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Climate Bonds INITIATIVE

Climate Bonds Initiative Sustainability-Linked Bond Database Methodology

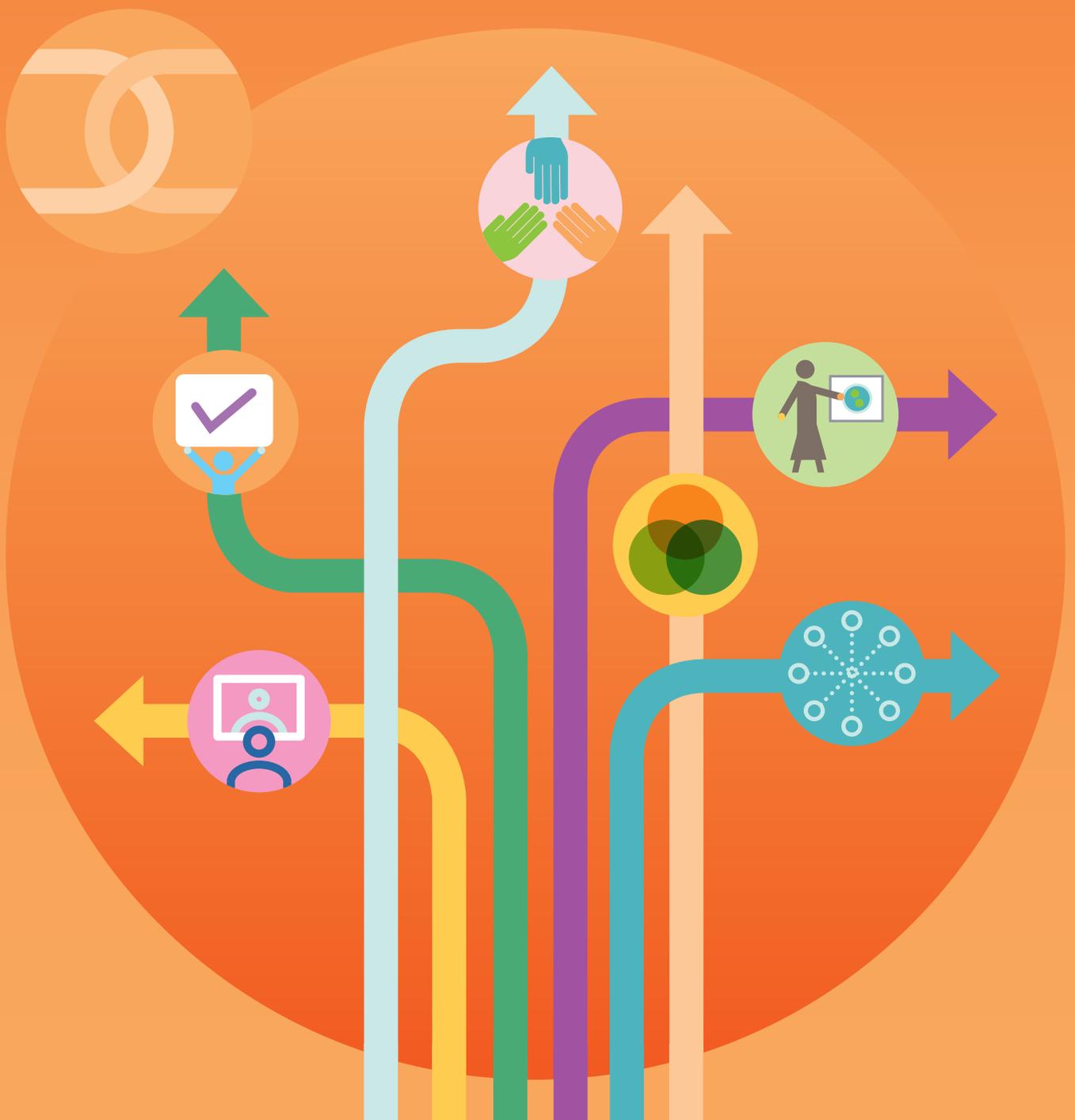


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1. Introduction

Climate Bonds Initiative (Climate Bonds) is an international not-for-profit organisation working to mobilise global capital for climate action.

