SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

FINANCIAL INSTITUTIONS NET-ZERO STANDARD TARGET-SETTING METHODS AND TOOL DOCUMENTATION

Version 1.0

September 2025

ABOUT SBTi

The Science Based Targets initiative (SBTi) is a corporate climate action organization that enables companies and financial institutions worldwide to play their part in combating the climate crisis.

We develop standards, tools and guidance which allow companies to set greenhouse gas (GHG) emissions reductions targets in line with what is needed to keep global heating below catastrophic levels and reach net-zero by 2050 at latest.

The SBTi is incorporated as a UK charity, with a subsidiary SBTi Services Limited, which hosts our target validation services. Partner organizations who facilitated SBTi's growth and development are CDP, the United Nations Global Compact, the We Mean Business Coalition, the World Resources Institute (WRI), and the World Wide Fund for Nature (WWF).

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VERSION HISTORY

Version	Change/update description	Release date	Effective dates
Version 1.0	N/A	September 4, 2025	September 4, 2025

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ABOUT THIS DOCUMENT

This document provides an overview of the methods and tools that financial institutions may use to set targets using the Financial Institutions Net-Zero Standard. The Standard includes five methods including portfolio climate alignment, portfolio intensity convergence, sector absolute contraction, portfolio index alignment, and phaseout.

To operationalize these methods, an Excel-based tool (SBTi Financial Institutions Net-Zero Target-setting Tool) has been developed. It enables financial institutions to input the required information and calculate the minimum target ambition. The tool's primary purpose is to provide a streamlined, user-friendly interface for setting science-based targets for financial activities. It includes the following components:

- **DEFINING IN-SCOPE/OUT-OF-SCOPE**
  Identifies which financial activities are in scope via the 5% revenue threshold.

- **SEGMENTATION AND DATA PROVISION**
  Segmentation by financial activity, with inputs aligned to the Standard's requirements:
  1) Segmentation: breakdown of sub-asset classes or lines of business to support.
  2) Near-term target coverage: selection of target types and coverage check.
  3) Base-year assessment by climate-alignment categories.
  4) Base-year assessment of sector metrics (if selected).
  5) Reconciliation of total exposure where there's overlap between climate-alignment and sector assessments.
  6) GHG emissions inventory data.

- **TARGET SETTING:** The tool is intended to be used to establish both climate-alignment and sector-specific targets.
  - **Climate-alignment targets:**
    - **How to inform climate alignment:** Using sector pathways, financial institutions can assess the divergence between their current portfolio company performance and the reference pathway. A value that meets or exceeds the minimum value in the reporting year of the reference pathway may be considered "in-transition." Alternatively, financial institutions may use eligible third-party climate-alignment methodologies listed in the SBTi Financial Institutions Net-Zero Standard Implementation List to assess counterparty climate alignment.
    - **Target tool functionality:** The tool incorporates relevant information provided by the financial institution in the segmentation tab (per financial activity). After selecting the target type, target year and regional breakdown, the tool calculates the minimum target ambition.
  - **Sector Targets:** Financial institutions apply the sector-specific methods (Portfolio Intensity Convergence, Sector Absolute Contraction, Portfolio Index Alignment, and Phaseout) to determine the minimum interim performance values required, based on their base-year performance. The tool integrates sector-specific data and methodologies to support informed decision-making and alignment with global climate goals.

1. ELEMENTS OF TARGET DESIGN

1.1 Target-Setting Methods Overview

Target-setting methods are mathematical formulae or algorithms used to calculate interim performance values, which serve as the reference for entities to set targets. These methods are independent of, but related to, pathways and metrics.

A target-setting method is applied to each target metric to determine the required interim performance value and to guide the formulation of science-based, measurable, and time-bound targets. While each metric is based on an underlying *methodology*, this term is distinct from the target-setting *method.* Within this document, *methodology* refers to the process used to inform the metric, whereas *method* refers specifically to the formula used to calculate target ambition.

Pathways and company input variables are used to determine net-zero aligned benchmark values. The target-setting method is then used to calculate the interim performance value and, subsequently, the target (Figure 1).

Figure 1. Elements of target design

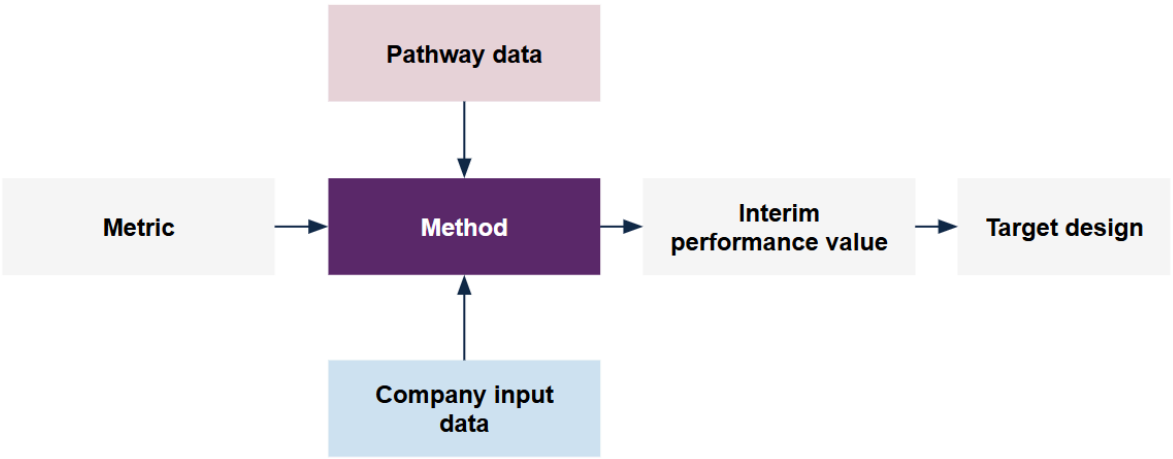


Table 1 provides an overview of the main target types used in the Financial Institutions Net-Zero Standard. Financial institutions can select between portfolio-wide climate-alignment targets or sector targets (for specific sectors).

Table 1. Summary of metrics and target-setting methods used in the Financial Institutions Net-Zero Standard

Target coverage	Metric	Method	Interim performance value	Target design	FINZ Standard Reference
Portfolio wide	Climate-Alignment	Portfolio Climate-Alignment method (see section)	Linear increase to milestones depending on a segment	Point in time linear target	Table 3 Climate-Alignment Targets

Sector-specific	Sector Metric (Physical Emissions Intensity)	Portfolio Intensity Convergence	Converges towards net-zero intensity value	Point in time target	Table 3 Sector Targets
	Sector Metric (Absolute Emissions)	Sector Absolute Contraction	Contracts at same rate as reference pathway	Point in time linear target	Table 3 Sector Targets
	Sector Metric (Technology Share)	Portfolio Index Alignment	Aligns to pathway value in target year	Point in time linear target	Table 3 Sector Targets
	Sector Metric (Absolute Emissions or Financial Exposure)	Phaseout	Linear path to 100% phaseout by 2030 in OECD countries and by 2040 globally	Point in time linear target	Table 3 Sector Targets

Each target-setting method is used to define the interim benchmark value required by the target year. The resulting target represents the commitment of the financial institution to close the gap between its baseline value and the minimum benchmark value required by that year.

As established in the Financial Institutions Net-Zero Standard portfolio near-term targets requirement (FINZ-C12.3), if a financial institution is already operating at or below the minimum benchmark target-year value, it must instead set a target that meets or exceeds the ambition level required by the subsequent milestone year (i.e., 2035, 2040, 2045, or 2050). This means using the target-setting method to calculate the benchmark value for the subsequent milestone year and targeting that value by the target year instead.

Example: based on the hypothetical benchmark intensity values below, a financial institution with a baseline intensity of 4.7 in 2025 that intends to set a 2030 target that has already met the minimum benchmark target year value for 2030 (i.e. 6.8 by 2030). Therefore, the financial institution must instead set a target of 3.9 or lower – the minimum benchmark intensity in 2035 – by 2030.

- Minimum benchmark intensity in 2030 = 6.8.
- Minimum benchmark intensity in 2035 = 3.9.

As another example, based on the hypothetical values below, a financial institution with a climate alignment of 50% in 2025 that intends to set a 2030 target has already met the minimum climate-alignment target ambition (when the calculation is based on its base-year value). The financial institution would therefore need to set a target to reach 71.25% climate alignment (i.e., the minimum value in 2035, the subsequent milestone year) or higher by 2030.

- Base-year climate alignment of 0% in 2020.
- Minimum climate-alignment target ambition of 95% by 2040.
    - Based on the base-year climate alignment of 0% in 2020, the minimum climate-alignment target ambition is 47.5% by 2030 and 71.25% by 2035.

1.2 General Data Requirements

Operationalizing the methods through the SBTi Financial Institutions Net-Zero Target-Setting Tool requires both input data from the financial institution and pre-supplied data embedded within the tool.

Input data requirements for target setting include:

- **Financial exposure**: The amount invested in, lent, or underwritten to real-economy activities in each sector. Financial exposure is expressed using the relevant financial metrics as specified in the Financial Institutions Net-Zero Standard (e.g., assets under management (AUM) for asset managers).

- **Sector segmentation**: To ensure that the correct reference pathways are selected for each counterparty, financial institutions may require data on the technology type, region, and business model of each counterparty. Further details are provided in Section 4.

- **Counterparty-level information**: The baseline metric performance of each counterparty must be determined prior to aggregation. For climate-alignment metrics, the baseline value represents the alignment status of each counterparty (which may include entities, projects or associated assets). For sector targets, the baseline value may vary– such as emissions intensity, absolute emissions, technology type, or financial exposure – depending on the sector. The final step is to aggregate the counterparty-level values to a sector or portfolio-level metric using a portfolio-share weighting approach, where each counterparty is weighted by its associated financial exposure.

Pre-supplied data in SBTi tools is limited to reference pathway data:

- **Climate-alignment pathways**: For portfolio climate-alignment targets, the tool provides linear pathways to determine near-term ambition levels for different portfolio segments.
- **Sector pathways**: Industry-standard activity-level pathways are provided for each sector. Section 4 provides an overview of these pathways.

2. CLIMATE ALIGNMENT TARGETS

The Financial Institutions Net-Zero Standard introduces alignment targets for near- and long-term target setting. Climate alignment targets are established across the portfolio within each financial activity.

2.1 Metric Description

The climate-alignment metric describes the extent to which financial activities are directed toward portfolio entities, projects, and assets that are in transition, constitute climate solutions, or have already transitioned to a net-zero-aligned performance level compatible with achieving a net-zero economy by 2050.

