0.

Publication of the second consultation draft marks a significant step in the development process and serves as an opportunity for all stakeholders to review and improve the proposed content, ensuring the final Standard is robust and effective. We invite all interested parties to review this draft and provide feedback on its content, clarity, and applicability. Your feedback will play a key role in ensuring that this Standard is effective, inclusive, and fit for purpose.

Participating in the second public consultation

The Power Standard draft will be published for a second public consultation from July 15 until August 31, 2026. The SBTi welcomes all feedback on the draft Standard, especially on the following topics:

- Activities and emissions in scope of the Power Standard and its applicability.
- Applicability of the Corporate Net-Zero Standard V2.0 in parallel with this Standard and clarity of the overall Standard framework.

[5] Quick Start Guide for Electric Utilities (SBTi, 2020).

- Metrics for determining base year performance.
- Options proposed for power generation activities to set interim targets, in particular on the asset decarbonization plan.
- Requirements for unabated fossil fuel capacity phase out.
- Metrics and targets for other value chain activities, including electricity technical losses for transmission and distribution and low carbon electricity targets for retail activities.

Feedback can be submitted through the consultation survey. Respondents can choose to complete the full survey or respond to selected sections. Depending on the sections chosen, completing the survey can take as little as 30 minutes. We welcome feedback from all interested parties, including, for example, industry professionals, academics, civil society organizations, and the general public.

The draft also presents options currently under consideration, which stakeholders can evaluate and provide comments on through the consultation survey. The online consultation survey will also include additional questions which are not displayed in this draft. These questions relate to the clarity and completeness of this Standard, as well as questions that collect data to identify and categorize respondents.

The SBTi invites stakeholders to review the draft and share feedback to help identify potential issues, practical challenges, or opportunities for improvement.

Next steps

In parallel with the period of second public consultation, the SBTi will hold a period of pilot testing on this draft Standard. Feedback from the second public consultation and pilot testing will be published in the Public Consultation Feedback Report, the Pilot Testing Feedback Report and inform revisions to the draft. A final version of this Standard will then be presented for approval to the SBTi Technical Council and adoption by the Board of Trustees. A Basis for Conclusions Report will be published at launch to summarize the main points of feedback received on the project and the responses to it.

Stakeholders are able to submit feedback not only during the public consultation phase but also throughout the course of the project through the Project Feedback Form. All updates on the SBTi Power Sector Net-Zero Standard development will be communicated on the SBTi's power sector webpage, newsletter and social media channels.

1. APPLICABILITY OF AND INTERACTION WITH THE SBTi CORPORATE NET-ZERO STANDARD VERSION 2.0 CRITERIA

Table 1. Applicability of Corporate-Net Zero Standard Version 2.0 criteria to Power sector activities and new sector criteria

SBTi Corporate Net-Zero Standard Version 2		Interaction rule	Power Sector Standard	
Criterion	Theme		Criterion	Explanation
1. NET-ZERO GOVERNANCE				
All Chapter 1 criteria (CNZS-C1 to -C2) are preserved.				
2. TARGET BASE YEAR ASSESSMENT				
CNZS-C3	Organizational Boundary	[P]	n/a	
CNZS-C4	Target Base Year	[P]	n/a	
CNZS-C5	GHG Inventory	[M]	n/a	When criterion CNZS-C5 is applied to the power sector boundary and associated emissions the following modifications apply: C5.2 [M]: all companies shall account and report for scope 1, 2 and 3 emissions in scope of the Power Sector Standard.
Sector addition	*Sector metrics*	[N]	PS-C1	Companies shall also report on the applicable sector-specific metrics as per PS-C1.
CNZS-C6	EIA Identification[6]	[P]	n/a	
CNZS-C7	Assurance	[M]	n/a	Companies shall apply this criterion and corresponding sub-criteria to the total GHG inventory done as per CNZS-C5, and on the applicable metrics used within the SBTi Power Sector Net-Zero Standard as per criterion PS-C1. C7.1 [M]: The assurance shall cover emissions covered by the SBTi Power Sector Net-Zero Standard.
CNZS-C8	Recalculation	[P]	n/a	
3. TARGET SETTING				

[6] Emissions-intensive value chain activities (EIA).

SBTi Corporate Net-Zero Standard Version 2		Interaction rule	Power Sector Standard	
Criterion	Theme		Criterion	Explanation
CNZS-C9	General Target Setting	[M]	n/a	C9.1 [M]: all companies shall set separate targets to address scope 1, 2 and 3 emissions in scope of the Power Sector Standard (no category A/B differentiation).
CNZS-C10	Scope 1 Near-Term	[S]	PS-C2	Companies with power generation activities shall set near-term targets according to criterion PS-C2 for scope 1 CO_2 emissions from power generation.
Sector addition		[N]	PS-C4	Companies with transmission and/or distribution activities shall set targets according to criterion PS-C4 for scope 1 SF6 emissions.
CNZS-C11	Scope 1 Long-Term	[S]	PS-C2	Companies shall set long-term scope 1 targets on the activities and corresponding GHG emissions covered by the SBTi Power Sector Net-Zero Standard by applying PS-C2.
Sector addition		[N]	PS-C4	Companies with transmission and/or distribution activities shall set targets according to criterion PS-C4 for scope 1 SF6 emissions.
CNZS-C12	Scope 2 Near-Term	[P]		
Sector addition		[N]	PS-C3	Companies with transmission and/or distribution activities shall set near-term targets on the share of electricity losses through criterion PS-C3 that applies in addition to CNZS-C12.
CNZS-C13	Scope 2 Long-Term	[P]		
Sector addition		[N]	PS-C3	Companies with transmission and/or distribution activities shall set long-term targets on the share of electricity losses through criterion PS-C3 that applies in addition to CNZS-C13.
CNZS-C14	Scope 3 Boundary	[P]		The Power Standard only covers scope 3 category 3 emissions from electricity purchased and sold to end users (Metric-PS.13 and Metric-PS.14) which is addressed through criterion PS-C5, where applicable. All other scope 3 emissions shall be covered by the SBTi Corporate Net-Zero Standard V2.0. • C14.1 on significant categories: Scope 3 categories that individually represent 5% or more of the company's total scope 3 emissions based on the physical inventory shall be covered by targets set through the SBTi Corporate Net-Zero