Climate Bonds screens self-labelled debt instruments for inclusion in the Climate Bonds Databases.

One such database contains sustainability-linked bonds (SLBs), for which this document describes the requirements for inclusion and the database screening and maintenance process.

Sustainability-linked bonds (SLBs), together with their green, social, and sustainability (GSS) counterparts, provide powerful and complementary tools to raise capital for entities seeking to drive deep decarbonisation and deliver a range of environmental and social goals.

When used to tie the cost of financing to sustainability key performance indicators (KPIs), SLBs can incentivise and penalise entities to achieve those metrics, even if they do not have sufficient green assets, projects, or expenditures to raise sustainability related use-of-proceed (UoP) bonds.

While Climate Bonds supports and encourages the diverse use of the performance-linked debt format, within the context of this methodology, SLBs are a transition instrument to drive decarbonisation, and the requirements for inclusion in the **Climate Bonds SLB Database** focus on decarbonisation.

The eligibility criteria are based on the relevant parts of Climate Bonds' *Five Hallmarks for Credibly Transitioning Companies*, first published in a 2021 discussion paper.¹ Specifically, it uses Hallmarks 1 and 5 to develop instrument-level assessment criteria. Hallmarks 2, 3, and 4 are also screened to track the development of entity-level transition plans that underpin the targets.

Mapping SLB Frameworks and the Climate Bonds Five Hallmarks

SLB	Five Hallmarks
KPI selection	 Hallmark 1 Paris-aligned targets
SPT calibration	
Strategies to achieve the targets	 Hallmark 2 Foundation
	 Hallmark 3 Implementation Action
	 Hallmark 4 Governance
Reporting and verification	 Hallmark 5 External reporting

2. Overview of SLB database collection and screening process

In accordance with the Climate Bonds Green Bond Database and Social and Sustainability Bond Database, inclusion of any deal in the SLB Database is contingent three conditions being satisfied:

i. It must be an eligible debt instrument, which includes but is not limited to bonds, sukuk, and Schuldscheine (SSD). However, sustainability-linked loans are not tracked due to lack of disclosure around the relevant KPIs and SPTs,

ii. It must have an eligible label, meaning it must be self-labelled as a SLB, or similar term (see section 4.1),

iii. It must provide adequate public disclosure, to determine that the sustainability performance targets (SPTs) are sufficiently ambitious and can be tested for their ambition, as well as to identify and track basic information about the debt instruments, as outlined in Section 3.

Screening for eligible sectors and assessing the ambition of the SPT relies on determining alignment to 1.5°C (or where unavailable, as close as possible) decarbonisation pathways (see Annex A).

Wherever possible, these pathways will be sector specific and adhere to the Climate Bonds sector criteria. Third-party pathways are utilised where Climate Bonds is yet to release them. The pathways being utilised are listed in Table 1, Annex A.

3. Disclosure and instrument requirements for inclusion

Basic information with respect to the debt instruments must be disclosed, namely:

- i. The amount issued, issue date, and maturity date of the instrument.
- ii. Type of debt instrument (bonds, medium-term notes, asset backed securities, etc.)

Eligible SLB Instrument Types

All forms of public sustainability-linked debt instruments can be considered for inclusion in the SLB database. There is no restriction on the seniority of the debt, or the coupon type.