To calculate the baseline climate-alignment share of their portfolio, the financial institution must determine the share of financial exposure to counterparties in the "in-transition", “climate solutions”, and “net-zero state” categories. Table 2 provides definitions of each category.

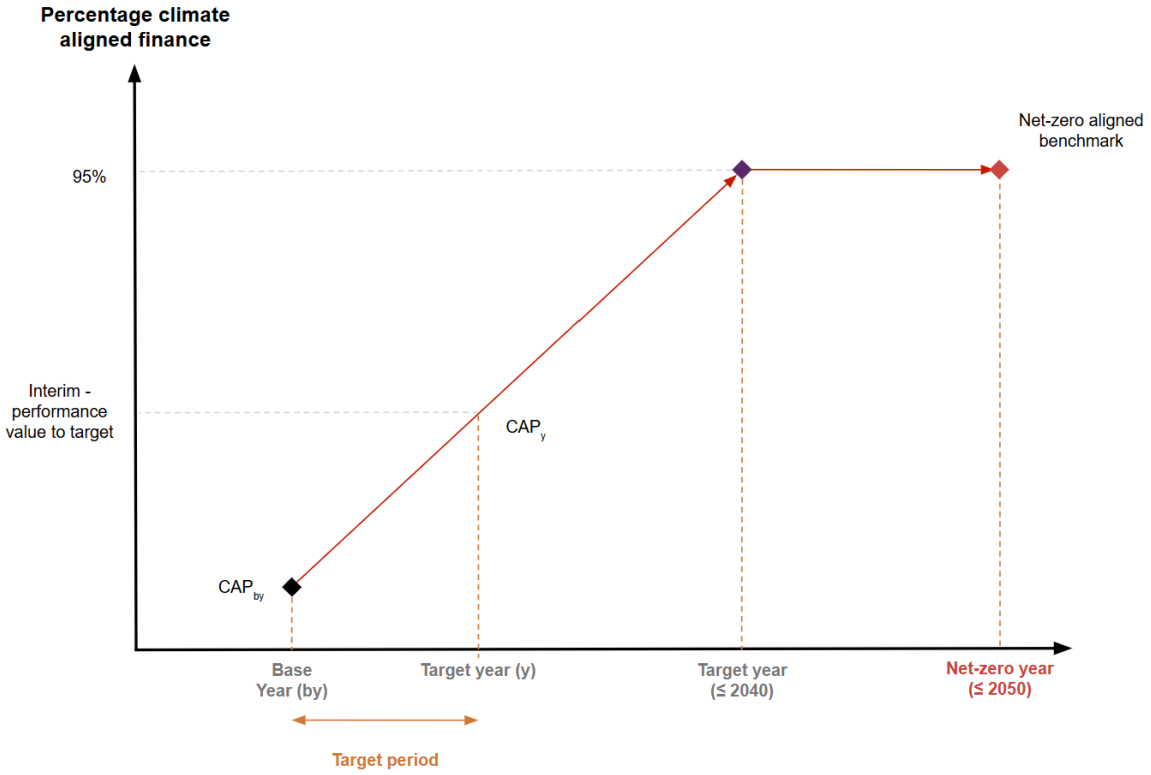
Table 2. Key elements of the portfolio climate-alignment approach

	In transition	Climate solutions	Net-zero state	Not aligned	Not assessed
Definition	Counterparties that are on a science-based pathway to net-zero.	Activities that are necessary for the economy-wide transition to net-zero.	Counterparties that have reached zero or near-zero emissions levels.	Counterparties that are not targeting a net-zero transition.	No information on the counterparty available (yet).

2.2 Target-setting method description

The portfolio climate-alignment method establishes interim performance values for the climate-alignment metric between the base year and the net-zero target year. While a financial institution's portfolio may change over time, its counterparties are still expected to align with the net-zero goals of the Paris Agreement.

Figure 2. Key elements of the portfolio climate-alignment approach



2.2.1 Step 1: Calculate alignment of portfolio

Within each financial activity, the total of climate-aligned financial activities is first calculated using Equation 1, representing the total financial exposure to climate-aligned counterparties. To convert this into a percentage share metric, divide the total climate-aligned exposure by the total outstanding exposure of the financial activity for the reporting year (Equation 2).

Equation 1. Aggregation of climate-aligned financial activities in a specific year

$$\text{Total climate aligned \$} = \sum_{i}^{n} \left(\text{Aligned counterparty share of exposure} \times \text{\$ exposure} \right)$$

Assessed using alignment methodologies relevant for different counterparty types

Equation 2. Calculation of portfolio climate-alignment percentage for the reporting year

$$\text{Portfolio climate alignment (\%)} = \frac{\text{Total climate aligned \$}}{\text{Total portfolio \$}} \times 100$$

2.2.2 Step 2: Calculate alignment of portfolio in the target year

The minimum share of financial activities that must be climate-aligned by the interim target year is determined by measuring the base year level of alignment of the financial activity and applying the climate-alignment values required for each portfolio segment at future milestone years (in line with Table 3 of the Standard).

Equation 3 is applicable to Segments B and C, providing the formula to calculate the climate-alignment percentage for the target year for all counterparties within each segment. Financial institutions can use this to determine the required target year percentage.

Equation 3. Portfolio climate-alignment target for Segments B and C (developed economies) – see Table 3 below for milestone benchmark and corresponding milestone year.

$$CAP_y = 95\% - \left[\left(2040 - y \right) \times \left(\frac{95\% - CAP_{by}}{2040 - by} \right) \right]$$

Where:

CAP_y = Climate-aligned percentage in the target year (y)

CAP_{by} = Climate-aligned percentage in the base year (by)

Table 3: Corresponding milestone benchmark and year by year segment and geography

Regional differentiation		**Near-term target:** Climate-alignment at or above linear path (as of target year) from base year % to … in …	**Milestone year for deriving near-term target**	**Long-term target:** Climate-alignment (net-zero state only) at or above
No regional differentiation		… to 95% in …	… Segment A: 2035 Segment B: 2040 Segment C: 2040 Segment D: 2050	95%
With regional differentiation	Developed economies	… to 95% in …		
	Developing economies	… to 85% in …		

The final step aggregates the targeted alignment levels across all segments to produce an aggregate alignment target (Equation 4). The individual climate-aligned percentage targets for each segment is aggregated based on the current exposure to each segment.

Equation 4: Aggregation of target ambition across multiple segments

$$\text{Aggregated } CAP_y = \sum_{i=\text{Segment A}}^{\text{Segment D}} \left(\text{Exposure}_i \times CAP_{y\,i} \right)$$

2.3 Tool description

This section describes the relevant components of the climate-alignment target tool, including how the segmentation tabs feed into the calculations.

Initial required parameters:

- Selection of a base year (FINZ-C5).
- Selection of near-term target (FINZ-C12) year and long-term target year (FINZ-C13).
- Selection of target type (climate-alignment only or a mix of climate-alignment and sector targets, in line with FINZ-C12).
- Selection of a regional breakdown (aligned with Table 3).

(LND | AOI | AMI | INS | CMA) segmentation tabs:

- **Financial exposure (or GHG emissions)** per segment A, B, C, and D as well as per climate-alignment assessment (FINZ-C7).
    - The climate-alignment assessment can be informed by methodologies listed in the Implementation List or by performing a benchmark divergence assessment using the sector pathways provided in the tool (for example, an entity or asset such as a building is classified as “in transition” when it demonstrates better performance than the relevant sector benchmark in the reporting year).

Climate-alignment target tab:

- Navigate to the respective in-scope financial activity and select the preferred breakdown. Follow the prompt to navigate to the corresponding grouping (see illustrative screenshot below):

*Please select the **target type** (Climate-alignment only or a mix of climate-alignment and sector targets) and **geographic differentiation** (global or regionally differentiated ambition level), after selection proceed to the relevant table as indicated by the note. Please note that autopopulation is triggered by the selection here.*

Target type *Select*	Mix of Climate-Alignment and Sector Targets	Note: Start in row 233
Geographic differentiation for targets *Select*	Regional differentiation	

- The tool is largely populated automatically but may require additional exposure information depending on the selected parameters. These needs are indicated in the two columns “Additional input required” and “Input to calculate the target” in Table 4.

Table 4. Summary of climate-alignment target tool

Financial activity	Target Type	Geographic differentiation	Additional input required	Input to calculate the target
LND | AOI | AMI | INS | CMA	Climate-alignment only	No regional differentiation	n/a	Indicate both near-term and long-term target year Indicate minimum target ambition for both near-term and long-term[1]
		Regional differentiation	Climate alignment exposure assessment for regional breakdown	
	Mix of Climate-alignment and sector targets	No regional differentiation	n/a	
		Regional differentiation	Climate alignment exposure assessment for regional breakdown	

[1] If no target ambition is indicated, the tool uses the required minimum ambition.

3. SECTOR TARGETS

Sector targets may be established for ten emissions-intensive sectors. For each sector, one or more metrics and corresponding methods are available for target setting. Table 5 provides an overview of the available metrics and methods.