SBTi Corporate Net-Zero Standard Version 2		Interaction rule	Power Sector Standard	
Criterion	Theme		Criterion	Explanation
				Standard V2.0 and through applicable SBTi Sector Standards. • C14.2.b: This exclusion is not permitted for the activities and corresponding GHG emissions in scope of the SBTi Power Sector Net-Zero Standard.
CNZS-C15	Scope 3 Near-Term	[S]	PS-C5	Companies shall set near-term scope 3 targets on the activities and corresponding GHG emissions covered by the SBTi Power Sector Standard through criterion PS-C5 instead.
CNZS-C16	Scope 3 Long-Term	[S]	PS-C5	Companies shall apply this criterion and corresponding sub-criteria to all activities (and corresponding GHG emissions) that are not covered by the SBTi Power Sector Net-Zero Standard. Companies shall set near-term scope 3 targets on the activities and corresponding GHG emissions covered by the SBTi Power Sector Standard through criterion PS-C5 instead. Notes: • C16.1 on coverage: If companies chose to set long-term scope 3 targets through the SBTi Corporate Net-Zero Standard V2.0, the 100% coverage threshold shall be met through targets set through the SBTi Corporate Net-Zero Standard V2.0 and through applicable SBTi Sector Standards.
CNZS-C17	Net-Zero Target	[P]	n/a	
CNZS-C18	Target Reporting	[P]	n/a	
CNZS-C19	Consolidate Scope 3	[P]	n/a	
CNZS-C20	Target Revision	[P]	n/a	
4. TARGET IMPLEMENTATION				
All Chapter 4 criteria (CNZS-C21 to -C35) are preserved. Companies that purchase electricity for sale to end users applying criterion PS-C5 shall refer to sections 4.3 and 4.4 of the Corporate Net-Zero Standard V2.0 for requirements on target implementation.				
5. REPORTING & ASSESSING TARGET PROGRESS				

SBTi Corporate Net-Zero Standard Version 2		Interaction rule	Power Sector Standard	
Criterion	Theme		Criterion	Explanation
All Chapter 5 criteria (CNZS-C36 to -C37) are preserved.				
6. ONGOING EMISSIONS RESPONSIBILITY				
All Chapter 6 criteria (CNZS-C38 to -C46) are preserved.				

2. ADDITIONAL POWER SECTOR CRITERIA

2.1 Net-Zero Governance

No additional requirements need to be followed by companies in the power sector.

2.2 Target Base Year Assessment

PS-C1. Companies shall determine the value of each applicable metric for the target base year for the relevant power sector activities in their organizational boundary.

Company category: *All companies*
Activity type*: All activities*
Interaction rule*: New criterion added for power sector only*
Assessment stage: *Initial Validation, Renewal Validation*

C1.1. **Applicable metrics**: Companies shall use Table B.1.1 of Annex B: Metrics, Methods and Pathways to identify the metrics applicable to their operations and value chain activities:

a. **Power generation**: Metric-PS.1 to Metric-PS.5.
b. **Transmission** and **distribution**: Metric-PS.6a - Metric-PS.10a and Metric-PS.6b - Metric-PS.10b respectively.
    i. Companies with transmission AND distribution activities may report Metric-PS.6a, 8a, 9a, 10a and Metric-PS.6b, 8b, 9b, 10b as aggregated metrics for transmission and distribution together.
    ii. Companies with transmission and/or distribution activities may only report the share of total electricity losses (Metric-PS.9a and/or Metric-PS.9b) if they have no visibility on the contribution of the technical losses only (Metric-PS.10a and/or Metric-PS.10b).
c. **Storage**: Metric-PS.11 and Metric-PS.12.
d. **Retail**: Metric-PS.13 and Metric-PS.14.

C1.2. **Current performance**: Companies shall measure their level of performance in the target base year by calculating the values for all the applicable metrics and value chain activities identified at C1.1.

2.3 Target Setting

2.3.1 Power generation activities

Box 1: Methods and pathways for power generation activities

Target-setting methods
Targets for companies with power generation activities are aligned with the scope 1 target methods proposed in the SBTi Corporate Net-zero Standard V2.0, with modifications and additional sector-specific requirements as detailed in criterion PS-C2. The eligible target-setting methods are:

- ***Scope 1 emissions intensity reduction**: Targets to reduce scope 1 CO_2 emission intensity, using the Sectoral Decarbonization Approach (SDA) and electricity emission pathway (see Table B.2.1).*
- ***Asset transition targets**: Targets to reduce scope 1 emissions through retirement or retrofit of unabated fossil fuel power generation assets consistent with reaching net-zero emissions by 2050 (see details below).*

The option to set scope 1 alignment targets on the low carbon electricity generated proposed in the first consultation draft is no longer included, to align more closely with the final Corporate Net-Zero Standard Version 2.0 and increase comparability with SBTi cross-sector requirements. Moreover, the underlying method (technology share approach) proved to lead to emission reductions comparable to those achieved through the application of the SDA approach and SBTi decided to no longer include it among the methods applicable within SBTi Standards framework.