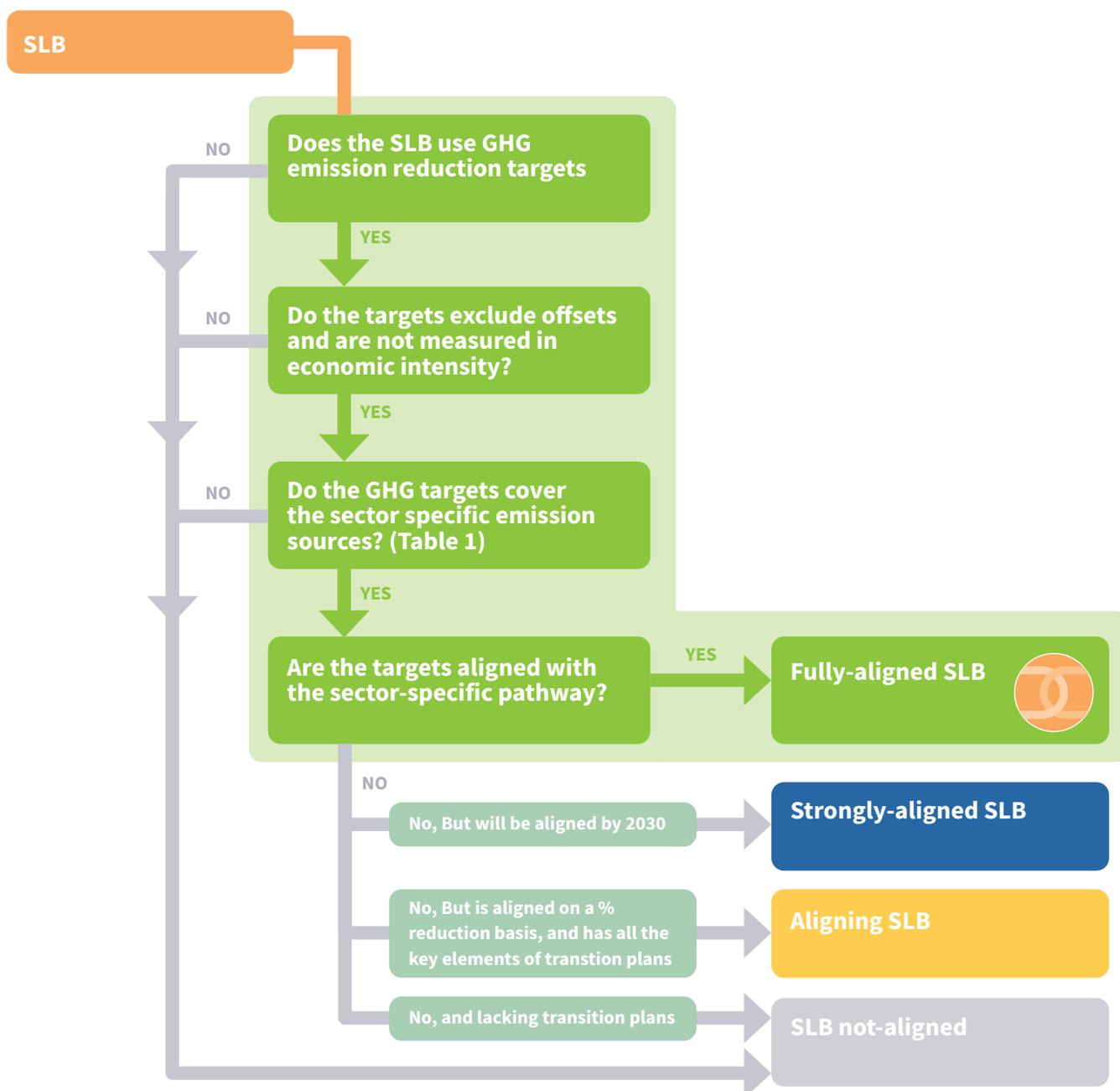
Callable bonds, which may be redeemed by the issuer before the SPT observation date, can be included in the database as long as the SPT

observation date is before the call date of the bond. In the event that the call date is before the SPT observation date, Climate Bonds will contact the issuer or underwriter to confirm the existence of protection within the bond's legal documentation. For example, that the step-up or redemption premium will still be applied in the event the bond is called early. Once confirmed, such bonds can be considered for inclusion.

SLBs that contain some form of external assessment are encouraged but not required if equivalent information is disclosed by the issuer in the debt instrument framework, prospectus, or other documentation.