Table 5. Summary table of available metrics and methods for each sector

FINZ Metric Reference Table 4.3	Sector	Metric	Method model	Covered in FINZ Tool
Sector metric-FINZ.1a & b	Coal	Absolute emissions (tCO_2e) or total financial exposure ($)	Phaseout	Covered
Sector metric-FINZ.2	Oil and Gas	Absolute emissions (tCO_2e)	Sector Absolute Contraction	Covered
Sector metric-FINZ.3a	Power Generation	Physical Emissions Intensity (tCO_2e/MWh)	Sectoral Portfolio Intensity Convergence	Covered
Sector metric-FINZ.3b		Technology Share (% zero emissions generation capacity, defined as less than 0.001 tCO_2e/MWh)	Sectoral Portfolio Index Alignment	Covered
Sector metric-FINZ.4	Air Transport	Physical Emissions Intensity (g CO_2e / revenue tonne km)	Sectoral Portfolio Intensity Convergence	Covered
Sector metric-FINZ.5a	Maritime	Physical Emissions Intensity - EEOI (t CO_2e / ton-nautical mile)	Sectoral Portfolio Intensity Convergence (*Currently based on existing SDA equations and tools*)	*For the maritime sector, financial institutions shall use the SBTi Maritime Transport Target-Setting Tool.*
Sector metric-FINZ.5b		Physical Emissions Intensity - AER (g CO_2e / DWT-nautical mile)	Sectoral Portfolio Intensity Convergence	*For the maritime sector, financial institutions shall use the SBTi Maritime*

				Transport Target-Setting Tool. Currently covered only via conversion to EEOI metric.
Sector metric-FINZ.6a	Automotive (passenger vehicles)	Physical Emissions Intensity (g CO_2e / vehicle-km)	Sectoral Portfolio Intensity Convergence	Covered
Sector metric-FINZ.6b		Technology Share (% new zero emission vehicles)	Sectoral Portfolio Index Alignment	Covered
Sector metric-FINZ.7	Cement	Physical Emissions Intensity (tCO_2e/t cement)	Sectoral Portfolio Intensity Convergence	Covered
Sector metric-FINZ.8	Steel	Physical Emissions Intensity (tCO_2e/t steel)	Sectoral Portfolio Intensity Convergence	Covered
Sector metric-FINZ.9	Buildings (residential and commercial)	Physical Emissions Intensity kg tCO_2e/m2)	Sectoral Portfolio Intensity Convergence (*Currently based on existing SDA equations and tools*)	*For the buildings sector, financial institutions shall use the SBTi Buildings Target-Setting Tool.*
Sector metric-FINZ.10	FLAG commodities - supply side	Physical Emissions Intensity (tCO_2e/t commodity)	Sectoral Portfolio Intensity Convergence (*Currently based on existing FLAG equations and tools*)	Covered
-	FLAG commodities - demand side	n/a		*For the FLAG sector, financial institutions shall use the SBTi FLAG Target-Setting Tool.*

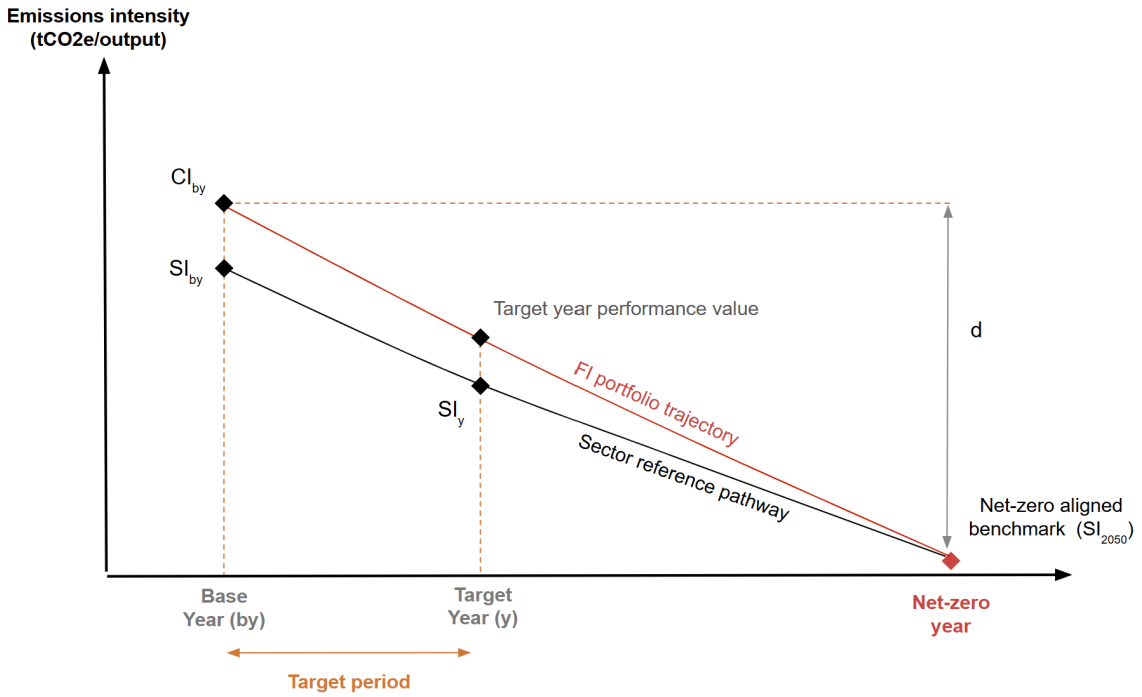
3.1. Sectoral Portfolio Intensity Convergence

3.1.1 Target-setting method description

Similar to the Sectoral Decarbonization Approach (SDA), the Portfolio Intensity Convergence (PIC) method produces an emissions intensity pathway between the base year and the target year, representing the portfolio's reduction curve needed to reach the net-zero benchmark by 2050. This method is based on a physical intensity convergence approach, and modifies the SBTi's Sectoral Decarbonization Approach (SBTi, 2015) which companies use to address their scope 1 and 2 emissions.

The Portfolio Intensity Convergence approach uses the underlying SDA equations (see Section 3.1.2), but removes the market share parameter, which is equivalent in SDA terms to fixing its value at 1. The removal of the market share parameter and updating of the underlying scenarios creates occasional minor variance in PIC and SDA outputs. Financial institutions that wish to use the SDA may do so insofar as the output intensities are at least as ambitious as the corresponding PIC tool outputs where available. The Portfolio Intensity Convergence method provides interim performance values, enabling financial institutions to establish targets that reduce the physical emissions intensity of their financial activities at a rate aligned with the sector average by the net-zero year, without requiring activity projections for the portfolio companies. Figure 3 shows how the portfolio intensity convergence method is implemented. The Equations listed in Section 3.1.2 are derived directly from the SBTi's SDA documentation (SBTi, 2015).

Figure 3. Illustration of the Portfolio Intensity Convergence approach



3.1.2 Target-setting method implementation

Step 1: Calculate the initial performance parameter

The initial performance parameter establishes the gap between the current physical emissions intensity of the activity and the net-zero aligned benchmark in the base year.

Equation 5. Calculating the initial performance parameter

$$d = CI_{by} - SI_{2050}$$

Where:

d	=	Initial performance parameter
CI_{by}	=	Emissions intensity of portfolio in base year (tCO_2e/output)
SI_{2050}	=	Sector emissions intensity for the activity in 2050 (net-zero aligned benchmark value in tCO_2e/output)

Step 2: Calculate the sector decarbonization index

The Portfolio Intensity Convergence method assumes that the emissions intensity of the portfolio will converge in the net-zero year, 2050. This convergence is represented by an index equal to 1 in the base year and 0 in 2050, calculated using Equation 6.

Equation 6. Calculating the sector decarbonization index

$$P_y = \frac{SI_y - SI_{2050}}{SI_{by} - SI_{2050}}$$

Where:

P_y	=	Sector decarbonization index
SI_y	=	Sector emissions intensity for product in year y (tCO_2e/output)
SI_{by}	=	Sector emissions intensity for product in the base year (tCO_2e/output)

Step 3: Calculate the target year portfolio intensity

Combining the portfolio's initial performance parameter with the sector decarbonization index for year *y* yields the portfolio's intensity target for any year between the base year and 2050 net zero year (Equation 7).

Equation 7. Calculating the target year intensity of the product

$$CI_y = \left(d \times P_y \right) + SI_{2050}$$

Where:

CI_y	=	Average emissions intensity of portfolio in year y
d	=	Initial performance parameter in the base year relative to the 2050 sector target
P_y	=	Sector decarbonization index in year y
SI_{2050}	=	Sector emissions intensity in 2050 (net-zero aligned benchmark value in tCO_2e/output)

Required company input variables:

- Emissions intensity of portfolio in the base year (CI_{by}) in tCO_2e/output.

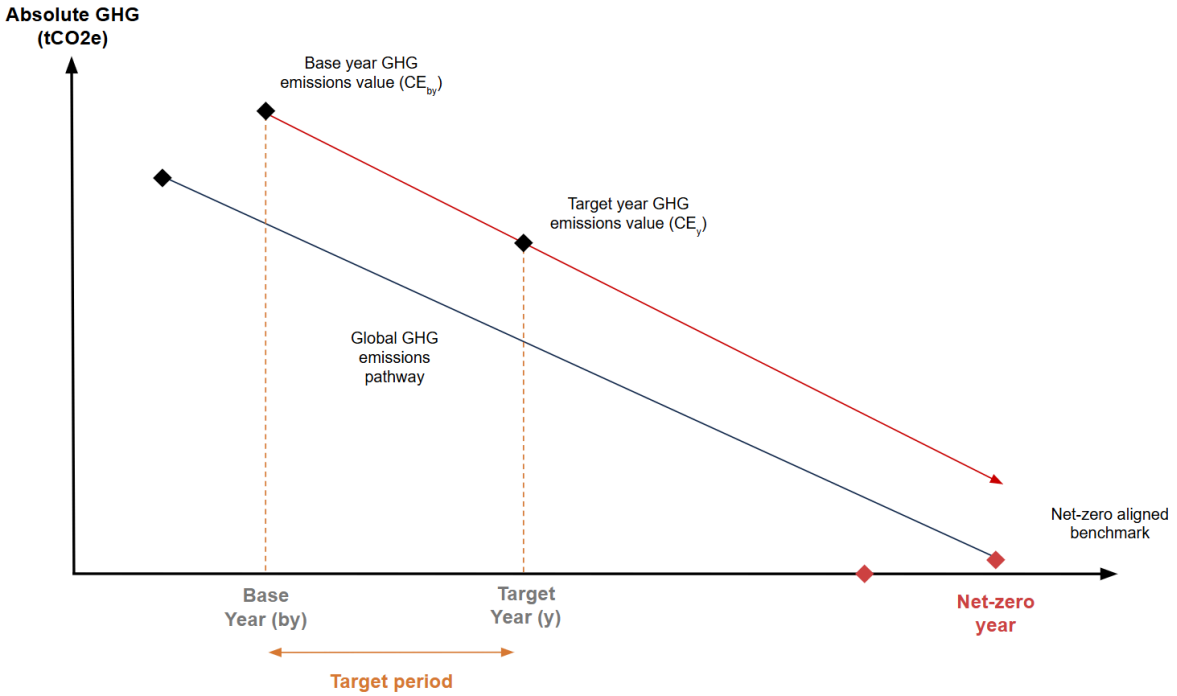
3.2 Sector Absolute Contraction

3.2.1 Target-setting method description

The Sector Absolute Contraction method establishes an absolute emissions pathway from the base year to the target year, representing the financial institution's reduction curve. It determines interim performance values for scope 3 portfolio emissions, and is only required at the sector level for the fossil fuel sector. To address their fossil fuel sector exposure, financial institutions are required to set targets for absolute emissions reductions at a rate consistent with reference scenarios. For other sectors, financial institutions may also apply absolute contraction at the counterparty level.

The method uses a grandfathering allocation principle, meaning that the larger a sector's emissions in the financial institution's base year, the larger its share of emissions allowed in the target year.