Asset transition targets
The Asset Decarbonization Plan method is described in detail along with the Corporate Net-Zero Standard V2.0 complementary documentation and has been substantially revised with respect to what was proposed in the first power sector consultation draft. The Asset Decarbonization Plan shall set out a schedule to abate or retire unabated power generation through one or both of the following approaches:

- ***Science-aligned milestones:** Companies submit a plan to phase out unabated fossil fuel generation in line with the milestones set out in the power generation asset transition pathway or the end of their lifetime (see Table B.2.1), whichever is earlier. Exceptions are allowed for non-baseload power generation and peaking plants as detailed in subcriterion C2.3.*

- ***Science-aligned organizational carbon budget**: Companies define an asset decarbonization plan that is consistent with the carbon budget derived from the Sectoral Decarbonization Approach and electricity emission pathway.*

Pathways
Recognizing the heterogeneity in technological, financial, and policy contexts, and in line with feedback received during the first public consultation, the SBTi introduced regional benchmarks and pathways for power generation activities. Drawing from the IEA WEO NZE 2024 scenario, the target-setting options and associated benchmarks for emission intensity and asset transition allow for regional disaggregation between advanced economies and emerging market and developing economies, as per IEA categorization. See the Power Sector pathways supporting documentation.

The power generation asset transition pathway provides explicit phaseout milestones for unabated baseload fossil fuel power generation capacity, differentiated both by fuel type and geography.

While the SBTi is responsive to the desire for greater granularity in target setting, derivation of regional pathways poses significant challenges both from a methodological and data availability perspective. At this stage, the SBTi is seeking input on the proposed approach to regional differentiation in the Power Standard Pathways (see consultation survey for details). Key topics include proposed geographic groupings and perceived equity implications.

PS-C2. Companies with power generation activities shall set long-term and near-term scope 1 targets consistent with achieving net-zero emissions from power generation by the net-zero target year.

Company category: *All companies*
Activity type*: Power generation*
Interaction rule: *Superseding CNZS-C10 and CNZS-C11*
Assessment stage: *Initial Validation, Renewal Validation*

C2.1. **Long-term target:** Companies shall set a long-term scope 1 target to reduce emissions from power generation using Metric-PS.3 to the emissions level corresponding to the sector's net-zero target year based on the reference pathway (see Table B.2.1).

C2.2. **Near-term target**: Companies shall set near-term scope 1 targets to reduce emissions in line with eligible science-based target-setting methods and pathways. The following methods are eligible (see Table B.2.1):

a. **Sectoral Decarbonization Approach:** Targets to reduce emissions intensity from power generation (see Metric-PS.3) at a rate consistent with the reference pathway (see Annex B).
b. **Asset transition targets:** Targets to reduce scope 1 emissions in line with the trajectory defined by the Asset Decarbonization Plan (ADP). The plan shall set out a schedule to abate, retire or replace unabated fossil fuel power generation assets in a manner consistent with targets set in C2.1, using either one or both of the following approaches:
    i. **Science-aligned milestones:** Companies shall abate, retire, or replace all unabated fossil fuel generation assets in line with the reference pathway (see Table B.2.1), except where C2.3 applies.
    ii. **Science-aligned organizational carbon budget:** Companies shall set out an asset transition plan, on a schedule selected by the company, that is consistent with the carbon budget[7] derived from the reference pathway.

C2.3. **Exceptions**: Companies setting asset transition targets with the science-aligned milestone approach (option b.i.) may exclude assets serving for non-baseload power generation (e.g., peak plants) from the plan if the following requirements are met:

a. Request for exemption is supported by relevant documentation such as reference to regulatory requirements, capacity-based contracts for ancillary services or reserve capacity, dispatch records, grid assessments.
b. The asset shall maintain an Annual Capacity Factor (ACF) of no more than 15%, calculated on a rolling three-year average.
c. The asset shall not exceed 1,314 total synchronized hours (15% of a calendar year) of operation in any single year, inclusive of testing and maintenance.

[7] The organizational carbon budget refers to the total cumulative GHG emissions from the company's base year to the net-zero target year, consistent with the trajectory established by the Sectoral Decarbonization Approach (SDA) and electricity emission pathway.

d. The asset must demonstrate the technical capability to reach its Minimum Operating Level from a cold start within 60 minutes or less, ensuring its primary function is rapid response to grid stress rather than steady-state supply.

2.3.2 Transmission, distribution, storage activities

Box 2: Targets for electricity losses

The SBTi Power Sector Net-Zero Standard consultation draft introduces a criterion to improve efficiency of electricity networks and storage systems and minimize electricity losses (PS-C3).

Transmission, distribution and 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 increased renewable penetration introduces system stability challenges. In consideration of the consultation responses highlighting limited control over non-technical losses, as well as the request for greater granularity in regionality and transmission and distribution operations, the metrics for electricity losses now distinguish between technical and non-technical losses and transmission and distribution separately, with differentiated benchmarks for advanced economies and emerging market and developing economies, as per IEA categorization.

Lack of standardized definitions and variability in the publicly available data, makes it challenging to derive appropriate benchmarks for technical losses. Three reports mainly informed the options proposed in criterion PS-C3, which are the Council of European Energy Regulators (CEER) 3rd Report on Power Losses (2025), the Association of Mediterranean Energy Regulators (MEDREG)'s Regulatory practices on handling technical and non-technical losses for electricity (2019) and the Update on Technical and Non-Technical Losses (2023).

- ***Option A**: Use of CEER data to derive a global loss % benchmark value for transmission and distribution networks separately and assign different benchmark years for advanced economies and emerging market and developing economies.*
- ***Option B**: Use combined data sets (MEDREG and IEA) to derive separate loss % benchmark values for transmission and distribution networks for advanced economies and emerging market and developing economies.*

The SBTi is seeking consultation feedback on which of the two options is considered the most appropriate. Further details on the data assessed is available in the Pathway Derivation: Power Sector Pathway document.

For storage activities it was noted during the first public consultation that there should be only a recommendation as reducing losses is particularly challenging.