Climate Bonds will consider bonds for which there is no external review, but where adequate disclosure is still provided by the issuer. For example, in the case of US Munis and Chinese domestic market issuers, relevant information is often provided in the bond prospectus.

Climate Bonds Sustainability-Linked Bond Database Methodology overview



4. Screening process in detail

Identification of sustainability-linked bonds

The issuer of an SLB must declare that the bond is intended to be a form of performance-linked financing through labelling the bond. The most common label is sustainability-linked bond but other examples include and are not limited to:

Sustainability-linked
ESG-linked
SDG-linked
Performance-linked
Transition-linked

The label should appear in a public document such as a press release, prospectus or issuance document, SLB framework, or external review of a framework to confirm the bond's environmental credentials, or any other kind of public document.

Screening credibility for sustainability-linked bonds:

Currently, SLBs will be assessed as financial tools to drive decarbonisation and climate change mitigation. Climate Bonds is working on other overlays that could be applied to assess SLBs focussed on other environmental and/or social goals, such as for driving climate adaptation and resilience, biodiversity, and a just transition, among others.

Climate change mitigation overlay for sustainability-linked bonds

As the sustainability function of SLBs is based around the success or failure of meeting pre-defined targets, the assessment criteria for SLBs as a tool for decarbonisation is focused on the implementation of Hallmark 1: Paris-aligned targets.

Hallmark 1: Paris-aligned targets contain two key elements:

1. The selection of a common science-based sectoral decarbonisation pathway that is aligned with a 1.5°C scenario, or the next-best available pathway.
2. The selection of company specific KPIs that measure the company's alignment with the pathway.

These elements need to

- a. Cover the short, medium, and long-term until net zero emissions would be reached, with interim targets to track progress.
- b. Address all material emissions. By default, this means scope 1, 2, and 3, but varies by sector.

These elements and requirements are then translated for SLBs as follows:

Key Performance Indicator (KPI) selection

By default, SLB GHG emission targets must be tied to the emissions source(s) stipulated by their sector-specific pathways, available in Table 1, Annex A below.

If there is not a relevant pathway available, SLB targets must be tied to all three scopes of emissions, including upstream and downstream scope 3 emissions, in line with an accredited carbon accounting framework.² Alternatively, if two scopes of an entity's emissions account for over 80% of the entity's total emissions, accounted for in line with SBTi's Net Zero Standard for Scope 3 emissions, the SLB can also be considered for inclusion.³

For companies that have multiple business segments, e.g., cement and electric utility, they are free to use targets that separate emissions by those segments, but segment-specific targets must independently meet the requirements detailed above.

All companies involved in the sale or distribution of fossil gas or other fossil fuel products are required to tie financing to scope 3 emission reduction targets, irrespective of the scope 3 emissions as a proportion of total company emissions. This can be done separately using multiple KPIs or grouped together under one. For example, an SLB's KPI 1 targets scope 1 and 2 emissions, and KPI 2 targets scope 3 emissions. Alternatively, KPI 1 targets scope 1, 2, and 3 emissions.

Non-GHG emission targets are welcome additions to SLBs and although recorded within the Climate Bonds database are not mandatory.

Non-GHG emission targets that measure the contributions of activities towards the entity's decarbonisation targets are encouraged. Examples can include increasing renewable energy use or capacity, increasing the share of new low-carbon activities, and energy efficiency improvements.

Sustainability Performance Target (SPT) calibration

SPTs will be assessed against the relevant sectoral pathway from Climate Bonds sector criteria where that exists. In lieu of this, sector-specific decarbonisation pathways from the Transition Pathway Initiative, Science Based Targets Initiative, and other relevant third-party organisations will be substituted. However, all pathways used must be aligned with a sector-specific 1.5°C pathway where available, or a below 2°C pathway. In the absence of a relevant sector pathway, targets will be assessed against the Absolute Contraction Approach (ACA) pathway. Refer to Annex A for further details about the sectoral pathways used for assessment.

If the SPTs are in line with the relevant pathway, then the SLB is eligible to be considered Fully-aligned in the Climate Bonds SLB Database.