Figure 4. Key elements of the Sector Absolute Contraction applied to the fossil fuel sector



3.2.2 Target-setting method implementation

Step 1: Determine the target year emissions level

Use Equation 8, which incorporates the scenario linear annual reduction rate (LARR), representing the linearized % reduction per year between the baseline and target years.

Equation 8. Calculating target year emissions level

$$CE_y = CE_{by} - \left(CE_{by} \times \left(y - by \right) \times LARR \right)$$

Where:

CE_y	=	Portfolio emissions in any year *y* within the target time frame (tCO_2e)
CE_{by}	=	Portfolio emissions in the base year selected by the financial institution (tCO_2e)
y	=	Any year *y* within the target time frame
by	=	The base year selected by the financial institution
LARR	=	Linear Annual Reduction Rate, derived from the underlying pathway (%/year). Eligible pathways are detailed in the Tool Documentation section

Step 2: Determine the ambition level of the target

Calculate the absolute percentage reduction by multiplying the LARR by the number of years in the target period.

Equation 9. Target ambition in absolute percentage reduction terms

Target Ambition (%)	=	y - by	x	LARR

Required company input variables:

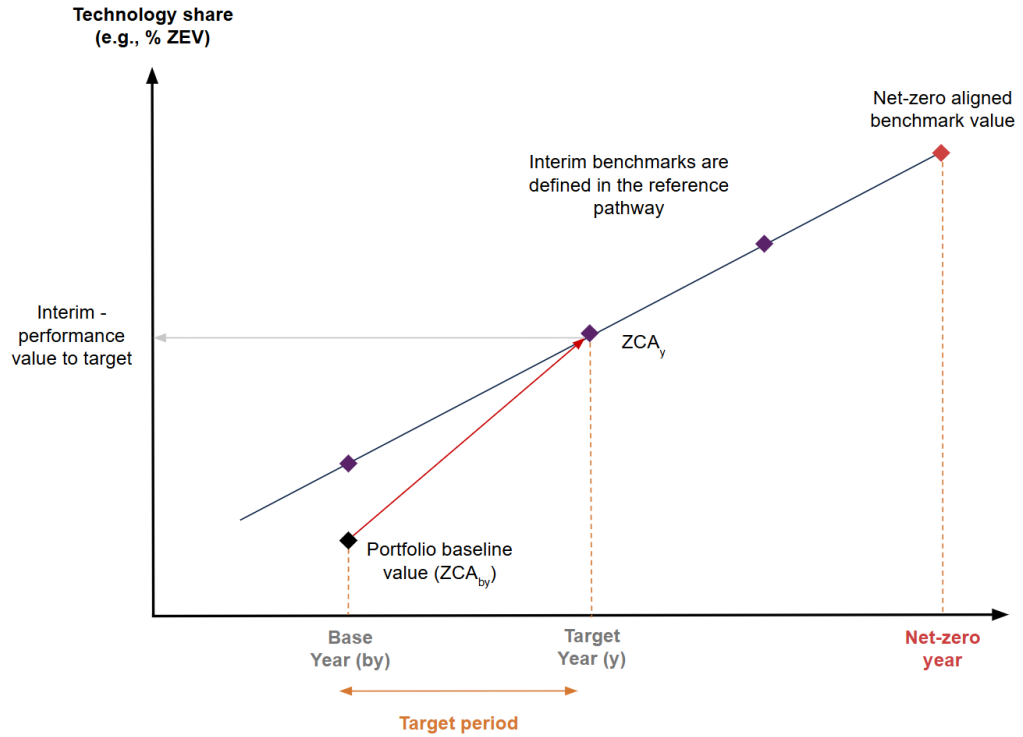
- Base year.
- Base year GHG emissions.
- Target year.

3.3 Sectoral–Portfolio Index Alignment

3.3.1 Target-setting method description

The portfolio index alignment method uses pathways with predefined interim benchmark values for eligible target years that each portfolio must achieve. The method applies a sector convergence principle requiring all financial activities to reach the sector benchmark value by the target year, regardless of their starting point. Figure 5 provides an overview.

Figure 5. Key elements of the Portfolio Index alignment approach



3.3.2 Target-setting method implementation

Step 1: Determine the baseline portfolio value

Calculate the technology share of financial activities for zero-carbon activities in the base year using Equation 10.

Equation 10. Target ambition in absolute percentage increase terms

$$ZCA_{by}(\%) = \frac{ZCA_{bv}}{A_{by}} \times 100$$

Where:

ZCA_{by} (%)	=	The percentage share of zero-carbon activities
ZCA_{by}	=	The amount of zero-carbon activity (e.g., zero-carbon power generation (MWh) or zero-emission sold vehicles (number of vehicles))
A_{by}	=	Total amount of activity (e.g., power generation (MWh) or sold vehicles (# of vehicles))

Step 2: Determine ambition level of the target

Select the pathway value for the target year. The required change is defined by a linear interpolation between the base year ZCA_{by} % share and the target year share.

Equation 11. Change in zero-carbon carbon activity required between base and target year

$$\Delta ZCA = ZCA_{y}(\%) - ZCA_{by}(\%)$$

zero-carbon activity share defined in selected pathway

Where:

ΔZCA	=	Targeted change in the share of zero-carbon activity from the base year (by) to the target year (y)
ZCA_{y} (%)	=	The minimum percentage of zero-carbon activities in the year (y) on the reference pathway
ZCA_{by} (%)	=	The percentage of zero-carbon activities in the base year (by)

Required company input variables:

- The amount of zero-carbon activity in the base year.
- Total amount of activity in the base year.

3.4 Phaseout

3.4.1 Target-setting method description and implementation

The phaseout method establishes benchmarks for reducing financial exposure or emissions tied to applicable value chain companies, projects, and assets by the end of a specified year.

Specifically, the Financial Institutions Net-Zero Standard requires financial institutions to phase out all applicable financial activities to coal projects and coal companies in countries that are members of the Organization for Economic Co-operation and Development (OECD) by the end of 2030, and by the end of 2040 in non-OECD countries.

If the year of full phaseout is more than five years from the year of target submission, financial institutions shall also set a near-term sector reduction target on their in-scope financial activities in the coal sector. For example, a financial institution submitting net-zero targets in 2025 with a 2030 coal phaseout year would not need to set a separate near-term sector target to reduce its coal-related financial exposure or GHG emissions, while a financial institution submitting net-zero targets in 2025 with a 2024 base year and 2040 coal phaseout year (for non-OECD counterparties) would need to set a separate near-term sector target to reduce its coal-related financial exposure or GHG emissions. In this case, at least a 37.5% reduction by 2030 is required by the SBTi Financial Institutions Net-Zero Target-Setting Tool based on the calculation: [(target year – base year) x (100%) / coal phaseout year – base year)], or in this case [(2030 – 2024) x (100%) / (2040 – 2024)].

Calculate cumulative ambition of phaseout target per geography (for example, by OECD or global levels)

Equation 12. Phaseout targets ambition formula

$$P_y = P_{by} + \left(100\% - P_{by}\right) \times \left(\frac{y - by}{fy - by}\right)$$

P_y = Required phaseout percentage in target year y

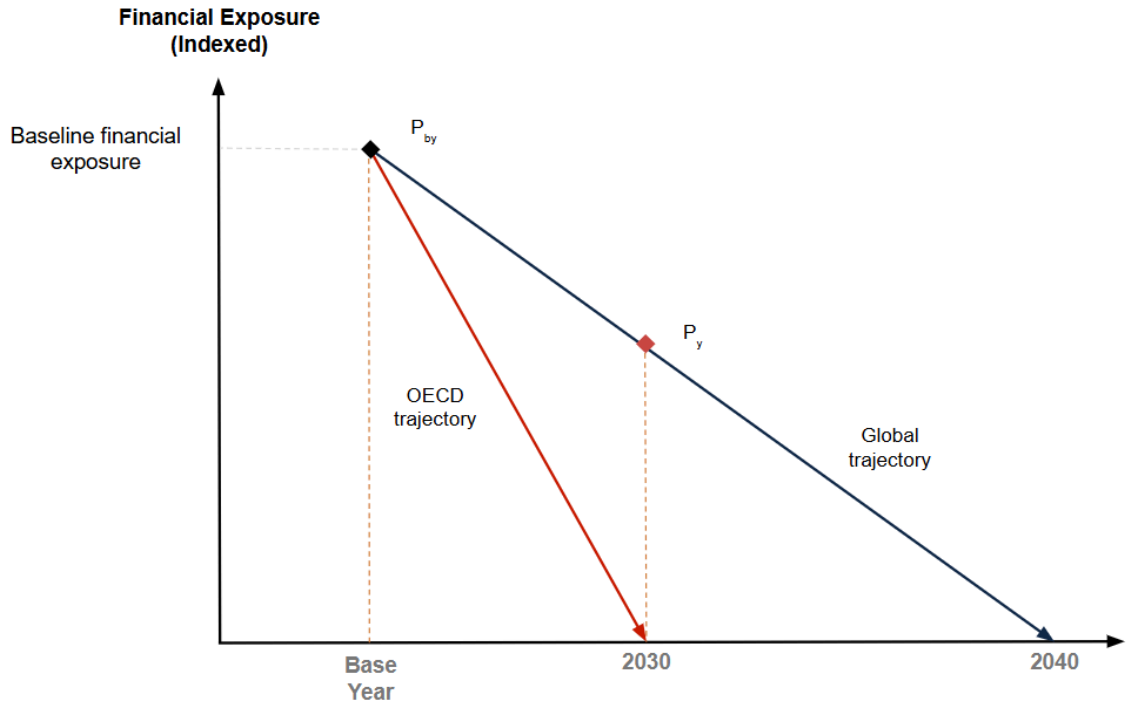
P_{by} = Phaseout percentage in base year

y = Target year

by = Base year

fy = Final phaseout year (i.e., 2030 for OECD countries; 2040 globally, i.e. countries that are not members of the OECD)

Figure 6. OECD (2030) and global (2040) phaseout trajectories



4. SECTOR-SPECIFIC GUIDANCE

4.1 Coal

The coal sector covers the scope 1, 2, and 3 emissions of fossil coal value chains, as established in the Financial Institutions Net-Zero Standard. In 2022, total CO_2 emissions from the combustion of all fossil fuels reached 34.98 Gt CO_2e. Coal combustion was the largest single source, contributing a total of 15.27 Gt CO_2e, or almost 44% of all CO_2 emissions from fossil fuels in 2022. A significant disparity in these emissions is evident between regions; non-OECD countries accounted for the vast majority at 12.62 Gt, while OECD countries contributed 2.65 Gt CO_2e. This breakdown reveals that non-OECD nations were responsible for over 82% of all CO_2 from coal (IEA, 2024b).