This Standard also proposes a criterion for companies with transmission and/or distribution networks to minimize SF6 emissions (PS-C4). SF_6 has a very high Global Warming Potential (GWP) and can become a significant source of GHG emissions for companies with large transmission and distribution systems. However, mitigation and SF_6 phase out capabilities vary significantly among regions and depend on technology availability, therefore the criterion proposed focuses on companies commitments and best practice implementation.

PS-C3. Companies with owned or controlled transmission and/or distribution activities shall set targets to minimize electricity losses and improve efficiency within their operations.

***Company category:** All companies*
***Activity type:** Transmission, Distribution*
***Interaction rule**: New criterion for transmission and distribution activities only*

Assessment stage: *Initial Validation, Renewal Validation*

C3.1. **Target on technical losses:** Companies with transmission and/or distribution activities shall set a target to reduce their technical losses as defined in Metric-PS.10a and Metric-PS.10b in line with the benchmark values and timelines in Table 2.

C3.2. **Target on total electricity losses:** Companies with transmission and/or distribution activities may set a target on the share of total electricity losses as defined in Metric-PS.9a and Metric-PS.9b instead of Metric-PS.10a and Metric-PS.10b if they have no visibility on the contribution of the technical losses only. The reference benchmark values and timelines remain those in Table 2 for the technical losses only.

C3.3. **Aggregated target:** Companies with transmission AND distribution activities may set a combined target aggregating Metric-PS.10a and Metric-PS.10b and the associated benchmark values in Table 2.

Recommendations for storage activities

R3.1. Companies with electricity storage activities should disclose and aim to reduce their electricity losses as defined in Metric-PS.12.

Table 2. Benchmark values and years for targets on transmission and distribution electricity technical losses (options for consultation)

Option	Metric	Net-zero aligned benchmark value	Net-zero aligned benchmark year
Option A	Transmission technical losses (%)	2%	Advanced economies: 2035 Emerging market and developing economies: 2050
	Distribution technical losses (%)	7%	Advanced economies: 2035 Emerging market and developing economies: 2050
Option B	Transmission technical losses (%)	Advanced economies: 2% Emerging market and developing economies: 4%	2050
	Distribution technical losses (%)	Advanced economies: 5% Emerging market and developing economies: 10%	2050

PS-C4. Companies with transmission and/or distribution activities shall publicly commit to minimize scope 1 SF6 emissions and phase out use and installation of SF6 equipment.

Company category: *All companies*
Activity type: *Transmission, Distribution*
Interaction rule*: New criterion for transmission and distribution activities only*
Assessment stage: *Initial Validation, Renewal Validation*

C4.1. Companies shall commit to adopt best practices and technologies in tracking and handling SF6 emissions, including the following:

a. Periodical Leak Detection And Repair (LDAR) campaigns.
b. Plans for equipment upgrade and replacement in line with technology and market availability.
c. Recycling of recovered SF6 gas.
d. Ensure proper decommissioning of SF6 equipment.

Recommendations

R4.1. Companies should aim to maintain the SF6 leakage rate within their transmission and/or distribution networks as defined in Metric-PS.7a and Metric-PS.7b below 0.1%.

Retail of purchased electricity

Box 3: Target for low carbon electricity purchased and sold to end users

The SBTi Power Sector Net-Zero Standard introduces a dedicated criterion (PS-C5) for companies with purchase and retail of electricity to set targets to increase their share of low-carbon electricity (LCE) that is purchased and sold to end-users. Criterion PS-C5 below has been revised to align with the method, pathway and implementation requirements for scope 2 targets on low carbon electricity purchased and consumed by companies included in the Corporate Net-Zero Standard V2.0 (CNZS-C12 and CNZS-C13), and include clarity around the accounting and the use of market instruments such as EACs.

Pathway
The pathway for low carbon electricity purchased is consistent with the one used for scope 2 LCE targets in the Corporate Net-Zero Standard V2.0. The scenario source for power sector pathways must contain sufficient technological granularity to derive trajectories for low carbon power generation and reflect more recent trends in global electricity decarbonization milestones. The 2024 version of the IEA World Energy Outlook Net Zero Emissions 2050 scenario is therefore used as the scenario source for the low carbon electricity power pathway (IEA, 2024), which also allows for regional disaggregation between advanced economies and emerging market and developing economies, as per IEA categorization.

Target-setting method
The target-setting method proposed for targets on the low carbon electricity purchased and sold to end users is aligned with the method proposed for scope 2 LCE targets in the Corporate Net-Zero Standard V2.0, therefore using linear alignment. The technology share approach proposed in the first consultation draft of the Power Standard is no longer included among the methods applicable within SBTi Standards framework.

PS-C5. Companies with retail of purchased electricity shall set scope 3 targets to increase the share of low carbon electricity that is purchased and sold to end users.

Company category: *All companies*
Activity type: *Retail of purchased electricity*
Interaction rule*: Superseding CNZS-C15 and CNZS-C16*
Assessment stage: *Initial Validation, Renewal Validation*

C5.1. Companies with retail of purchased electricity shall set a target to increase the share of low-carbon electricity (LCE) attributes retired against electricity sold to end users as defined in Metric-PS.14 according to the target-setting method and applicable pathway specified in Table B.2.1.

C5.2. Use of market instruments for LCE targets shall follow the target implementation criteria in Chapter 4 of the SBTi Corporate Net-Zero Standard V2.0. In particular companies shall follow the requirements set forth in chapters 4.3 and 4.4

C5.3. For transparency in how the target is implemented and to ensure credible claims, companies shall publicly disclose the volume of LCE attributes retired through each of the mechanisms defined in CNZS-C31.1.

Recommendation

R5.1. Companies should annually report the percentage of LCE attributes by activity pool which are retired against total resold electricity using an hourly accounting interval and share this information with end-users at hourly granularity.

R5.2. Companies should separately report any electricity consumption by customers and corresponding LCE attribute retirements for customers for which hourly meter data is not available and may exclude it from the calculation of percentage of LCE attributes as per R5.1.