If the SPT is not in line with the emission pathway, but will be by 2030, the SLB can be considered Strongly-aligned.

If the SPT is not in line with the emission intensities of the sector-specific pathway, but the targets do meet the slope of the pathway, and the issuer has all the key elements of a transition plan as listed below, then the SLB is eligible to be considered Aligning in the Climate Bonds SLB Database. These are defined as having:

- An action plan for decarbonisation that includes a publicly disclosed list of assets and changes to activities for transition, covering all material scopes of emissions, defined in Table 1 below,
- A financing plan with a publicly disclosed capex allocation for transition,
- A governance mechanism (defined as having a publicly disclosed, dedicated sustainability/transition board member or committee).

Worked Example of an 'Aligning' SLB

For example, Company A operates in X sector. The sectoral pathway dictates that it must reach 1.0 tCO₂e/t produced by 2030, down from 2.0 tCO₂e/t in 2020.

Company A had an emission intensity of 4.0 tCO₂e/t in 2020, and is aiming to reach 1.5 tCO₂e/t by 2030. Because it is targeting a 75% reduction, which is greater than the 50% reduction dictated by the pathway, it can be considered for Aligning status in the SLB Database, pending its transition plan screening, despite it being above the pathway's emission intensity.

SLBs issued by Airports will be required to include emissions relating to the flights they enable in their targets (as part of Scope 3 Category 11 - Use of Sold Products). Such targets will be assessed against the pathway for Airlines, while the remaining emission targets will be assessed against the SBTi ACA.

Financial Mechanism (FM) calibration

Climate Bonds supports the use of a variety of financial mechanisms (FMs). While market participants are encouraged to ensure their choice of FM guarantees a genuine financial incentive for the issuer to meet the targets, Climate Bonds will not exclude any deal based on the choice of FM. However, to promote this genuine financial incentive, this database will track the number of coupon payments a coupon step-up/down would apply to, and the maximum potential financial penalty of each instrument.

Targets that rely on offsets (>10%) will not be considered aligned in the SLB database.

Sovereign and sub-sovereign SLBs will be assessed against the relevant country's Nationally Determined Contributions (NDCs), or if they choose to use sector-specific emissions targets, against the relevant sectoral pathway.

5. Pending and resolution process

In some cases, the information available on the deal's KPI selection or SPT calibration is insufficient for an immediate decision on inclusion in the SLB database. This is often the case for private deals, but may also occur when documentation is only shared with bondholders and lenders and not in the public domain.

Such bonds are marked as Pending and further work is undertaken to obtain clarity. This investigation process involves contacting the issuer, underwriter, rating agency, or the second party opinion provider (if applicable) within 30 days of the bond being identified. Climate Bonds will also continue monitoring information disclosed to the market.

If no further information is made available or the obtained information does not confirm alignment in the 90 days after the bond is identified, or the database requirements are still not met, the bond is added to the not-aligned list or other Climate Bonds databases as appropriate.

6. Links to other Climate Bonds databases

Hybrid SLBs that have UoP structures as well as a performance-linked structure will be referred to the relevant Climate Bonds database for inclusion pending alignment with the respective database methodology, in addition to inclusion in the SLB database.

7. Climate Bonds Standard v4 and the SLB database

The Climate Bonds Standard v4 requires a more stringent, and slightly different set of requirements that are available [here](#) on the Climate Bonds website.

Therefore, certified SLBs, or SLBs from issuers that are certified by the Climate Bonds Standard v4, will automatically be included in the SLB database. This will apply to the relevant bonds from both Aligned and Transition-aligned issuers.

Annex: Sectoral pathways for sustainability-linked bonds in the Climate Bonds Sustainability-Linked Bond database

Notes on the use of pathways for assessing SPT credibility

Scopes of emissions:

SLB targets will be assessed for alignment with the relevant sector-specific pathways listed below.

Approved sector-specific pathways

Climate Bonds is in the process of updating some of its sector criteria to include GHG emission pathways for use in SLB assessment and Certification. Currently, the Basic Chemicals, Cement, and Steel criteria include emission pathways and other measures that will be used to assess SLBs for the SLB database, with others added as they are updated.