The value chain of coal in the Financial Institutions Net-Zero Standard is focused on addressing the climate impact of coal combustion by requiring the phase-out of thermal coal production and power plants. This aligns with broader climate milestones; for example, a key target for the electricity sector is a 95% reduction by 2040 in the unabated use of fossil fuels to generate electricity, which includes the complete phase-out of unabated coal in advanced economies by 2030 and globally by 2040 (IEA, 2023a).

To support this goal, the Financial Institutions Net-Zero Standard requires 100% of financial exposure and/or absolute emissions to be phased out by 2030 for OECD nations and by 2040 for non-OECD countries. Additionally, targets for the near-term linear reduction of exposure to coal entities, projects, or assets in non-OECD countries are required to demonstrate progress towards the complete phaseout of exposure to the in-scope coal value chain.

4.1.1. Metrics description

The Financial Institutions Net-Zero Standard provides two metrics for the coal sector to establish sector targets. Financial institutions may choose to use one or both of these metrics for their coal phaseout targets. Table 6 offers an overview.

Table 6. Metrics used for the coal sector

Metric	Unit	Description
Absolute emissions	t CO_2e	Measures the absolute gross emissions (scope 1, 2, and 3) of oil and gas entities, projects, and assets attributed to financial activities. The metric represents a bottom up aggregation from the counterparties to produce a sector absolute emissions value at the portfolio level.
Financial Exposure	Currency unit (i.e. USD)	Measures the total financial exposure to coal entities, projects, and assets.

4.2 Oil and Gas

The oil and gas sector covers the scope 1, 2 and 3 emissions of fossil oil and gas value chains, as established in the Financial Institutions Net-Zero Standard. In 2022, 55% of the total energy-related greenhouse gas emissions (40 Gt CO_2e) were associated with oil and gas (IEA, 2023b). This includes emissions from the use of oil and gas (40% of total energy-related emissions), and 5.1 Gt CO_2e (15% of total energy-related emissions) from production, transport and processing (IEA, 2023b).

4.2.1. Metrics description

The Financial Institutions Net-Zero Standard provides one metric for the oil and gas sector to establish sector targets. Table 6 offers an overview.

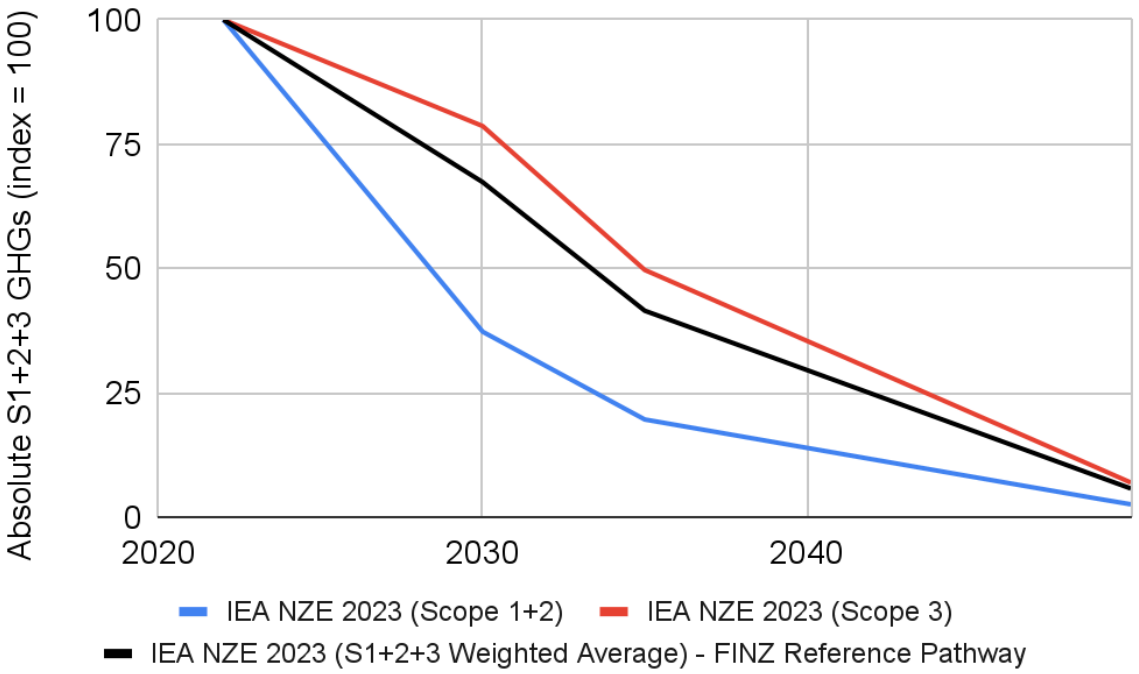
Table 6. Metrics used for the oil and gas sector

Metric	Unit	Description
Absolute emissions	t CO_2e	Measures the absolute gross emissions (scope 1, 2, and 3) of oil and gas entities, projects, and assets attributed to financial activities. The metric represents a bottom up aggregation from the counterparties to produce a sector absolute emissions value at the portfolio level.

4.2.2 Pathways

The pathways detailed here derive from the Net Zero Emission (NZE) scenario developed by the International Energy Agency (IEA, 2023a). Both operational (scope 1 and 2) and combustion (scope 3, category 11) pathways are available from the IEA, as highlighted in Figure 8. A weighted average pathway is provided, with scope 1+2 emissions weighted at approximately 27% of total scope 1+2+3 emissions. This is based on IEA data showing that 40% of total energy-related emissions come from the use of oil and gas, while 15% arise from upstream and midstream operational emissions (IEA, 2023b). The scope 1+2+3 GHG emission pathway is used to determine the minimum ambition rates for near and long-term targets for financial activities in the oil and gas sector.

Figure 8. Oil and gas sector pathway in indexed absolute emission terms (tCO_2e)



4.3 Power Generation

The power sector accounts for around 40% of global energy-related emissions in 2023 (IEA, 2024a). Simultaneously, it is a key enabler of decarbonization across other sectors, with demand projected to grow due to growth in emerging markets, electrification, and green hydrogen (IEA, 2023a). Electricity's share of final energy consumption is expected to rise from 20% today (2023) to over 50% by 2050 (IEA, 2023a). SBTi first published power sector target-setting guidance in 2020 with its *Quick Start Guide for Electric Utilities,* which includes complete documentation on applicable pathways.

4.3.1 Metrics description

The Standard offers two metrics for the power generation sector. Financial institutions must select at least one when establishing sector targets. An overview of the metrics is displayed in Table 7.

Table 7. Metrics used for the power sector

Metric	Unit	Description
Weighted average physical emissions intensity	t CO_2e / megawatt-hour (MWh)	Measures the average gross emissions per unit of electricity generated attributed to financial activities. The emissions value covers the scope 1 emissions of all electricity generated by the activity, or bought and resold by an entity.
Technology share	% zero-emissions	Measures the share of zero-emissions generation capacity attributed to financial

	generation capacity	activities. It includes any technology with low direct emissions (less than 0.001 t CO_2e/MWh per year). While these technologies still have lifecycle emissions (e.g., via the embedded materials), the indicator only references the electricity generation phase.

4.3.2 Pathways

SBTi applies a scenario envelope approach to identify eligible and produce an SBTi reference pathway. Twenty power sector pathways met SBTi principles. At a minimum, pathways aligned with 1.5°C zero emissions targets around 2040. These pathways show stronger reductions between 2020 and 2035 than the median of all low and no-overshoot scenarios in the IPCC's Special Report on Global Warming of 1.5°C. Higher near-term ambition reflects the exclusion of many scenarios heavily reliant on carbon dioxide removal beyond feasible levels after 2040. SBTi power sector pathways also accommodate varied electricity growth trajectories. Figures 9 and 10 display the reference pathways for the two power sector metrics.

Figure 9. SBTi power sector pathway in emissions intensity terms (tCO_2e / MWh)