2.4 Target Implementation

No additional requirements need to be followed by companies in the power sector.

2.5 Reporting and Assessing Target Progress

No additional requirements need to be followed by companies in the power sector.

2.6 Ongoing Emissions Responsibility

No additional requirements need to be followed by companies in the power sector.

KEY TERMS AND ACRONYMS

A full list of SBTi terms, definitions, and acronyms is in the SBTi Glossary. Please find here a list of new or updated key terms used in this Standard. Terms marked 'revised' differ from the current definitions in the SBTi Glossary.

Term	Definition
Annual capacity factor	The ratio of the actual number of hours a power generation asset operates in a given year to the total number of hours in that year (8,760), expressed as a percentage.
Asset	A tangible physical unit, equipment, or infrastructure under the company's ownership or operational control that performs a defined function within operations and can be associated with energy or material flows that generate scope 1 GHG emissions. In the context of power generation activities, an asset is defined as any physical infrastructure dedicated to power generation (e.g., coal, oil and natural gas fired power plants).
Capture rate	The proportion of CO_2 emissions from a power generation asset that are captured by carbon capture and storage (CCS) equipment prior to atmospheric release is expressed as a percentage of the total emissions from combustion.
Demand side energy efficiency services	Refers to initiatives and programs aimed at reducing energy consumption by improving the efficiency of energy use on the consumer side. These services can include: time of use tariffs, retrofits, upgrades and behavioral programs.
Dispatch record	Documented operational data recording the timing, duration, and output level of electricity generated by a power generation asset during a given period, used to verify compliance with utilization thresholds applicable to non-baseload exemptions.
Expert Advisory Group (EAG)	A project-specific advisory group providing expert consultation that forms the stakeholder engagement and input to this SBTi Standard.
Energy carrier	A substance or system that contains energy that can be later converted to other forms, such as electricity or mechanical work. Examples of energy carriers include: electricity, hydrogen, chemical batteries, biofuels and fossil fuels.
Final Investment Decision (FID)	A critical milestone in the development of a project, such as a major energy asset, at which the decision by the Board or sponsor to proceed is made with a financial commitment to construction or ownership.
Grid assessment	A technical evaluation of electricity grid conditions and operational requirements used to demonstrate the role of a specific generation asset in maintaining grid stability and security.

Term	Definition
Low carbon power generation	Electricity produced by an individual generator that is characterized by direct GHG emissions less than or equal to 0.048 kg CO2/kWh. This threshold changes to 0.024 kg CO2/kWh in 2035.
Minimum operating level	The lowest sustained power output at which a generation asset can operate in a stable and controllable manner while remaining synchronized with the grid.
No-load consumption	The amount of electrical power consumed by a device when it is plugged in but not actively performing its primary function. This is also known as standby power or vampire power.
Non-baseload power generation	Power generation which is typically dedicated to peak load management and grid security including, but not limited to, peaking plants (refer to criterion PS-C2, subcriterion C2.3 for non-baseload exclusion requirements as applicable in the Power Sector Standard).
Electricity losses	Electricity that is lost within transmission and/or distribution networks, typically categorized between: ● Technical losses: Physical electricity losses caused by resistive losses (e.g. heating of conductors), along with capacitive and inductive losses in transmission lines and distribution transformers. ● Non-technical losses: Electricity lost caused by non-metered consumption, theft, and others (such as metering errors, difference in metering, billing, and data processing).
Renewable energy	Renewable energy is any form of energy from solar, geophysical or biological sources that is replenished by natural processes at a rate that equals or exceeds its rate of use. Renewable energy is obtained from the continuing or repetitive flows of energy occurring in the natural environment including, but not limited to, solar energy, hydropower, wind, tide and waves and ocean thermal energy.
Reserve capacity	Generation capacity held available but not continuously dispatched, maintained to ensure grid reliability and to respond to unexpected demand peaks, supply shortfalls, or asset failures.
Storage	Within this Standard storage shall refer to the process of retaining or holding energy for future use as electricity.
Sulphur Hexafluoride (SF6)	Synthetic, colorless, odorless, non-flammable, and non-toxic greenhouse gas, widely used in the electrical industry for its excellent insulating and arc-quenching properties but with a global warming potential (GWP) of 23,500 and atmospheric lifetime of 3,200 years.
Retail of electricity	Within this Standard, sale of electricity refers to the sale of purchased electricity to the user and intended as the transaction where electricity is sold from a supplier to an end-user or consumer, also known as electricity retail.

Term	Definition
Transmission, distribution (T&D) of electricity	The stages of delivering electricity from power plants to end users. ● Transmission: This involves moving electricity over long distances from power plants to substations using high-voltage power lines. ● Distribution: This stage involves delivering electricity from substations to homes, businesses, and other end users.
Unabated fossil fuel power generation	Fossil fuels power generation without carbon capture, utilization, and storage (CCUS) or equipped with CCS with a capture rate less than 95%.

Acronyms	Definition
European Financial Reporting Advisory Group (EFRAG)	Private association established in 2001. Its Member Organisations are European stakeholders and National Organisations having knowledge and interest in the development of International Financial Reporting Standards
Expert Advisory Group (EAG)	A project-specific advisory group providing expert consultation that forms the stakeholder engagement and input to this SBTi Standard.
International Standard Industrial Classification of All Economic Activities (ISIC)	United Nations system for classifying economic activities, providing a comprehensive framework to categorize productive activities and enable the collection and reporting of statistical data.
Nomenclature statistique des activités économiques dans la Communauté européenne (NACE)	Industry standard classification system used in the European Union providing a framework for collecting and presenting statistical data according to economic activity via four hierarchical levels.
Standard Operating Procedure (SOP)	The processes and guidelines for developing or revising SBTi Standards, this ensures the Standards are created systematically, transparently, and in alignment with scientific principles.