In place of relevant Climate Bonds pathways, the SLB database will either rely on pre-approved third-party sector-specific pathways as listed below, or refer to SBTi's 1.5°C Absolute Contraction Approach (ACA).

Economic intensity targets will not be accepted or assessed against the sectoral pathways.

Sovereign sustainability-linked debt will be assessed against the relevant country's NDCs, or against the relevant sectoral pathway if sector-specific emissions targets have been selected.

Note on conversion of units of measurement

When a company utilises an SPT that uses units of measurement that are different from the units of measurement below, this methodology will:

- Convert to the relevant unit of measurement where possible, or
- If the issuer's targets are based on absolute emissions rather than emission intensity, the targets will be assessed against the relative annual reduction required by the pathway.

Emission scope requirements on a sector-by-sector basis

The following table lists the emission target coverage requirements on a GICs sectoral basis. This is based on Climate Bond's own sectoral criteria, as well as data on sectoral emission sources such as

[CDP's Technical Note on Scope 3 emissions.](#)

Table 1: Emission Target Coverage and Assessment

Sector/Issuer Type	Emission Target Coverage requirements	Assessment Pathway
Cement	Scope 1	Climate Bond's Cement pathway
Steel	Scope 1 and 2	Climate Bond's Steel pathway
Chemicals	Scope 1, 2, and upstream 3	Climate Bond's Basic Chemicals pathway
Electric Utilities	Scope 1* or 80% of total emissions *If entity has fossil fuel-based business segment, Scope 2 and 3 also required	TPI's 1.5 Degree Pathway for Electric Utilities* <i>*If entity has a fossil fuel-based business segment, it's Scope 2 and 3 targets will be assessed against the below Oil & Gas pathway</i>
Oil & Gas	Scope 1, 2, and 3	TPI's 1.5 Degree Pathway for Oil & Gas
Forest, Land, and Agriculture	Scope 1, 2, and 3	SBTi's FLAG Pathway
Real Estate	Scope 1, 2, and 3 or 80% of total emissions	CRREM Global Pathways
Automobiles	Scope 3 or 80% of total emissions	TPI's 1.5 Degree Pathway for Automobiles
Airlines	Scope 1 or 80% of total emissions	TPI's 1.5 Degree Pathway for Airlines
Shipping	Scope 1 or 80% of total emissions	TPI's 1.5 Degree Pathway for Shipping
Diversified Mining	Scope 1, 2, and 3 or 80% of total emissions	TPI's 1.5 Degree Pathway for Diversified Mining
Aluminium	Scope 1, 2 or 80% of total emissions	TPI's Below 2 Degrees Pathway for Aluminium
Pulp and Paper	Scope 1, 2 or 80% of total emissions	TPI's Below 2 Degrees Pathway for Pulp and Paper
Sovereigns	Emissions produced within the Country	Country NDC Emission Targets (Note: Economic Intensity not accepted)
Others	Scope 1, 2, and 3 or 80% of total emissions	SBTi's Absolute Contraction Approach

Climate Bond's sectoral pathways

Table 2. Climate Bond's sectoral pathways

Sector	Unit of Measurement	Scopes	2025 Target	2030	2040	2050
Cement	Tonnes of CO ₂ per tonne of cementitious product	1, 2, (3: up until the point of finished cement*)	0.539	0.463	0.219	0.032
Steel	Tonnes of CO ₂ per tonne of steel	Primary Intensity: 1, 2	2.09	1.81	0.90	0.12
		Secondary Intensity: 1, 2	0.54	0.32	0.12	0.12
Basic Chemicals	Tonnes of CO ₂ per tonne of product.	1, 2, (3: upstream)	(See Climate Bonds Basic Chemicals Criteria document for breakdown by basic chemical type)			

*Climate Bond's [Cement Criteria](#) pathway requires the inclusion of all emissions (including any scope 3) up to the point of the finished cement, but not downstream emissions associated with transporting or using the cement product.