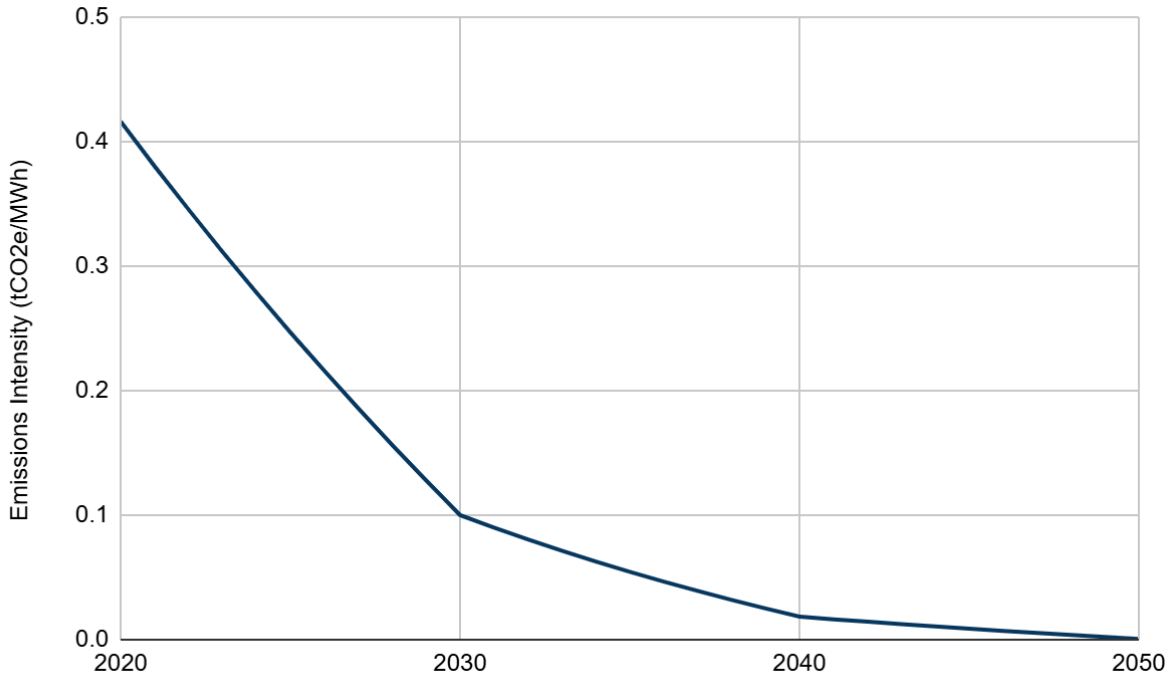
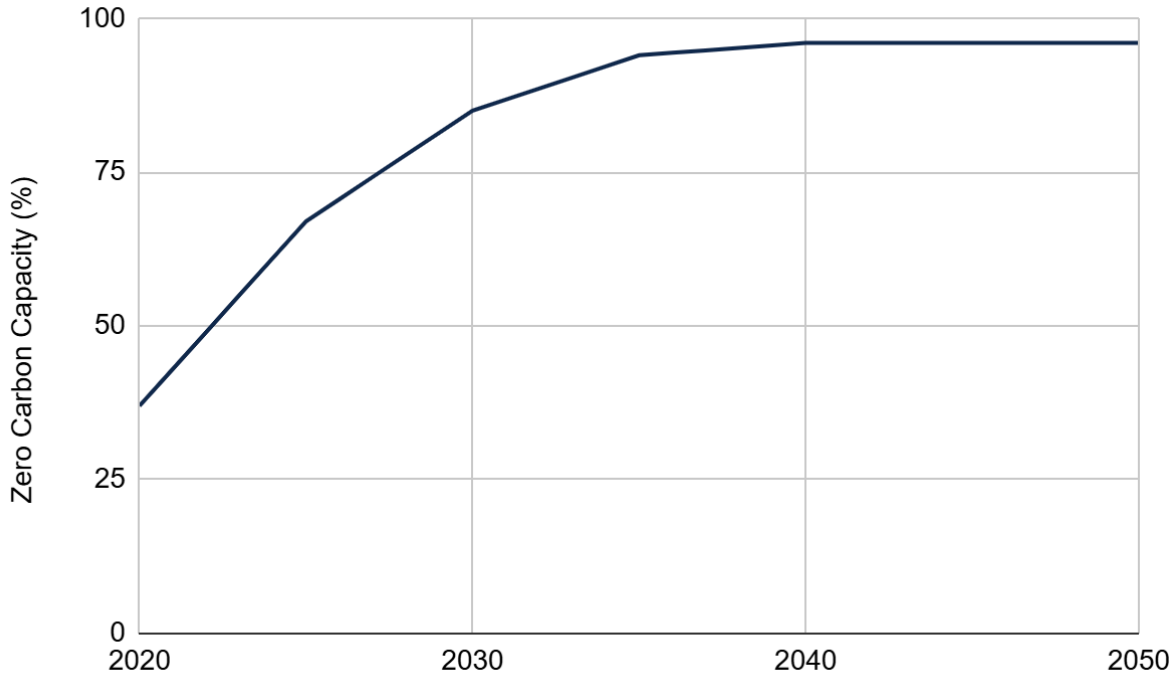


Figure 10. SBTi power sector pathway in technology share terms (% zero-emissions generation capacity)



4.4 Air Transport

Due to its relatively high abatement costs, the air transport sector is considered hard to abate, representing ~2% of global CO_2 emissions in 2022 (IEA, 2023a). Efforts to decarbonize aviation face significant technical barriers (e.g., alternatives to jet fuel), low profit margins, and limited historic regulatory pressure.

4.4.1 Metrics description

The Standard offers one metric for the air transport sector. Table 8 provides an overview.

Table 8. Metrics used for the air transport sector

Metric	Unit	Description
Weighted average physical emissions intensity	g CO_2e / RTK	Measures the average gross emissions generated per revenue ton-kilometer (RTK) attributed to financial activities, following leading industry standards, such as the SBTi Aviation Sector or RMI's Pegasus Principles

4.4.2 Pathways

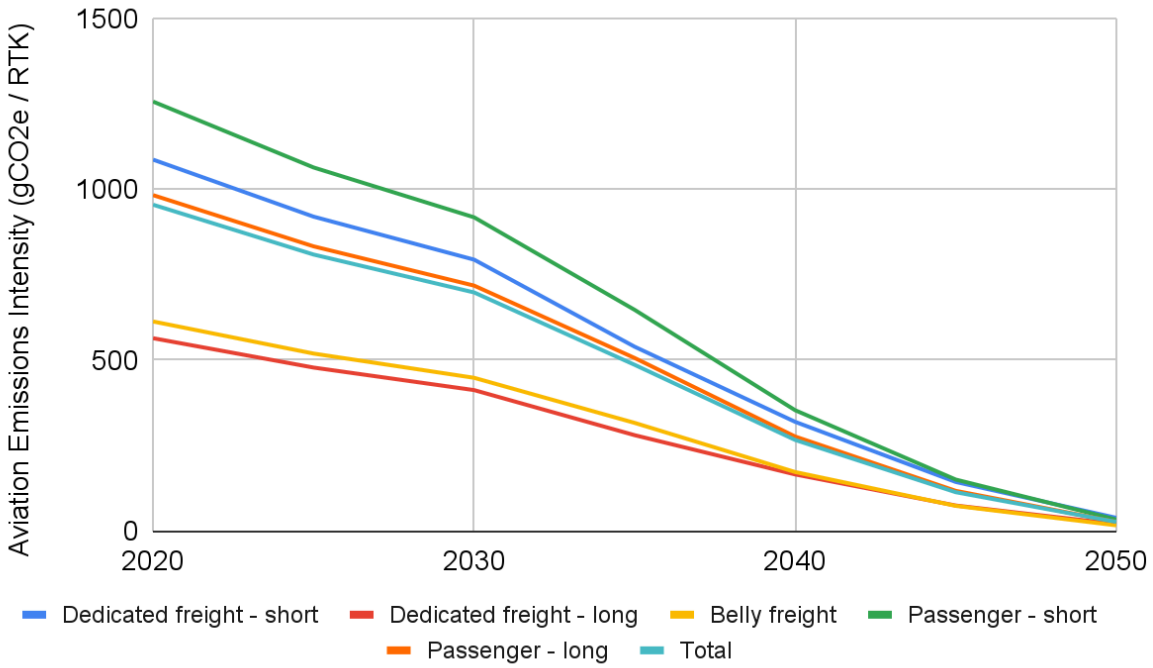
The SBTi interim 1.5°C sector aviation pathway derives from the Breakthrough scenario in the Aviation Vision 2050 report from the International Council on Clean Transportation (Graver et al. 2022). The scenario projects widespread investments in zero-carbon aircraft

and fuels, a peak in fossil jet fuel use in 2025, and elimination by 2050. It aligns a 2050 net-zero carbon dioxide (CO_2) goal with limited removals, but is plausible according to industry trends.

The IEA Net Zero Emissions (NZE) scenario (IEA 2023a) sets upper bounds for sector emissions across all SBTi guidance (Chang et al. 2021). To ensure that the overall emissions budget for a 1.5°C temperature goal, including all sectors, is not exceeded, it is important to confirm that sector pathways derived from alternative sources fall below the corresponding NZE budget assigned to that sector. The cumulative emissions of the Breakthrough scenario from 2019-2050 fall below the IEA NZE budget for aviation, consistent with limiting global warming to 1.5°C without overshoot.

To ensure that near-term targets using the interim 1.5°C pathway exhibit equal or greater ambition than Well-Below 2°C targets set for the same time period, the interim 1.5°C pathway follows the WB-2°C pathway derived from the Sustainable Development Scenario (SDS) for the time period 2023-2031, and the Breakthrough scenario for 2032-2050.

Figure 11. SBTi aviation sector pathways by fleet type emissions intensity (tCO_2e / RTK)



4.4.3 Additional guidance on input data needs

Financial institutions first determine the types of aviation fleet they are financing, and then must categorise by fleet type or use a generic aggregate if data is unavailable. The following fleet types options are available:

- Dedicated freight - long haul.
- Dedicated freight - short haul.
- Belly freight.
- Passenger freight - long haul.
- Passenger freight - short haul.
- Aggregate (in cases where data fleet type is not available).

Where revenue-passenger-km (RPK) data from counterparties is available, this can be converted into the revenue-ton-km (RTK) with a conversion factor of 100kg to convert RPK into RTK. Emissions intensities are calculated on a well-to-wake basis.

4.5 Maritime

The maritime sector underpins global trade. Carrying over 80% of global trade by volume (UNCTAD, 2022) contributing ~2% of global GHG emissions and is currently heavily reliant on fossil fuels (IEA, 2023a). It spans diverse cargo types, from refrigerated food products and pharmaceuticals, to bulk chemicals to railway locomotives and offshore oil production platforms. Ships also vary broadly in size. For example, bulk petroleum tankers range from around 10,000 deadweight tonnes (DWT) to more than 400,000 DWT. Along with this range in cargoes and sizes, vessel routes vary widely. One ship may operate on a weekly liner service between ports in a single region and another on a tramp service that takes the ship around the world over the span of months or years. Decisions in the near term are critical as ships have long replacement cycles that lock in emissions for decades.

The Financial Institutions Net-Zero Target-Setting Tool V1.0 does not include maritime sector target-setting information. Financial institutions that wish to set net-zero targets covering their maritime sector activities are directed to the SBTi Maritime sector guidance and Maritime Transport Tool.

4.5.1 Metrics description

The Standard offers two metrics for maritime sector targets. Table 9 provides an overview.

Table 9. Metrics used for the maritime sector

Metric	Unit	Description
Weighted average physical emissions intensity (EEOI)	t CO_2e / ton-nautical mile	The Energy Efficiency Operational Indicator (EEOI) metric measures the average gross Well-to-Wake emissions per ton-nautical mile attributed to financial activities. Well-to-Wake emissions are based on fuel used for the voyage and the life cycle carbon intensity of the fuel. Ton-nautical miles represent the actual tonnage transported over each nautical mile.
Weighted average physical emissions intensity (AER)	g CO_2e / DWT-nautical mile	The Annual Efficiency Ratio (AER) metric measures the average gross emissions of a ship per unit of transport work, obtained from its total distance traveled and design deadweight tonnage (DWT). Calculation of the intensity shall follow leading industry standards, such as the Poseidon Principles.

4.5.2 Pathways

The SBTi Maritime Transport Tool relies on the logistics trajectory cumulative sector budget derived from 2018 IPCC 1.5°C, the 2017 IEA WB-2°C carbon budgets and the IMO scenario RCP 2.6 SSP2 transport demand forecasts between 2018 and 2050 to calculate carbon

intensity trajectories in grams of CO_2 equivalent per ton nautical mile (gCO_2e / ton-nautical mile). Granular pathway segmentation enables financial institutions to prioritize vessel types and sizes by carbon intensity, operational limits and customer needs. A complete overview is in the SBTi's maritime sector guidance.