ANNEX A: ACTIVITIES AND EMISSIONS IN SCOPE

The activities within scope of this Standard have been defined in line with main industry classification systems[8] and can be described as follows:

- **Power generation**: operation of generation facilities that produce electricity, including heat and power cogeneration in CHP plants[9], from fossil and non-fossil sources, including but not limited to: natural gas, coal, fossil-based hydrogen and other fossil fuels, biofuels, renewables (e.g. hydropower, on-shore and off-shore wind power, photovoltaic solar energy, thermal solar energy, geothermal energy, green hydrogen-to-power, and tide, wave and ocean energy), nuclear, fossil fuels.
- **Transmission of electricity**: operation of transmission systems that convey the electricity from the generation facility to the distribution system.
- **Distribution of electricity**: operation of distribution systems (i.e., consisting of lines, poles, meters, and wiring) that convey electric power received from the generation facility or the transmission system to the final consumer.
- **Retail of electricity**: sale of purchased electricity to the user.
- **Storage of electricity**: conversion of electrical energy into a form of energy which can be stored, the storing of such energy, and the subsequent reconversion of such energy into electrical energy (e.g. operation of pump storage facilities, compressed air storage facilities, or battery storage facilities).

The table below summarizes the value chain activities and key emissions sources typically associated with the Power sector, with a clear distinction between those covered by the SBTi Power Sector Net-Zero Standard and those covered by the Corporate Net-Zero Standard (as not requiring sector-specific criteria):

[8] This classification is in line with many sector-acknowledged classification systems, including EFRAG. Note that EFRAG sector classification is still under development 04-02 - Sector Classification SEC 1 - clean - SRB 240917.pdf.
[9] Stand alone heat generation activities are not in scope.

Table A.1. Activities and emission sources in and out of scope of the SBTi Power Sector Net-Zero Standard

Associated activities	Power sector activities and emission sources in/out of scope			
	Power Generation	**Electricity Transmission, Distribution**	**Electricity Storage**	**Electricity Purchase and Retail**
Purchased material and services	Scope 3 Cat 1 and 2	Scope 3 Cat 1 and 2	Scope 3 Cat 1 and 2	Scope 3 Cat 1 and 2
Construction and installation	Scope 1 (where self-build) Scope 2 (construction power) Or Scope 3 Cat. 1 and 2	Scope 1 (where self-build) Scope 2 (construction power) Or Scope 3 Cat. 1 and 2	Scope 1 (where self-build) Scope 2 (construction power) OR Scope 3 Cat. 1 and 2	Scope 1 (where self-build) Scope 2 (construction power) Or Scope 3 Cat. 1 and 2
Power generation	**Scope 1 (from generation assets)**	**Scope 2 (losses in the network)**	**Scope 2 (losses in storage)**	**Scope 3 Cat. 3 (Activity D - generation of purchased electricity that is sold to end users)**
Asset management, operations, maintenance	Scope 1 and 2	Scope 1 and Scope 2 from purchased and consumed electricity	Scope 1 and Scope 2 from purchased and consumed electricity	Scope 1 and Scope 2 from purchased and consumed electricity
Transmission, distribution, storage	Scope 3 Cat. 3 (Activity A - Upstream emissions of purchased fuels)	**Scope 1 SF6 emissions**	Scope 3: Cat. 3 (Activity C - T&D losses)	Scope 3 Cat. 3 (Activity C - T&D losses)

Covered by the SBTi Power Sector Net-Zero Standard	**Covered by the Corporate Net-zero Standard or other applicable SBTi Sector Standard**

Table A.2. lists the activities falling within the scope of the SBTi Power Sector Net-Zero Standard in relation to the International Standard Industrial Classification of All Economic Activities (ISIC)[10] section and class codes, as well as the Statistical classification of economic activities in the European Community (NACE)[11] and European Financial Reporting Advisory Group (EFRAG)[12] sector classification class codes.

Table A.2. Economic activities within the scope of the Power Sector Net-Zero Standard as defined by sector classification codes

ISIC Class	ISIC Class	Activity/ NACE Group	NACE class		EFRAG	SBTi Power Sector Net-Zero Standard activity
D Electricity, gas, steam, and air conditioning supply	3510	Electric power generation, transmission and distribution	35.11	Production of electricity from non-renewable sources	D.35.11 Production of electricity from non-renewable sources	Power generation[13] from fossil and non fossil sources including, but not limited to: coal, oil, gas, renewables (solar, wind, hydro, geothermal), biomass, biogas from waste, nuclear, hydrogen.
			35.12	Production of electricity from renewable sources	D.35.12 Production of electricity from renewable sources	
			35.13	Transmission of electricity	D.35.13 Transmission of electricity	Electricity transmission
			35.14	Distribution of electricity	D.35.14 Distribution of electricity	Electricity distribution
			35.16	Storage of electricity	D.35.16 Storage of electricity	Electricity storage

[10] ISIC Revision 4, (United Nations, 2008).
[11] NACE Rev. 2.1, (eurostat, 2022).
[12] Note that EFRAG sector classification is still under development, (EFRAG, 2024).
[13] Including heat and power cogeneration in CHP plants. Stand alone heat generation activities are not in scope.

ANNEX B: METRICS, METHODS & PATHWAYS

This annex illustrates metrics, methods and pathways applicable to set targets within this Power Sector Standard.

B.1 Metrics overview

Metrics measure quantitative data about the company's activities that are relevant to setting climate targets. They include GHG metrics and alignment metrics. GHG metrics measure the direct and indirect GHG emissions associated with the company's operations and its value chain. Alignment metrics measure various metrics that reflect the company’s operational and value chain performance against alignment with a net-zero economy.