Third-party sectoral pathways

Note on use of third-party sectoral pathways

The following sectoral decarbonisation pathways have been selected as they align with the requirements of first Hallmark for Paris-aligned targets, and the IEA's 1.5°C/Below 2°C Net Zero pathways.

Some of these sector-specific pathways do not cover all of Scope 1, 2, and 3. For entities in these sectors, emissions from missing scopes will be assessed against the Absolute Contraction Approach instead.

Transition Pathway Initiative

Table 3. Transition Pathway Initiative

Sector	Pathway name + link	Unit of Measurement	Scopes	2025 Target	2030	2040	2050
Electric Utilities	1.5 Degrees	Carbon intensity (metric tonnes of CO ₂ per MWh electricity generation)	1	0.288	0.138	0	-0.005
Oil & Gas	1.5 Degrees	Emissions intensity (gCO ₂ e / MJ)	1, 2, 3	51.52	40.95	16.87	5.85
Automobiles	1.5 Degrees	Average new vehicle emissions (grams of CO ₂ per kilometre [NEDC])	3	85.69	30.68	2.67	0.44
Airlines	1.5 Degrees	Carbon intensity (gCO ₂ / RTK)	1	1071	616	309	108
Shipping	1.5 Degrees	Carbon intensity (gCO ₂ / t-km)	1	5.63	4.31	1.58	0.40
Diversified Mining	1.5 Degrees	Carbon intensity (tonne CO ₂ e / tonne copper equivalent)	1, 2, 3	49.79	41.54	17.56	1.63
Aluminium	Below 2 Degrees	Carbon intensity (tCO ₂ e / t aluminium)	1, 2	4.004	3.069	1.739	0.996
Pulp and paper	Below 2 Degrees	Carbon intensity (tonnes of CO ₂ per tonne of pulp, paper and paperboard)	1, 2	0.427	0.353	0.172	0.056

Carbon Risk Real Estate Monitor (CRREM)
Global Pathways – Real Estate

Table 4. Carbon Risk Real Estate Monitor (CRREM) Global Pathways – Real Estate

Sub-sector	Pathway name + link	Unit of Measurement	Scopes	2025 Target	2030	2040	2050
Residential	1.5°C-Resi-GHG V1.093	kgCO ₂ /m ² /yr	1, 2, (3: tenant energy use & embodied carbon)	26.4	19.6	9.0	1.6
Commercial Real Estate (CRE)	1.5°C-CRE-GHG V1.093	kgCO ₂ /m ² /yr	1, 2, (3: tenant energy use & embodied carbon)	59.6	43.8	19.2	3.0

Note: CRREM Pathways and Global Pathways are location-specific at the country level. GHG Emission targets will be assessed against the location-specific pathways where available, and at the global average elsewhere. As CRREM updates its pathways, the pathways used here will be updated too.

Science Based Targets Initiative (SBTi)

Table 5. Science Based Targets Initiative (SBTi)

Sub-sector	Pathway name + link	Unit of Measurement	Scopes	Annual Reduction %
Cross-sector Absolute Contraction Approach (ACA)	SBTi Criteria and Recommendations	% based reduction	1, 2	4.2%
			3	2.5%
Forest, Land, and Agriculture (FLAG)	SBTi FLAG Guidance	% based reduction	1, 2, 3	3.03%

Endnotes

- Climate Bonds Initiative 2021, Transition Finance for Transforming Companies, <https://www.climatebonds.net/transition-finance-transforming-companies>.
- This includes: the GHG Reporting Protocol, the Climate Disclosure Standards Board, CDP Carbon Accounting Methodologies, Global Reporting Initiative's Sustainability Reporting Guidelines, the International Organisation for Standardisation (ISO 14064-1), the Task Force on Climate Related Disclosures, and the Carbon Trust Standard.
- Science Based Targets Initiative 2021, SBTi Corporate Net Zero Standard, <https://sciencebasedtargets.org/resources/files/Net-Zero-Standard.pdf>.

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