4.5.2 Additional guidance on input data needs

The SBTi maritime tool breaks down the carbon intensity targets by vessel type and size. Financial institutions must select from the 14 vessel types used in the Fourth IMO GHG Study:

- Bulk Tanker
- Chemical Tanker
- Container
- Cruise
- Ferry Passenger Only
- Ferry Roll On/Off and Passenger
- General Cargo
- Liquified Gas Tanker
- Oil Tanker
- Other Liquids Tanker
- Offshore
- Refrigerated Bulk Tanker
- Roll On/Off
- Vehicle Carrier

Pathways are in EEOI units of t CO_2e / ton-nautical mile. To use AER data, financial institutions must convert AER to EEOI.

4.6 Automotive (Passenger Vehicles)

The land transport sector directly contributes ~21-23% of anthropogenic GHG emissions (ICCT, 2025). Future emissions reductions depend on new vehicle efficiencies, technology shifts, user actions (influenced by policy and price changes) and developments in the energy supply sector. The automotive sector emissions come primarily from vehicle usage (tailpipe emissions), with passenger cars responsible for about 45% of global transport emissions.

4.6.1 Metrics description

The Standard offers two metrics for automotive sector targets. Table 10 provides an overview.

Table 10. Metrics used for the automotive sector

Metric	Unit	Description
Weighted average physical emissions intensity	g CO_2e / v.km	Measures the average gross life cycle emissions (well-to-wheel emissions of the vehicle) per vehicle-kilometer (v.km) attributed to financial activities.

Technology share	% new ZEV	Measures the share of zero-emission vehicles (ZEV) produced relative to all vehicles attributed to financial activities. A ZEV is any vehicle with zero tailpipe emissions during its use phase.

4.6.2 Pathways

The IEA Net Zero by 2050 report is the preferred 1.5ºC pathway for the automotive sector, offering a detailed narrative for emissions reductions, lower residual 2050 emissions and updated base year data.

Figure 12. SBTi automotive sector pathways in emissions intensity terms (gCO_2e / v.km)

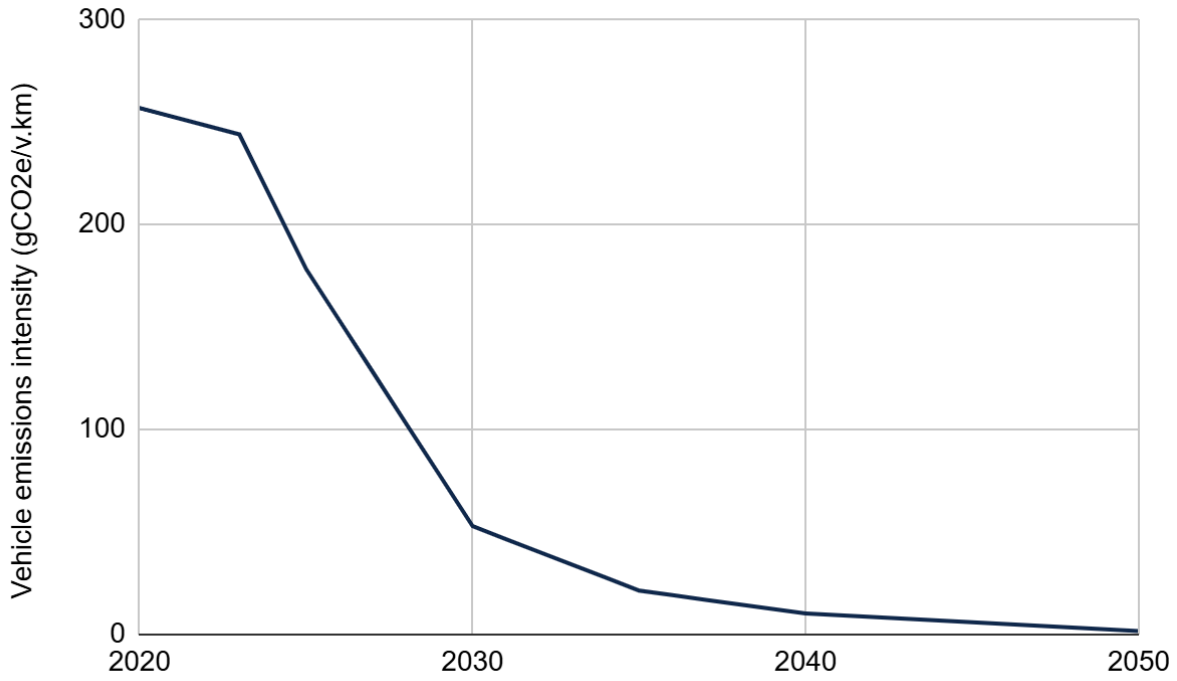
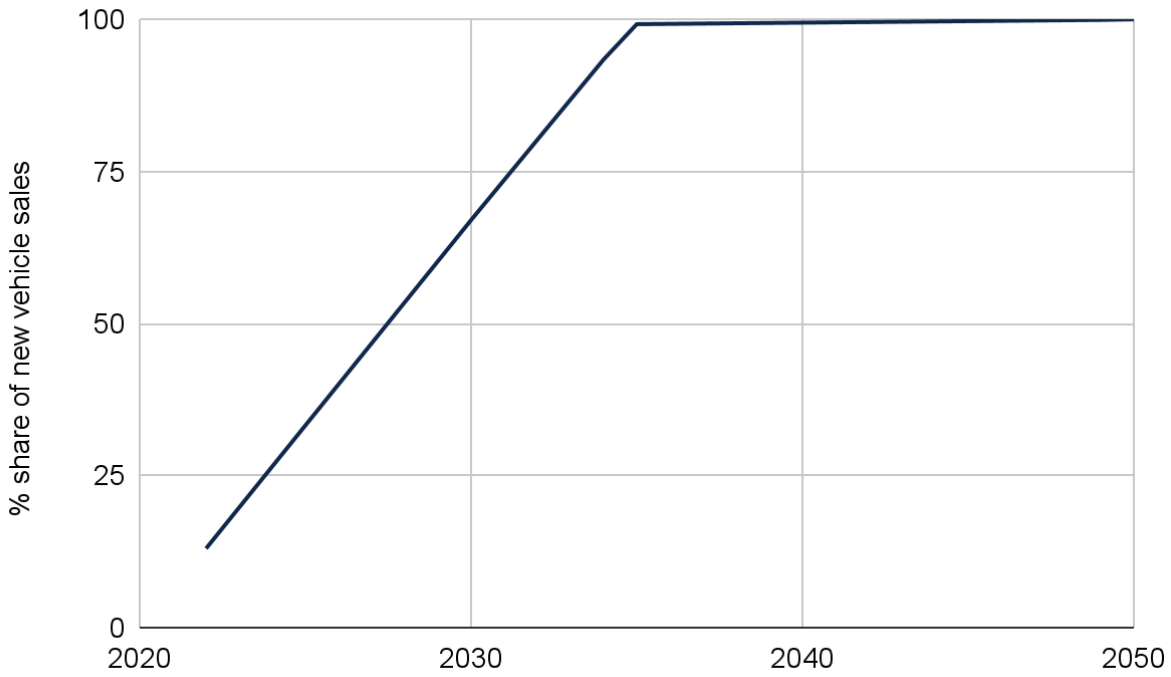


Figure 13. SBTi automotive sector pathways in technology share terms (% new ZEV cars and vans)



4.7 Cement

The cement sector is the third-largest industrial energy consumer and the second-largest industrial CO_2 emitter, representing ~7% of global emissions (IEA, 2023a). As a largely homogenous sector, one unique 1.5ºC pathway is sufficient, with no disaggregation into sub-sectors. The vast majority of cement production volumes and emissions today are from "traditional" (Portland) cement. Other clinker-based cements such as white cement or calcium sulpho-aluminate cement also fit the definition of cement and are covered by the sector pathway.

4.7.1 Metrics description

The Standard offers one metric for cement sector targets. An overview of the metrics is displayed in Table 11.

Table 11. Metrics used for the cement sector

Metric	Unit	Description
Weighted average physical emissions intensity	t CO_2e / ton cementitious product	Measures the average gross emissions (including emissions from the combustion of waste-derived fuels) per ton of cementitious product attributed to financial activities. Cementitious product means clinker, cement, and cement substitutes produced by the reporting company.

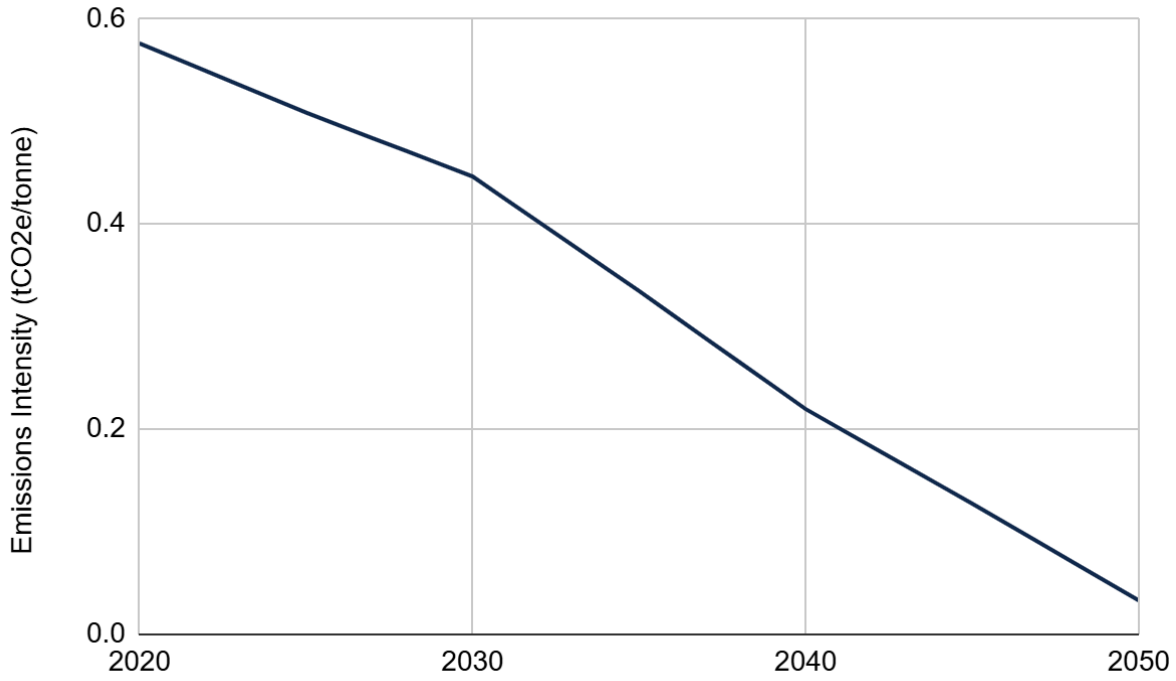
		The full definition for t CO_2e / ton cementitious product shall be according to the Cement CO_2 Protocol v3.0 (WSBCD, 2011). The intensity shall be measured in “gross” emission terms, i.e., emissions from combustion of waste derived fuels shall be included in the emissions covered in the base year.

4.7.2 Pathways

The SBTi published an assessment of possible 1.5ºC emissions scenarios for all sectors in its *Pathways to NetZero: SBTi Technical Summary* (Chang et al., 2021). This technical summary found that the range of 1.5ºC-aligned cumulative 2020- 2050 emissions for cement in the literature is 35-41 GT CO_2. Therefore, emissions scenarios with cumulative emissions within or below could be considered potential scenarios for 1.5ºC-aligned science-based target setting by the SBTi.

The IEA Net Zero by 2050 pathway was selected as the most suitable for 1.5ºC-aligned science-based target setting for the cement sector, as it provides a more detailed narrative for how emissions reductions might be achieved, includes lower residual emissions in 2050 and offers more up-to-date base year data.

Figure 14. SBTi cement sector pathway in emissions intensity terms (tCO_2e / ton cementitious product)



4.8 Steel

Globally, the steel sector's direct CO_2 emissions amounted to 2.6 GT in 2022, equivalent to about 7% of total energy sector emissions (IEA, 2023a).

4.8.1 Metrics description

The Standard offers one metric for the steel sector for establishing sector targets.Table 12 provides an overview.

Table 12. Metrics used for the steel sector

Metric	Unit	Description
Weighted average physical emissions intensity	t CO_2e / ton hot rolled steel	Measures the average gross emissions per unit of hot rolled steel produced attributed to financial activities or RMI's Sustainable Steel Principles. Specific calculation guidance should follow leading industry standards, such as the SBTi steel sector guidance or or RMI's Sustainable Steel Principles.

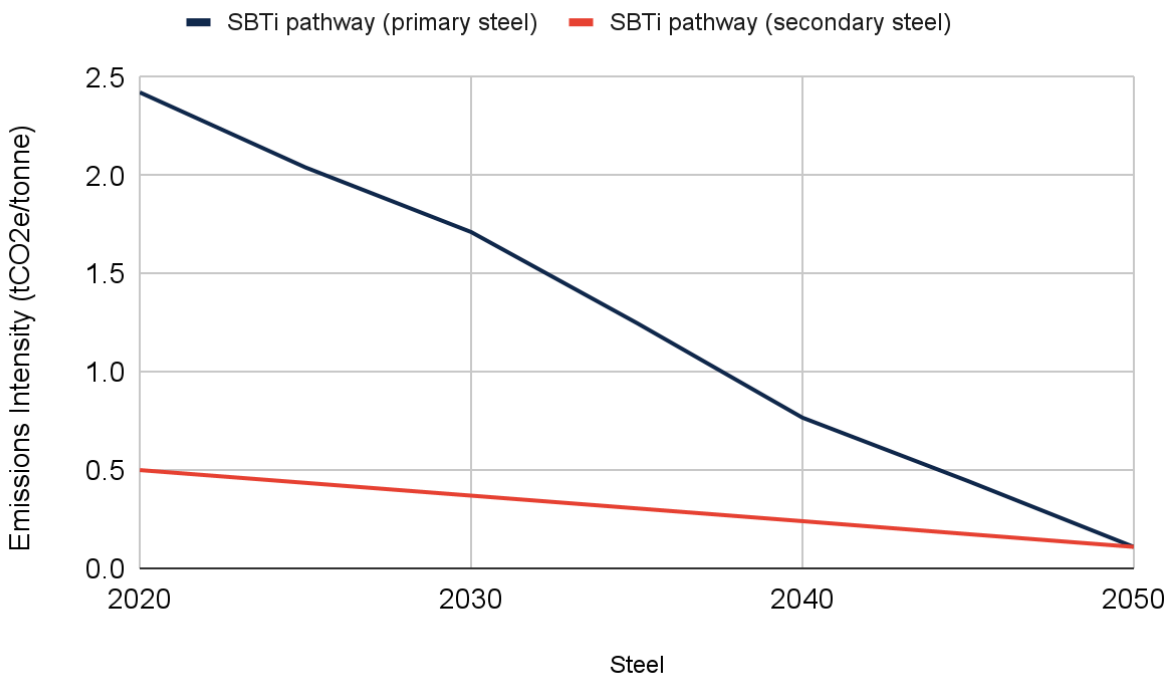
4.8.2 Pathways

The *Pathways to Net-Zero: SBTi Technical Summary* (Chang et al., 2021) indicates that the range of 1.5°C-aligned cumulative 2020-2050 direct emissions for steel in the literature is 20-40 GT CO_2. Therefore, emissions scenarios within or below this range could be considered potential options for 1.5°C-aligned science-based target setting by the SBTi.

Several organizations have developed decarbonization pathways for the iron and steel industry. From a wide range of 1.5°C-aligned steel pathways, the IEA Net Zero by 2050 report was chosen as the most suitable scenario for the steel sector, as it provides a more detailed narrative on achieving emissions reductions, includes lower residual emissions in 2050, and uses more recent base year data.

To address the very different emission profiles of ore- and scrap-based steelmaking – and the different challenges to decarbonize each – scrap-input dependent pathways are used. These sector-specific pathways are calculated from two separate, fixed, 1.5°C-aligned sector pathways: a 100% scrap-based (secondary) pathway and a 0% scrap-based (primary) pathway. The scrap-input dependent pathway for a given sector is a weighted average of these primary and secondary pathways, based on the proportion of scrap and ore-based metallics input and how this changes over time. For example, a company producing with 30% scrap and 70% ore-based inputs will have a pathway converging to a point that lies between the two separate pathways.

Figure 15. SBTi steel sector pathway in emissions intensity terms (tCO_2e / ton hot rolled steel)



4.8.3 Additional guidance on input data needs

Financial institutions need to obtain information about the scrap share for the steel activity they are financing. If this information is not available, a default scrap share of 0% should be used.

4.9 Buildings (Residential and Commercial)

The buildings sector is responsible, directly and indirectly, for 34% of global final energy consumption and 26% of global energy-related emissions (IEA, 2023c). In 2022, around 8% of global energy- and process-related emissions were linked to fossil fuel use in buildings, about 18% to the generation of electricity and heat used in buildings, and a further 4% to embodied emissions from the manufacture of cement, steel, and aluminum used for construction (IEA, 2023c). Beyond carbon dioxide (CO_2), fugitive emissions from fluorinated greenhouse gases are also a substantial, and growing, source of emissions, mainly from refrigeration and air conditioning equipment.

Global floor area is expected to grow significantly, by around 15% to 2030, with more than 80% of this growth projected in developing and emerging economies – an increase equivalent to more than the whole built floor area of North America (IEA, 2023c).

The Financial Institutions Net-Zero Target-Setting Tool V1.0 does not include building sector target-setting information. Financial institutions that wish to set net-zero targets covering their building sector activities are directed to the SBTi Buildings Criteria and Buildings Target-Setting Tool.

4.9.1 Metrics description

The Standard offers one metric for the buildings sector for establishing sector targets. Table 13 provides an overview.

Table 13. Metrics used for the buildings sector

Metric	Unit	Description
Weighted average physical emissions intensity	t CO_2e / m^2	Measures the average gross in-use operational emissions (from any energy consumption, electricity, or other fuels used for heating) per unit of floor area (square meter or m^2) of residential buildings attributed to financial activities. Calculation guidance is specified by PCAF's Technical Guidance for the Financial Industry.

4.9.2 Pathways

The SBTi partnered with the Carbon Risk Real Estate Monitor (CRREM) to provide the buildings sector with more granular 1.5°C-aligned pathways that reflect different geographical locations and building typologies.

Since its inception in 2017, CRREM has supplied the industry with science-based carbon reduction pathways at the building portfolio and company level, as well as financial risk assessment tools to cost-effectively manage carbon mitigation strategies. CRREM developed regional pathways by downscaling the 1.5°C emissions pathway for buildings from the IEA Net Zero Emissions by 2050 Scenario (NZE). For buildings not covered by existing CRREM pathways, an "Other" pathway is provided, based on the remaining carbon budget and projected floor area developments for these regions.

4.9.3 Additional guidance on input data needs

The buildings sector is segmented by building type and geographic region. Financial institutions must determine the building type and region for each asset.

4.10 Food, Land, and Agriculture (FLAG)

The forest, land and agriculture (FLAG) sector, also known in the scientific community as the Agriculture, Forestry, and Other Land Use (AFOLU) sector, or simply the land sector, has historically been challenging to evaluate with GHG accounting and target-setting approaches. Nonetheless, FLAG represents about 22% of net anthropogenic GHG emissions (~13 GT CO_2e per year), roughly split between agriculture and land use, land-use change and forestry (LULUCF) (IPCC, 2022).

The Financial Institutions Net-Zero Target-Setting Tool V1.0 does not include FLAG sector target-setting information. Financial institutions that wish to set net-zero targets covering their FLAG sector activities are directed to the SBTi FLAG Guidance and FLAG Target-Setting Tool.

4.10.1 Metrics descriptions

The Standard offers one metric for the FLAG sector for establishing sector targets. Table 14 provides an overview.

Table 14. Metrics used for the FLAG sector

Metric	Unit	Description
Weighted average physical emissions intensity	tCO_2e / ton	Measures the average net emissions per ton of FLAG commodities produced, attributed to financial activities. Commodity pathways are applicable only to the entities producing the commodities. The latest SBTi FLAG guidance on how emissions netting is to be conducted for targets on supply-side FLAG companies shall be followed.

4.10.2 Pathways

Per commodity pathway segmentation is provided to help financial institutions establish more precise FLAG targets. Segmentation enables institutions to identify which FLAG commodities and regions to prioritize based on their carbon intensity. A complete overview of the pathways is available in the SBTi's FLAG sector guidance.

4.10.3 Additional guidance on input data needs

The FLAG sector is segmented into specific commodities and regions.inancial institutions must identify both the commodity being financed and its production location. The Standard offers the following commodity types:

- Beef.
- Chicken.
- Dairy.
- Leather.
- Maize.
- Palm oil.
- Pork.
- Rice.
- Soy.
- Wheat.
- Timber & wood fiber.

The emissions intensity of each commodity should represent the net emissions intensity of commodity production.

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