Table B.1.1 provides an overview of all the sector-specific metrics that are used in the Power Sector Standard, grouped by power sector activity and scope. To be noted that some metrics are only used for disclosure purposes and/or to determine applicability thresholds of the Power Sector Standard.

Table B.1.1. Power sector metrics overview

Code	Metric	Scope	Description	Unit	Purpose
Power Generation					
Metric-PS.1	Absolute CO_2 emissions from power generation	Scope 1	Direct CO_2 emissions from power generation from assets and activities owned or controlled by the entity. Measured annual CO_2 emissions from generation of electricity. In line with the assumptions within the electricity generation emissions pathway, Metric-PS.1 excludes negative emission electricity generation (e.g. BECCS) and emissions from the combustion of biomass.	t CO_2	Disclosure
Metric-PS.2	Absolute CO_2e emissions from power generation	Scope 1	Direct CO_2-equivalent emissions from power generation from assets and activities owned or controlled by the entity. Measured annual CO_2, (as per Metric-PS.1), CH4 and N2O emissions from generation of electricity converted into CO2-equivalent based on GWP in line with GHGP recommendations. Other GHGs are not considered material for power generation activities.	t CO_2e	Disclosure, applicability, Target setting
Metric-PS.3	Physical CO_2 emissions intensity from power generation	Scope 1	Physical CO_2 emissions intensity of power generation from assets and activities owned or controlled by the entity. Calculated by dividing the Scope 1 CO_2 emissions from power generation as per Metric-PS.1 by annual power generation in MWh. *Note: Non-CO2 emissions (mainly CH4 and N2O) from power generation are not included in the metrics for target setting as the power sector pathway considers CO2 emissions only. Non-CO2 emissions also represent a minor contribution (~1%) to Scope 1 combustion emissions from power generation[14] and are reduced proportionally to CO2 within the target on Metric-PS.3*	kg CO_2 / MWh	Disclosure, Target-setting

[14] Greenhouse Gas Inventory Guidance: Direct Emissions from Stationary Combustion Sources.

Code	Metric	Scope	Description	Unit	Purpose
Metric-PS.4	Share of low carbon power generation	Scope 1	Share of total power generation with direct CO2 emissions intensity equal to or less than 0.048 kg CO_2/kWh calculated as the ratio of low-carbon generation to total electricity generation. This threshold reflects the emissions intensity of natural gas combined cycle generation equipped with carbon capture and storage (CCS) operating at a 90% CO_2 capture rate. From 2035 onwards, the threshold is tightened to 0.024 kg CO_2/kWh, reflecting an increase in capture rates to approximately 95%, consistent with anticipated technological improvements.	%	Disclosure
Metric-PS.5	Low carbon investments	N/A	Gross investments dedicated to the addition/expansion of low-carbon power generation capacity, where low carbon power generation is where direct CO2 emissions intensity equal to or less than 0.048 kg CO_2/kWh. From 2035 onwards, the threshold is tightened to 0.024 kg CO_2/kWh, reflecting an increase in capture rates to approximately 95%, consistent with anticipated technological improvements.	M $	Disclosure
Electricity Transmission					
Metric-PS.6a	Absolute SF_6 emissions from electricity transmission	Scope 1	SF_6 emissions from electricity transmission by assets and activities owned or controlled by the entity. SF_6 emissions in electricity transmission is largely due to equipment leakage caused by imperfect seals, damage or wear-and-tear, and improper handling during installation, maintenance, or disposal. Absolute emissions from SF_6 leakage are calculated through a combination of direct measurement (monitoring) and estimation methods (mass balance approach: input vs. output).	t SF_6	Disclosure, applicability
Metric-PS.7a	SF_6 leakage rate in electricity	Scope 1	Rate at which SF_6 gas escapes from electrical equipment in transmission networks due to leaks, measured as a percentage of the	%	Disclosure, Recommendation

Code	Metric	Scope	Description	Unit	Purpose
	transmission		total SF_6 gas volume within the equipment, per year. SF_6 leakage can be calculated through direct measurement (preferred approach), pressure/density monitoring, mass balance		
Metric-PS.8a	Absolute CO_2 emissions from transmission electricity losses	Scope 2	CO_2 emissions from electricity losses and no-load consumption within the entity's operated transmission system. Calculated by multiplying transmission losses between secondary energy and final energy (in MWh per year) by location-based grid emission factor (in t CO_2 per MWh per year).	t CO_2	Disclosure, applicability
Metric-PS.9a	Share of total losses of electricity in transmission network	Scope 2	Share of electricity lost in transmission networks, defined as the share of electricity losses in transmission network Calculated by dividing electricity transmission losses (in MWh per year) by total electricity transmitted (in MWh per year) and multiplying by 100, expressed in % terms.	%	Disclosure, Target-setting (optional)
Metric-PS.10a	Share of technical losses of electricity in transmission network	Scope 2	Share of electricity lost in transmission networks due to technical losses, defined as the share of electricity technical losses in transmission network Calculated by dividing electricity transmission technical losses (in MWh per year) by total electricity transmitted (in MWh per year) and multiplying by 100, expressed in % terms.	%	Disclosure, Target-setting
Electricity Distribution					
Metric-PS.6b	Absolute SF_6 emissions from electricity distribution	Scope 1	SF_6 emissions from electricity distribution by assets and activities owned or controlled by the entity. SF_6 emissions in electricity distribution is largely due to equipment leakage caused by imperfect seals, damage or wear-and-tear, and	t SF_6	Disclosure, applicability

Code	Metric	Scope	Description	Unit	Purpose
			improper handling during installation, maintenance, or disposal. Absolute emissions from SF_6 leakage are calculated through a combination of direct measurement (monitoring) and estimation methods (mass balance approach: input vs. output).		
Metric-PS.7b	SF_6 leakage rate in electricity distribution	Scope 1	Rate at which SF_6 gas escapes from electrical equipment in distribution networks due to leaks, measured as a percentage of the total SF_6 gas volume within the equipment, per year. SF_6 leakage can be calculated through direct measurement (preferred approach), pressure/density monitoring, mass balance	%	Disclosure, Recommendation
Metric-PS.8b	Absolute CO_2 emissions from distribution electricity losses	Scope 2	CO_2 emissions from electricity losses and no-load consumption within the entity's operated distribution system. For disclosure use only. Calculated by multiplying distribution losses between secondary energy and final energy (in MWh per year) by location-based grid emission factor (in t CO_2 per MWh per year).	t CO_2	Disclosure, applicability
Metric-PS.9b	Share of total losses of electricity in distribution network	Scope 2	Share of electricity lost in distribution networks, defined as the share of total electricity losses in distribution network. Calculated by dividing electricity distribution losses (in MWh per year) by total electricity distributed (in MWh per year) and multiplying by 100, expressed in % terms.	%	Disclosure, Target-setting (optional)
Metric-PS.10b	Share of technical losses of electricity in distribution network	Scope 2	Share of electricity lost in distribution networks due to technical losses, defined as the share of electricity technical losses in distribution network. Calculated by dividing electricity distribution technical losses (in MWh per year) by total electricity distributed (in MWh per year) and multiplying by 100, expressed in % terms.	%	Disclosure, Target-setting

Code	Metric	Scope	Description	Unit	Purpose
Storage of Electricity					
Metric-PS.11	Absolute CO_2 emissions from electricity storage losses	Scope 2	CO_2 emissions from electricity losses within the entity's electricity storage system. For disclosure purposes only. Calculated by multiplying electricity storage losses (in MWh per year) by location-based grid emission factor (in t CO_2 per MWh).	t CO_2	Disclosure, applicability
Metric-PS.12	Total share of electricity lost in electricity storage	Scope 2	Electricity lost in storage systems as a share of total electricity storage. Calculated by dividing electricity storage losses (in MWh per year) by total electricity storage input (in MWh per year) and multiplied by 100, expressed in % terms.	%	Disclosure, Recommendation
Retail of purchased Electricity					
Metric-PS.13	Absolute CO_2 emissions from electricity purchased and sold to end user	Scope 3 Category 3	CO_2 emissions from electricity purchased and sold to the end user. For disclosure use only. Calculated by multiplying total electricity purchased and sold to the end user (in MWh per year) by the relevant grid CO_2 emission factor. Accounting of Scope 3 emissions from electricity purchased shall follow requirements set forth in the Corporate Net-Zero Standard V2.0 chapter 4.3 and 4.4.	t CO_2	Disclosure, applicability
Metric-PS.14	Share of electricity purchased and sold to end user from low carbon power generation	Scope 3 Category 3	Share of electricity purchased and sold to end users from sources with direct CO2 emissions intensity equal to or less than 0.048 kg CO_2/kWh, calculated as the ratio of low-carbon electricity purchased and sold to end-users to total electricity purchased and sold to end-users. This threshold reflects the emissions intensity of natural gas combined cycle generation equipped with carbon capture and storage (CCS) operating at a 90% CO_2 capture rate. From 2035 onwards, the	%	Disclosure, Target-setting

Code	Metric	Scope	Description	Unit	Purpose
			threshold is tightened to 0.024 kg CO_2/kWh, reflecting an increase in capture rates to approximately 95%, consistent with anticipated technological improvements.		

B.2 Power sector target-setting methods and pathways

Table B.2.1 below summarizes the target metrics for emissions and activities in scope of the Power Standard, the associated target setting methods and the applicable pathways. Detailed description of each applicable method and pathway is provided in the complementary documentation published along with SBTi Corporate Net-Zero Standard Version 2.0 available here.

Table B.2.1. Power sector metrics, target-setting methods and pathways/benchmarks applicable for targets within the Power Sector Net Zero Standard, grouped by power sector activity type

Activity type	Scope	Metric	Target-setting options	Method	Pathway/Benchmark
Power generation	Scope 1	**Metric-PS.3** - Physical CO2 emissions intensity from power generation	Emission intensity reduction targets: Targets to reduce aggregate Scope 1 emissions	SDA	Electricity emission pathway
	Scope 1	**Metric-PS.1** - Absolute CO2 emissions from power generation	Asset transition target(s): targets to phase out carbon-emitting assets	ADP - milestone approach	Power generation asset transition pathway
				ADP - budget approach	Electricity emission pathway
Electricity transmission	Scope 2	**Metric-PS.10a** - Share of technical losses of electricity in transmission network	Targets to reduce the share of electricity technical losses	Linear alignment[15]	**OPTION A** 2% by 2035 for Advanced economies 2% by 2050 for Emerging markets and Developing economies
					OPTION B 2% by 2050 for Advanced economies 4% by 2050 for Emerging

Activity type	Scope	Metric	Target-setting options	Method	Pathway/Benchmark
					markets and Developing economies
Electricity distribution	Scope 2	**Metric-PS.10b** - Share of technical losses of electricity in distribution network	Targets to reduce the share of electricity technical losses	Linear alignment[15]	**OPTION A** 7% by 2035 for Advanced economies 7% by 2050 for Emerging markets and Developing economies
					OPTION B 5% by 2050 for Advanced economies 10% by 2050 for Emerging markets and Developing economies
Retail of electricity purchased	Scope 3	**Metric-PS.14** - Share of low carbon electricity purchased and sold to end user	Alignment targets: Target to increase the share of electricity purchased and sold to end users from low carbon sources	Linear alignment[15]	Low carbon electricity pathway

[15] Method applicability as per the specification sheet published within the Corporate Net-Zero Standard V2.0 Methods, Metrics and Pathways, is extended to include Scope 2 from electricity losses and Scope 3 Cat. 3 emissions from electricity purchased and sold to end users.

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SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION