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ACT BUILDINGS WBA

Version 2.0 – 06/2026

ACKNOWLEDGMENTS

World Benchmarking Alliance and ADEME warmly thank:

- the members of the Technical Working Group for their inputs and feedback on the methodology (to get to v2.0 of the methodology)
- the companies involved in the road-test of the methodology for their contribution to the methodology improvement (to get to v2.0 of the methodology)
- stakeholders involved during the update process (to get to v2.0 of the methodology)

METHODOLOGY VERSION	CONSTRUCTION/PROPERTY DEVELOPER V1.1, REAL ESTATE V1.2	BUILDINGS V2.0
DATE	February 2020, October 2022	June 2026
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QUALITY ASSURANCE AND QUALITY CONTROL	/	/

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1. Introduction

The 2015 United Nations Climate Change Conference in Paris reinforced the global commitment to act on climate change with the political agreement to limit warming to well-below 2° C and pursue efforts to limit the temperature increase to 1.5º C above pre-industrial levels. The 'Accelerate Climate Transition' (ACT) Initiative measures a company's alignment with a future low-carbon world. The goal is to drive action by companies and encourage businesses to move to a 1.5º C compatible pathway in terms of their climate strategy, business model, investments, operations and greenhouse gas (GHG) emissions management. The general approach of ACT is based on the Sectoral Decarbonisation Approach (SDA) (SBTi, 2015) developed by the Science-Based Targets initiative (SBTi) to compare a company's alignment with a 1.5º C world, the application of which is described in the ACT Framework (ACT Initiative, 2024). Accounting for 34% of total emissions in 2023, the construction and operation of buildings continue to be a major source of global CO_2 emissions today (IEA, 2025). Operational emissions represent around 26% of total emissions whereas embodied emissions represent around 8% of total emissions (UNEP, 2025).

Operational emissions are generated through the use and maintenance of buildings through activities such as heating, cooling, lighting and use of electrical appliances. Generally, operational emissions are known to represent the more significant share of a building's emissions, accounting for up to 75% of total emissions (UNEP, 2023). Whereas **embodied emissions** associated with the construction and deconstruction of a building through activities such as extraction, manufacturing, transportation and use of building materials account for the remaining 25% (UNEP, 2023). While operational emissions have been the focus of considerable attention (UNEP, 2023), the importance of embodied emissions is increasing, even more so when considering the expected 15% increase of the global floor area by 2030 (IEA, 2023) as well as the projected population growth (UN, 2026). It is now estimated that embodied emissions will rise from representing 25% of the built environment to 49% in 2050 (UNEP, 2023).

Aligning with the Net Zero Emissions (NZE) Scenario requires the buildings sector's energy intensity to decrease at a rate nearly five times faster over the next decade than it did during the previous one (IEA, 2023). Thus, this decade is pivotal for implementing the measures required to achieve the targets of all new buildings and 20% of the existing building stock to be zero-carbon-ready by 2030 (IEA, 2023). There is a great opportunity, as global modelled scenarios indicate that, with ambitious policies combining sufficiency, efficiency, renewable energy coupled with the removal of decarbonization barriers, retrofitted existing buildings and new buildings could approach net-zero GHG emissions by 2050 (IPCC, 2022). The Energy Performance of Buildings Directive (EPBD)'s Nearly Zero Energy Buildings (NZEB) requirement since 2020 or its enhanced version of Zero Emission Buildings starting in 2028 is a concrete example of how policies can shape the future of the built environment (European Comission, n.d.). However, while the strengthening policy landscape is paving the way for the decarbonisation of this sector, progress is lacking with the sector still classified as one where more efforts are needed (IEA, 2023). This calls for the need for heightened accountability and for front runners to accelerate the transition to facilitate the path for others to follow.

The prominent role of the building sector in the fight against climate change reflects the need to assess companies involved in this industry and encourage them to decarbonise. This highly complex sector covers different activities and are operated by diverse company types. To better address the variety of issues related to an assessment of the building sector, three separate reference methodologies (ACT Building Construction, ACT Building Property Developer and ACT Building Real Estate) have been merged to cover all the relevant stakeholders.

2. Principles

The selection of principles to be used for the methodology development and implementation is explained in the general Framework. Table 1 recaps the adopted principles that were adhered to when developing the methodology.

TABLE 1: PRINCIPLES FOR IMPLEMENTATION

RELEVANCE - Select the most relevant information (core business and stakeholders) to assess low-carbon transition.
VERIFIABILITY - The data required for the assessment shall be verified or verifiable.
CONSERVATIVENESS - Whenever the use of assumptions is required, the assumption shall err on the side of achieving well-below 2°C maximum global warming and pursuing efforts to limit the temperature increase to 1.5°C (compared to pre-industrial levels).
CONSISTENCY - Whenever time series data is used, it should be comparable over time.
LONG-TERM ORIENTATION - Enables the evaluation of the long-term performance of a company while simultaneously providing insights into short- and medium-term outcomes in alignment with the long-term.

3. Scope

3.1. SCOPE OF THE DOCUMENT

This document presents the ACT assessment methodology for the Building sector. It includes rationales, definitions, indicators and guidance for the sector specific aspects of performance, narrative and trend scorings. It is focused on the specific considerations and constraints that need to be considered when assessing the low-carbon alignment of the Building sector.

This document supersedes the previous ACT methodologies for the construction and real estate sectors, namely ACT Construction, ACT Real Estate, and ACT Property Developer, by consolidating and updating their approaches into a single framework for the Building sector.

It was developed in compliance with the ACT Guidelines for the development of sector methodologies (10), which describe the governance and process of this development, as well as the required content for such documents.

It is intended to be used in conjunction with the ACT Framework (2), which describes the aspects of the methodology that are not sector specific.

3.2. SCOPE OF THE BUILDING SECTOR

The methodology focuses on actors that have direct influence over building-related emissions across the life cycle, including both embodied emissions from construction and renovation, and operational emissions from the use of buildings.

A company is considered within the scope of the building sector if its core business model involves generating revenue from buildings or building-related services, including through development, construction, renovation, ownership, leasing, management, or operation of property portfolios.

The methodology applies to companies engaged in one or more of the following activities:

- Project development and delivery of new buildings
- Operation and maintenance of buildings
- Construction of new buildings and renovation of existing buildings
- Ownership of building portfolios, including leasing activities
- Property management, asset management, and facility management of buildings

Activities that fall outside of the scope of this methodology include:

- Supply of construction materials
- Architectural design and engineering
- Execution of construction works under subcontracting arrangements

In other words, companies primarily engaged in the supply of construction materials, as well as subcontractors, architects, and engineering firms, are excluded from the scope of this methodology. While these actors are important stakeholders involved in the sector, they are not included due to the methodology's focus on business models directly tied to building delivery and operation. Emissions from construction materials are accounted for indirectly through

embodied emissions at the building level, rather than at the supplier level. Similarly, subcontractors are excluded because their activities relate to specific work packages with limited control over whole-building outcomes, unlike main contractors or developers. Architecture and engineering firms, although highly influential in design decisions, are not included as they do not retain direct ownership or operational control to be responsible for the building's life cycle emissions.

The sector's activities are classified under the code and description "F – Construction" and "M – Real Estate Activities" in the NACE classification. An overview of the sector is provided below;

NACE CODE	DESCRIPTION	STATUS
F41	**Construction of residential and non-residential buildings**	
F41.0	Construction of residential and non-residential buildings (incl. development)	Included
F41.00	Construction of residential and non-residential buildings	Included
F42	**Civil engineering**	Excluded
F43	**Specialised construction activities**	Included if main contractor* Excluded if subcontractor
M68	**Real estate activities**	
M68.1	Real estate activities with own property and development of building projects	Included
M68.11	Buying and selling of own real estate	Included
M68.12	Development of building projects	Included
M68.2	Rental and operating of own or leased real estate	Included
M68.20	Rental and operating of own or leased real estate	Included
M68.3	Real estate activities on a fee or contract basis	Included
M68.31	Real estate agencies	Included
M68.32	Management of real estate on a fee or contract basis	Included
N71	**Architectural and engineering activities; technical testing and analysis**	
N71.1	Architectural and engineering activities and related technical consultancy	Excluded
N71.2	Technical testing and analysis	Excluded

*Included when the company acts as the main contractors responsible for all work packages and having control over whole-building outcomes.

Refer to section 4. Boundaries for a detailed definition of the sector's value chain and main actors covered by this methodology.

4. Boundaries

4.1. REPORTING BOUNDARIES

4.1.1. EMISSIONS BOUNDARIES ALONG THE VALUE CHAIN

For companies involved in the Building sector, the most significant sources of emissions arise from both the construction - **embodied emissions (EE)** - and the use phase - **operational emissions (OE)** - of buildings pertaining to their portfolio. These emissions do not map straightforwardly onto the GHG Protocol categories and can fall across Scope 1, 2 and 3 under the GHG protocol, depending on a company's role in the value chain.

Figure 1 is an illustration of where emissions typically occur across the sector, depending on whether a company is primarily engaged in development, construction, management, or a combination of these activities. In general, Scope 1 and 2 emissions are more prominent for management and operational activities, where companies have direct control over building energy use. Scope 3 upstream emissions are most significant for development and construction activities, reflecting material production and construction processes. Scope 3 downstream emissions are particularly significant for companies that retain ownership and/or operational control of buildings as they include emissions from the use of sold or leased assets.

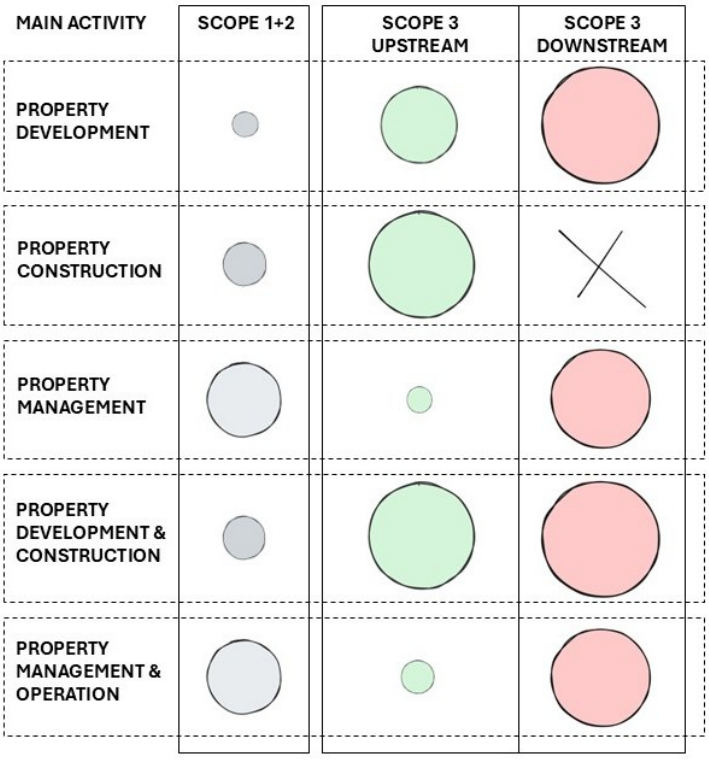


FIGURE 1: ILLUSTRATION OF EMISSIONS DISTRIBUTION PER MAIN SECTORAL ACTIVITY

This variability in emissions distribution across activities reiterates a key characteristic of the building sector: the same physical emissions can be accounted for under different scopes and categories depending on the role of the company in the value chain. To address this complexity and ensure a consistent and transparent allocation of emissions, this methodology relies on three main variables:

- **Actor Role**: This refers to the company's position in the value chain, which may include acting as a lessor, where a company owns and leases buildings, a seller, where a company develops and transfers buildings, or a manager where a company operates or manages a building on behalf of an owner.
- **Building Construction**: This reflects the extent to which a company is responsible for the construction activities and associated upfront embodied emissions for new buildings and in-use embodied emissions for renovations. Here, a distinction is made between direct construction where the company acts as the main contractor and is actively involved in the construction or renovation, and indirect construction where the company outsources the construction or renovation activities to a third party.
- **Building Operation**: This reflects the extent to which a company is responsible for the operation activities and associated in-use operational emissions. Here, a distinction is made between direct operation where a company is responsible for managing or operating the building and its energy performance, and indirect operation where the company is not responsible for managing or operating the building and its energy performance.

These variables reflect the key factors that influence whether emissions fall under Scope 1 and 2 or Scope 3 according to the GHG Protocol and sector guidance. They allow different company profiles; developers, owners, managers, contractors, to be represented while ensuring that emissions are allocated consistently across the value chain. Thus, adopting this approach helps overcome potential inconsistencies in actor definitions across sector classifications and existing standards.

In that way, the methodology also makes an explicit distinction between buildings managed, leased or sold in relation to in-use operational emissions and between new buildings and building renovations thus highlighting the difference between upfront and in-use embodied emissions.

Emissions associated with buildings occupied by the company, for instance its own offices, remain within the reporting boundary but are not distinguished as a separate category in this methodology. Instead, they are integrated within the overall operational emissions, reflecting their relatively limited contribution compared to portfolio-level emissions.

Table 2 presents the different company profiles identified based on the possible combinations of these variables and the associated distribution of embodied and operational emission sources. The assessor may choose the profile most fitting to the company's activities.

Within the profiling framework used in this methodology, ownership is generally implied through leasing and selling activities. However, to provide further clarity, the treatment of upfront embodied emissions and embodied emissions from renovations follows the definition established by SBTi. Under this approach, both the developer and the first owner are responsible for accounting for these emissions (SBTi, 2025).

In cases where the developer also retains ownership upon project completion, emissions are accounted for only once. Conversely, where a building is acquired after completion, the entity that becomes the first owner is also required to account for these emissions. Accordingly, references to "first owner" throughout this document refer to the entity holding ownership directly at the point of project completion.

TABLE 2: DEFINITION OF COMPANY PROFILES

PROFILE	ACTOR ROLE	BUILDING CONSTRUCTION	BUILDING OPERATION	COMPANY DESCRIPTION	EMISSIONS DISTRIBUTION
Lessor - Contractor	Lessor	Direct	Indirect	A company that owns and builds but does not manage buildings	Embodied emissions from new construction and operational emissions
Lessor - Manager	Lessor	Indirect	Direct	A company that owns and manages buildings but outsources maintenance	Operational emissions
Lessor - Developer	Lessor	Indirect	Indirect	A company that owns and develops buildings	Embodied emissions from new construction and operational emissions
Seller - Contractor	Seller	Direct	Indirect	A company that directly builds and sells buildings	Embodied emissions from new construction and lifetime operational emissions
Seller - Developer	Seller	Indirect	Indirect	A company that develops (through a contractor) and sells buildings	Embodied emissions from new construction and lifetime operational emissions
Manager	Manager	Indirect	Direct	A company that manages buildings but outsources maintenance	Operational emissions
Contractor	NA	Direct	NA	A company that strictly builds buildings	Embodied emissions from new construction

Note: This list of profiles is non-exhaustive but represents the most common combinations of company activities in the sector.

TABLE 3: LIFE CYCLE APPLICABILITY PER PROFILE

PROFILE	PRODUCT STAGE*	CONSTRUCTION PROCESS	USE STAGE	END OF LIFE
Lessor –Contractor		√	√	√
Lessor – Developer		√	√	√
Lessor – Manager			√	
Seller – Contractor		√		√
Seller – Developer		√		√
Manager			√	
Contractor		√		√**

* Emissions from the product stage are accounted for implicitly through the upfront embodied emissions pathways.

**In case of deconstruction/demolition

4.1.2. TEMPORAL BOUNDARIES

The assessment is aligned with the life cycle approach consistent with the European standard for assessing the environmental performance of buildings EN 15978:2011 (European Committee for Standardization, 2011). The standard divides the buildings life cycle into four main stages:

- Product stage: raw material supply, transport, manufacturing
- Construction process stage: transport, construction
- Use stage: use, maintenance, repair, replacement, refurbishment, operational energy and water use
- End-of-life stage: deconstruction/demolition, transport, waste processing and disposal

Based on this division, four different categories of emissions, as defined by SBTi, are adopted in this methodology:

- Upfront embodied emissions (UEE): modules A1 to A5
- In-use embodied emissions (IEE): modules B1 to B5
- In-use operation emissions (IOE): module B6
- End-of-life embodied emissions (EEE): modules C1 to C4

Figure 2 depicts the Building sector value chain indicating the stages within (construction, use, end-of-life) and outside (design) of the scope of this methodology and identifying the actors that included and excluded. It also illustrates the building's life cycle across all stages distinguishing between operational emissions and the different types of embodied emissions.

Avoided GHG emissions and carbon offset are not taken into account for ACT assessment of quantitative performance indicators (ACT Initiative, n.d.)

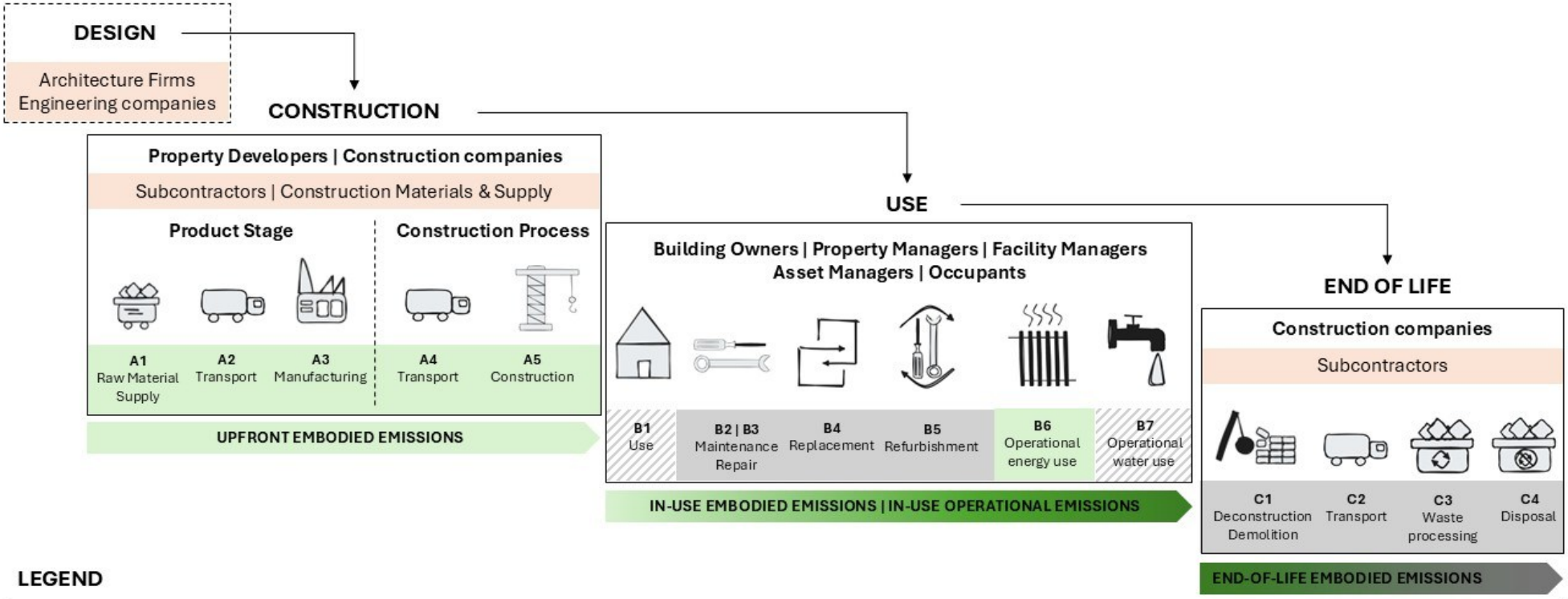


FIGURE 2 BUILDING SECTOR VALUE CHAIN AND MAIN ACTORS (AS ADAPTED FROM EN15978:2011)

4.1.3. PHYSICAL BOUNDARIES & BUILDING TYPOLOGIES

The physical boundaries of this methodology are defined at the **building level,** focusing exclusively on emissions associated with buildings and excluding other types of construction such as civil engineering works and infrastructure (Table 4).

TABLE 4 ACTIVITIES INCLUDED/EXCLUDE FROM THE SCOPE

INCLUDED	EXCLUDED
Building construction: Residential and Commercial buildings	Civil engineering works and infrastructure
New construction	Specialised construction activities
Major renovations	Routine maintenance
	Minor renovations

In terms of building typology, both residential and commercial buildings are included, with a more detailed differentiation applied to operational emissions than to embodied emissions, as illustrated in Figure 3.

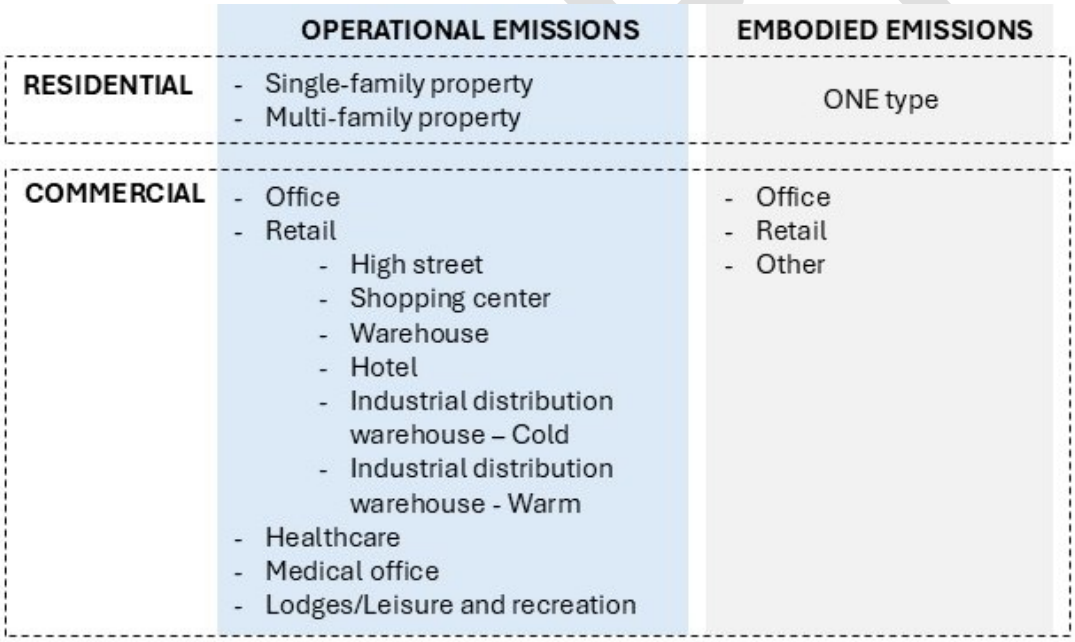


FIGURE 3 BUILDING TYPOLOGIES

A distinction is made between new construction and renovations, with the latter limited to major renovations. In line with the definitions of the Global Real Estate Sustainability Benchmark, a new construction is not limited to the development of new buildings but also includes additions to existing buildings that would result in changing the usable area. A renovation is considered major when it involves more than 50% of the building's total floor area or causes the relocation of more than 50% of the occupancy (GRESB, 2025). Minor renovations and routine maintenance fall outside of the scope of embodied emissions considered in this methodology.

At the building scale embodied emissions cover the structural components and building envelope as well as internal walls and finishes and technical installations (SBTi, 2025). For operational emissions, the boundary encompasses

both direct emissions from on-site fuel combustion, including fugitive emissions, as well as indirect emissions linked to the use of electricity and district heating and cooling (PCAF, GRESB, & CRREM, 2023) (Figure 4).

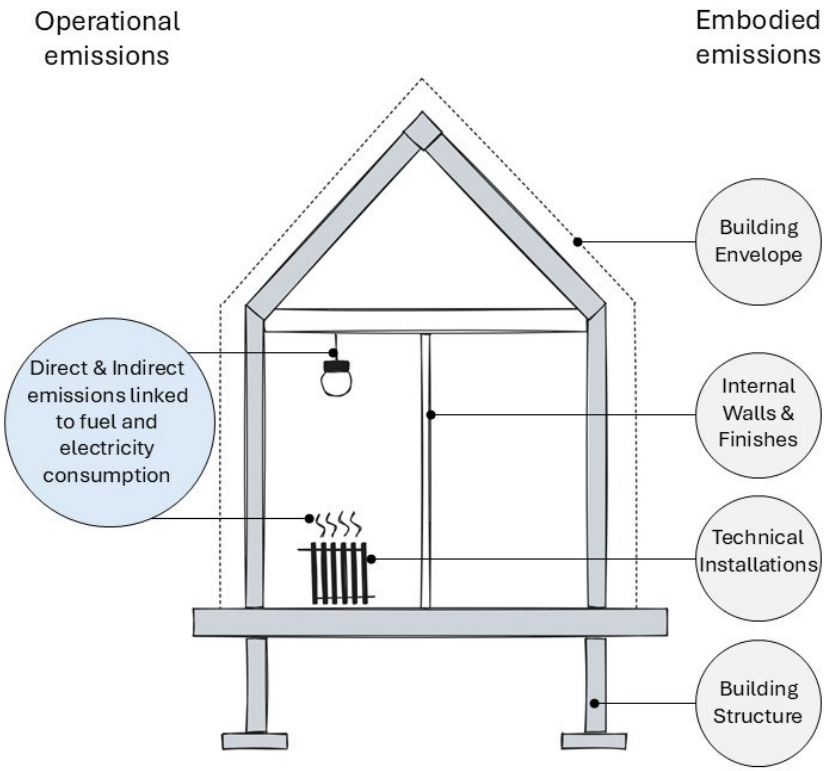


FIGURE 4: PHYSICAL BOUNDARIES

4.2. RATIONALE

4.2.1. SECTOR DEFINITION

A review of existing sector definitions and frameworks highlights both convergence and fragmentation in how the building sector is delineated. Generally, a distinction is made between construction and real estate sectors. For instance, the NACE classification differentiates between construction activities comprising both general and specialized works (F) and real estate activities (M) which include developing, owning, buying, and leasing properties (European Commission, 2025). In a similar manner, the Transition Plan Taskforce (TPT) differentiates between Engineering & Construction Services and Real Estate (TPT, 2024). However, a closer look highlights misalignment when it comes to the construction of buildings. While ISIC groups residential and non-residential building construction under its Construction category, TPT adopts a different approach by combining non-residential construction with infrastructure activities under its Engineering & Construction Services and including residential construction under Real Estate.

While civil engineering works and infrastructure construction fall outside of the scope, the ACT methodology seeks to capture emissions from construction and real estate activities for both residential and non-residential buildings. This highlights the need to approach the sector from a building life-cycle perspective, in which both construction and operational activities are considered together, while clearly distinguishing buildings from other types of construction. It is also one of the reasons why the previous separation between ACT Construction and ACT Real Estate has been reconsidered. Rather than maintaining distinct methodologies, this approach consolidates them into a single ACT Buildings methodology, reflecting the interconnected nature of development, construction and operation activities. In doing so, the scope is explicitly defined by the construction and use of buildings.

4.2.2. MAIN ACTORS AND EMISSIONS DISTRIBUTION

Emissions from the building life cycle do not map straightforwardly onto the GHG Protocol categories. For example, upfront embodied emissions include both emissions from material manufacturing and direct emissions from construction activities. For a construction company, these emissions would be allocated partly to Scope 1 and 2 covering on-site fuel and electricity, and partly to Scope 3 Upstream for purchased materials. By contrast, depending on the company's role in the value chain, these same upfront embodied emissions may be allocated entirely to Scope 3 Upstream emissions, as is typically the case for a property developer.

In practice, these roles are often intertwined. Many companies operate across multiple segments of the value chain, for example by acting simultaneously as developers and contractors, or as owners and managers. Even when a company strictly acts as a property developer, the allocation of emissions varies depending on whether buildings are leased or sold. Overall, this further complicates emissions allocation, as the same company may be associated with different emissions sources depending on the activity performed.

To address these challenges, this methodology adopts a variable-based approach rather than relying on fixed actor categories. Profiles are defined based on actor role and the level of involvement in both the construction, including renovation, and operation of buildings. By structuring emissions allocation around these variables rather than fixed actor definitions, the methodology allows for a wide range of business models while ensuring a consistent and transparent allocation of emissions across the value chain.

4.2.3. TEMPORAL AND PHYSICAL BOUNDARIES

The building sector is known for a lack of consensus on how emissions are accounted for and/or assessed, as well as significant data availability challenges. To address this, the methodology prioritizes alignment with established benchmarks, notably the CRREM and SBTi sector-specific pathways, thereby increasing the chances for comparability and robustness across the sector (SBTi, 2025; CRREM, 2026; CRREM and SBTi, 2022).

Greater granularity is applied to operational emissions, reflecting the long-standing focus of the sector on operational energy use and the relatively higher availability and maturity of data in this area. In contrast, while embodied emissions are increasingly recognized as a critical component of the building life cycle, methodological approaches and data remain less harmonized. As a result, the methodology prioritizes upfront embodied emissions, which are more commonly and consistently accounted for in life-cycle assessments, compared to end-of-life emissions where there is limited consensus and data availability.

The ACT methodology distinguishes between new construction and renovation activities. In the Global North, it is estimated that around 80% of the buildings expected to be in use by 2050 are already standing today, making the retrofit of existing structures essential for meeting global net-zero carbon targets (WBCSD, 2025). This is in line with the crucial principles and measures of sufficiency, which is described as “a set of measures aimed at reducing the demand for resources—such as energy, materials” (IFPEB, 2024). Although data limitations are more pronounced for renovations, the methodology includes major renovations in its scope given their importance in the transition towards a zero-energy built environment.

Minor renovations and routine maintenance are excluded, as they are both less material in impact and highly variable in nature, making consistent quantification challenging. This approach ensures that the most significant emission sources across the building life cycle are captured, while maintaining methodological consistency and feasibility.

5. Construction of the data infrastructure

5.1. DATA SOURCES

In order to carry out a company level assessment, many data points need to be gathered from various sources. Principally, ACT relies on the voluntary provision of data by the participating companies. External data sources are also consulted where this would streamline the process, ensure fairness, and provide additional value for checking, validation and preparation of the assessment narrative.

The ACT assessment uses the data sources listed in Table 5.

TABLE 5: ACT ASSESSMENT DATA SOURCES

DATA SOURCE	MAIN USE
Company data request	Primary data source for most indicators
Contextual and financial information database sources (e.g. online and press news, RepRisk)	Contextual and financial information on the company and events related to the company that could impact the ACT assessment
IPCC Working Group III Assessment (2022)	Technology level data

Where indicators refer to third-party data sources as the default option, reporting companies may provide their own data if they can provide a justification for doing so along with information about its verification status, any assumptions used and the calculation methodology.

5.2. COMPANY DATA REQUEST

The data included in Table 6 are requested from companies to conduct an ACT assessment.

TABLE 6: DATA REQUESTED FOR AN ACT BU ASSESSMENT

MODULE	INDICATORS	DATA REQUEST
1 - Targets	1.1	Target year Annual in-use operational emission reduction between base year and target year Coverage of emissions Base year and emissions (intensity and/or absolute) at base year Portfolio floor area of buildings managed and/or leased at base year by building typology and geographical location Portfolio floor area of buildings managed and/or leased at target year by building typology and geographical location (unless fixed market share used)
	1.2	Target year Lifetime in-use operational emission reduction between base year and target year Coverage of emissions Base year and emissions (intensity and/or absolute) at base year Portfolio floor area of buildings sold at base year by building typology and geographical location Portfolio floor area of buildings sold at target year by building typology and geographical location (unless fixed market share used)
	1.3	Target year Upfront embodied emission reduction between base year and target year Coverage of emissions Base year and emissions (intensity and/or absolute) at base year Portfolio gross floor area of new buildings developed at base year by building typology Portfolio gross floor area of buildings developed at target year by building typology (unless fixed market share used)
	1.4	Target year In-use embodied emission reduction between base year and target year Coverage of emissions

		Base year and emissions (intensity and/or absolute) at base year Gross floor area of buildings renovated at base year Gross floor area of buildings renovated at target year
	1.5	Targets year (end and intermediate dates) Targets emissions coverage, scope of emissions
	1.6	Base year Reporting year Target year Reduction percentage from base year to reporting year in absolute GHG emissions or GHG emissions intensity
2 - Material investment	2.1	Average share of CAPEX in low-carbon technologies (out of total CAPEX) for the next 3 years
3 - Intangible investment	3.1	Average share of R&D in low-carbon technologies (out total R&D) in for the last 3 years
4 - Sold Product Performance	4.1	Interventions to reduce life-cycle emissions of low-carbon assets
	4.2	In-use operational emissions (intensity and/or absolute) of buildings sold, managed and/or leased (from RY-5 to RY) Internal floor area of buildings sold, managed and/or leased (from RY-5 to RY)
	4.3	Upfront embodied emissions (intensity and/or absolute) of buildings constructed and/or developed (from RY-5 to RY) Gross floor area of buildings constructed and/or developed (from RY-5 to RY)
	4.4	Operational emissions intensity (from RY to RY+5) related to the use of sold, managed and/or leased buildings
	4.5	Upfront embodied emissions intensity (from RY to RY+5) related to the construction and/or development of buildings
	4.6	Share of zero-carbon-ready buildings delivered (from RY-3 to RY) Projected share of zero-carbon-ready buildings (from RY to RY+3)
	4.7	Share of renovated buildings (from RY-3 to RY) Projected share of renovated buildings (from RY to RY+3)
	4.8	Operational emission intensity from the use of buildings managed, leased and/or sold (from RY to RY+30) In-use embodied emission intensity from the construction and/or development of new buildings (from RY to RY+30) Forecast of portfolio growth (from RY to RY+30)
5- Management	5.1	Environmental policy and details regarding governance
	5.2	
	5.3	Transition plan, including scope and timeline of the plan, financial content, actions planned in near- and long-terms, measure of success, review and update process, progress reporting process, role of scenario testing and carbon price

	5.4	Management incentives
	5.5	Fossil fuel management incentives
	5.6	Scenario testing: scope, timescale, scenarios used, hypotheses/assumptions that are considered, materiality of climate-related risks/opportunities, outputs and role of a carbon price
6 - Suppliers engagement	6.1	Methods of supplier engagement, strategy for prioritizing supplier engagements and measures of success
		Number of suppliers engaged and proportion of total spend (or share of emissions as a proxy)
		Data on suppliers' GHG emissions and climate change strategies
	6.2	List of initiatives and activities implemented to influence suppliers to reduce their GHG emissions, green purchase policy or track record, supplier code of conduct
7 - Client engagement	7.1	Strategy to influence clients GHG emissions
		% of clients covered by the strategy
		Data on clients' choices and preferences for reducing GHG emissions
	7.2	Strategy to influence clients GHG emissions
		% of clients covered by the activities
		Data on clients' choices and preferences for reducing GHG emissions
8- Policy engagement	8.1	Public climate change policy positions
		Description of this policy (scope & boundaries, responsibilities, process to monitor and review)
		Trade associations that are likely to take a position on climate change legislation
	8.2	Company policy on engagement with associations, alliances, coalitions or thinktanks
	8.3	Position of the company on significant climate policies (public statements, etc.).
	8.4	Elements related to engagement with regulators and legislators
9 - Business Model	9.1	Revenue from low-carbon products and services each year from RY-3 to RY, total revenue for the same years, and description of the types of products and services the company considers to be low-carbon
		For each business model: description, size (as a percentage of total FTE, revenue, or relevant activity-based metric of size), and growth potential and timelines
	9.2	For each decarbonisation action: description, growth potential and timelines, life cycle phases impacted

TABLE 7: INDICATOR APPLICABILITY PER PROFILE

	LESSOR - CONTRACTOR	LESSOR - MANAGER	LESSOR - DEVELOPER	SELLER - CONTRACTOR	SELLER - DEVELOPER	MANAGER	CONTRACTOR
BU 1.1 Alignment of operational emissions of buildings managed and/or leased reduction targets	√	√	√			√	
BU 1.2 Alignment of operational emissions of buildings sold reduction targets				√	√		
BU 1.3 Alignment of upfront embodied emissions of buildings reduction targets	√		√	√	√		√
BU 1.4 Alignment of in-use embodied emissions of buildings reduction targets	√		√	√	√		√
BU 1.5 Time horizon of targets	√	√	√	√	√	√	√
BU 1.6 Historic target ambition and company performance	√	√	√	√	√	√	√
BU 2.1 Share of low-carbon CAPEX investments	√	√	√	√	√	√	√
BU 3.1 R&D spending on low-carbon technologies	√	√	√	√	√	√	√
BU 4.1 Product/Service-specific interventions	√	√	√	√	√	√	√
BU 4.2 Trend in past emissions intensity for operational emissions	√	√	√	√	√	√	√
BU 4.3 Trend in past emissions intensity for upfront embodied emissions	√	√	√	√	√	√	√
BU 4.4 Trend in future emissions intensity for operational emissions	√	√	√	√	√	√	√
BU 4.5 Trend in future emissions intensity for upfront embodied emissions	√	√	√	√	√	√	√
BU 4.6 Share of low-carbon buildings	√	√	√	√	√		
BU 4.7 Share of renovations towards low-carbon buildings	√	√	√	√	√		√
BU 4.8 Locked-in emissions from sold products	√	√	√	√	√		

Note: The remaining indicators apply to all profiles.

5.3. PERFORMANCE INDICATORS

The performance indicators have been conceived following the main principles described in **Error! Reference source not found.**Table 8. When emissions are not reported as operational and embodied emissions, refer to ACT Generic for the following indicators;

- 1.1 Alignment of Scope 1+2 emissions reduction targets
- 1.2 Alignment of upstream Scope 3 emissions reduction targets
- 1.3 Alignment of downstream Scope 3 emissions reduction targets
- 2.1 Trend in past emissions
- 2.2 Trend in future emissions
- 2.4 Locked-in emissions from own fleet and buildings
- 4.2 Trend in past product/service specific performance
- 4.3 Locked-in emissions from sold products

This methodology aligns with state-of-the-art frameworks and target-setting approaches, when it comes to emissions disclosure. Accordingly, companies that continue to strictly report Scope 1 and 2 and Scope 3 emissions, without adopting a portfolio-level whole-building approach, are subject to a score cap of 80%.

TABLE 8 PERFORMANCE INDICATORS

ACT BUILDINGS			
	PAST	***PRESENT***	***FUTURE***
1.TARGETS	BU 1.6. Historic target ambition and company performance		BU 1.1. Alignment of operational emissions of buildings managed and/or leased reduction targets
			BU 1.2. Alignment of operational emissions of buildings sold reduction targets
			BU 1.3. Alignment of upfront embodied emissions of buildings reduction targets
			BU 1.4. Alignment of in-use embodied emissions of buildings reduction targets
			BU 1.5. Time Horizon of targets
2.MATERIAL INVESTMENT		BU 2.1. Share of low-carbon CAPEX investments	
3.INTANGIBLE INVESTMENTS	BU 3.1. R&D spending on low-carbon technologies		

4.SOLD PRODUCT PERFORMANCE	BU 4.1. Product/Service-specific interventions		
	BU 4.2. Trend in past emissions intensity for operational emissions		BU 4.4. Trend in future emissions intensity for operational emissions
	BU 4.3. Trend in past emissions intensity for upfront embodied emissions		BU 4.5. Trend in future emissions intensity for upfront embodied emissions
	BU 4.6. Share of low-carbon buildings		
	BU 4.7. Share of renovations towards low-carbon buildings		
			BU 4.8. Locked-in emissions from sold products
5.MANAGEMENT		BU 5.1. Oversight of climate change issues	BU 5.3. Low-carbon transition plan
		BU 5.2. Climate change oversight capability	BU 5.5. Climate change scenario testing
		BU 5.4. Climate change management incentives	
6.SUPPLIER ENGAGEMENT	BU 6.2. Activities to influence suppliers to reduce their GHG emissions		BU 6.1. Strategy to influence suppliers to reduce their GHG emissions
7.CLIENT ENGAGEMENT	BU 7.2. Activities to influence clients to reduce their GHG emissions		BU 7.1. Strategy to influence clients to reduce their GHG emissions
8.POLICY ENGAGEMENT		BU 8.1. Company policy on engagement with trade associations, alliances, coalitions or thinktanks	
		BU 8.2. Associations, alliances, coalitions or thinktanks supported do not have climate-negative activities or positions	
		BU 8.3. Position on significant climate policies	
		BU 8.4. Collaboration with local public authorities	
9.BUSINESS MODELS	BU 9.1. Revenue from low-carbon products and/or services		
	BU 9.2. Changes to business models		

ACT methodologies use maturity matrices which are scaled on five levels, from “Basic” (lowest level) to “Low-carbon aligned” (highest level). Each level is associated with a score, as highlighted in Table 9 below. Some performance indicators are based on maturity matrices with a single question (or “subdimension"), whereas other indicators are based on multi-subdimension matrices. In the latter case, each subdimension is associated with a weighting which is taken into

account to calculate the overall indicator score. Most matrices in the methodology make use of the full five-level matrix structure, although some may only use 2, 3 or 4 of the available maturity levels.

TABLE 9: ACT MATURITY LEVELS

Evaluation level	Basic	Standard	Advanced	Next practice	Low-carbon aligned
Score	0	0.25	0.5	0.75	1

MODULE 1: TARGETS

Module 1, "Targets", assesses the company's commitments to reduce emissions, as these are the north star for navigating the low-carbon transition. Targets provide a goal with which the company can align its strategy, business decisions, capital expenditure (CAPEX) and research and development (R&D) to deliver emissions reductions. Targets should be science-based, include both long-term and near-term targets, and cover all relevant scopes of emissions. This module focuses on operational, upfront embodied and in-use embodied emissions arising from the lifecycle emissions of buildings sold, managed or leased in the company's portfolio.

Note: As mentioned in section ***Error! Reference source not found.****, carbon offsets are not allowed for quantitative assessment within ACT methodologies* (ACT Initiative, n.d.)*. In practice, this means that a target (especially a "net-zero" one) cannot be assessed if it is unclear how the company relies on offsets. To align with SBTi's Corporate Net Zero Standard, companies, once a company achieves its long-term target of reducing emissions at least by 90%, it must use permanent carbon removal to offset the final 10% of residual emissions that cannot be eliminated. A target is only considered net-zero when long-term targets are reached for emissions across all scopes and any residual emissions are fully neutralised* (SBTi, 2026)*. See ACT website (FAQ section) for more information* (ACT Initiative, n.d.)*.*

- **BU 1.1 ALIGNMENT OF OPERATIONAL EMISSIONS OF BUILDINGS MANAGED AND/OR LEASED REDUCTION TARGETS**

SHORT DESCRIPTION OF INDICATOR

A measure of the alignment of the company's near- and long-term operational emissions intensity or absolute emissions reduction targets of buildings managed and/or leased with its decarbonization pathway. The indicator will compare the trend of the company's target pathway to the trend of the company's benchmark pathway and thus identify the gap between both pathways at the target year. This is expressed as the company's commitment gap.

This indicator only applies to the company profiles of Lessor-Contactor, Lessor-Manager, Lessor-Developer and Manager.

When emissions are not reported as operational and embodied emissions, refer to ACT Generic for indicators 1.1 Alignment of Scope 1+2 emissions reduction targets, 1.2 Alignment of upstream Scope 3 emissions reduction targets, 1.3 Alignment of downstream Scope 3 emissions reduction targets. Companies that report Scope 1 and 2 and Scope 3 emissions, without adopting a portfolio-level whole-building approach, are subject to a score cap of 80%.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Targets information for each relevant operational GHG emissions of buildings managed and/or leased (Target year, emission reduction between base year and target year, coverage)

- Base year, emissions at base year

CDP Questionnaire 2023 mapping to this indicator:

- C4.1a
- C4.1b
- C4.2c

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 7.53
- 7.54

External sources of data used for the analysis of this indicator are:

- Low-carbon pathways (1.5°C aligned) – See section 6.1 for a detailed explanation about sources and low-carbon scenarios that have been identified.
- SDA – specific benchmark pathway definition.

The benchmark indicators involved are the following:

TARGET TYPE	PARAMETER	INTENSITY METRIC	METHODOLOGICAL SOURCES
Benchmark operational emissions intensity from buildings managed and/or leased	EI_{BBML}	$kgCO_{2e}/m^2$	See section 6.1
Company operational emissions intensity from buildings managed and/or leased	EI_{CBML}	$kgCO_{2e}/m^2$	See section 6.1

HOW THE ASSESSMENT WILL BE DONE

The analysis has two dimensions.

- Dimension 1 assesses the alignment of the company's near-term targets. Any target where the target year ≤ reporting year + 10 can -be included in this dimension.
- Dimension 2 assesses the alignment of a company's long-term targets. Any target for which the target year > reporting year + 10 can be included in this dimension.
- The scoring rationale and calculation are the same for both dimensions.

The analysis is based on a trend ratio between the company's operational emissions target from managed and/or leased buildings and the company benchmark. Trends are computed between base year and the longest time horizon of the target.

The company's target pathway is the decarbonization over time, defined by the company's operational emissions reduction target from managed and/or leased buildings. To compute it, a straight line is drawn between the starting point of the analysis and the company's target endpoint.

The company benchmark pathway is the company specific operational emissions low-carbon benchmark pathway for managed and/or leased buildings. See section 6.1.5**Error! Reference source not found.** for details on the computation of this pathway.

The company achieves the maximum score if the company's target pathway and the company benchmark pathway are aligned (commitment gap = 0) and if the targets are covering most of the company's operational emissions from buildings managed and/or leased at base year.

CALCULATION OF SCORE

TREND RATIO

The score is calculated by dividing the company's emissions intensity reduction trend by the specific benchmark emissions intensity reduction trend between the base year and the target year through the trend ratio:

The same reasoning which applies to intensity targets also applies to absolute emissions reduction targets.

$$Trend\ ratio = \frac{Company's\ target\ trend}{Benchmark\ pathway\ trend} = \frac{EI_{CBML}(TY) - EI_{CBML}(BY)}{EI_{BBML}(TY) - EI_{CBML}(BY)}$$

Where:

- $EI_{CBML}(TY)$ is the company operational emissions intensity from buildings managed and/or leased at target year

- EI_{CBML}(BY) is the company operational emissions intensity from buildings managed and/or leased at base year
- EI_{BBML}(TY) is the company's benchmark operational emissions intensity from buildings managed and/or leased at target year

The commitment gap of the company is equal to (1- trend ratio). Thus, when the company's target pathway is aligned on the company's benchmark, the trend ratio is equal to 1 and the commitment gap is 0 (see Figure 5).

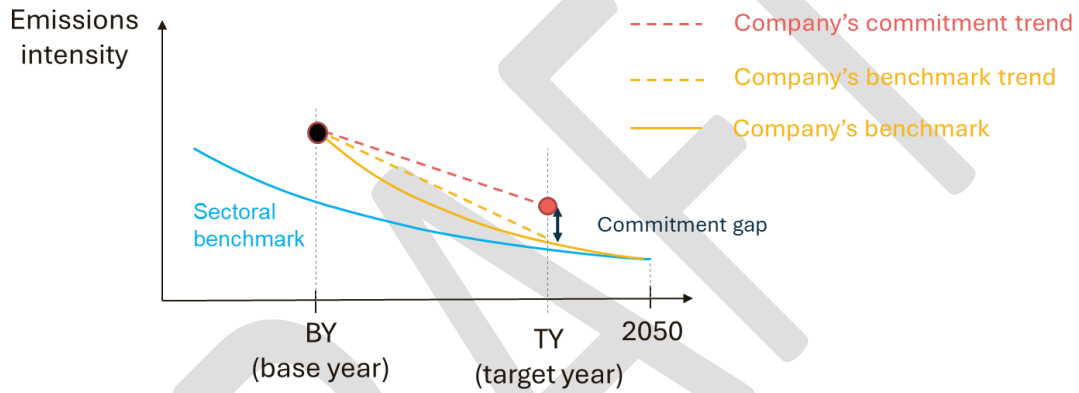


FIGURE 5: TREND RATIO AND COMMITMENT GAP

FINAL SCORE

The final score assigned to the indicator is calculated as follows (see Appendix 11.4 for a graphic illustration of the different cases):

CONDITIONS	SCORE
$Company's\ target\ trend > 0$ Increase in company emissions intensity	0%
$Company's\ target\ trend \leq 0$ $0 \leq trend\ ratio \leq 1$	$Trend\ ratio \times 100\%$

Decrease in company emissions intensity but company's commitment does not go beyond the company's benchmark ambition	
$Company's\ target\ trend < 0$ and $EI_{CBML}(BY) \geq EI_{BBML}(2050)$ $trend\ ratio > 1$ Decrease in company emissions intensity and company's commitment equals or exceeds the company's benchmark ambition	100%
$Company's\ target\ trend \leq 0\ and\ EI_{CBML}(BY) \leq EI_{BBML}(2050)$ No increase in company emissions intensity and company's emissions intensity is already below the company's benchmark ambition for 2050	100%

Targets that do not cover > 95% of the company's portfolio emissions of building managed and/or leased are not preferred in the calculations. If only such targets are available, then the score will be adjusted downwards in proportion with % coverage. If the target coverage of total company emissions at base year (C_{BY}) represents less than 95%, the final score is equal to:

Final Score = Score x Target coverage of total company emissions (C_{BY})

If the company has set several targets, the consolidation of the scores assigned to each target will be based on the share of emissions covered by the targets.

The final score for each dimension is given as the average score for all targets assessed within the timescale for each dimension.

AGGREGATE SCORE: DIMENSION 1: 50%, DIMENSION 2: 50%

RELEVANCE OF THE INDICATOR

Operational emissions reduction targets of buildings managed and/or leased are included in this ACT methodology for the following reasons:

- Targets are an indicator of corporate commitment to reduce emissions and are a meaningful metric of the company's internal planning towards the transition.
- Targets are one of the few metrics that can predict a company's long-term plan beyond that which can be projected in the short-term, satisfying ACT's need for indicators that can provide information on the long-term future of a company.
- In-use operational emissions of buildings managed and/or leased make up the most significant portion of emissions in a company's GHG inventory.

SCORING RATIONALE

Targets are quantitatively interpreted and directly compared to a low-carbon benchmark built from the company's current level of emissions at base year and converging toward the 2050 value of the sectoral benchmark relevant for this source. Comparing the trends gives a direct measure of the commitment gap of the company. It was chosen for its relative simplicity in interpretation and powerful message.

The indicator is split into two dimensions to account for the importance of a company having targets which are aligned not just in the long-term but also in the near-term. The Science Based Targets initiative's Net Zero Standard requires companies to set both near-term and long-term science-based targets which are in line with 1.5-degree pathways. The justification for having both near- and long-term targets is explained in the Net Zero Standard: "Near-term targets galvanize the action required for significant emissions reductions to be achieved by around 2030. Near-term emissions reductions are critical to not exceeding the global emissions budget and are not interchangeable with long-term targets. […] Long-term targets drive economy-wide alignment and long-term business planning to reach the level of global emissions reductions needed to meet climate goals based on science (SBTi, 2026)." The report by the United Nations Secretary-General's High-Level Expert Group on the Net-Zero Emissions Commitments of Non-State Entities (HLEG) also recommends setting both near-term and long-term targets (High-Level Expert Group on the Net-Zero Emissions Commitments of Non-State Entities, 2022).

- **BU 1.2 ALIGNMENT OF OPERATIONAL EMISSIONS OF BUILDINGS SOLD REDUCTION TARGETS**

SHORT DESCRIPTION OF INDICATOR

A measure of the alignment of the company's near- and long-term operational emissions intensity or absolute emissions reduction targets of buildings sold with its decarbonization pathway. The indicator will compare the trend of the company's target pathway to the trend of the company's benchmark pathway and thus identify the gap between both pathways at the target year. This is expressed as the company's commitment gap.

This indicator only applies to the company profiles of Seller-Contractor and Seller-Developer.

When emissions are not reported as operational and embodied emissions, refer to ACT Generic for indicators 1.1 Alignment of Scope 1+2 emissions reduction targets, 1.2 Alignment of upstream Scope 3 emissions reduction targets, 1.3 Alignment of downstream Scope 3 emissions reduction targets. Companies that report Scope 1 and 2 and Scope 3 emissions, without adopting a portfolio-level whole-building approach, are subject to a score cap of 80%.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Targets information for each relevant operational GHG emissions of buildings sold (Target year, emission reduction between base year and target year, coverage)

- Base year, emissions at base year

CDP Questionnaire 2023 mapping to this indicator:

- C4.1a
- C4.1b
- C4.2c

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 7.53
- 7.54

External sources of data used for the analysis of this indicator are:

- Low-carbon pathways (1.5°C aligned) – See section 6.1 for a detailed explanation about sources and low-carbon scenarios that have been identified.

The benchmark indicators involved are:

TARGET TYPE	PARAMETER	INTENSITY METRIC	METHODOLOGICAL SOURCES
Benchmark operational emissions intensity from buildings sold	EI_{BBS}	$kgCO_{2e}/m^2$	See section 6.1
Company operational emissions intensity from buildings sold	EI_{CBS}	$kgCO_{2e}/m^2$	See section 6.1

HOW THE ASSESSMENT WILL BE DONE

Same calculation as indicator BU 1.1 Alignment of operational emissions of buildings managed and/or leased reduction targets.

RELEVANCE OF THE INDICATOR

Relevance of the indicator:

Operational emissions of buildings sold reduction targets are included in this ACT methodology for the following reasons:

- Targets are an indicator of corporate commitment to reduce emissions and are a meaningful metric of the company's internal planning towards the transition.
- Targets are one of the few metrics that can predict a company's long-term plan beyond that which can be projected in the short-term, satisfying ACT's need for indicators that can provide information on the long-term future of a company.
- Operational emissions of buildings sold make up the most significant portion of emissions in a company's GHG inventory.

SCORING RATIONALE

As per indicator 1.1 Alignment of operational emissions of buildings managed and/or leased reduction targets.

• BU 1.3 ALIGNMENT OF UPFRONT EMBODIED EMISSIONS OF BUILDINGS REDUCTION TARGETS

SHORT DESCRIPTION OF INDICATOR

A measure of the alignment of the company's near- and long-term upfront embodied emissions intensity or absolute emissions reduction targets of buildings with its decarbonization pathway. The indicator will compare the trend of the company's target pathway to the trend of the company's benchmark pathway and thus identify the gap between both pathways at the target year. This is expressed as the company's commitment gap.

This indicator only applies to the company profiles of Lessor-Contractor, Lessor-Developer, Seller-Contractor, Seller-Developer and Contractor.

When emissions are not reported as operational and embodied emissions, refer to ACT Generic for indicators 1.1 Alignment of Scope 1+2 emissions reduction targets, 1.2 Alignment of upstream Scope 3 emissions reduction targets, 1.3 Alignment of downstream Scope 3 emissions reduction targets. Companies that report Scope 1 and 2 and Scope 3 emissions, without adopting a portfolio-level whole-building approach, are subject to a score cap of 80%.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Targets information for each relevant upfront embodied GHG emissions of buildings (Target year, emission reduction between base year and target year, coverage)
- Base year, emissions at base year

CDP Questionnaire 2023 mapping to this indicator:

- C4.1a
- C4.1b
- C4.2c

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 7.53
- 7.54

External sources of data used for the analysis of this indicator are:

- Low-carbon pathways (1.5°C aligned) – See section 6.1 for a detailed explanation about sources and low-carbon scenarios that have been identified.
- SDA – specific benchmark pathway definition.
- ACA

The benchmark indicators involved are:

TARGET TYPE	PARAMETER	INTENSITY METRIC	METHODOLOGICAL SOURCES
Benchmark upfront embodied emissions intensity from buildings	EI_{BUE}	$kgCO_{2e}/m^2$	See section 6.1
Company upfront embodied emissions intensity from buildings	EI_{CUE}	$kgCO_{2e}/m^2$	See section 6.1

HOW THE ASSESSMENT WILL BE DONE

Same calculation as indicator BU 1.1 Alignment of operational emissions of buildings managed and/or leased reduction targets.

RELEVANCE OF THE INDICATOR

Relevance of the indicator:

Upfront embodied emissions of buildings reduction targets are included in this ACT methodology for the following reasons:

- Targets are an indicator of corporate commitment to reduce emissions and are a meaningful metric of the company's internal planning towards the transition.

- Targets are one of the few metrics that can predict a company's long-term plan beyond that which can be projected in the short-term, satisfying ACT's need for indicators that can provide information on the long-term future of a company.
- With the improvement of operational energy performance, the significance and relevance of embodied energy in the life cycle of buildings is increasing and must be accounted for.

SCORING RATIONALE

As per indicator 1.1 Alignment of operational emissions of buildings managed and/or leased reduction targets.

BU 1.4 ALIGNMENT OF IN-USE EMBODIED EMISSIONS OF BUILDINGS REDUCTION TARGETS

SHORT DESCRIPTION OF INDICATOR

A measure of the alignment of the company's near- and long-term in-use embodied emissions intensity or absolute emissions reduction targets of buildings with its decarbonization pathway. The indicator will compare the trend of the company's target pathway to the trend of the company's benchmark pathway and thus identify the gap between both pathways at the target year. This is expressed as the company's commitment gap.

This indicator only applies to the company profiles of Lessor-Contractor, Lessor-Developer, Seller-Contractor, Seller-Developer and Contractor.

When emissions are not reported as operational and embodied emissions, refer to ACT Generic for indicators 1.1 Alignment of Scope 1+2 emissions reduction targets, 1.2 Alignment of upstream Scope 3 emissions reduction targets, 1.3 Alignment of downstream Scope 3 emissions reduction targets. Companies that report Scope 1 and 2 and Scope 3 emissions, without adopting a portfolio-level whole-building approach, are subject to a score cap of 80%.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Targets information for each relevant in-use embodied GHG emissions of buildings (Target year, emission reduction between base year and target year, coverage)
- Base year, emissions at base year

CDP Questionnaire 2023 mapping to this indicator:

- C4.1a
- C4.1b
- C4.2c

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 7.53
- 7.54

External sources of data used for the analysis of this indicator are:

- Low-carbon pathways (1.5°C aligned) – See section 6.1 for a detailed explanation about sources and low-carbon scenarios that have been identified.
- SDA – specific benchmark pathway definition.
- ACA – specific benchmark pathway definition

The benchmark indicators involved are:

TARGET TYPE	PARAMETER	INTENSITY METRIC	METHODOLOGICAL SOURCES
Benchmark in-use embodied emissions intensity from buildings	EI_{BIE}	$kgCO_{2e}/m^2$	See section 6.1
Company in-use embodied emissions intensity from buildings	EI_{CIE}	$kgCO_{2e}/m^2$	See section 6.1

HOW THE ASSESSMENT WILL BE DONE

Same calculation as indicator BU 1.1 Alignment of operational emissions of buildings managed and/or leased reduction targets.

RELEVANCE OF THE INDICATOR

In-use embodied emissions of buildings reduction targets are included in this ACT methodology for the following reasons:

- Targets are an indicator of corporate commitment to reduce emissions and are a meaningful metric of the company's internal planning towards the transition.
- Targets are one of the few metrics that can predict a company's long-term plan beyond that which can be projected in the short-term, satisfying ACT's need for indicators that can provide information on the long-term future of a company.

- Most of the buildings in use by 2050 are already standing today, making the retrofit of existing structures essential for meeting global net-zero carbon targets. Additionally, following the principle of sufficiency, the priority should be to decrease emissions through avoidance rather reduction.

SCORING RATIONALE

As per indicator 1.1 Alignment of operational emissions of buildings managed and/or leased reduction targets.

BU 1.5 TIME HORIZON OF TARGETS

SHORT DESCRIPTION OF INDICATOR

A measure of the time horizons of company targets. The ideal set of targets is forward looking enough to include a long-time horizon that includes the majority of a company's asset lifetimes but also includes short-term targets that incentivize action in the present.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Per target: Target year, and scopes or emissions sources covered by the target. Please include all company targets (target with the longest time horizon **and** all intermediate targets).

CDP Questionnaire 2023 mapping to this indicator:

- C4.1a
- C4.1b
- C4.2c

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 7.53
- 7.54

HOW THE ASSESSMENT WILL BE DONE

The analysis has two dimensions:

- A comparison of: (a) the longest time horizon of the company's targets, and (b) the long-term point fixed by ACT assessment methodology.

- The company has interval targets that ensure both short and long-term targets are in place to incentivize short-term action and communicate long-term commitments.

DIMENSION 1 - TARGET ENDPOINT

The company's target endpoint (T_e) is compared to a relevant time horizon for the sector (LT).

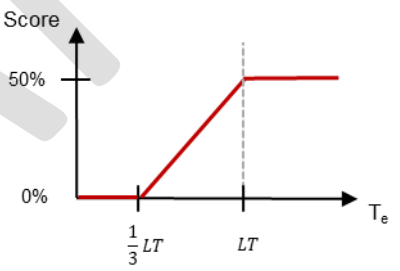
The company's target endpoint (T_e) is equal to the longest time horizon among the company's targets, minus the reporting year:

$$T_e = Longest\ target\ time\ horizon - reporting\ year$$

The analysis compares T_e to LT. This analysis measures the horizon gap:

$$Horizon\ gap = LT - T_e$$

The company's target endpoint is scored according to the following scoring table:

HORIZON GAP	SCORE	
$\boldsymbol{T_e > LT}$	50%	
$\boldsymbol{33\% * LT < T_e < LT}$	$75\% * \frac{T_e}{LT} - 25\%$	
$\boldsymbol{T_e \leq 33\% * LT}$	0%	

DIMENSION 2 - INTERMEDIATE HORIZONS

All company targets and their endpoints are calculated and plotted. The ideal scoring company does not have intervals between target endpoints larger than 5 years from the reporting year.

Measurements are done in five-year intervals between the reporting year and the longest time horizon of the company.

The company's targets are compared according to the following scoring table:

INTERMEDIATE TARGET GAP LENGTH	SCORE

All the gaps during T_e are equal to or less than 5 years	50%
All the gaps until 80% of T_e are equal to or less than 5 years	40%
All the gaps until 60% of T_e are equal to or less than 5 years	30%
All the gaps until 40% of T_e are equal to or less than 5 years	20%
All the gaps until 20% of T_e are equal to or less than 5 years	10%
All the gaps of 5 years or less do not reach 20% of T_e or there is no such gaps disclosed by the company	0%

An example is illustrated in Figure 6.

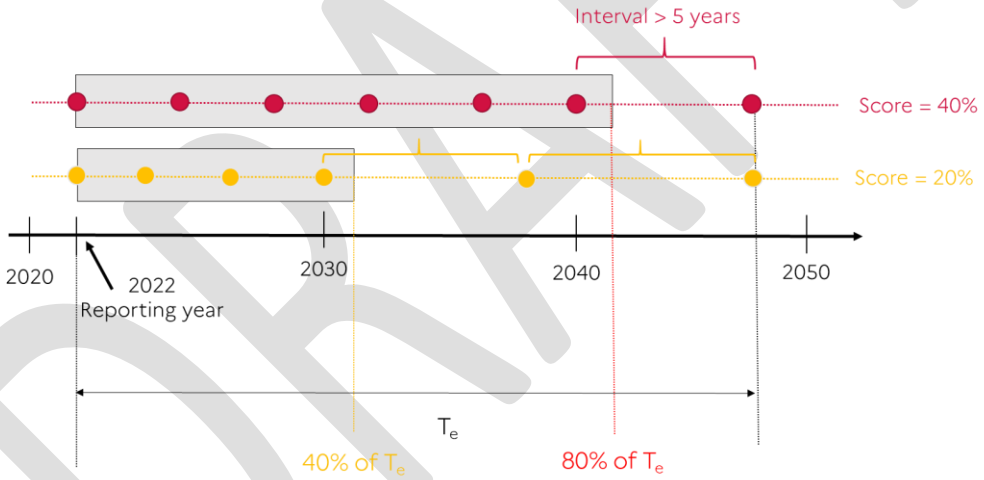


FIGURE 6: EXAMPLES OF HORIZONS OF INTERMEDIATE TARGETS SET BY THE COMPANY AND CORRESPONDING SCORES ON DIMENSION 2 OF THE INDICATOR 1.5

AGGREGATE SCORE: DIMENSION 1: 50%, DIMENSION 2: 50%

FOR ALL CALCULATIONS

Targets that do not cover > 95% of direct emissions are not preferred in the calculations. If only such targets are available, then the score will be adjusted downwards in proportion with % coverage. If the target coverage of total company emissions at reporting year (C_{RY}) represents less than 95%, the final score is equal to:

Final Score = Score x Target coverage of total company emissions (C_{RY})

If the company has set several targets, the consolidation of the scores assigned to each target will be based on the share of emissions covered by the targets.

RELEVANCE OF THE INDICATOR

The time horizon of targets is included in this ACT methodology for the following reasons:

- The target endpoint is an indicator of how forward-looking the company's transition strategy is.
- Aside from communicating long-term commitments, short-term action needs to be incentivized. This is why short time intervals between targets are needed. A 5-year interval is seen as a suitable interval to ensure company is taking enough action, holding itself accountable by measuring progress every 5 years.

BU 1.6 ACHIEVEMENT OF PAST AND CURRENT TARGETS

SHORT DESCRIPTION OF INDICATOR

A measure of the company's historic target achievements and current progress towards active emissions reduction targets. All the scopes of the company are considered. The ambition of the target is qualitatively assessed and is not included in the performance indicators.

DATA REQUIREMENTS

The relevant data for this indicator are:

For each target set in the past 10 years:

- Base year
- Start year
- Target year
- Percentage of reduction target from base year in absolute emissions
- Percentage of absolute emissions reduction target achieved
- Percentage of reduction target from base year in emissions intensity
- Percentage of emissions intensity reduction target achieved

- Percentage of operational (managed and/or leased, sold), upfront embodied and/or in-use embodied emissions covered by targets depending on the company profile

CDP Questionnaire 2023 mapping to this indicator:

- C4.1a
- C4.1b
- C4.2c

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 7.53
- 7.54

HOW THE ASSESSMENT WILL BE DONE

For the performance score, this indicator is assessed on two dimensions, whereby companies achieve the maximum score if:

DIMENSION 1 – PAST TARGETS

The company has achieved all previous emissions reduction targets with a target year in the past 10 years. If all past targets are indeed achieved, the highest score is obtained. If not, the achievement ratio a is computed as follows:

$$a = \frac{E(BY) - E(TY)}{E(BY) - T(TY)} \geq 0.5$$

Where:

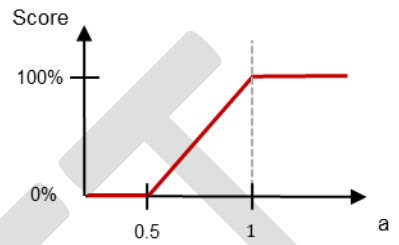
- $E(BY)$ is the level of emissions of the company in the base year
- $T(TY)$ is the target the company set (a given level of emissions at a given horizon year, now past)
- $E(TY)$ is the effective level of emissions reached by the company in the target year

A threshold is set for scoring at 0.5: if the company achieved less than 50% of the historic target, it will receive a zero score.

If the company has several past targets over the last 10 years, the ratio a shall be computed for each target, and the average of all a ratio shall be used for scoring.

ACHIEVEMENT RATIO	SCORE

$a \geq 1$	100%
0.5 < a< 1	100%*(2*a-1)
$a \leq 0.5$	0%



DIMENSION 2 – RUNNING TARGETS

Assesses whether the company is currently on track to meet a current emissions reduction target. The assessment is based on the progress ratio p:

$$\mathrm{p} = \frac{a}{\%\ time}$$

a being defined in dimension 1 and the past time ratio $\%time$ defined as follows:

$$\%time = \frac{RY - BY}{TY - BY}$$

Where;

- BY is the target's base year
- RY is the reporting year
- TY is the year of horizon of the target

The highest score is attained if $p \geq 1$. A percentage score is assigned for any value between 0 and 1.

PROGRESS RATIO	SCORE
$p \geq 1$	100%
$p < 1$	p (%)

For this second dimension, target year must be at least one year after reporting year, and target start year must be at least one year before reporting year.

AGGREGATE SCORE - DIMENSION 1: 25%, DIMENSION 2: 75%

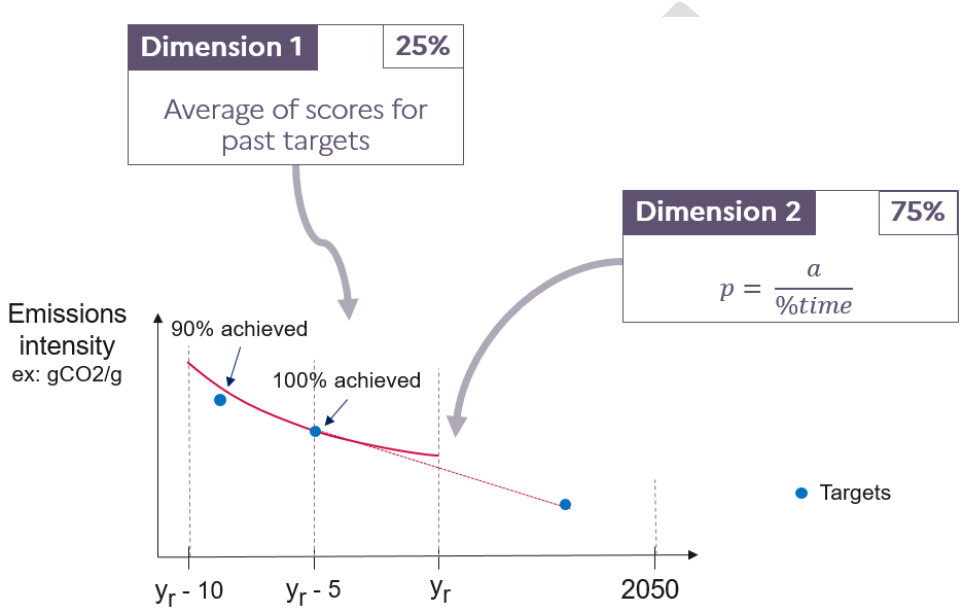


FIGURE 7: CALCULATION OF THE ACHIEVEMENT OF PREVIOUS TARGET INDICATOR

FOR ALL CALCULATIONS

- Companies which do not have targets with target years in the past but only with target years in the future are not assessed on dimension 1, but only on dimension 2. Their score for this indicator is based on Dimension 2.
- Targets should cover >95% of the company's GHG emissions scope. However, if it is not the case, no penalty is applied since indicators assessing ambition of targets already penalize partial coverage of emissions.
- If the company has multiple targets in different types of emissions that can be assessed according to the above criteria, then the score is an average score based on the progress ratios of all targets assessed.

The performance score does not assess the ambition level of previous targets, and therefore dimension 1 has a low weight in the final performance score. This information is also qualitatively assessed in the narrative analysis, which will consider the following dimensions:

- Achievement level: To what degree has the company achieved its previously set emissions reduction targets.
- Progress level: To what degree is the company on track to meet its currently active emissions reduction targets.
- Ambition level: What level of ambition do the previously achieved emissions reduction targets represent.

RELEVANCE OF THE INDICATOR

The historic target ambition and company performance is included in this ACT methodology for the following reasons:

- The ACT assessment looks only to the past to the extent where it can inform the future. This indicator is future-relevant because it provides information on the organizational capability to set and meet emissions reduction targets. Dimension 1 of this indicator gives credibility to any company commitments to a science-based reduction pathway when the company shows it has succeeded in achieving its past targets.
- Dimension 2 of this indicator adds additional value to the assessment by showing if the company is on track to achieve current targets.

SCORING RATIONALE

Previous target achievement is not straightforward to interpret quantitatively. Therefore, the performance score does not take into account past target ambition and leaves it to the narrative assessment for a meaningful judgement on the ambition level of past targets.

- Dimension 1 of the performance score will penalize companies who have not met past targets in the past 10 years, as this means the company has lower credibility when setting ambitious science-based targets.
- Dimension 2 uses a simple ratio, which reflects how well or not the company is currently on track to reach its existing emissions reduction target. The maximum score is obtained when the percentage of the targeted reduction achieved is equal to or higher than the time elapsed since the target base year. This results in a progress ratio of 1 or above. No score is awarded if the percentage of reduction achieved is less than half the percentage of time elapsed. Consequently, staying on track with the original target throughout its timeline is rewarded.

MODULE 2: MATERIAL INVESTMENT

Module 2, “Material investment”, assesses low-carbon investments. Comparing capital expenditure (CAPEX) allocated to low-carbon technologies against the total CAPEX provides an indication of future emissions reductions.

When emissions are not reported as operational and embodied emissions, refer to ACT Generic for indicators 2.1 Trend in past emissions, 2.2 Trend in future emissions, 2.4 Locked-in emissions from own fleet and buildings. Companies that report Scope 1 and 2 and Scope 3 emissions, without adopting a portfolio-level whole-building approach, are subject to a score cap of 80%.

- **BU 2.1 SHARE OF LOW-CARBON CAPEX**

SHORT DESCRIPTION OF INDICATOR

A measure of the alignment of the company’s planned CAPEX in low-carbon technologies for the next 3 years with its low carbon scenario pathway. The indicator scores the gap between the company’s planned low-carbon CAPEX share and its decarbonization pathway.

An analysis of the share of CAPEX invested in Low-Carbon & Mitigation technologies.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Share of CAPEX in low-carbon technologies (out of total CAPEX, M$/M$) planned for the next 3 years.

CDP Questionnaire 2023 mapping to this indicator:

- C3.5

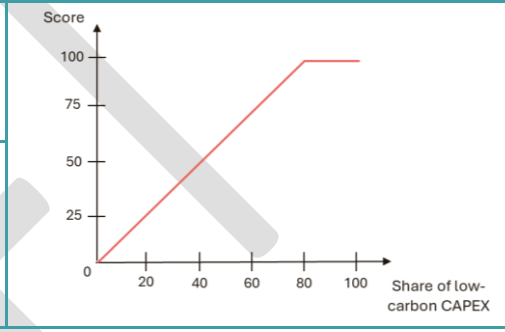
CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 5.4
- 5.7

HOW THE ASSESSMENT WILL BE DONE

The score is calculated using the following formula:

$$Score = Share\ of\ low\ carbon\ CAPEX \times \frac{1}{80\%}$$

CONDITIONS	SCORE	GRAPH
$Share\ of\ low\ carbon\ CAPEX < 80$	$\text{Share of low carbon CAPEX} \times \frac{1}{80\%}$	
$Share\ of\ low\ carbon\ CAPEX \geq 80$	100	

Companies whose share of low-carbon CAPEX exceeds 80% of its total CAPEX will receive the highest score. Companies who are at lower levels will receive a score proportional to that ratio.

DEFINING LOW-CARBON & MITIGATION TECHNOLOGIES

The list of low-carbon technologies for the building sector includes (but is not limited to) the following:

TABLE 10: LOW-CARBON TECHNOLOGIES UNDER MARKET UPTAKE READINESS LEVEL

PRIMARY GROUP	SECONDARY GROUP	TERTIARY GROUP	TECHNOLOGY
Cooking technologies	Biofuels		Anaerobic digester cooking, Biomass gasification stove, Improved biomass cooking stove
	Electricity		Electric stove, Induction cooking
	Other sources		LPG stove, Solar cooking
Design and envelope	Building design tools		Building design optimization tools, Building information modeling (BIM) softwares
		Lightweighting	Composite construction

	Building envelope materials	Reducing material losses	Building prefabrication, Extended building materials lifetime, Fabric formwork (building envelope), Pre-casting for building construction and renovation
	Building envelope technologies	Fenestration	Highly insulating window, Insulation glass coating
		Solar thermal technologies for wall, roof & façades	Transpiring wall-mounted solar heat collectors
		Wall, roof & façade	Building envelope air sealing, Cool roof, Double skin facade, Green roof, Reflective façade, Structural insulated panel, Vacuum insulated panel
Operations and equipment	Building energy management systems		Building energy management software, Building integrated photovoltaic systems, Interval-time of use meter, Programmable thermostat, Smart meter
	Heating, cooling and ventilation technologies	Air conditioners	Packaged air conditioners, Split air conditioners, Variable refrigerant flow heat pump
		Air-source heat pumps	Air-to-air heat pumps, Air-to-water heat pump, Exhaust air heat pump, Heat pump water heaters
		Building heating from bioenergy	Pellet burning stove and boiler, Wood-burning stove
		Evaporative cooling	Evaporative cooler
		Ground-source and water-source heat pumps	Water-source heat pump using waste water, Water-to-water heat pump
		Other building heating and cooling technologies	Heat exchanger, Heat recovery chiller, Hydrogen boiler
		Other heat pumps technologies	Hybrid heat pump, Shallow ground-source heat pump
		Polygeneration systems	Fuel cell micro-CHP for buildings, Trigeneration (CCHP)
		Thermally-driven heat pump	Absorption heat pump, Adsorption heat pump, High vacuum flat plate collectors heat pump

	Lighting technologies and control systems		Conventional LED, Direct current lighting, Lighting control system, Organic LED
Thermal storage for buildings and district heating	Building-level thermal storage		Chilled water storage, Electrical storage for building systems integration, Hot water tank
		Latent heat	Ice slurry thermal storage, Ice thermal storage in buildings, PCM heat batteries for domestic hot water/space heating
	District heating thermal storage		Aquifer thermal energy storage, Borehole thermal energy storage, Pit thermal energy storage, Tank thermal energy storage, Underground cavern thermal energy storage

The technologies above are sourced from IEA's ETP Clean Energy Technology Guide and only consider those that are currently under market uptake which are technically ready for sale or licensing (IEA, 2026).

If the technology described by the company is not listed above, then the analyst must check further external sources to determine whether it is a relevant low-carbon technology. A low-carbon technology must be widely considered to contribute substantially to climate change mitigation and do not significantly harm other environmental topics.

RELEVANCE OF THE INDICATOR

Planned investments in low-carbon CAPEX are included in this ACT methodology for the following reason:

- Planned low-carbon CAPEX is an indicator of corporate commitment to a low-carbon transition and is a meaningful metric of the company's internal planning towards the transition.

Although this indicator may be based on a specific external benchmark in other ACT methodologies, no benchmark is available for this sector. Therefore, a ratio has been used instead.

MODULE 3: INTANGIBLE INVESTMENT

It is not enough for the company to only invest in its tangible or material assets. Module 3, “Intangible investment”, assesses the company’s investments in intangible assets such as research and development (R&D) as well as low-carbon and mitigation technologies. Companies in many sectors state that the development of new technologies is essential for them to transition, and these indicators give an indication of the level of commitment to new technologies and work practices.

- **BU 3.1 R&D SPENDING ON LOW-CARBON TECHNOLOGIES**

SHORT DESCRIPTION OF INDICATOR

A measure of the ratio of R&D costs/investments in low-carbon technologies. The indicator scores the ratio between the company’s R&D investment in low-carbon technologies and total R&D investment.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Share of R&D in low-carbon technologies (out of total R&D, M$/M$) invested from RY-3 to the reporting year.

CDP Questionnaire 2023 mapping to this indicator:

- C-CG9.6a

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 5.5
- 5.5.1
- 5.5.6
- 5.5.7

HOW THE ASSESSMENT WILL BE DONE

The score is calculated using the following formula:

$$Score = Share\ of\ low\ carbon\ R\&D\ \times \frac{1}{80\%}$$

Companies whose share of low-carbon R&D exceeds 80% of its total R&D will receive the highest score. Companies who are at lower levels will receive a score proportional to that ratio.

The list of low-carbon technologies for the building sector includes (but is not limited to) the following:

TABLE 11: LOW-CARBON TECHNOLOGIES UNDER ALL READINESS LEVELS

PRIMARY GROUP	SECONDARY GROUP	TERTIARY GROUP	TECHNOLOGY
Cooking technologies	Biofuels		Anaerobic digester cooking, Biomass gasification stove, Improved biomass cooking stove
	Electricity		Electric stove, Induction cooking
	Other sources		LPG stove, Solar cooking
Design and envelope	Building design tools		Building design optimization tools, Building information modelling (BIM) software
	Building envelope materials	Lightweighting	Composite construction
		Reducing material losses	Building prefabrication, Extended building materials lifetime, Fabric formwork (building envelope), Pre-casting for building construction and renovation
	Building envelope technologies	Fenestration	Highly insulating window, Insulation glass coating
		Solar thermal technologies for wall, roof & façades	Transpiring wall-mounted solar heat collectors
		Wall, roof & façade	Building envelope air sealing, Cool roof, Double skin facade, Green roof, Reflective façade, Structural insulated panel, Vacuum insulated panel
Operations and equipment	Building energy management systems		Building energy management software, Building integrated photovoltaic systems, Interval-time of use meter, Programmable thermostat, Smart meter
		Air conditioners	Packaged air conditioners, Split air conditioners, Variable refrigerant flow heat pump

	Heating, cooling and ventilation technologies	Air-source heat pumps	Air-to-air heat pumps, Air-to-water heat pump, Exhaust air heat pump, Heat pump water heaters
		Building heating from bioenergy	Pellet burning stove and boiler, Wood-burning stove
		Evaporative cooling	Evaporative cooler
		Ground-source and water-source heat pumps	Water-source heat pump using waste water, Water-to-water heat pump
		Other building heating and cooling technologies	Heat exchanger, Heat recovery chiller, Hydrogen boiler
		Other heat pumps technologies	Hybrid heat pump, Shallow ground-source heat pump
		Polygeneration systems	Fuel cell micro-CHP for buildings, Trigeneration (CCHP)
		Thermally-driven heat pump	Absorption heat pump, Adsorption heat pump, High vacuum flat plate collectors heat pump
	Lighting technologies and control systems		Conventional LED, Direct current lighting, Lighting control system, Organic LED
Thermal storage for buildings and district heating	Building-level thermal storage		Chilled water storage, Electrical storage for building systems integration, Hot water tank
		Latent heat	Ice slurry thermal storage, Ice thermal storage in buildings, PCM heat batteries for domestic hot water/space heating
	District heating thermal storage		Aquifer thermal energy storage, Borehole thermal energy storage, Pit thermal energy storage, Tank thermal energy storage, Underground cavern thermal energy storage
Design and envelope	Building design tools		Construction site inspection tools
	Building envelope materials	Reducing material losses	Additive manufacturing for building materials
	Building envelope technologies	Fenestration	Dynamic glazing – thermochromic fenestration, Electrochromic fenestration

		Solar thermal technologies for wall, roof & façades	Building integrated solar thermal collector (BIST)
		Wall, roof & façade	Aerogel insulation from silica or carbon, Carbon negative construction material, Dynamic building envelope
Operations and equipment	Building energy management systems		Direct current buildings system, Gamification devices for buildings energy demand management, Proportional hydraulic control for buildings
	Heating, cooling and ventilation technologies	Evaporative cooling	Liquid or solid desiccant evaporative cooling system
		Ground-source and water-source heat pumps	Booster heat pump
		Other heat pumps technologies	Inclined or deep horizontal wells heat pump, Metal hydride heat pump, Natural/hydrocarbon refrigerants
		Solid-state equipment cooling	Thermoelectric (peltier effect) cooling
Thermal storage for buildings and district heating	Building-level thermal storage		Combined latent and sensible storage system, Vacuum-insulated high-temperature water tank
		Latent heat	Liquid-gaseous thermal storage, Macroencapsulated PCM modules in heat exchangers / air-handling units, Solid-solid thermal storage
	District heating thermal storage		Sand thermal battery
Design and envelope	Building envelope materials	Lightweighting	Funicular floor system
	Building envelope technologies	Solar thermal technologies for wall, roof & façades	Trombe wall
		Wall, roof & façade	Building integrated heat and moisture exchange panel, Building integrated phase change materials
Operations and equipment	Building energy management systems		Active control systems

	Heating, cooling and ventilation technologies	Air-source heat pumps	High-temperature heat pump
		Solid-state equipment cooling	Magnetocaloric cooling
		Thermally-driven heat pump	Vuilleumier heat pump
Cooking technologies	Other sources		Hydrogen cooking
Operations and equipment	Heating, cooling and ventilation technologies	Other heat pumps technologies	Thermo-acoustic heat pump
	Lighting technologies and control systems		Fibre-optic daylighting
Operations and equipment	Heating, cooling and ventilation technologies	Other heat pumps technologies	Membrane heat pump
		Solid-state equipment cooling	Barocaloric cooling, Elastocaloric cooling
Design and envelope	Building envelope materials	Lightweighting	Thin shelled concrete
		Wall, roof & façade	Dynamic insulation
Operations and equipment	Heating, cooling and ventilation technologies	Air-source heat pumps	Integrated heat pump with storage for heating and cooling
		Evaporative cooling	Evaporative cooling coupled with permeable membrane
		Solid-state equipment cooling	Electrocaloric cooling
Thermal storage for buildings and district heating	Building-level thermal storage	Latent heat	Active latent heat storage, Shape-stabilised phase change material (ss-PCM)
			Thermo-chemical storage
Operations and equipment	Heating, cooling and ventilation technologies	Polygeneration systems	Quad-generation (CCHP +)

The technologies above are sourced from IEA's ETP Clean Energy Technology Guide and consider technologies of all readiness levels ranging from market uptake, demonstration, large prototype, small prototype to concept (IEA, 2026).

If the technology described by the company is not listed above, then the analyst must check further external sources to determine whether it is a relevant low-carbon technology. A low-carbon technology must be widely considered to contribute substantially to climate change mitigation and do not significantly harm other environmental topics.

RELEVANCE OF THE INDICATOR

R&D in low-carbon technologies is included in this ACT methodology for the following reasons:

- R&D is a key proactive action to develop these technologies and demonstrates commitment by companies.
- R&D is also one of the main tools to reduce the costs of a technology in order to increase its market penetration.
- Aside from technology, companies can also invest R&D on operational practices to optimize the carbon reductions where they have direct responsibility.

Expenditure over the 3 last years is used for the indicator to account for the fact that expenditure for major R&D projects may not be linear over time and between years.

Although this indicator may be based on a specific external benchmark in other ACT methodologies, no benchmark is available for this sector. Therefore, a ratio has been used instead.

MODULE 4: SOLD PRODUCT PERFORMANCE

Module 4, “Sold product performance”, assesses action to reduce emissions from the company’s building portfolio, contributing to the overall decarbonisation of its products and/or services. Most sectors are assessed on trends in past and forecast future emissions from the buildings they develop, sell, manage and/or lease. Depending on the sector’s specific decarbonisation levers, this module may address the company’s efforts to reduce indirect emissions from upstream manufacturing processes, and use-phase emissions of sold, managed and/or leased products through increasing the share of low-carbon products and improving energy efficiency.

- **BU 4.1 PRODUCT / SERVICE-SPECIFIC INTERVENTIONS**

SHORT DESCRIPTION OF INDICATOR

An analysis of the company’s reporting of mature interventions to reduce lifecycle GHG emissions of buildings in accordance with the three main decarbonization principles identified by the IPCC: Sufficiency, Efficiency and Renewables.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Scope 3 emissions linked to the full lifecycle of buildings: Product stage, construction process, use stage and end of life.
- List and description of recent (RY-1, RY) and planned interventions (until RY+5), reported by decarbonization principle for each life cycle stage where applicable: design stage, product stage, construction process, use stage, end of life stage.

HOW THE ASSESSMENT WILL BE DONE

To be ready for the transition to a low-carbon economy, companies need to plan and carry out “interventions” within the value chain in order to exercise their market position and their influence to reduce GHG emissions.

For each life cycle stage, the analyst identifies sufficiency, efficiency and renewables interventions that determine the most ambitious impacts achievable by a company and highlights the GHG emissions hotspots in accordance with best practices. This establishes a relative benchmark. The analyst compares the interventions reported by the company with this benchmark and against other interventions reported by other reporting companies, whereby the analyst assigns a ‘maturity scoring’ to the reported interventions.

TABLE 12: PRINCIPLES OF SUFFICIENCY, EFFICIENCY, AND RENEWABLES AS ADAPTED FROM (EUROPEAN COMMISSION, 2026; IPCC, 2022)

SUFFICIENCY	EFFICIENCY	RENEWABLES
Avoiding the demand for energy and materials over the life cycle of buildings	**Improving energy and materials intensity**	**Reducing environmental impacts of the demand for energy and materials**
♦ Prioritise renovations over demolition and new construction ♦ Use of unoccupied or underoccupied buildings ♦ Design and renovate buildings to be adaptable to different functions and future uses ♦ Increase the average space use intensity in office and residential buildings	♦ Achieve zero emissions standards in new buildings ♦ Improve the energy performance of existing buildings through ambitious renovation rates and depths while also considering low embodied carbon solutions ♦ Implement material efficiency and circularity principles that allow for the same functional results but with less material use	♦ Phase-out fossil fuels in heating and cooling systems ♦ Switch to renewable energy sources in material production ♦ Use of low-carbon and carbon storing materials

TABLE 13: NON-EXHAUSTIVE LIST OF DECARBONIZATION MEASURES PER BUILDING LIFE CYCLE STAGE

DESIGN	PRODUCT	CONSTRUCTION	USE	END OF LIFE
Building envelope technologies: air sealing, double skin façade, Reflective façade, Structural insulated panel, Vacuum insulated panel, cool roof, green roof **Fenestration technologies:** Highly insulating window, Insulation glass coating, Dynamic glazing – thermochromic fenestration, Electrochromic fenestration **Solar thermal technologies for walls, roof and facades:** Transpiring wall-mounted solar heat collectors, Building	**Building envelope technologies for wall, roof and facade**: Structural insulated panel, Vacuum insulated panel, Aerogel insulation, Carbon negative construction material, Dynamic building envelope, Building integrated heat and moisture exchange panel,	**Reduction of material losses:** Building prefabrication, Extended building materials lifetime, Fabric formwork, Pre-casting, Additive manufacturing for building materials **Use of Electric vehicles**	**Building level thermal storage:** Chilled water storage, Electrical storage for building systems integration, Hot water tank, Combined latent and sensible storage, Vacuum-insulated high-temperature water tank, Ice slurry thermal storage, Ice thermal storage, PCM heat batteries, Liquid-gaseous thermal storage, Macro-encapsulated PCM modules, Solid-solid thermal storage, Active latent heat storage, Shape-stabilised PCM, Thermo-chemical storage **Building energy management systems**: Building energy management software, Building integrated photovoltaic systems, Interval-time of use meter, Programmable thermostat, Smart meter, Direct	**Prioritization of reuse over demolition** **Maximization of recycling materials** **Responsible waste disposal**

integrated solar thermal collectors, Trombe wall **Reduction of material losses**: Building prefabrication, Extended building materials lifetime, Fabric formwork, Pre-casting, Additive manufacturing for building materials **Building design optimization tools** **Lightweight building envelope materials**: composite construction, funicular floor system, thin shelled concrete	Building integrated PCM, Dynamic insulation **Use of Electric vehicles** **Transportation optimization**: efficiency of routes **Locally sourced materials** and products only	**Transportation optimization:** efficiency of routes **Locally sourced materials** and products only **Waste avoidance and reduction** **Use of construction site inspection tools**	Current buildings system, Gamification devices, Proportional hydraulic control, Active control systems **Heating, cooling and ventilation technologies:** Air conditioners, Air-source heat pumps, building heating from bioenergy, evaporative cooling, ground source and water source heat pumps, poly-generation systems, solid-state equipment cooling, thermally driven heat pumps **Solar thermal technologies:** Transpiring wall-mounted solar heat collectors **Lighting technologies:** Conventional LED, DC lighting, Lighting control system, Organic LED, Fibre-optic daylighting Electricity-based, renewable-based or biofuel-based **cooking technologies**	

Several measures are combined to assign a score to the intervention. These measures are:

INTERVENTION MATURITY SCORING

This assesses how advanced the intervention is relative to current practice, and other elements that can ensure its success like clear goals and measures of success, use of supporting technology, use of certification and verification.

LEVEL OF AMBITION

The company shall report on the level of ambition of the intervention. The first level is an incremental improvement (e.g. packaging reduction). The second level is a complete product/service redesign, which consists of a new development (e.g. full product reparability to increase lifetime). The third level is a breakthrough innovation (e.g. replacing an electronic product with a low-tech solution that does not use energy).

CARBON MITIGATION POTENTIAL

Only interventions that are verifiable and significantly reduce GHG emissions shall receive a non-zero score. It is not expected that a verification be performed, however a methodology must be in place to reliably assess or measure the GHG emissions reduction, which could be verified by a third party. The greater the GHG reduction resulting from the intervention, the higher the carbon mitigation potential.

SIGNIFICANCE AND EXTENT OF THE INTERVENTION

Whether the intervention is large or small in scale affects its overall level of impact on GHG emissions. Large-scale interventions receive more points (e.g. significant interventions covering a high percentage of a product/service category).

Correspondence between the product/service life cycle phase, the intervention targets and the highest GHG impact life cycle phase of the product/service

To effectively reduce GHG emissions, interventions should target the life cycle phases or processes of product/service systems with the highest portion of GHG emissions attributed to them, so this is awarded more points.

CORRESPONDENCE BETWEEN THE PRODUCT/SERVICE LIFE CYCLE PHASE, THE INTERVENTION TARGETS AND THE HIGHEST GHG IMPACT LIFE CYCLE PHASE OF THE PRODUCT/SERVICE

To effectively reduce GHG emissions, interventions should target the life cycle phases or processes of product/service systems with the highest portion of GHG emissions attributed to them, so this is awarded more points.

Evaluation level	Basic	Advanced	Low-carbon practice	Subscore
Score	***0%***	***50%***	***100%***	
Intervention maturity	Intervention is not backed with success factors like planning, adequate resources, clear goals, performance tracking and measures of success.	Intervention is backed with some success factors like planning, adequate resources, clear goals, performance tracking, and measures of success.	Intervention is backed with all relevant success factors like planning, adequate resources, clear goals, performance tracking and measures of success.	***20%***
Level of ambition	Incremental improvement	Product/service redesign	Breakthrough innovation	***20%***
Emissions mitigation potential	Not significant (< 20% emissions reduction) or not verifiable	Significant (20% - 60% emissions reduction) and verifiable	Drastic (> 60% emissions reduction) and verifiable	***20%***

Extent or size of the intervention	Intervention involves products/services that together represent a marginal share (<40%) of the product/service emissions in the category.	Intervention involves products/services that together represent a significant share (40% - 60%) of the product/service emissions in the category.	Intervention involves products/services that together represent the major share (> 80%) of the product/service emissions in the category.	***20%***
Relationship between the product/service(s) life cycle phase the intervention targets and the highest GHG impact life cycle phases of the product/service(s)	Intervention does not impact any of the most relevant life cycle phase(s) or processes of the product/service(s) in terms of GHG emissions.	Intervention impacts at least one relevant life cycle phase or process of the product/service(s) in terms of GHG emissions.	Intervention clearly targets and impacts the most relevant life cycle phase(s) or processes of the product/service(s) in terms of GHG emissions.	***20%***

The analyst assigns a scoring to all interventions reported and keep the best score for each life cycle stage. The scorings for each life cycle stages reported on are then aggregated into a numerical value.

Applicability of life cycle interventions per company profile are listed as below;

TABLE 14: APPLICABILITY OF LIFE CYCLE INTERVENTIONS PER COMPANY PROFILE

PROFILE	LIFE CYCLE STAGE
Lessor - Contractor, Lessor – Developer	Design stage, Product stage, Construction process, Use stage, End of life
Seller - Contractor, Seller – Developer, Contractor	Design stage, Product stage, Construction process, End of life
Manager	Use stage

Lessor - Manager	Product stage, Construction process, Use stage

RELEVANCE OF THE INDICATOR

Decarbonisation efforts in the building sector have focused primarily on in-use operational emissions. However, as these emissions are progressively reduced, other life-cycle emissions—particularly upfront embodied emissions—are becoming increasingly significant. This shift highlights the need for companies to address embodied emissions more proactively, especially given that demand for new construction is expected to continue.

As a result, reducing embodied emissions at early stages—particularly during design—becomes critical, alongside addressing end-of-life emissions through strategies such as material reuse, recovery, and recycling. Taking a life-cycle perspective is therefore essential to avoid shifting emissions across stages and to achieve meaningful emissions reductions in the sector. More importantly, taking a step backwards and considering the design stage is even more crucial as it allows addressing emissions at their source by considering material choices, construction methods and building performance early on, before they are locked in.

Accordingly, this indicator incorporates the following stages: design stage, product stage, construction process, use stage, end of life stage.

This method aims to assess all product/service-specific dimensions of a low-carbon transition. The objective of this indicator is to measure the company's "interventions" on its products / services, i.e. the actions taken to reduce the carbon impact of its products / services. This indicator is applicable either for companies that are multiproduct/service, or for companies that are monoproduct. The criteria “Correspondence between the product/service life cycle phase the intervention targets and the highest GHG impact life cycle phase of the product/service” in the maturity matrix is used to check that the intervention targets the most material issues on the product.

While other sectors in the ACT Initiative have activity-specific indicators (e.g. generation emissions for electric utilities, fleet emissions for car companies) that can account for the majority of their total emissions, this is not the case here, where emissions sources are scattered across the value chain and have different points of origin. To address all emissions, different types of actions are necessary to address different types of emissions sources. Furthermore, this multidimensionality means that large efforts, such as Life Cycle Assessments (LCA), are needed to accurately gain insight and information on exactly where the significant emissions sources are and what can be done about them from each company’s point of view. It is commonly understood that this information is scarce among companies, which operate in many different sectors and often have a large number of different tiers in their supply chains, requiring large transaction costs and research to obtain complete information.

SCORING RATIONALE

A key issue with the interventions approach is that if interventions have no measurable impact on GHG emissions, they are effectively assimilated to “greenwashing”. However, we recognise that, when attempting to influence GHG emissions outside of direct operations, measurement may be difficult. It could be technically feasible yet impractical because of time or cost considerations. GHG emissions reductions may also not occur immediately, or methodological approaches for measurement may be lacking. Barriers

to measurement should not be barriers to action, therefore the analysis will consider interventions where the GHG emissions mitigation has not been measured. Nonetheless, companies should describe the rationale for emissions reduction connected to the intervention so that it is clear this potential exists.

The reporting should also include, where possible, enough detail on mitigation potential, and the scale of impact expected, to distinguish between interventions that could be considered tokenism or greenwash and those with a material, positive climate change mitigation impact.

- **BU 4.2 TREND IN PAST EMISSIONS FOR OPERATIONAL EMISSIONS**

SHORT DESCRIPTION OF INDICATOR

A measure of the alignment of the past trend of the company's emissions intensity (emissions related to the use of buildings sold, managed and/or leased) with the low-carbon benchmark pathway. The indicator will compare the gradient of this trend over a 5-year period to the reporting year (reporting year minus 5 years) with the low-carbon benchmark pathway trend over a 5-year period after the reporting year.

When emissions are not reported as operational and embodied emissions, refer to ACT Generic for indicators 4.2 Trend in past product/service specific performance, 4.3 Locked-in emissions from sold products. Companies that report Scope 1 and 2 and Scope 3 emissions, without adopting a portfolio-level whole-building approach, are subject to a score cap of 80%.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Operational emissions intensity of buildings sold, managed and/or leased and activity at reporting year (RY) and reporting year minus five years (RY-5)
- OR
- Absolute operational emissions of buildings sold, managed and/or leased and total floor area of the whole portfolio at RY and RY-5.

CDP Questionnaire 2023 mapping to this indicator:

- C6.5

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 7.8
- 7.71

HOW THE ASSESSMENT WILL BE DONE

The analysis is based on the comparison between the company's recent (RY-5) life-cycle operational emissions intensity trend gradient (CR'_{S3}) for buildings sold and the company's in-use operational decarbonisation pathway trend gradient (CB'_{S3}) in the short-term (RY+5).

The analysis is based on the comparison between the company's recent (RY-5) operational emissions intensity trend gradient (CR'_{S3}) for building managed and/or leased and the company's in-use operational decarbonisation pathway trend gradient (CB'_{S3}) in the short-term (RY+5).

The emissions intensity of the company at the reporting year ($EI_C(RY)$) and the sectoral benchmark value of emissions intensity in 2050 ($EI_B(2050)$) are also taken into consideration to calculate the company's score.

CR'_{S3} is the gradient of the linear trend-line of the company's recent operational emissions intensity over time (CR_{S3}).

CB'_{S3} is the gradient of the linear trend-line of the company benchmark pathway for emissions intensity (CB_{S3}). See section 6.1.5**Error! Reference source not found.** for details on the computation of the company specific decarbonization pathway.

The difference between CR'_{S3} and CB'_{S3} will be measured by their ratio (r_{S3}). This is the operational emissions Transition ratio, which is calculated by the following equation, with the apostrophe symbol (') used to denote gradients:

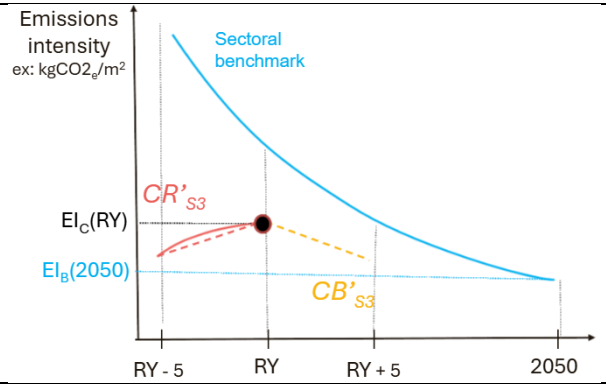
$$r_{S3} = \frac{CR'_{S3}}{CB'_{S3}}$$

Four different cases are to be taken into consideration, as illustrated in Table 15:

- Case #1: CR'_{S3} is positive → Score = 0 (whatever the r_{S3} and $EI_C(RY)$ values)
- Case #2: CR'_{S3} is negative and $0 < r_{S3} < 1$ and $EI_C(RY)$ is higher than $EI_B(2050)$ → Score = r_{S3} (expressed as a percentage)
- Case #3: CR'_{S3} is negative and $r_{S3} \geq 1$ and $EI_C(RY)$ is higher than $EI_B(2050)$ → Score = 100 %
- Case #4: CR'_{S3} is negative and $EI_C(RY)$ is lower than $EI_B(2050)$ → Score = 100 % (whatever the r_{S3} value)

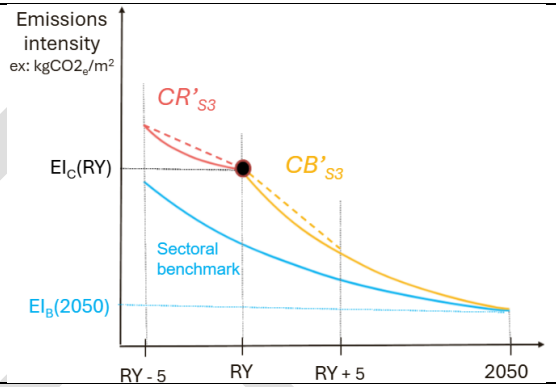
TABLE 15: ILLUSTRATIVE GRAPHS FOR TREND IN PAST EMISSIONS INTENSITY SCORING

Case #1	Case #2



$CR'_{S3} > 0$
Whatever the r_{S3} value
Whatever the $EI_C(RY)$ value

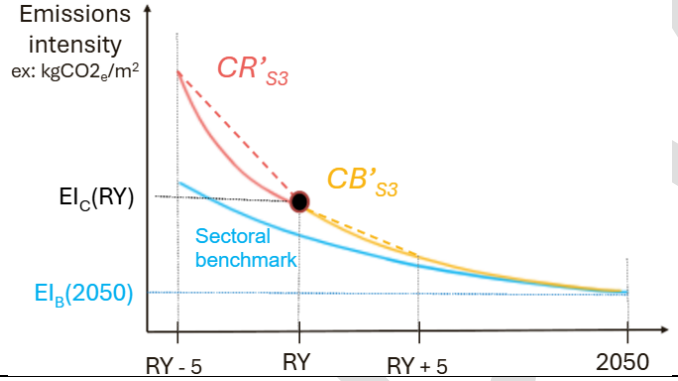
Score = 0



$CR'_{S3} < 0$
$0 < r_{S3} < 1$
$EI_C(RY) > EI_B(2050)$

Score = r_{S3} (%)

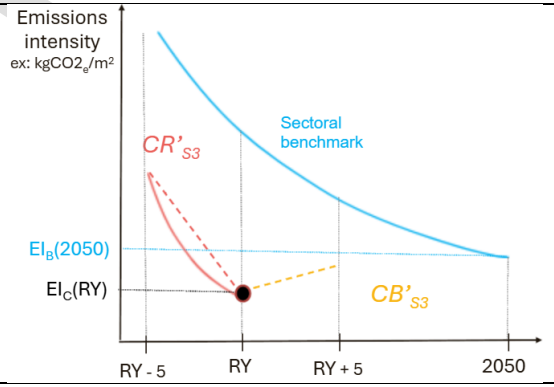
Case #3



$CR'_{S3} < 0$
$r_{S3} \geq 1$
$EI_C(RY) > EI_B(2050)$

Score = 100 %

Case #4



$CR'_{S3} < 0$
$EI_C(RY) < EI_B(2050)$
whatever the r_{S3} value

Score = 100 %

The scope 3 categories used in the calculation is differentiated based on the company profiles as below;

PROFILE	SCOPE 3 CATEGORIES
Lessor - Operator, Lessor - Contractor, Lessor - Manager, Lessor - Developer	Category 13: Downstream Leased Assets
Seller - Contractor, Seller - Developer	Category 11: Use of Sold Products over their lifetime
Manager, Manager - Operator	Category 11: Use of Sold Products at reporting year

RELEVANCE OF THE INDICATOR

Trend in past emissions intensity is included in this ACT methodology for the following reasons:

- The trend shows the speed at which the company has been reducing its emissions intensity over the recent past. Comparing this to the future low-carbon transition pathway gives an indication of the scale of the change that needs to be made within the company to bring it onto a low-carbon pathway.
- While ACT aims to be future-oriented, it nevertheless does not want to rely solely on projections of the future, in a way that would make the analysis too vulnerable to the uncertainty of those projections. Therefore, this measure, along with projected emissions intensity and absolute emissions, forms part of a holistic view of company emissions performance in the past, present, and future.

SCORING RATIONALE

While 'gap' type scoring is preferred where possible for any indicator, this indicator only looks at past emissions and would therefore require a different baseline in order to generate a gap analysis. Thus, instead of a gap analysis, a trend analysis is conducted to compare current data of the company to the past data and improvements that have been made since the past data. An advantage of this trend analysis is that trends can be compared directly and a score can be directly correlated to the resulting ratio.

- **BU 4.3 TREND IN PAST EMISSIONS FOR UPFRONT EMBODIED EMISSIONS**

SHORT DESCRIPTION OF INDICATOR

A measure of the alignment of the past trend of the company's emissions intensity (emissions related to the construction and/or development) with the low-carbon benchmark pathway. The indicator will compare the gradient of this trend over a 5-year period to the reporting year (reporting year minus 5 years) with the low-carbon benchmark pathway trend over a 5-year period after the reporting year.

When emissions are not reported as operational and embodied emissions, refer to ACT Generic for indicators 4.2 Trend in past product/service specific performance, 4.3 Locked-in emissions from sold products. Companies that report Scope 1 and 2 and Scope 3 emissions, without adopting a portfolio-level whole-building approach, are subject to a score cap of 80%.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Upfront embodied emissions intensity of buildings and activity at reporting year (RY) and reporting year minus five years (RY-5)
- OR
- Total direct upfront embodied emissions of buildings and total floor area of the whole portfolio at RY and RY-5.

CDP Questionnaire 2023 mapping to this indicator:

- C6.5

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 7.8
- 7.71
- 7.72

HOW THE ASSESSMENT WILL BE DONE

This indicator uses the same computation as indicator 4.2 Trend in past emissions intensity for operational emissions.

The scope 3 categories used in the calculation is differentiated based on the company profiles as below;

PROFILE	SCOPE 3 CATEGORIES
Lessor - Operator, Lessor - Contractor, Lessor - Manager, Lessor – Developer, Seller - Developer	Category 2: capital goods
Seller - Contractor, Contractor	Category 1: purchased goods and services Category 2: capital goods

RELEVANCE OF THE INDICATOR

Trend in past emissions intensity is included in this ACT methodology for the following reasons:

- The trend shows the speed at which the company has been reducing its emissions intensity over the recent past. Comparing this to the future low-carbon transition pathway gives an indication of the scale of the change that needs to be made within the company to bring it onto a low-carbon pathway.
- While ACT aims to be future-oriented, it nevertheless does not want to rely solely on projections of the future, in a way that would make the analysis too vulnerable to the uncertainty of those projections. Therefore, this measure, along with projected emissions intensity and absolute emissions, forms part of a holistic view of company emissions performance in the past, present, and future.

SCORING RATIONALE

While 'gap' type scoring is preferred where possible for any indicator, this indicator only looks at past emissions and would therefore require a different baseline in order to generate a gap analysis. Thus, instead of a gap analysis, a trend analysis is conducted to compare current data of the company to the past data and improvements that have been made since the past data. An advantage of this trend analysis is that trends can be compared directly and a score can be directly correlated to the resulting ratio.

- **BU 4.4 TREND IN FUTURE EMISSIONS FOR OPERATIONAL EMISSIONS**

SHORT DESCRIPTION OF INDICATOR

A measure of the alignment of the future trend of the company's operational emissions intensity (emissions related to the use of sold, managed and/or leased buildings) with the low-carbon benchmark pathway. The indicator will compare the gradient of this trend with the low-carbon benchmark pathway trend over a 5-year period after the reporting year.

When emissions are not reported as operational and embodied emissions, refer to ACT Generic for indicator 2.2 Trend in future emissions. Companies that report Scope 1 and 2 and Scope 3 emissions, without adopting a portfolio-level whole-building approach, are subject to a score cap of 80%.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Operational emissions intensity and activity at reporting year (RY) and reporting year plus five years (RY+5)
- OR
- Total direct operational emissions from buildings sold, managed and/or leased and total floor area of the whole building portfolio at RY and RY+5.

Future operational emissions intensity should be estimated from forecast predictions of floor area of buildings sold, managed and/or leased. If future operational emissions intensity cannot be estimated from company future activity, the expected trend in future operational emissions intensity should be estimated by extrapolating the trend from the last 5 years before the reporting year.

CDP Questionnaire 2023 mapping to this indicator:

- C4.1c

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 7.53.3

HOW THE ASSESSMENT WILL BE DONE

The analysis is based on the Future Action ratio (A_{future}) which represents the ratio between the trend gradient of company's future (RY+5) operational emissions intensity and the trend gradient of the company's future benchmark (RY+5) operational emissions intensity, as shown in Figure 8.

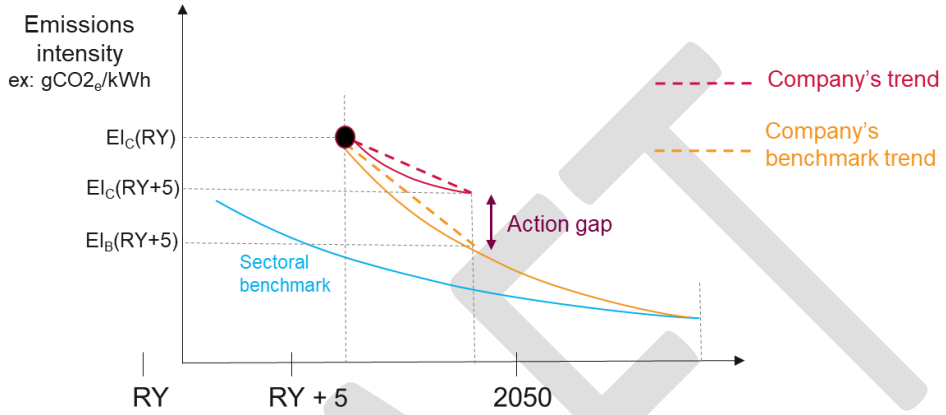


FIGURE 8: COMPARISON OF TREND IN FUTURE EMISSIONS AND TREND IN COMPANY'S BENCHMARK

CALCULATION OF SCORE

Future Action ratio (A_{future}) is calculated by dividing the trend of the company's future operational emissions intensity from buildings sold, managed and/or leased (between RY and RY+5) and the future benchmark emissions intensity (also between RY and RY+5):

$$A_{future} = \frac{EI_c(RY) - EI_c(RY+5)}{EI_C(RY) - EI_B(RY+5)}$$

Where:

- $EI_c(RY)$ is the company emissions intensity at RY
- $EI_c(RY+5)$ is the company emissions intensity at RY+5
- $EI_B(RY+5)$ is the benchmark emissions intensity at RY+5

The action gap of the company is equal to $(1 - A_{future})$. Thus, when the company's future operational emissions pathway is aligned with the company's benchmark, the Future Action ratio is equal to 1 and the action gap is 0 (see Figure 8).

The final score assigned to the indicator is calculated as follows (see Appendix 11.4 for a graphical illustration of the different cases):

CONDITIONS	SCORE
$Company's\ future\ trend > 0$ Increase in company operational emissions intensity	0%
$Company's\ future\ trend \leq 0$ and $EI_C(RY) > EI_B(2050)$ $0 \leq A_{future} \leq 1$ Decrease in company operational emissions intensity but company's pathway does not go beyond the company's benchmark ambition	$A_{future} \times 100\%$
$Company's\ future\ trend < 0$ $A_{future} > 1$ Decrease in company operational emissions intensity and company's pathway equals or exceeds the company's benchmark ambition	100%
$Company's\ future\ trend \leq 0\ and\ EI_C(RY + 5) \leq EI_B(2050)$ No increase in company operational emissions intensity and company's operational emissions intensity is already below the company's benchmark ambition for 2050	100%

RELEVANCE OF THE INDICATOR

Trends in future products specific performance are included in this ACT methodology for the following reasons:

- The trend shows the speed at which the company needs to reduce its operational emissions intensity for the coming years. Comparing this to the low-carbon benchmark pathway gives an indication of the scale of the change that needs to be made within the company to bring it onto a low-carbon pathway.
- ACT aims to be future-oriented. Therefore, this particular indicator, with projected operational emissions intensity, forms part of a holistic view of company's operational emissions performance in the past, present, and future.

SCORING RATIONALE

Comparing the trends gives a direct measure of the future action gap of the company. It was chosen for its relative simplicity in interpretation; it is aligned with most of the other forward-looking indicators. Indeed, the indicator looks at a fixed point in the future and assesses the capacity of the company to deploy a range of low-carbon products in the short term.

- **BU 4.5 TREND IN FUTURE EMISSIONS FOR UPFRONT EMBODIED EMISSIONS**

SHORT DESCRIPTION OF INDICATOR

A measure of the alignment of the future trend of the company's upfront embodied emissions intensity (emissions related to the construction and/or development of buildings) with the low-carbon benchmark pathway. The indicator will compare the gradient of this trend with the low-carbon benchmark pathway trend over a 5-year period after the reporting year.

When emissions are not reported as operational and embodied emissions, refer to ACT Generic for indicator 2.2 Trend in future emissions. Companies that report Scope 1 and 2 and Scope 3 emissions, without adopting a portfolio-level whole-building approach, are subject to a score cap of 80%.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Upfront embodied emissions intensity and activity at reporting year (RY) and reporting year plus five years (RY+5)
- OR
- Total absolute upfront embodied emissions from buildings and total floor area of the whole building portfolio at RY and RY+5.

Future upfront embodied emissions intensity should be estimated from forecast predictions of floor area of buildings constructed and/or developed. If future upfront embodied emissions intensity cannot be estimated from company future activity, the expected trend in future upfront embodied emissions intensity should be estimated by extrapolating the trend from the last 5 years before the reporting year.

CDP Questionnaire 2023 mapping to this indicator:

- C4.1c

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 7.53.3

HOW THE ASSESSMENT WILL BE DONE

This indicator uses the same computation as indicator 4.4 Trend in future emission intensity for operational emissions.

RELEVANCE OF THE INDICATOR

Trends in future products specific performance are included in this ACT methodology for the following reasons:

- The trend shows the speed at which the company needs to reduce its upfront embodied emissions intensity for the coming years. Comparing this to the low-carbon benchmark pathway gives an indication of the scale of the change that needs to be made within the company to bring it onto a low-carbon pathway.
- ACT aims to be future-oriented. Therefore, this particular indicator, with projected upfront embodied emissions intensity, forms part of a holistic view of company's upfront embodied emissions performance in the past, present, and future.

SCORING RATIONALE

Comparing the trends gives a direct measure of the future action gap of the company. It was chosen for its relative simplicity in interpretation; it is aligned with most of the other forward-looking indicators. Indeed, the indicator looks at a fixed point in the future and assesses the capacity of the company to deploy a range of low-carbon products in the short term.

• BU 4.6 LOW-CARBON BUILDINGS SHARE

SHORT DESCRIPTION OF INDICATOR

A measure of the company's share of zero-carbon-ready (ZCR) new buildings acquired, constructed and/or developed from reporting year -3 until reporting year and expected growth for the next 3 years as compared with the expectations required in the sector under a 1.5C degree scenario. This indicator only applies to the company profiles of Lessor – Contractor, Lessor – Manager, Lessor – Developer, Seller – Contractor and Seller – Developer. This indicator only applies to new buildings.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Share of zero-carbon-ready buildings delivered at RY-3 to RY
- Projected share of zero-carbon-ready buildings for RY to RY+3

CDP Questionnaire 2023 mapping to this indicator:

- C4.2b

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 7.54.2
- 7.76
- 7.78

External sources of data used for the analysis for this indicator are (see section 6.2 for more details)

- IEA - Net Zero Roadmap: A Global Pathway to Keep the 1.5 °C Goal in Reach (2023): Global share of zero-carbon-ready buildings

HOW THE ASSESSMENT WILL BE DONE

The analysis is split into two dimensions:

DIMENSION 1

Dimension 1 is based on the ratio between the company's share of zero-carbon-ready buildings (CS_{ZCR}) in the reporting year and the three years preceding and the sector benchmark for the same period (BS_{ZCR}).

$$\text{ZCR ratio} = \frac{CS_{ZCR}}{BS_{ZCR}}$$

THE SCORE

The score for this dimension is taken as the average of the scores for each year between RY and RY-3. For each year the score is equal to;

- The ZCR ratio if the ratio is lower than 1
- 1 if the ZCR ratio is higher than 1 (the company's share of the company's ZCR building share is higher than the benchmark share)

DIMENSION 2

Dimension 2 is a trend analysis based on the comparison between the gradient of the company's projected share of ZCR buildings from RY to RY+3 and the gradient of the company's benchmark share of ZCR buildings during that same period.

- CS'_{ZCR} is the gradient of the linear trend line of the company's projected zero-carbon-ready building share from RY to RY+3
- BS'_{ZCR} is the gradient of the linear trend line of the benchmark for the share of zero-carbon-ready buildings over the same period
- The difference between the two gradients is measured by their ratio.

$$\text{ZCR trend ratio} = \frac{CS'_{ZCR}}{BS'_{ZCR}}$$

An approach based on the sectoral decarbonisation approach (SDA) is used to generate the benchmark by taking the company's reporting year value for ZCR buildings share and converging to the 2030 value (at which point ZCR buildings account for 100% of all new buildings). (See section 6.2).

THE SCORE

In the trend comparison, if the trend ratio is 1 or greater, the company's growth rate is equal to or greater than the benchmark and the company receives the maximum score of 100%. If the ratio is lower than 1, the company growth rate is lower than the benchmark and a score is assigned as a percentage value equal to the value of the ratio. If the company has already achieved 100% ZCR building share and is projected to stay at this level, the company scores 100%.

AGGREGATE SCORE: DIMENSION 1: 50%, DIMENSION 2: 50%

RELEVANCE OF THE INDICATOR

Share of low-carbon buildings is included in this ACT methodology for the following reasons:

- GHG emissions intensity pathways in the sector cannot be met without a step change improvement in the energy efficiency and flexibility of the stock and a complete shift away from fossil fuels, and the construction of new buildings that are zero-carbon-ready are the direct 'output measure' that indicates how this change is incorporated in the business model.
- The IEA's NZE scenario and other 1.5°C aligned pathways for the sector, require the share of low-carbon-ready buildings to reach 100% by 2030 for new constructions entailing a significant increase on a yearly basis. A company's compliance to zero-carbon-ready buildings is therefore a strong indication of its commitment to a 1.5°C future.

TABLE 16: ZERO-CARBON-READY BUILDINGS SHARE BENCHMARK FOR NEW BUILDINGS

2022	2023	2024	2025	2026	2027	2028	2029	2030
1%	13.4%	25.8%	38.1%	50.5%	62.9%	75.3%	87.6%	100%

DEFINITION OF LOW-CARBON BUILDINGS

In this methodology a low-carbon building is defined as a zero-carbon-ready building in alignment with the IEA's definition. A zero-carbon-ready building is a building that is highly advanced in terms of energy efficiency using either renewable energy directly or an energy supply that will be fully decarbonised by 2050, such as electricity or district heat. In other words, a zero-carbon-ready building is one that can become a zero-carbon building by 2050, without requiring any additional changes to the building envelope or technical equipment (IEA, 2021).

SCORING RATIONALE

A hybrid approach was chosen for this indicator to allow an assessment of both the progress the company has already made towards decarbonising its portfolio and the ambition of the company's plans for future. The use of gap and trend scoring allows for both absolute performance against the benchmark and relative progress towards alignment with the benchmark to be assessed.

• BU 4.7 SHARE OF RENOVATIONS TOWARDS LOW-CARBON BUILDINGS

SHORT DESCRIPTION OF INDICATOR

A measure of the company's growth in renovated buildings (RB) as compared with a benchmark renovation pathway.

A measure of the company's renovation share of existing buildings from reporting year -3 until reporting year and expected growth for the next 3 years as compared with the expectations required in the sector under a 1.5C degree scenario.

This indicator is only applicable to Lessor – Developer, Lessor – Contractor, Lessor – Manager (in case of first ownership*), Seller – Developer, Seller – Contractor and Contractor.

*As per SBTI definition, in the case the actor is the first owner of the building, the actor needs to account for embodied emissions from construction and/or renovations of buildings recently acquired and added to the portfolio in any one year of the last 3 years.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Share of renovated buildings at RY-3 to RY
- Projected share of renovated buildings for RY to RY+3

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 7.54.2
- 7.77

External sources of data used for the analysis for this indicator are (see section 6.2 for more details)

- IEA - Net Zero Roadmap: A Global Pathway to Keep the 1.5 °C Goal in Reach (2023): Global share of renovated buildings

HOW THE ASSESSMENT WILL BE DONE

The analysis is split into two dimensions:

DIMENSION 1

Dimension 1 is based on the ratio between the company's share of renovated buildings (CS_{RB}) in the reporting year and the three years preceding and the sector benchmark for the same period (BS_{RB}).

$$\text{RB ratio} = \frac{CS_{RB}}{BS_{RB}}$$

THE SCORE

The score for this dimension is taken as the average of the scores for each year between RY and RY-3. For each year the score is equal to;

- The RB ratio if the ratio is lower than 1
- 1 if the RB ratio is higher than 1 (the company's share of the company's renovated buildings share is higher than the benchmark share)

DIMENSION 2

Dimension 2 is a trend analysis based on the comparison between the gradient of the company's projected share of renovated buildings from RY to RY+3 and the gradient of the company's benchmark share of renovated buildings during that same period.

- CS'_{RB} is the gradient of the linear trend line of the company's projected renovated buildings share from RY to RY+3
- BS'_{RB} is the gradient of the linear trend line of the benchmark for the share of renovated buildings over the same period
- The difference between the two gradients is measured by their ratio.

$$\text{RB trend ratio} = \frac{CS'_{RB}}{BS'_{RB}}$$

An approach based on the sectoral decarbonisation approach (SDA) is used to generate the benchmark by taking the company's reporting year value for renovated buildings share and converging to the 2030 value (at which point renovated buildings account for 20% of all existing buildings). (See section 6.2).

THE SCORE

In the trend comparison, if the trend ratio is 1 or greater, the company's growth rate is equal to or greater than the benchmark and the company receives the maximum score of 100%. If the ratio is lower than 1, the company growth rate is lower than the benchmark and a score is assigned as a percentage value equal to the value of the ratio. If the company has already achieved 100% building renovation share and is projected to stay at this level, the company scores 100%.

AGGREGATE SCORE: DIMENSION 1: 50%, DIMENSION 2: 50%

RELEVANCE OF THE INDICATOR

Renovated buildings shares are included in the ACT BU assessment for the following reason:

- Emissions intensity pathways in the sector cannot be met without a change in building renovation ambition, and the share is the main indication of how this is incorporated in the company's main decarbonisation plan.
- Performing renovation is a key action towards a global warming limited to 1.5°C. In the Global North, it is estimated that around 80% of the buildings expected to be in use by 2050 are already standing today, making the retrofit of existing structures essential for meeting global net-zero carbon targets (WBCSD, 2025). This is in line with the crucial principles and measures of sufficiency, which is described as "a set of measures aimed at reducing the demand for resources—such as energy, materials" (IFPEB, 2024).

TABLE 17: RENOVATED BUILDINGS SHARE BENCHMARK FOR EXISTING BUILDINGS

2022	2030	2035	2050
5%	20%	35%	85%

DEFINITION OF RENOVATION

This indicator considers renovations strictly related to the improvement of the energy performance of buildings specifically with the objective of achieving a zero-carbon-ready level as defined by the IEA, regardless of the scale of the renovation. A zero-carbon-ready building is a building that is highly advanced in terms of energy efficiency using either renewable energy directly or an energy supply that will be fully decarbonised by 2050, such as electricity or district heat. In other words, a zero-carbon-ready building is one that can become a zero-carbon building by 2050, without requiring any additional changes to the building envelope or technical equipment. Any other type of renovation is not considered for this indicator.

SCORING RATIONALE

A hybrid approach was chosen for this indicator to allow an assessment of both the progress the company has already made towards decarbonising its portfolio of existing buildings and the ambition of the company's plans for the future. The use of gap and trend scoring allows for both absolute performance against the benchmark and relative progress towards alignment with the benchmark to be assessed.

• BU 4.8 LOCKED-IN EMISSIONS FROM SOLD PRODUCTS

SHORT DESCRIPTION OF INDICATOR

A measure of the company's cumulative scope 3 downstream emissions over a 30-year period from reporting year. This is compared to the company's carbon budget calculated from its 1.5°C-aligned benchmark pathways. An activity ratio, considering both secured and projected activities, completes the scoring to ensure there is consistency between companies' concrete plans and long-term projections.

This indicator only applies to the company profiles of Lessor – Developer, Lessor – Contractor, Lessor – Manager, Seller – Developer and Seller – Contractor.

For Managers only dimension 1 is applicable and for Contractors only dimension 2 is applicable.

When emissions are not reported as operational and embodied emissions, refer to ACT Generic for indicator 4.3 Locked-in emissions from sold products. Companies that report Scope 1 and 2 and Scope 3 emissions, without adopting a portfolio-level whole-building approach, are subject to a score cap of 80%.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Forecast of new buildings developed and/or built (from RY to RY+30) - if such forecast is not available, portfolio growth from RY-5 to RY should be used to calculate a proxy, keeping the same trend in growth.
- Forecast of buildings managed, leased and/or sold (from RY to RY+30) - if such forecast is not available, portfolio growth from RY-5 to RY should be used to calculate a proxy, keeping the same trend in growth.

- Forecast of Scope 3 upfront embodied emissions intensity from the construction and/development of new buildings expressed in $kgCO_2e/m^2$ of gross floor area from RY to RY+30 - if such forecast is not available, emissions intensity from RY-5 to RY should be used to calculate a proxy, keeping the same trend in emissions intensity.
- Forecast of Scope 3 operational emissions intensity from the use of buildings expressed in $kgCO_2e/m^2$ of internal floor area from RY to RY+30 - if such forecast is not available, emissions intensity from RY-5 to RY should be used to calculate a proxy, keeping the same trend in emissions intensity.

CDP Questionnaire 2023 mapping to this indicator:

- C 6.5
- C 4.2b

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 7.8
- 7.54.2

External sources of data used for the analysis of this indicator are:

- 1.5ºC-aligned pathways – See section 6.1.

HOW THE ASSESSMENT WILL BE DONE

The analysis has two dimensions:

DIMENSION 1 – OPERATIONAL EMISSIONS

The analysis is based on the ratio between the company's locked-in GHG emissions from the use of buildings over the long-term (L.30 years) and the company's carbon budget (B.30 years). Assuming that the lifetime of a building is around 60 years (SBTi, 2025), the period until the first deep renovation, which would increase emission intensity, would be 30 years. Yearly locked-in emissions are calculated as the emissions intensity associated with the use of buildings ($kgCO_2/m^2$) per building type, multiplied by the size of the portfolio expressed in internal floor area per building type.

- L. 30 years is calculated as the total cumulative emissions implied by the operation of buildings in the future up until 30 years after the reporting year, calculated as the cumulative product of the portfolio size of buildings managed, leased and/or sold multiplied by their emissions intensity.
- B. 30 years is calculated as the company's carbon budget over the 30 years after the reporting year, by drawing the total carbon budget up until 2050 and cutting off at 30 years from the reporting year to draw the intermediate budget. The company's total carbon budget related to operational emissions is calculated based on the company's benchmark.

DIMENSION 2 – UPFRONT EMBODIED EMISSIONS

The analysis is based on the ratio between the company's locked-in GHG emissions from the construction and/or development of new buildings over the long-term (L.30 years) and the company's carbon budget (B.30 years). Yearly locked-in emissions are calculated as the emissions intensity associated with the construction and/or development of buildings ($kgCO_2/m^2$) per building type, multiplied by the size of the portfolio expressed in gross floor area per building type.

- L. 30 years is calculated as the total cumulative emissions implied by the construction of buildings in the future up until 30 years after the reporting year, calculated as the cumulative product of the portfolio size of buildings developed multiplied by their emissions intensity.
- B. 30 years is calculated as the company's carbon budget over the 30 years after the reporting year, by drawing the total carbon budget up until 2050 and cutting off at 30 years from the reporting year to draw the intermediate budget. The company's total carbon budget related to upfront embodied emissions is calculated based on the company's benchmark.

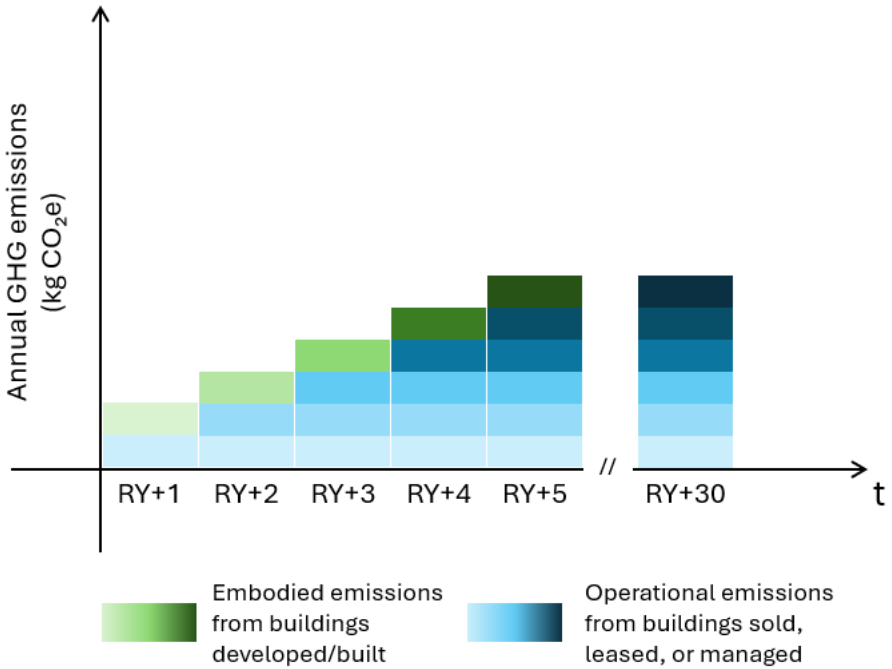


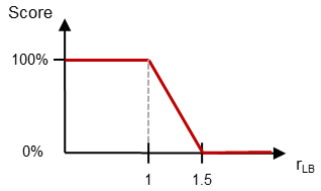
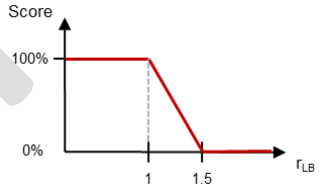
FIGURE 9: ILLUSTRATION OF COMPANY LOCKED-IN GHG EMISSIONS

The "locked-in ratio" r_{LB} is calculated as follow:

$$r_{LB} = \frac{L(30\ years)}{B(30\ years)}$$

CALCULATION OF THE SCORE

LOCKED IN RATIO r_{LB}	SCORE	SCHEME

$r_{LB} \leq 1$ the company stays within its carbon budget	1	
$r_{LB} \geq 1{,}5$ the company strongly exceeds its carbon budget	0	
$1 < r_{LB} < 1{,}5$ the company exceeds its carbon budget	$\frac{1{,}5 - r_{LB}}{50\%}$	

AGGREGATED SCORE: DIMENSION 1 XX% DIMENSION 2 XX%

RELEVANCE OF THE INDICATOR

Locked-in downstream emissions are included in this ACT methodology for the following reasons:

- Absolute GHG emissions over time is the most relevant measure of emissions performance for assessing a company's contribution to global warming. Analysing a company's locked-in emissions alongside science-based budgets also introduces the means to scrutinize the potential cost of inaction over the short-medium term.
- Examining absolute emissions, along with recent and short-term emissions intensity trends, forms part of a holistic view of company emissions performance in the past, present and future.

SCORING RATIONALE

By estimating building construction and/or operation 30 years after the reporting year, this indicator attempts to explore the divergence between the forecasted pathway and the low-carbon benchmark pathway. Applying this forecast provides a useful indication of how the company's emissions intensity relates to absolute emissions.

MODULE 5: MANAGEMENT

Module 5, “Management”, assesses whether the company has the expertise, strategy, incentives (both linked to climate change management and objectives linked to fossil fuels use) and plans in place to manage its low-carbon transition. It assesses the quality of the transition plan and the scenario analysis used to develop it.

- **BU 5.1 OVERSIGHT OF CLIMATE CHANGE ISSUES**

SHORT DESCRIPTION OF INDICATOR

The company discloses that responsibility for climate change mitigation lies at the highest level of decision-making within the company structure.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Environmental policy and details regarding governance
- The reporter shall provide details on where the highest level of direct responsibility for climate change within the organization is

CDP Questionnaire 2023 mapping to this indicator:

- C1.1
- C1.1a
- C1.2

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 4.1
- 4.3

External sources of data may also be used for the analysis of this indicator.

HOW THE ASSESSMENT WILL BE DONE

The benchmark case is that climate change managed within the highest decision-making structure within the company.

The position at which climate change is managed within the company structure is determined from the company data submission and accompanying evidence. For small companies, or for cases in which the corporate structure does not match the structure of the maturity matrix, the analyst should assign a score based on the company's specific hierarchy (i.e., if responsibility for climate change mitigation lies at the highest level of decision-making within the organization, award "Low-carbon aligned". If responsibility lies one level below the highest level, award "Next practice", etc.). The maturity matrix used for the assessment is the following:

Question	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weighting
Associated score	***0%***	***25%***	***50%***	***75%***	***100%***	
What is the position of the employee/ committee with highest responsibility for climate change mitigation issues?	No one in charge of climate change issues	Level 4 (see guidance)*	Level 3 (see guidance)*	Level 2 (see guidance)*	Level 1 (see guidance)*	***100%***

Further guidance for each level of seniority is given below:

LEVEL 1

- Highest level of accountability or decision-making within the organization, with responsibility for overall organizational or corporate strategic direction.
- Examples: Board, sub-set of the Board, Chief Executive Officer (CEO)

LEVEL 2

- Person/committee that is one step down the corporate structure from the highest level of decision-making (i.e. reports to or is accountable to Level 1). Inputs into organizational strategy but does not make decisions on it. May have responsibility and accountability for business unit strategy formation and implementation of one or more business units.
- Examples: Vice President, Director, other C-Suite officer (e.g., Chief Financial Officer (CFO), Chief Procurement Officer (CPO), Chief Risk Officer (CRO), Chief Operating Officer (COO), Chief Sustainability Officer (CSO), etc.), other committee appointed by the Board

LEVEL 3

- Person/committee that is two steps down the corporate structure from the highest level of decision-making. May have responsibility and accountability for business unit strategy formation and implementation for one business unit.
- Examples: Manager, Senior Manager

LEVEL 4

- Person/committee that is three or more steps down the corporate structure from the highest level of decision-making. No responsibility or accountability for business unit strategy development.
- Examples: Officer, Senior Officer

RELEVANCE OF THE INDICATOR

Successful change within companies, such as the transition to a low-carbon economy, requires strategic oversight and buy-in from the highest levels of decision-making within the company. For the building sector, a change in strategy and potentially business model will be required and this cannot be achieved at lower levels within an organization. Evidence of how climate change is addressed within the top decision-making structures is a proxy for how seriously the company takes climate change, and how well integrated it is at a strategic level. High-level ownership also increases the likelihood of effective action to address low-carbon transition.

Changes in strategic direction are necessarily future-oriented, which fits with this principle of the ACT initiative.

Managing oversight of climate change is considered as a good practice.

• BU 5.2 CLIMATE CHANGE OVERSIGHT CAPABILITY

SHORT DESCRIPTION OF INDICATOR

Company board or executive management has expertise on the science and economics of climate change, including an understanding of policy, technology and consumption drivers that can disrupt current business. This expertise is used by the individual or committee to inform high-level decision-making within the company.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Environmental policy and details regarding governance

- The reporter shall identify the position of the individual or name of the committee with this responsibility and outline their expertise regarding climate change and the low-carbon transition

CDP Questionnaire 2023 mapping to this indicator:

- C1.1
- C1.1a
- C1.1d
- C1.2

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 4.2
- 4.4

External sources of data may also be used for the analysis of this indicator.

HOW THE ASSESSMENT WILL BE DONE

The presence of expertise on topics relevant to climate change and the low-carbon transition at the level of the individual or committees with overall responsibility for it within the company is assessed. The presence of expertise is the condition that must be fulfilled for points to be awarded in the scoring.

The analyst determines if the company has expertise as evidenced through a named expert's biography outlining capabilities. A cross check is performed against 5.1 on the highest responsibility for climate change, the expertise should exist at the level identified. To be awarded Low-carbon aligned, the company must provide examples of how the individual or committee's expertise has informed strategic investment planning and/or decision-making processes.

The maturity matrix used for the assessment is the following:

Question	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weighting
Associated score	***0%***	***25%***	***50%***	***75%***	***100%***	

Does the individual or committee with oversight of climate change issues (as reported in indicator 5.1) have relevant climate change- and low-carbon transition-related expertise*?	The employee/committee does not meet any of the characteristics of climate change- and low-carbon transition-related expertise*.	The employee/committee meets 1 of the characteristics of climate change- and low-carbon transition-related expertise*.	The employee/committee meets 2 of the characteristics of climate change- and low-carbon transition-related expertise*.	The employee/committee meets 3 or more of the characteristics of climate change- and low-carbon transition-related expertise*.	The employee/committee meets 3 or more of the characteristics of climate change- and low-carbon transition-related expertise*. Expertise systematically informs strategic investment planning/decision-making processes.	***100%***

*"Characteristics of climate change- and low-carbon transition-related expertise" include:

- Academic/professional qualification related to climate change and the low-carbon transition, including an understanding of the impacts and risks, and the solutions to implement (e.g., Bachelors, Masters, Doctorate, professional certification, diploma, etc.)
- A purely energy-related background with no relationship to climate change and the low-carbon transition is not enough to qualify as expertise.
- Recent (i.e., within last 10 years) professional experience related to climate change and the low-carbon transition (e.g., previous employment in climate change/low-carbon transition-related role, or with a climate change/low-carbon transition-related organisation, etc.)
- Recent (i.e., within last 10 years)/active membership of organisation(s) driving corporate knowledge and action on climate change and the low-carbon transition (e.g., World Business Council For Sustainable Development, Solar Energy Industry Association, etc.)
- Technical knowledge related to climate change and the low-carbon transition, evidenced through recently (i.e., within last 10 years) published outputs written by the individual/committee (e.g., statements, reports, etc.)

RELEVANCE OF THE INDICATOR

Effective management of the low-carbon transition requires specific expertise related to climate change and its risks, and their likely direct and indirect impacts on the business. Presence of this capability within or closely related to the decision-making bodies that will implement low-carbon transition both indicates company commitment to that transition and increases the chances of success.

Even if companies are managing climate change at the Board level or equivalent level, a lack of expertise could be a barrier to successful management of low-carbon transition.

- **BU 5.3 LOW-CARBON TRANSITION PLAN**

SHORT DESCRIPTION OF INDICATOR

The company has a plan on how to transition the company to a business model compatible with a low-carbon economy.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Environmental policy and details regarding governance
- The reporter should provide a description of the transition plan including the following details:
- Whether the transition plan exists in a documented form and whether that document is public
- How the results of climate scenario testing influenced the transition plan
- Timescale for implementation of the transition plan
- Who has responsibility for its implementation (at the strategic level, not operational)
- How successful implementation of the plan will be measured and monitored. (Should include details of any linked targets, emissions reduction or energy efficiency targets, or KPIs.)

CDP Questionnaire 2023 mapping to this indicator:

- C3.1
- C3.3
- C3.4

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 5.2
- 5.3

HOW THE ASSESSMENT WILL BE DONE

From the 2021 CDP Transition Plans discussion paper: “A climate transition plan is a time-bound action plan that clearly outlines how an organization will achieve its strategy to pivot its existing assets, operations, and entire business model towards a trajectory that aligns with the latest and most ambitious climate science recommendations, i.e., halving greenhouse gas (GHG) emissions by 2030 and reaching net-zero by 2050 at the latest, thereby limiting global warming to 1.5°C.” (CDP, 2021). Other initiatives have

also developed their own similar definitions (IFRS - International Financial Reporting Standards, TCFD - Task Force on Climate-Related Financial Disclosures, EFRAG - European Financial Reporting Advisory Group, TPT – UK Transition Plan Task Force, GFANZ – Glasgow Financial Alliance for Net Zero).

The analyst evaluates the description and evidence of the low-carbon transition plan for the presence of best practice elements and consistency with the other reported management indicators. The company description and evidence are compared to the maturity matrix developed to guide the scoring and a greater number of points are allocated for elements indicating a higher level of maturity.

Among the best practice elements identified to date are:

- The plan includes financial projections
- The plan should include cost estimates or other assessments of financial viability as part of its preparation
- The description of the major changes to the business is comprehensive, consistent, aligned with other indicators
- Quantitative estimates of how the business will change in the future are included
- Costs associated with the plan (e.g. write-downs, site remediation, contract penalties, regulatory costs) are included
- Potential “shocks” or stressors (sudden adverse changes) have been taken into consideration
- Relevant region-specific considerations are included
- The plan’s measure of success is SMART – contains targets or commitments with timescales to implement them, is time-constrained or the actions anticipated are time-constrained
- The plan’s measure of success is quantitative
- The description of relevant testing/analysis that influenced the transition plan is included
- The plan is consistent with reporting against other ACT indicators
- The scope should cover entire business, and is specific to that business
- The plan should cover the short, medium and long terms. From now or the near future <5 years, until at least 2035 and preferably beyond (2050)
- The plan contains details of actions the company realistically expects to implement (and these actions are relevant and realistic)
- The plan is approved at the strategic level within the organisation
- Discussions about the potential impacts of a low-carbon transition on the current business have been included
- The company has a publicly acknowledged well-below 2°C (or beyond) science-based target (SBT)
- The company has been carrying out a diagnosis of climate change impacts and identified related physical risks

The maturity matrix used for the assessment is the following:

Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weighting
Associated score	***0%***	***25%***	***50%***	***75%***	***100%***	
Measure of success	No measure of success		At least one measure of success which is fully SMART* and contains both qualitative and quantitative elements.		More than one measure of success. All measures of success are fully SMART*, contain both qualitative and quantitative elements, and are aligned with a low-carbon scenario.	***10%***
Financial content in plan	No financial content	Financial projections, cost estimates or other estimates of financial viability are described but not quantified.	Financial projections, cost estimates or other estimates of financial viability are quantified in some detail.	Quantitative estimations of how the business will change in the future are included. Costs associated with the plan (e.g., write-downs, site remediation, contract penalties, regulatory costs) are included.	Description of the major financial changes to the business over all timescales is comprehensive and aligned with other indicators. The transition plan is integrated into the overall business strategy of the organization and linked to the profit and loss statement.	***10%***

Short-term actions (recent past up to reporting year + 5 years)	Contains no discussion of short-term actions.		Contains examples of short-term actions the company expects to implement.		Contains detailed descriptions of relevant and achievable short-term actions the company expects to implement to make the transition a reality.	***10%***
Long-term actions and vision (from reporting year + 5 years onwards)	Contains no discussion of long-term actions or vision.		Contains descriptions of long-term actions the company expects to implement to make the transition a reality.		Contains descriptions of long-term actions the company expects to implement to make the transition a reality. Contains a vision of what the far-future company could look like in terms of physical assets and business model.	***10%***
Scope	Scope of transition plan is not defined.	Transition plan applies only to specific business units/operations (representing less than 50% of company's GHG emissions).	Transition plan applies only to specific business units/operations (representing more than 50% of company's GHG	Transition plan applies to all business units/operations.	Transition plan applies to all business units/operations and the rest of the value chain (upstream and downstream).	***10%***

			emissions).		Any exclusions from the plan must not be material to the organization in terms of GHG emissions.	
Implementation of results of scenario testing	The results of the company's scenario testing (as assessed in Indicator 5.5 – Scenario testing) have not informed the development of the company's transition plan.				The results of the company's scenario testing (as assessed in Indicator 5.5 – Scenario testing) have informed the development of the company's transition plan.	***10%***
Transition plan timescale†	Covers only short term, from reporting year until (RY + 3 years)	Covers only short and medium term, from reporting year until (RY + 4 to 10 years)	Covers short, medium and long term, from reporting year until (RY + 11 to 20 years)	Covers short, medium and long term, from reporting year until (RY + 21 years to 2049)	Covers short, medium and long term, from reporting year until 2050 or beyond	***10%***
Review and update process	No transition plan review and update process is in place.	Commitment to review and update transition plan, but no defined timescale or process.	Commitment to review and update transition plan, with either a defined timescale or process.	Commitment to review and update transition plan less often than every 5 years, with a defined process.	Commitment to review and update transition plan at least every 5 years for continuous relevancy and efficacy, with a defined process.	***10%***

Progress reporting process	No transition plan progress reporting process is in place.	Commitment to report progress against the transition plan and any material changes, but no defined timescale or stakeholder feedback process (e.g., shareholders and AGMs).	Commitment to report progress against the transition plan and any material changes, with either a defined timescale or stakeholder feedback process (e.g., shareholders and AGMs).	Commitment to report progress against the transition plan and any material changes less often than annually, with a defined stakeholder feedback process (e.g., shareholders and AGMs).	Commitment to report progress against the transition plan and any material changes annually, with a defined stakeholder feedback process (e.g., shareholders and AGMs).	***10%***
The role of a carbon price in the plan	No carbon price is considered.	Internal studies have been conducted regarding a carbon price, but this has not been used to guide decisions.	A carbon price is used only qualitatively by the company.	A carbon price is embedded in cost calculations as a financial indicator.	The carbon price value is aligned with a low-carbon scenario[‡] and is integrated into the financial scenario used for making key business decisions.	***10%***

A measure of success is considered "fully SMART" if it meets each of the following SMART* elements (Yemm, 2012):

- **Specific**: the measure of success is explicit, with no room for misinterpretation.
- **Measurable**: the measure of success is measurable, and it will be clear when it has been achieved.
- **Achievable**: the measure of success is stretching and ambitious, but not so much that it is unachievable.
- **Relevant**: the measure of success contributes to the organisation's overall objectives and complements other measures of success.
- **Time-bound**: the measure of success has a set deadline.

[†]Companies aiming to achieve their low-carbon transition (e.g., reach net-zero emissions) any year before 2050 and maintain or improve this low-carbon state beyond this specified year, should score Low-carbon aligned.

‡ Refer for instance to International Energy Agency (IEA), World Energy Outlook 2025, Annex B, p 459 (IEA, 2025). CO_2 prices are displayed by world regions, predicted values in 2035, 2040 and 2050.

RELEVANCE OF THE INDICATOR

The Building sector will require substantial changes to their business to align to a low-carbon economy, over the short, medium and long term, whether it is voluntarily following a strategy to do so or is forced to change by regulations and structural changes to the market. It is better for the success of its business and of its transition that these changes occur in a planned and controlled manner.

• BU 5.4 CLIMATE CHANGE MANAGEMENT INCENTIVES

SHORT DESCRIPTION OF INDICATOR

The Board's compensation committee has included metrics for the reduction of GHG emissions in the annual and/or long-term compensation plans of senior executives. The company provides financial incentives for the management of climate change issues as defined by a series of relevant indicators.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Management incentives
- The reporter shall report whether the company provides incentives for the management of climate change issues, including the attainment of targets
- The reporter shall provide details on the incentives provided for the management of climate change issues
- The reporter shall provide details on the activities that are usually rewarded by incentives in the company

CDP Questionnaire 2023 mapping to this indicator:

- C1.3
- C1.3a

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 4.5

HOW THE ASSESSMENT WILL BE DONE

The analyst verifies if the company has compensation incentives set for senior executive compensation and/or bonuses, that directly and routinely reward specific, measurable reductions of tons of carbon emitted by the company in the preceding year and/or the future attainment of emissions reduction targets, or other metrics related to the company's low-carbon transition plan. For small companies, or for cases in which the corporate structure does not match the structure of the maturity matrix, the analyst should assign a score based on the company's specific hierarchy (i.e., if climate change management incentives are awarded to the highest level of decision-making within the organization, award "Low-carbon aligned". If incentives are available one level below the highest level, award "Next practice", etc.).

Note: the wording of the "What is the type of incentive" is based on the Executive Compensation Guidebook for Climate Transition developed by Willis Towers Watson, in partnership with the Climate Governance Initiative, a project in collaboration with the World Economic Forum (Willis Towers Watson, 2021).

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weighting
Associated score		***0%***	***25%***	***50%***	***75%***	***100%***	
Who is entitled to benefit?	*Who is entitled to benefit?*	Any other answer	Level 4 (see guidance)*	Level 3 (see guidance)*	Level 2 (see guidance)*	Level 1 (see guidance)*	***50%***
What is the type of incentive?	*Type of incentive*	No incentives	The company has introduced climate metrics (key performance indicators (KPIs)), including metrics related to GHG emissions reductions,		The company has introduced climate metrics (key performance indicators (KPIs)), including metrics related to GHG emissions reductions,	The company has introduced climate metrics, (key performance indicators (KPIs)), including metrics related to GHG emissions reductions,	***50%***

			within annual bonuses (or other short-term incentive plans).		within its long-term incentive plan (likely to include equity in the company).	within its long-term incentive plan (likely to include equity in the company). This plan aligns with the timescale and content of the company's transition plan and emissions reduction targets.	

Further guidance for each level of seniority is given below:

LEVEL 1

- Highest level of accountability or decision-making within the organization, with responsibility for overall organizational or corporate strategic direction.
- Examples: Board, sub-set of the Board, Chief Executive Officer (CEO)

LEVEL 2

- Person/committee that is one step in the corporate structure from the highest level of decision-making of the organization (i.e. reports to or is accountable to Level 1). Inputs into organizational strategy but does not make decisions on it. May have responsibility and accountability for business unit strategy formation and implementation of one or more business units.
- Examples: Vice President, Director, other C-Suite officer (e.g., Chief Financial Officer (CFO), Chief Procurement Officer (CPO), Chief Risk Officer (CRO), Chief Operating Officer (COO), Chief Sustainability Officer (CSO), etc.), other committee appointed by the Board

LEVEL 3

- Person/committee that is two steps in the corporate structure from the highest level of decision-making of the organization. May have responsibility and accountability for business unit strategy formation and implementation for one business unit.
- Examples: Manager, Senior Manager

LEVEL 4

- Person/committee that is three or more steps in the corporate structure from the highest level of decision-making of the organization. No responsibility or accountability for business unit strategy development.
- Examples: Officer, Senior Officer

RELEVANCE OF THE INDICATOR

Executive compensation should be aligned with overall business strategy and priorities. As well as commitments to action the company should ensure that incentives, especially at the executive level, are in place to reward progress towards low-carbon transition. This will improve the likelihood of successful low-carbon transition.

Monetary incentives at the executive level are an indication of commitment to successful implementation of a strategy for low-carbon transition.

BU 5.5 CLIMATE CHANGE SCENARIO TESTING

SHORT DESCRIPTION OF INDICATOR

Testing or analysis relevant to determining the impact of transition to a low-carbon economy on the current and projected business model and/or business strategy has been completed, with the results reported to the board or c-suite, the business strategy revised where necessary, and the results publicly reported.

DATA REQUIREMENTS

The relevant data for this indicator are:

- The reporter shall provide the details and supporting documents on the organization's climate change scenario testing

CDP Questionnaire 2023 mapping to this indicator:

- C2.3a
- C3.2
- C3.2a
- C3.2b

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 3.1

- 5.1

HOW THE ASSESSMENT WILL BE DONE

The analyst evaluates the description and evidence of the low-carbon economy scenario testing for the presence of best-practice elements and consistency with the other reported management indicators. The company description and evidence are compared to the maturity matrix developed to guide the scoring, and a greater number of points are allocated for elements indicating a higher level of maturity.

Best-practice elements to be identified in the test/analysis include:

- full coverage of the company's boundaries
- timescale from present to long-term (2035-2050)
- results are expressed in value-at-risk or other financial terms
- multivariate: a range of different changes in conditions are considered together
- changes in conditions are specific to a low-carbon climate scenario
- climate change conditions are combined with other likely future changes in operating conditions over the timescale chosen

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low carbon aligned	Weighting
Associated score		***0%***	***25%***	***50%***	***75%***	***100%***	
What is the scope of the scenario testing?	*Scope*	Scope of scenario testing is not defined.	Scenario testing applies only to specific business units / operations (representing less than 50% of company's GHG emissions).	Scenario testing applies only to specific business units / operations (representing more than 50% of company's GHG emissions).	Scenario testing applies to all business units / operations,	Scenario testing applies to all business units / operations and the rest of the value chain (upstream and downstream). Any exclusions from the plan must not be material to the	***25%***

						organization in terms of GHG emissions.	
What is the timescale of the scenario testing?	*Timescale*	Covers only short term, from reporting year until (RY + 3 years).	Covers only short and medium term, from reporting year until (RY + 4 to 10 years).	Covers short, medium and long term, from reporting year until (RY + 11 to 20 years).	Covers short, medium and long term, from reporting year until (RY + 21 years to 2049).	Covers short, medium and long term, from reporting year until 2050 or beyond.	***20%***
Does the company assess the materiality of climate-related risks/opportunities*?	*Climate-related risks/opportunities**	The materiality of climate-related risks/opportunities* is not assessed.	The materiality of 1 category of climate-related risks/opportunities* is assessed.	The materiality of 2 categories of climate-related risks/opportunities* is assessed.	The materiality of 3 categories of climate-related risks/opportunities* is assessed.	The materiality of 4 categories of climate-related risks/opportunities* is assessed.	***10%***
How many scenarios are considered?	*Scenarios*	No scenarios are considered.	Considers 1 scenario.	Considers 2 scenarios.		Considers 3 or more scenarios, including a low-carbon economy scenario.	***10%***
What parameters/assumptions are considered?	*Parameters/assumptions considered*	Considers 1-2 different parameters/assumptions.		Considers 3-4 parameters/assumptions together (multivariate)		Considers 5 or more parameters/assumptions together, related to changing climate conditions in combination	***15%***

						with changes in operating conditions .	
Are the results† expressed in qualitative/ quantitative/ financial terms?	*Results†*	No results available	Expressed only in qualitative terms	Expressed in qualitative and quantitative terms	Expressed in qualitative, quantitative and financial terms	Expressed in qualitative, quantitative and financial terms and results are translated into value-at-risk	***10%***
Is a carbon price considered?	*Carbon price*	No carbon price is considered.		A carbon price is used as one of the main parameters/assumptions		The carbon price used is aligned with the parameters/assumptions of a low-carbon economy scenario‡	***10%***

* Climate-related risk categories (TCFD, 2017):

- Market and Technology shifts
- Reputation
- Policy and Legal
- Physical Risks

† Results of scenario analysis should be presented as business impacts which can include (TCFD, 2017):

- Earnings – what conclusions does the organization draw about impact on earnings and how does it express that impact (e.g., as EBITDA (earnings before interest, taxes, depreciation and amortization), EBITDA margins, EBITDA contribution, dividends)?
- Costs – what conclusions does the organization draw about the implications for its operating/production costs and their development over time?
- Revenues – what conclusions does the organization draw about the implications for the revenues from its key commodities/ products/ services and their development over time?
- Assets – what are the implications for asset values of various scenarios?

- Capital Allocation/ investments – what are the implications for capex and other investments?
- Timing – what conclusions does the organization draw about development of costs, revenues and earnings across time (e.g., 5/10/20 year)?

‡ Refer for instance to International Energy Agency (IEA), World Energy Outlook 2025, Annex B, p 459 (IEA, 2025). CO_2 prices are displayed by world regions, predicted values in 2035, 2040 and 2050.

RELEVANCE OF THE INDICATOR

Changes predicted to occur due to climate change could have a number of consequences for the Building sector, including increased costs, a dramatically changed operating environment and major disruptions to the business. There are a variety of ways of analysing the potential impacts of climate-related changes on the business, whether these are slow and gradual developments or one-off “shocks”. Investors are increasingly calling for techniques such as use of an internal price on carbon, scenario analysis and stress testing to be implemented to enable companies to calculate the value-at-risk that such changes could pose to the business. As this practice is emergent at this time there is currently no comprehensive survey or guidance on specific techniques or tools recommended for the sector. The ACT methodology thus provides a broad definition of types of testing and analysis which can be relevant to this information requirement, to identify both current and best practices and consider them in the analysis.

Scenario stress testing is an important management tool for preparing for low-carbon transition. For businesses likely to be strongly affected by climate change impacts (both direct and indirect), it has even greater importance.

MODULE 6: SUPPLIER ENGAGEMENT

Module 6, “Supplier engagement”, assesses the company’s efforts to decarbonise its supply chain. This module assesses the company’s strategy to engage with its suppliers to reduce emissions. It then assesses existing activities, initiatives and partnerships, launched by the company to influence and support suppliers to reduce emissions.

- **BU 6.1 STRATEGY TO INFLUENCE SUPPLIERS TO REDUCE THEIR GHG EMISSIONS**

SHORT DESCRIPTION OF INDICATOR

This indicator assesses the strategic policy and the process which are formalized and implemented into business decision making processes to influence, enable or otherwise shift suppliers’ choices and behaviours in order to reduce its GHG emissions.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Methods of supplier engagement, strategy for prioritizing supplier engagement and measures of success
- Proportion of total procurement spend and/or supplier-related scope 3 emissions covered by the strategy
- Data on suppliers’ GHG emissions and climate change strategies
- Key procurement templates (e.g., New supplier contracts, Supplier Code of Conduct, RFI/RFPs (request for information / proposal), Supplier self-assessments, Performance cards

CDP Questionnaire 2023 mapping to this indicator:

- C12.1a
- C12.2
- C12.2a

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 5.11
- 5.11.1
- 5.11.2

- 5.11.5
- 5.11.7

HOW THE ASSESSMENT WILL BE DONE

The assessment will assign a maturity score based on the company's formalized, written strategy regarding its engagement with its suppliers, expressed in a maturity matrix.

A company that is placed in the 'Low-carbon aligned' category will receive the maximum score. A company which is at a lower level will receive a partial score, with 0 points awarded for having no engagement at all.

This maturity matrix is indicative but does not show all possible options that can result in a particular score. The company's responses will be scrutinized by the analyst and then placed on the level in the matrix where the analyst deems it most appropriate.

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weighting
Associated score		***0%***	***25%***	***50%***	***75%***	***100%***	
What is the scope of the supplier engagement strategy?	*Scope*	No strategy applied to any suppliers.	Strategy applied to up to 30% of total procurement spend OR up to 30% of supplier-related scope 3 emissions.	Strategy applied to 31-60% of total procurement spend OR 31-60% of supplier-related scope 3 emissions.	Strategy applied to 61-90% of total procurement spend OR 61-90% of supplier-related scope 3 emissions.	Strategy applied to over 90% of total procurement spend OR over 90% of supplier-related scope 3 emissions.	***30%***
To what extent are GHG emissions reduction requirements integrated in engagement with suppliers?	*Emissions reduction requirements*	No emissions reduction requirement included in key procurement templates.*	Unquantified emissions reduction requirement included in key procurement templates.*	Quantified emissions reduction requirement included in key procurement templates* but the supplier is not required to report progress	Quantified emissions reduction target included in key procurement templates* and the supplier is required to report progress	Quantified, science-based emissions reduction target (that is aligned with the sector/industry pathway) included in key procurement	***20%***

				to the company.	to the company.	templates* and the supplier is required to report progress to the company.	
To what extent are other low-carbon transition-related requirements/recommendations† integrated in engagement with suppliers?	*Other low-carbon transition-related requirements/recommendations*	No other low-carbon transition-related requirements/recommendations † included in key procurement templates.*				1 or more other low-carbon transition-related requirements/recommendations † included in key procurement templates.*	***5%***
To what extent are suppliers required to publicly report on their GHG emissions and other low-carbon transition-related requirements/recommendations?	*Reporting*	No requirement included in key procurement templates* for suppliers to publicly report on their GHG emissions or other low-carbon transition-related requirements/recommendations.		Requirement included in key procurement templates* for suppliers to publicly report on their GHG emissions but not any other low-carbon transition-related requirements/recommendations.		Requirement included in key procurement templates* for suppliers to publicly report on their GHG emissions and other low-carbon transition-related requirements/recommendations.	***5%***

Are GHG emissions reduction/reporting requirements included in selection of new suppliers, renewal of contract with existing suppliers, neither or both?	*New suppliers/existing suppliers*	Requirements included in NEITHER the selection of new suppliers NOR renewal of contracts with existing suppliers.		Requirements included in EITHER the selection of new suppliers OR renewal of contracts with existing suppliers.		Requirements included in BOTH the selection of new suppliers AND renewal of contracts with existing suppliers.	***5%***
How does the company respond to supplier non-compliance with GHG emissions reduction requirements?	*Non-compliance*	No response to supplier non-compliance.		Company retains/suspends/sanctions and engages non-compliant suppliers, but does not exclude those that fail to show significant improvement after the period of engagement.	.	Company retains/suspends/sanctions and engages non-compliant suppliers, and permanently excludes those that fail to show significant improvement after the period of engagement.	***5%***
What action levers‡ are embedded in the company's strategy to engage suppliers?	*Action levers‡ embedded in strategy*	No action levers‡ embedded in strategy.	Strategy includes action lever(s) from one of the three engagement types (Information collection, Engagement & Incentivisation,	Strategy includes action levers from two of the three engagement types (Information collection, Engagement & Incentivisation,	Strategy includes action levers from all of the three engagement types (Information collection, Engagement & Incentivisation,	Strategy includes action levers from all of the three engagement types (Information collection, Engagement & Incentivisation,	***30%***

			Innovation & collaboration) used.‡	Innovation & collaboration) used.‡	Innovation & collaboration) used.‡	Innovation & collaboration) used.‡ Strategy includes regular audits of the supplier by the company or a representative.	

* “Key procurement templates” include but are not limited to (SME Climate Hub, s.d.):

- New supplier contracts
- Supplier Code of Conduct
- RFI/RFPs
- Supplier self-assessments
- Performance cards

† Other low-carbon transition-related requirements/recommendations” refers to key aspects of a supplier’s low-carbon transition, beyond emissions reductions and targets, that companies can engage them on. These may not be specific requirements but can be general/high-level recommendations. These aspects can include performance indicators from any ACT performance modules, such as:

- Intangible investment
  - For example, the company recommends that its suppliers increase their R&D spend in low-carbon technologies.
- Management
  - For example, the company requires its suppliers to conduct climate change scenario testing.
- Policy engagement
  - For example, the company only selects suppliers not opposed to relevant climate policies.
- Business model
  - For example, the company engages with its suppliers to develop new, low-carbon business models.
- Any other relevant low-carbon transition-related requirement/recommendation (e.g., ACT assessment, setting a Science Based Target, etc)

‡ Action levers must be embedded in a strategy document, and not be presented as examples of past/present actions/initiatives (such examples should be scored in indicator 6.2). “Action levers” include, but are not limited to, the following examples, which are grouped into three engagement types (CDP, 2025) (C3D, 2022)):

- Information collection (understanding supplier behaviour)
  - Collect GHG emissions data at least annually from suppliers
  - Collect targets information at least annually from suppliers
  - Collect climate-related risk and opportunity information at least annually from suppliers
  - Collect climate transition plan information at least annually from suppliers
  - Collect other climate-related information at least annually from suppliers
- Engagement & incentivization (changing supplier behaviour)
  - Run an engagement campaign to educate suppliers about climate change
  - Provide training, support, and best practices on how to make credible renewable energy usage claims
  - Provide training, support, and best practices on how to set science-based targets
  - Directly work with suppliers on climate-related topics, such as defining common GHG emissions reduction plans (i.e., both companies commit to reduce X tCO2e together)
  - Climate change performance is featured in supplier awards scheme
  - Offer financial incentives for suppliers who contribute to reducing the company’s operational emissions (Scopes 1 & 2)
  - Offer financial incentives for suppliers who contribute to reducing the company’s downstream emissions (Scope 3)
  - Offer financial incentives for suppliers who contribute to reducing the company’s upstream emissions (Scope 3)
  - Offer financial incentives for suppliers who increase the share of renewable energy in their total energy mix
  - Offer financial incentives for suppliers who develop/adopt a climate transition plan
  - Facilitate adoption of a unified climate transition approach with suppliers
- Innovation & collaboration (changing markets)
  - Run a campaign to encourage innovation to reduce climate impacts on products and services
  - Collaborate with suppliers on innovative business models to source renewable energy
  - Invest jointly with suppliers in R&D of relevant low-carbon technologies

RELEVANCE OF THE INDICATOR

Supplier engagement is included in this ACT methodology for the following reasons:

- As every part of the building's LCA has a significant impact in terms of GHG emission, achieving decarbonization of the whole supply chain is also key to reach the ambitious goals in the buildings sector.
- Engaging suppliers through contract clauses and sales incentives is necessary to bring them on board.

SCORING RATIONALE

Because of data availability and complexity, a direct measure of the outcome of such engagement is not feasible at this time. It is often challenging to quantify the emissions reduction potential and outcome of collaborative activities with the supply chain. Therefore, the approach of a maturity matrix allows the analyst to consider multiple dimensions of supplier engagement and assess them together to calculate a single score for Supplier Engagement.

• BU 6.2 ACTIVITIES TO INFLUENCE SUPPLIERS TO REDUCE THEIR GHG EMISSIONS

SHORT DESCRIPTION OF INDICATOR

This indicator assesses the extent to which the company implements activities and initiatives that help, influence or otherwise enable suppliers to reduce their GHG emissions. The indicator aims to be a holistic measure of these activities and initiatives, with evidence of implementation and outcomes in the value chain across all products/services.

DATA REQUIREMENTS

The relevant data for this indicator are:

- List of initiatives implemented to influence suppliers to reduce their GHG emissions, green purchase policy or track record, supplier code of conduct

CDP Questionnaire 2023 mapping to this indicator:

- C12.1a
- C12.2
- C12.2a

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 5.11
- 5.11.1
- 5.11.2

- 5.11.5
- 5.11.7

HOW THE ASSESSMENT WILL BE DONE

The assessment will assign a maturity score based on the company's demonstration of recent and current activities and initiatives with its suppliers, expressed in a maturity matrix.

A company that is placed in the 'Low-carbon aligned' category will receive the maximum score. A company which is at a lower level will receive a partial score, with 0 points awarded for having no engagement at all.

This maturity matrix is indicative but does not show all possible options that can result in a particular score. The company's responses will be scrutinized by the analyst and then placed on the level in the matrix where the analyst deems it most appropriate.

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weighting
Associated score		***0%***	***25%***	***50%***	***75%***	***100%***	
What action levers* does the company use in practice to engage suppliers?	*Action levers* used in practice*	No evidence of action levers* used in practice.	Evidence of company using action lever(s) from ONE of the three engagement types (Information collection, Engagement & Incentivisation, Innovation & collaboration) used.*	Evidence of company using action levers from TWO of the three engagement types (Information collection, Engagement & Incentivisation, Innovation & collaboration) used.*	Evidence of company using action levers from ALL of the three engagement types (Information collection, Engagement & Incentivisation, Innovation & collaboration) used.*	Evidence of company using action levers from ALL of the three engagement types (Information collection, Engagement & Incentivisation, Innovation & collaboration) used.* Regular audits of the supplier	***30%***

						by the company or a representative.	
What is the scope of the recent and current activities in supplier engagement?	*Scope*	No suppliers engaged.	Suppliers engaged represent up to 30% of total procurement spend OR up to 30% of supplier-related scope 3 emissions.	Suppliers engaged represent 31-60% of total procurement spend OR 31-60% of supplier-related scope 3 emissions.	Suppliers engaged represent 61-90% of total procurement spend OR 61-90% of supplier-related scope 3 emissions.	Suppliers engaged represent over 90% of total procurement spend OR over 90% of supplier-related scope 3 emissions.	***40%***
How impactful has the company's supplier engagement been?	*Impact of engagement*†	No evidence of impact† of action levers used.	Some action levers used have qualitative evidence of impact†.	Almost all action levers used have qualitative evidence of impact†.	Some action levers used have quantitative evidence of impact†.	Almost all action levers used have qualitative and quantitative evidence of impact†.	***30%***

* Action levers: as per indicator 6.1 Strategy to influence suppliers to reduce their GHG emissions

† The metric used to measure impact depends on the action lever the metric refers to. Examples of "evidence of impact" might include, but are not limited to:

- Qualitative example: Feedback from suppliers saying that they appreciate and will use this new knowledge to start their journey on the low-carbon transition
- Quantitative example: Engaged suppliers have reduced their annual GHG emissions by X%
- Quantitative example: The percentage of engaged suppliers setting science-based targets has increased annually by X%
- Quantitative example: The percentage of engaged suppliers conducting scenario testing has increased annually by X%

RELEVANCE OF THE INDICATOR

Activities to influence suppliers are included in this ACT methodology for the following reasons:

- As every part of the building's LCA has a significant impact in terms of GHG emission, achieving decarbonization of the whole supply chain is also key to reach the ambitious goals in the buildings sector. Building occupants and building managers have also a key role to play in order to achieve the NZE scenario.
- Engaging suppliers through contract clauses and sales incentives is necessary to bring them on board.
- Beyond the supplier selection process, building companies have the capacity to influence suppliers through increasing demand for low-carbon building materials, renewable energy systems, and other energy efficient products, appliances and more. If companies develop green purchase volume, suppliers would be encouraged to adapt.

SCORING RATIONALE

Because of data availability and complexity, a direct measure of the outcome of such engagement is not feasible at this time. It is often challenging to quantify the emissions reduction potential and outcome of collaborative activities with the supply chain. Therefore, the approach of a maturity matrix allows the analyst to consider multiple dimensions of supplier engagement and assess them together towards a single score for all the activities related to Supplier Engagement.

MODULE 7: CLIENT ENGAGEMENT

Module 7, “Client engagement”, assesses the company’s engagement efforts to influence client behaviour to reduce its greenhouse gas emissions. This module assesses the company’s strategy to engage with its clients or customers to reduce emissions. It then assesses existing activities, initiatives and partnerships, launched by the company to influence clients to reduce emissions.

The type of client for this sector varies depending on the actor role and profile as shown below;

PROFILE	CLIENT
Lessor – Developer	Occupants/tenants
Lessor – Contractor	Occupants/tenants
Lessor – Manager	Occupants/tenants
Seller – Developer	Acquiring entities
Seller – Contractor	Acquiring entities
Contractor	Building owners including property developers
Manager	Building owners, Occupants/tenants

- **BU 7.1 STRATEGY TO INFLUENCE CLIENTS TO REDUCE THEIR GHG EMISSIONS**

SHORT DESCRIPTION OF INDICATOR

The company has a strategy, ideally governed by policy and integrated into business decision making, to influence, enable, or otherwise shift client choices and behaviour in order to reduce their GHG emissions.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Strategy to influence clients GHG emissions

- % of clients covered by the strategy
- Data on clients' choices and preferences towards reducing GHG emissions

CDP Questionnaire 2023 mapping to this indicator:

- C12.1b

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 5.11
- 5.11.3
- 5.11.9

HOW THE ASSESSMENT WILL BE DONE

The assessment will assign a maturity score based on the company's formalized, written strategy regarding its engagement with its customers, expressed in a maturity matrix.

A company that is placed in the 'Low-carbon aligned' category will receive the maximum score. A company which is at a lower level will receive a partial score, with 0 points awarded for having no engagement at all.

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weighting
Associated score		***0%***	***25%***	***50%***	***75%***	***100%***	
What is the scope of the client engagement strategy?	*Scope*	No strategy applied to any clients.	Strategy applied to up to 30% of revenues OR up to 30% of client-related scope 3 emissions.	Strategy applied to 31-60% of revenues OR 31-60% of client-related scope 3 emissions.	Strategy applied to 61-90% of revenues OR 61-90% of client-related scope 3 emissions.	Strategy applied to over 90% of revenues OR over 90% of client-related scope 3 emissions.	***30%***

To what extent are GHG emissions reduction/energy efficiency targets integrated in client engagement strategy?	*Emissions reduction/ energy efficiency targets*	GHG emissions reduction/ energy efficiency targets not included in client engagement strategy.		Unquantified GHG emissions reduction/ energy efficiency target(s) included in client engagement strategy.		Quantified GHG emissions reduction/ energy efficiency target(s) included in client engagement strategy.	***30%***
To what extent are other low-carbon transition-related recommendations* integrated in client engagement strategy?	*Other low-carbon transition-related recommendations**	No other low-carbon transition-related recommendations* included in client engagement strategy.				1 or more other low-carbon transition-related recommendations* included in client engagement strategy.	***10%***
What action leversᵀ are embedded in the company's strategy to encourage clients to reduce their emissions?	*Action leversᵀ embedded in strategy*	No action leversᵀ embedded in strategy.	Strategy includes action lever(s) from one of the four engagement types (Education/information sharing; Collaboration & innovation; Compensation; Customer motivation via marketing and choice architecture)ᵀ. .	Strategy includes action lever(s) from two of the four engagement types (Education/information sharing; Collaboration & innovation; Compensation, Customer motivation via marketing and choice architecture)ᵀ.	Strategy includes action lever(s) from three of the four engagement types (Education/information sharing; Collaboration & innovation; Compensation, Customer motivation via marketing	Strategy includes action lever(s) from all four of the four engagement types (Education/information sharing; Collaboration & innovation; Compensation, Customer motivation via marketing and choice architecture)ᵀ.	***30%***

					and choice architecture)† .		

* “Other low-carbon transition-related recommendations” refers to key aspects of a client’s low-carbon transition, beyond emissions reductions and targets, that companies can engage them on. These aspects can include performance indicators from any ACT performance modules, such as:

- Intangible investment
  - For example, the company recommends that its clients increase their R&D spend in low-carbon technologies.
- Management
  - For example, the company encourages its clients to conduct climate change scenario testing.
- Policy engagement
  - For example, the company encourages its clients to support relevant climate policies.
- Business model
  - For example, the company engages with its clients to develop new, low-carbon business models.

† Action levers must be embedded in a strategy document, and not be presented as examples of past/present actions/initiatives (such examples should be scored in indicator 7.2). “Action levers” include but are not limited to the following individual action levers, which are grouped into four engagement types (CDP, 2025), (SBTi, 2017):

- Education/information sharing
  - Run an engagement campaign to educate customers about the quantified climate change impacts of (using) your products, goods, and/or services
  - E.g., highlight that the low-carbon product answers to the purchasing rules of the client
  - E.g., promote the low-carbon product highlighting that their client could use it to answer the purchasing rules of their own clients (e.g., low-carbon aluminium to produce a car door).
  - Share environmental information (e.g., quantified GHG emissions) about your products and relevant certification schemes (i.e., Energy STAR)
  - Provide documents and tools
- Collaboration & innovation
  - Run a campaign to encourage innovation to reduce climate change impacts
  - Organize multi-party working group with meetings taking place at least annually
- Compensation/demand-side response
  - Provide rebates for environmentally friendly actions

- Deliver energy efficiency programs offering customers incentives to increase efficiency and decrease overall electricity demand

- Customer motivation via marketing and choice architecture (“nudging”)
  - Design marketing campaigns/choice architecture aiming to indirectly encourage customers to reduce their emissions

RELEVANCE OF THE INDICATOR

Strategies to influence clients are included in this ACT methodology for the following reasons:

- As every part of the building’s LCA has a significant impact in terms of GHG emission, achieving decarbonization of the whole supply chain is also key to reach the ambitious goals in the buildings sector. Building occupants and building managers have also a key role to play in order to achieve the NZE scenario.
- The downstream value chain can represent the largest source of emissions for some companies and clients should be engaged through a proper, ambitious strategy.
- Companies who wish to develop low-carbon buildings or more sustainable buildings need to be able to market them and convince their clients to adopt sustainable practices for these buildings.
- Companies interact with many stakeholders who use the buildings and should encourage these stakeholders to optimize the energy consumption of the buildings through a comprehensive and formalized policy.

SCORING RATIONALE

Because of data availability and complexity, a direct measure of the outcome of such engagement is not very feasible at this time. It is often challenging to quantify the emissions reduction potential and outcome of collaborative activities with the supply chain. Therefore, the approach of a maturity matrix allows the analyst to consider multiple dimensions of supplier engagement and assess them together towards a single score for a strategy related to Client Engagement.

• BU 7.2 ACTIVITIES TO INFLUENCE CLIENTS TO REDUCE THEIR GHG EMISSIONS

SHORT DESCRIPTION OF INDICATOR

This indicator assesses the extent to which the company implements activities and initiatives that help, influence or otherwise enable clients to reduce their GHG emissions. The indicator aims to be a holistic measure of these activities and initiatives, with evidence of implementation and outcomes in the value chain across all products/services.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Activities to influence clients GHG emissions

- % of clients covered by the activities
- Data on clients' choices and preferences towards reducing GHG emissions

CDP Questionnaire 2023 mapping to this indicator:

- C12.1b

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 5.11
- 5.11.3
- 5.11.9

HOW THE ASSESSMENT WILL BE DONE

The assessment will assign a maturity score based on the company's demonstration of recent and current activities and initiatives with its clients, expressed in a maturity matrix.

A company that is placed in the 'Low-carbon aligned' category will receive the maximum score. A company which is at a lower level will receive a partial score, with 0 points awarded for having no engagement at all.

This maturity matrix is indicative but does not show all possible options that can result in a particular score. The company's responses will be scrutinized by the analyst and then placed on the level in the matrix where the analyst deems it most appropriate.

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weighting
Associated score		***0%***	***25%***	***50%***	***75%***	***100%***	
What action levers* does the company use in practice to encourage clients to	*Action levers* used in practice*	No evidence of action levers* used in practice.	Evidence of company responding only to customer demand for more low-carbon products without	Evidence of company using action lever(s) from ONE of the four engagement types (Education/information sharing; Collaboration & innovation; Compensation;	Evidence of company using action lever(s) from TWO of the four engagement types (Education/information sharing; Collaboration & innovation; Compensation;	Evidence of company using action lever(s) from AT LEAST THREE of the four engagement types (Education/information sharing; Collaboration & innovation;	***30%***

reduce their emissions?			attempting to change the existing customer demand towards low-carbon alternatives.	Customer motivation via marketing and choice architecture).*	Customer motivation via marketing and choice architecture).*	Compensation; Customer motivation via marketing and choice architecture).*	
What is the scope of the recent and current activities in client engagement?	*Scope*	No clients engaged.	Clients engaged represent up to 30% of revenues OR up to 30% of client-related scope 3 emissions.	Clients engaged represent 31-60% of revenues OR 31-60% of client-related scope 3 emissions.	Clients engaged represent 61-90% of revenues OR 61-90% of client-related scope 3 emissions.	Clients engaged represent over 90% of revenues OR over 90% of client-related scope 3 emissions.	***40%***
How impactful has the company's client engagement been?	*Impact of engagement†*	No evidence of impact† of action levers used.	Some action levers used have qualitative evidence of impact†.	Almost all action levers used have qualitative evidence of impact†.	Some action levers used have quantitative evidence of impact†.	Almost all action levers used have qualitative and quantitative evidence of impact†.	***30%***

* Action levers must be presented as examples of past/present actions/initiatives and not be theoretical/embedded in a strategy document (such examples should be scored in indicator 7.1). "Action levers" include but are not limited to: as per indicator *7.1 Strategy to influence clients to reduce their GHG emissions.*

† The metric used to measure impact depends on the action lever the metric refers to. Examples of "evidence of impact" might include, but are not limited to:

- Qualitative example: Feedback from clients saying that they appreciate and will use this new knowledge to start their journey on the low-carbon transition
- Quantitative example: Evidence that engaged clients have reduced their use-phase GHG emissions by X%

RELEVANCE OF THE INDICATOR

Activities to influence clients are included in this ACT methodology for the following reasons:

- As every part of the building's LCA has a significant impact in terms of GHG emission, achieving decarbonization of the whole supply chain is also key to reach the ambitious goals in the buildings sector. Building occupants and building managers have also a key role to play in order to achieve the NZE scenario.
- The downstream value chain can represent the largest source of emissions for some companies and clients should be engaged through a proper, ambitious strategy.
- Companies who wish to develop low-carbon buildings or more sustainable buildings need to be able to market them and convince their clients to adopt sustainable practices for these buildings.
- Companies interact with many stakeholders who use the buildings and should encourage these stakeholders to optimize the energy consumption of the buildings through a comprehensive and formalized policy.

SCORING RATIONALE

Because of data availability and complexity, a direct measure of the outcome of such engagement is not very feasible at this time. It is often challenging to quantify the emissions reduction potential and outcome of collaborative activities with the supply chain. Therefore, the approach of a maturity matrix allows the analyst to consider multiple dimensions of supplier engagement and assess them together towards a single score for all the activities related to Client Engagement.

MODULE 8: POLICY ENGAGEMENT

Module 8, “Policy engagement”, assesses how the company influences the policy agenda, whether through membership of trade associations and lobbying organisations, support for/obstruction of climate policies, and engagement with local authorities.

- **BU 8.1 COMPANY POLICY ON ENGAGEMENT WITH ASSOCIATIONS, ALLIANCES, COALITIONS OR THINKTANKS**

SHORT DESCRIPTION OF INDICATOR

The company has a policy on what action to take when associations, alliances, coalitions or thinktanks of which it is a member or to which it provides support are found to be opposing “climate-friendly” policies.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Public climate change policy positions
- Description of this policy (scope & boundaries, responsibilities, process to monitor and review)
- Associations, alliances, coalitions or thinktanks that are likely to take a position on climate change legislation
- External sources of data shall also be used for the analysis of this indicator (e.g. RepRisk database, InfluenceMap, press news, actions in standard development)

CDP Questionnaire 2023 mapping to this indicator:

- C12.3b

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 4.11
- 4.11.2

HOW THE ASSESSMENT WILL BE DONE

The analyst will evaluate the description and evidence of the policy on associations, alliances, coalitions or thinktanks of which the company is a member or to which it provides support, for the presence of best practice elements and consistency with the other reported management indicators. The company description and evidence will be compared to the maturity matrix developed to guide the scoring and a greater number of points will be allocated for elements indicating a higher level of maturity.

Best practice elements to be identified in the test/analysis include:

- A publicly available policy is in place
- The scope of the policy covers the entire company and its activities, and all associations, alliances, coalitions or thinktanks of which it is a member or to which it provides support. (Consideration should be given as to whether these associations, alliances, coalitions and thinktanks in turn are members of or otherwise support other such organisations that have climate-negative activities or positions).
- The policy sets out what action is to be taken in the case of inconsistencies
- Action includes option to terminate membership of the associations, alliances, coalitions or thinktanks
- Action includes option of publicly opposing or actively countering the association, alliance, coalition or thinktank's position
- Responsibility for oversight of the policy lies at top level of the organization, and implementation lies at senior management level
- There is a process to monitor and review association, alliance, coalition and thinktank positions

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weightings
Associated score		***0%***	***25%***	***50%***	***75%***	***100%***	
What is the scope covered by the engagement policy? Is the policy publicly available?	*Transparency and scope*	Does not cover the entire company (including all of its subsidiaries and business areas, and all operational jurisdictions, i.e., entities within its reporting boundary) or all associations, alliances and coalitions of which it is a member. Is not		Covers the entire company (including all of its subsidiaries and business areas, and all operational jurisdictions, i.e., entities within its reporting boundary), and all associations, alliances and coalitions of which it is a member. Is not		Covers the entire company (including all of its subsidiaries and business areas, and all operational jurisdictions, i.e., entities within its reporting boundary), and all associations, alliances and coalitions of which it is a member. Is publicly available.	***40%***

		publicly available.		publicly available.			
Does the company have a review process of associations, alliances, coalitions or thinktanks of which it is a member or to which it provides support?	*Review process*	No process to monitor and review association, alliance, coalition and thinktank climate policy positions exists.	A process to monitor and review association, alliance, coalition and thinktank climate policy positions exists. The process is not necessarily implemented.	A process to monitor and review association, alliance, coalition and thinktank climate policy positions exists. The process is implemented, but responsibility for oversight of the process lies below Level 1*, and implementation of the process lies below Level 3*.	A process to monitor and review association, alliance, coalition and thinktank climate policy positions exists. Either responsibility for oversight of the process lies at Level 1*, or implementation of the process lies at Level 3 or above*.	A process to monitor and review association, alliance, coalition and thinktank climate policy positions exists. Responsibility for oversight of the process lies at Level 1*, and implementation of the process lies at Level 3 or above*.	***40%***
Does the company have an action plan addressing what action to take when	*Action plan*	No action plan exists.	Action plan sets out which actions are to be taken when associations, alliances,	Action plan includes making public statements challenging associations,	Action plan includes engaging with associations, alliances, coalitions or	Action plan includes withdrawing funding for/suspending or ending membership of the association, alliance, coalition or	***20%***

associations, alliances, coalitions or thinktanks of which it is a member or to which it provides support are found to be opposing "climate-friendly" policies?†			coalitions or thinktanks are found to be opposing "climate-friendly" policies. Action plan does not include any of the actions listed†.	alliances, coalitions and thinktanks*. Does not include either of the other actions listed†.	thinktanks to change their position†. May include making public statements, but does not include withdrawing funding for/suspending or ending membership†.	thinktank*. May include both other actions listed†.	

Further guidance for each level of seniority is given below:

LEVEL 1

- Highest level of accountability or decision-making within the organization, with responsibility for overall organizational or corporate strategic direction.
- Examples: Board, sub-set of the Board, Chief Executive Officer (CEO)

LEVEL 2

- Person/committee that is one step in the corporate structure from the highest level of decision-making of the organization (i.e. reports to or is accountable to Level 1). Inputs into organizational strategy but does not make decisions on it. May have responsibility and accountability for business unit strategy formation and implementation of one or more business units.
- Examples: Vice President, Director, other C-Suite officer (e.g., Chief Financial Officer (CFO), Chief Procurement Officer (CPO), Chief Risk Officer (CRO), Chief Operating Officer (COO), Chief Sustainability Officer (CSO), etc.), other committee appointed by the Board

LEVEL 3

- Person/committee that is two steps in the corporate structure from the highest level of decision-making of the organization. May have responsibility and accountability for business unit strategy formation and implementation for one business unit.
- Examples: Manager, Senior Manager

LEVEL 4

- Person/committee that is three or more steps in the corporate structure from the highest level of decision-making of the organization. No responsibility or accountability for business unit strategy development.
- Examples: Officer, Senior Officer

Actions a company can take when associations, alliances, coalitions or thinktanks of which it is a member or to which it provides support are found to be opposing "climate-friendly" policies follow a hierarchy of severity, as follows (source: (Responsible climate lobbying, 2022), (AAA Framework for Climate Policy Leadership, n.d.)):

- Making public statements challenging associations, alliances, coalitions and thinktanks. For example, the company speaks out, publicly distancing itself from statements or lobbying against climate policy by associations, alliances, coalitions or thinktanks of which it is a member or to which it provides support. The company explains how these statements or lobbying are inconsistent with its own emissions reduction goals and with its support for climate policy.
- Engaging with associations, alliances, coalitions or thinktanks to change their position. For example, the company works to end lobbying against climate policy through transparent and time-bound engagement with those organizations.
- Withdrawing funding for/suspending or ending membership of the association, alliance, coalition or thinktank. For example, where attempts to change an association's position prove ineffective or insufficient, the company discontinues its membership or withdraws funding from the association.

RELEVANCE OF THE INDICATOR

Associations, alliances, coalitions and thinktanks are a key instrument by which companies can indirectly influence policy on climate. thus, when associations, alliances, coalitions and thinktanks take positions, which are negative for climate, companies need to take action to ensure that this negative influence is countered or minimized.

This indicator is consistent with the ACT Framework and ACT Guidelines and common to the other sectoral methodologies.

• BU 8.2 ASSOCIATIONS, ALLIANCES, COALITIONS AND THINKTANKS SUPPORTED DO NOT HAVE CLIMATE-NEGATIVE ACTIVITIES OR POSITIONS

SHORT DESCRIPTION OF INDICATOR

The company is not on the Board of, providing funding beyond membership to, or otherwise supporting any associations, alliances, coalitions or thinktanks that have climate-negative activities or positions.

DATA REQUIREMENTS

The relevant data for this indicator are:

- The reporter shall provide details of those associations, alliances, coalitions and thinktanks that are likely to take a position on climate change legislation
- The company should attach supporting documentation, if this exists, giving evidence

External sources of data shall also be used for the analysis of this indicator:

- RepRisk database,
- Climate Action 100+
- Ellen Macarthur Foundation
- Press news
- EP100 – Climate Group (www.theclimategroup.org/project/ep100)
- Low-carbon Technology Partnerships initiative (www.wbcsd.org/Programs/Climate-and-Energy/Climate/Low-Carbon-Technology-Partnerships-initiative)

CDP Questionnaire 2023 mapping to this indicator:

- C12.3b
- C12.3c

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 4.11
- 4.11.2

HOW THE ASSESSMENT WILL BE DONE

The list of associations, alliances, coalitions and thinktanks declared in the CDP data and other external sources relating to the company is assessed against a list of associations, alliances, coalitions and thinktanks that have climate-negative activities or positions (InfluenceMap is usually used for this (InfluenceMap, n.d.)). (Consideration should be given as to whether these associations, alliances, coalitions and thinktanks in turn are members of or otherwise support other such organisations that have climate-negative activities or positions.) Such activities or positions could include lobbying against climate policies and practices. The results will be compared to any policy described in 8.1 (“Company policy on engagement with associations, alliances, coalitions or thinktanks”).

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weighting

Associated score		0%	25%	50%	75%	100%	
Does the company support associations, alliances, coalitions or thinktanks that have climate negative activities/positions?	*Membership/funding*	The company is on the board or provides funding beyond membership to associations, alliances, coalitions and/or thinktanks that have climate – negative activities or positions		The company is not on the board or providing funding beyond membership of any associations, alliances, coalitions or thinktanks that have climate-negative activities or positions. Company may be a member.		The company is not a member of or providing funding for any associations, alliances, coalitions or thinktanks that have climate-negative activities or positions	***100%***

RELEVANCE OF THE INDICATOR

Associations, alliances, coalitions and thinktanks are key instruments by which companies can indirectly influence policy on climate. Thus, participating in associations, alliances, coalitions and thinktanks which actively lobby against climate-positive legislation is a negative indicator and likely to obstruct low-carbon transition.

- **BU 8.3 POSITION ON SIGNIFICANT CLIMATE POLICIES**

SHORT DESCRIPTION OF INDICATOR

The company is not opposed to any significant climate relevant policy and/or supports climate-friendly policies.

DATA REQUIREMENTS

The relevant data for this indicator are:

- The company should attach supporting documentation, if this exists, giving evidence on the position of the company on significant climate policies (public statements, etc.).
- The company shall disclose details of the issues on which it has been directly engaging with policy makers and its proposed legislative solution.

CDP Questionnaire 2023 mapping to this indicator:

- C12.3a

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 4.11
- 4.11.1

External sources of data shall also be used for the analysis of this indicator (e.g. RepRisk database, press news, actions in standard development)

HOW THE ASSESSMENT WILL BE DONE

The analyst evaluates the description and evidence on company position on relevant climate policies for the presence of best practice elements, negative indicators and consistency with the other reported management indicators. The company description and evidence will be compared to the maturity matrix developed to guide the scoring and a greater number of points will be allocated for elements indicating a higher level of maturity.

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weighting
Associated score		***0%***	***25%***	***50%***	***75%***	***100%***	
What is the position of the company on significant climate policies?	*Climate policy support*	Direct opposition to climate policies (including where third-party claims are found).	No reported direct opposition to climate policies.	Publicly supports significant climate policies.	Publicly supports significant climate policies. Publicly commits to international low-carbon commitments, such as the Paris Agreement.	Publicly supports significant climate policies. Publicly commits to international low-carbon commitments, such as the Paris Agreement. Actively participates in/leads sectoral/cross-sectoral initiatives	***60%***

						against climate change*.	
Does the company have a monitoring and review process to ensure that its policy positions are consistent with the goals of the Paris Agreement?	*Monitoring and review process*	No monitoring and review process to ensure that the company's policy positions are consistent with the goals of the Paris Agreement exists.	A monitoring and review process to ensure that the company's policy positions are consistent with the goals of the Paris Agreement exists. The process is not necessarily implemented.	A monitoring and review process to ensure that the company's policy positions are consistent with the goals of the Paris Agreement exists. The process is implemented, but oversight of the process lies below Level 1†, and implementation of the process lies below Level 3†.	A monitoring and review process to ensure that the company's policy positions are consistent with the goals of the Paris Agreement exists. Either oversight of the process lies at Level 1†, or implementation of the process lies at or above Level 3†.	A monitoring and review process to ensure that the company's policy positions are consistent with the goals of the Paris Agreement exists. Oversight of the process lies at Level 1†, and implementation of the process lies at or above Level 3†.	***40%***

Examples of sectoral/cross-sectoral initiatives against climate change might include, but are not limited to:

- Science-Based Targets Initiative (SBTi)
- Leadership Group for Industry Transition (LeadIT)
- Mission Possible Partnership (MPP)

Further guidance for each level of seniority is given below:

LEVEL 1

- Highest level of accountability or decision-making within the organization, with responsibility for overall organizational or corporate strategic direction.
- Examples: Board, sub-set of the Board, Chief Executive Officer (CEO)

LEVEL 2

- Person/committee that is one step in the corporate structure from the highest level of decision-making of the organization (i.e. reports to or is accountable to Level 1). Inputs into organizational strategy but does not make decisions on it. May have responsibility and accountability for business unit strategy formation and implementation of one or more business units.
- Examples: Vice President, Director, other C-Suite officer (e.g., Chief Financial Officer (CFO), Chief Procurement Officer (CPO), Chief Risk Officer (CRO), Chief Operating Officer (COO), Chief Sustainability Officer (CSO), etc.), other committee appointed by the Board

LEVEL 3

- Person/committee that is two steps in the corporate structure from the highest level of decision-making of the organization. May have responsibility and accountability for business unit strategy formation and implementation for one business unit.
- Examples: Manager, Senior Manager

LEVEL 4

- Person/committee that is three or more steps in the corporate structure from the highest level of decision-making of the organization. No responsibility or accountability for business unit strategy development.
- Examples: Officer, Senior Officer

RELEVANCE OF THE INDICATOR

Policy and regulation that acts to promote transition to a low-carbon economy is key to the success of the transition. Companies should not oppose effective and well-designed regulations in these areas but should support them.

• BU 8.4 COLLABORATION WITH LOCAL PUBLIC AUTHORITIES

SHORT DESCRIPTION OF INDICATOR

This indicator evaluates the extent to which the company collaborates with local public authorities to achieve local emissions reductions. While indicator 8.3 “Position on significant climate policies” relates to national and international policies, this indicator assesses the company’s engagement with sub-national public authorities, both in terms of climate-related policy engagement and the establishment of climate-related partnerships.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Participation in meetings/collaborations with public authorities/local actors
- Contracts with public authorities/local actors

CDP Questionnaire 2023 mapping to this indicator:

- C12.3
- C12.3a

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 4.11
- 4.11.1

HOW THE ASSESSMENT WILL BE DONE

The analyst evaluates the description and evidence of the company's collaboration with local authorities for the presence of best-practice elements. Collaboration generally falls into two main categories: policy engagement and collective action/partnerships. Policy engagement could range from dialogue between the company and local authority around the development of new climate-related policies, to participation in local pilot programs to test these policies, to large-scale support for and implementation of these policies. Collective action/partnerships could range from participation in working groups, roundtables, ongoing initiatives, events and/or platforms for local authorities and companies to advance specific issues related to climate change/emissions reduction, to large-scale public-private partnerships (PPPs) with a climate change/emissions reduction focus.

In general, a partnership can only be classed as such if it goes beyond a mere contract between the public authority and the company. It must be a collaboration that works to improve the current system/process and displays additionality (the collaboration reduces GHG emissions beyond business as usual, meaning the reductions would not have happened had the collaboration not been implemented). For example, a contract between a transport operator and a public authority would not be enough to be classed as a partnership by itself, whereas a partnership to reduce local GHG emissions by increasing the share of electric/hybrid/hydrogen buses and promoting greater uptake of public transport within the local area would be sufficient.

While the thematic areas of these collaborations will vary depending on the sector assessed, they should generally fall into one or more of four broad categories:

- Electrification and energy (including demand management and grid flexibility)
- Transport

- Circular economy
- Buildings

In each case, the level of maturity will depend on the level of commitment from the company, and whether there is evidence that the collaboration has been successful in achieving local emissions reductions.

The company description and evidence are compared to the maturity matrix developed to guide the scoring and a greater number of points are allocated for elements indicating a higher level of maturity.

Question	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weighting
Associated score	***0%***	***25%***	***50%***	***75%***	***100%***	
Does the company collaborate with and support local authorities to achieve local emissions reductions?	No evidence that the company is collaborating with and supporting local authorities to achieve local emissions reductions, other than respecting its contractual obligations, if any. Or Third-party claims are found showing that the company is not complying with local climate policies	The company engages in dialogue with local authority/authorities to design future climate-related policies/partnerships	The company actively participates in small-scale pilot/short-term/one-off programs with local authority/authorities to test/implement climate-related policies/partnerships.	The company is a significant partner* (alongside local authority/authorities and other stakeholders) in the implementation of long-term, climate-related policies/partnerships. The company has measured and disclosed an emissions reduction as a result of the policy/partnership being implemented.	The company is a significant partner* (alongside local authority/authorities and other stakeholders) in the implementation of long-term, climate-related policies/partnerships. The company has measured and disclosed an emissions reduction as a result of the policy/partnership being implemented.	***100%***

					The company has a policy to increase such collaboration in more of its operational jurisdictions, and is taking concrete steps towards this (e.g., engaging in dialogue, participating in pilot programs, implementing policies/partnerships with local authorities).†	

- A company can be classed as a "significant partner" if the policy/partnership would not exist, or be significantly smaller/less successful, without the company's involvement. The company must be one of the few largest or most invested stakeholders in the policy/partnership.
- Analysts should take into account the size of the company assessed. For example, companies operating in a single jurisdiction are not expected to be involved in collaboration with public authorities outside of that jurisdiction, and could still score Low-carbon aligned if they met each of the other criteria (for example, if they had demonstrated emissions reductions as a result of the policy/partnership being implemented, and had a policy to become involved in more collaboration within their operational jurisdiction).

RELEVANCE OF THE INDICATOR

Collaboration with local authorities can be a key instrument by which companies can indirectly influence policy on climate on their territory. Thus, participating actively in local dialogues shows leadership in climate actions and can significantly help climate policies enforcement.

MODULE 9: BUSINESS MODEL

A company may need to transition and/or replace its existing business model(s) to remain profitable in a low-carbon economy. The company's future business model(s) should enable it to decouple financial results from GHG emissions, in order to meet the constraints of a low-carbon transition while continuing to generate value. This can be done by developing new, low-carbon business models outside the core business of the company, while decarbonizing or terminating existing, high-carbon business models. This should lead to the company's revenue being generated entirely from low-carbon products and services, according to the ACT definition of "low-carbon" for a particular sector.

This module aims to identify both:

- The "big picture" view of the company's low-carbon transition, by assessing its overall share of revenue from low-carbon products and services and the trend in share over time (indicator 9.1);
- The detail of the specific changes it is making to its business: introducing/expanding new, low-carbon business models; and decarbonizing/terminating its existing, high-carbon business models (indicator 9.2).

It is recognised that transition to a low-carbon economy, with the associated change in business models, will take place over a number of years. The analysis will thus seek to identify and reward projects at an early stage as well as more mature business models.

While each sector methodology contains a list of low-carbon business models and activities that are considered relevant to the assessment, the following definitions provide further guidance to analysts:

DEFINING "LOW-CARBON BUSINESS MODEL"

A business model is a plan for performing activities that transform inputs (labour, capital, equipment, land, buildings, materials, and information) into outputs (products and services) that provide added value to customers and create value for the company. It includes sources of revenue, the intended customer base, and details of financing.

A *low-carbon* business model is one that is based primarily around a set of inputs, activities and/or outputs which are considered to contribute substantially to climate change mitigation.[1] There are two main categories of business model that can be classed as low-carbon:

- *Aligned/transitional* business models. These are either widely recognised as low-carbon solutions (for instance, by recognised taxonomies of sustainable activities), or have GHG emissions that are substantially lower than the sector or industry average, do not hamper the development and deployment of low-carbon alternatives, do not

[1] Definitions are partially based on the EU Taxonomy regulation: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020R0852

lead to a lock-in of assets incompatible with the objective of climate change mitigation, considering the economic lifetime of those assets, and do no significant harm to the environment.

- *Enabling/contribution* business models. These are business models that enable other activities/companies/sectors to make a substantial contribution to climate change mitigation, provided that the enabling business models do not lead to a lock-in of assets incompatible with the objective of climate change mitigation, considering the economic lifetime of those assets.

CATEGORIES OF LOW-CARBON BUSINESS MODEL AND LOW-CARBON BUSINESS ACTIVITIES

The relevant categories of low-carbon business model and low-carbon business activities for the sector are listed below. The minimum requirement for points to be awarded is that some level of exploration of one or more of these relevant business areas has started. This could include participation in collaborations, pilot projects, or research funding. These business models have been defined in line with the EU Taxonomy for Sustainable Activities. The relevance of each business model for the different actors in scope of this methodology has been included. The business seeks to encompass the different phases of a building's lifecycle.

Energy performance guarantees

- Offer low-carbon buildings with energy performance guarantees (high importance)
- Offer renovation services with guaranteed energy performance savings (high importance)
- Offer low-carbon buildings with energy services (renewable production, electricity storage, …) over 10-15 years (high importance)

Production and storage of low-carbon energy

- Monetise the production of low-carbon energy in real estate assets through direct sales, tenant energy services, or virtual power plants (medium importance)
- Storage of energy and sales of peak hours (medium importance)

Shared economy business models

- Design of multi-purpose buildings (medium importance)
- Design of buildings for collaborative use (coworking, co-living, etc.) (medium importance)
- Flexible space monetization platform (use underutilized real estate and redistributing access dynamically to multiple users, maximizing revenue per square meter) (medium importance)
- Sublet parcels of rooftop or ground-level green space to individuals, restaurants, or schools on seasonal subscriptions (low importance)
- Offer vehicle sharing model for tenants (car-pooling platform, bicycle-sharing systems, maintenance, ...) (low importance)
- Offer electric vehicle re-charging services (low importance)

Revenue increase via the adoption of circular economy

- Cost reduction via the reduction of primary material use (medium importance)
- Upcycle construction materials and waste to optimize construction costs (low importance)

Over property technology models

- Provide sensor networks and software that track real-time space utilisation, e.g., room occupancy, foot traffic and feed dashboards to facilities managers (low importance)

DEFINING "LOW-CARBON BUSINESS ACTIVITIES"

A business activity is anything a company does in order to carry out its business model, i.e., as part of the process of transforming inputs into outputs.

A low-carbon business activity is one which is considered to contribute substantially to climate change mitigation (following the definition in the section above, "Defining 'low-carbon business model'"). A list of relevant low-carbon business activities is listed within each sector methodology.

This is particularly relevant in indicator 9.2, dimension 2 ("Actions to decarbonise activities within existing business models"), since this dimension assesses the specific actions the company introduces in order to decarbonize the activities that make up its existing business model.

Examples of low-carbon business activities for this sector include:

Activities to decarbonise building use

- Integrating solar PV, heat pumps, battery storage, or district energy into building assets (high importance)
- Foster deep-energy renovation in existing building (high importance)
- Integrate vehicle to grid technology in building assets (low importance)
- Install battery storage in building assets (medium importance)
- Deployment of green roofs to improve thermal comfort and reduce energy needs indoors (medium importance)
- Use of passive-architecture techniques/strategies to reduce energy consumptions and increase the building energy efficiency, such as (medium importance):
  - double glass windows and adjustable summer shades to avoid overheating through windows' heat transfer
  - use of insulating materials on external walls, floors and ceilings (eg. wool and/or fiberglass, foam) preventing unwanted gains or losses of energy/heat
  - improvement of natural cross-ventilation of indoors spaces to remove moist and excess of heat
  - for new buildings, privilege orientations that maximizes natural light during winter seasons while minimizing it on summer periods

Activities to decarbonise building construction

- Material shift to reduce the use of carbon-intensive materials: natural fibres replace fossil-based chemicals, timber substitutes cement (medium importance)
- Increase the shares of green steel and low/zero clinker cement for construction of buildings (medium importance)

Activities to optimise the shared use of buildings

- Leasing space from and sub-letting it flexibly to multiple tenants — daily, weekly, or monthly (medium importance)
- Rent of unused spaces at specific schedule (on the weekend for offices) or on a temporary basis (low importance)
- Rent of green spaces dedicated to urban agriculture (low importance)

Activities to increase circularity

- Reduction of primary raw material in construction operation through expanding the use of secondary raw materials (medium importance)
- Developments of construction designs/techniques to support circularity via the incorporation of concepts for design for adaptability and deconstruction (medium importance)
- Storage of pluvial waters for systems' maintenance (low importance)

DEFINING "LOW-CARBON PRODUCTS AND SERVICES"

A low-carbon product or service is the output of a low-carbon business model (following the definition in the section above, "Defining 'low-carbon business model'"). Low-carbon products / services are provided by an economic activity that contributes substantially to climate change mitigation, as defined in the European taxonomy. The following sectoral examples are provided:

- Low-carbon product could be the offering of a low-carbon energy building, while a low-carbon service could be the sale of excess renewable energy stored in building assets to the electricity grid.
- Low-carbon product could be a renovated building with strict energy standards, while a low-carbon service would be to offer vehicle re-charging services for tenants

CALCULATION OF THE SCORE

- Indicator 9.1: The analyst uses the maturity matrix to calculate the company score for indicator 1.
- Indicator 9.2: The analyst identifies all relevant business model changes the company is making and scores them against the maturity matrix in the relevant dimension.
- Business model identification must reflect the company's position in the real-estate value chain, consistent with the emissions profiles defined in the Boundaries section (4). A company with no construction activities or building ownership, for instance, should not be evaluated under business models such as providing energy performance

guarantees. The evaluation scope must, to the best of abilities, match the company's actual value chain position. If the company has introduced multiple new, low-carbon business models within the last 5 years that match the company's actual value chain position, these should all be scored individually in dimension 1. If the company is also expanding another low-carbon business model, which it started before RY-5, this should also be scored in dimension 1. If the company is taking action to decarbonise several of the main activities that form its existing, high-carbon business model, these should all be scored individually in dimension 2.

- The final score for indicator 9.2 is calculated based on the highest scoring example from each dimension.
- For example, if the analyst identifies two examples of business models for dimension 1 and two examples of decarbonisation actions for dimension 2, then the highest-scoring examples from each of these dimensions should be taken and contribute towards the final score for the indicator.

- The weightings for the indicator 9.2 dimensions are as follows:
  - Dimension 1: 50%
  - Dimension 2: 50%

Since companies rarely span all defined business models, the analysis should focus more on the depth and comprehensiveness of growth plans for the business model that best fits the company's value chain position, and the range of actions supporting that growth. Hence the following scoring rational is suggested based on the number of business models and relevant categories the company is active in:

One business models category:

- If only one activity supporting the change in business models is identified, the maximum score for the indicator is 33%
- If two activities supporting the change in business models are identified, the maximum score for the indicator is 66%
- If three or more activities supporting the change in business models are identified, the maximum score for the indicator is 100%

Two or more business model categories:

- If only one activity supporting each business model is identified by the analyst, the maximum score for the indicator is 50%
- If at least two activities supporting each of the business models are identified by the analyst, the maximum score for the indicator is 100%

Indicator weightings:

- There are two routes to calculating the indicator weightings:
- The company scores 80% or above in indicator 9.1. In this case, the indicator weightings are as follows:
  - Indicator 9.1: 70%
  - Indicator 9.2: 30%

- The company scores below 80% in indicator 9.1. In this case, the indicator weightings are as follows:
  - Indicator 9.1: 50%
  - Indicator 9.2: 50%

SCORING RATIONALE

- The rationale for adjusting the weighting of indicator 9.1 and indicator 9.2 based on the company's score in indicator 9.1, is that companies a high share of low-carbon products and services (i.e., scoring 80% or above on indicator 1) have less need to develop new, low-carbon business models and decarbonising or phasing out existing ones, than companies with a low share of low-carbon products and services. As such, indicator 9.1 is weighted highly for companies with a high share of low-carbon products and services, while both indicators are weighted equally for companies with a lower share of low-carbon products and services.
- The rationale for applying a scoring cap for indicator 9.2 depending on how many of the relevant categories of low-carbon business model/activity the company is active in, lies in the fact that the ACT methodology identified several key areas that companies should be active in, in order to facilitate an effective low-carbon transition for the sector. For example, it was identified that Oil & Gas companies must be active in driving the energy mix to low-carbon, contributing to the reduction of energy demand, and developing CCS, CCUS and negative emissions technologies. Only if examples from all three areas are identified, can the company score 100% for this indicator.
- The rationale for the weightings of indicator 9.2 dimensions is that the module is designed to assess the company's transition into new, low-carbon business models outside of its core business model, in order to diversify its activities and stay profitable in a low-carbon economy. For this reason, dimension 1, "Creation/expansion of low-carbon business models" has the highest weighting within indicator 9.2 dimensions (50%). It is also recognised that companies must not only branch out into new, low-carbon business models, but must also take action to decarbonise their existing, core activities, hence the inclusion of dimension 2, "Actions to decarbonise activities within existing business models". However, since company progress on decarbonisation is already partially taken into account in other ACT performance indicators (such as trend in past and future emissions intensity, low-carbon investment, etc.), this dimension is given a low weighting (10%). Finally, the necessary shift towards low-carbon business models must in many cases be accompanied by a commitment to terminate or phase out a company's existing, high-carbon business models that may not be easily decarbonised. For this reason, dimension 3 has a relatively higher weighting (40%).

• EU 9.1 REVENUE FROM LOW-CARBON PRODUCTS AND/OR SERVICES

SHORT DESCRIPTION OF INDICATOR

This indicator assesses the company's overall share of revenue from low-carbon products and services, as well as whether this share is increasing over time.

DATA REQUIREMENTS

The relevant data for this indicator are (from RY-3 to RY):

- Revenue from low-carbon products and services, and total revenues, for each year
- Description of the types of products and services the company considers to be low-carbon

CDP Questionnaire 2023 mapping to this indicator:

- C4.5
- C4.5a

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 7.74

The analyst should check that the company's definition of low-carbon products and services is aligned with the ACT definition for the Buildings sector. If it does not align, then the analyst must decide how to adjust the value.

Public sources of data used for the analysis of this indicator include, but are not limited to:

- Company financial statements showing breakdown of revenue by business segment.

HOW THE ASSESSMENT WILL BE DONE

The analyst should identify the share of the company's total revenue from low-carbon products and/or services in the reporting year (see the section "Defining 'low-carbon products and services'"). They should then identify the share three years before the reporting year (RY-3) in order to calculate the annual average change in share during this time period.

The sources of information used to identify the share of low-carbon revenue in the RY and RY-3 should be directly comparable (e.g., all CDP data or all financial statement data).

For the second subdimension "Trend over time", if no actual figures/values are identified by the analyst, but there is clear evidence that the company is increasing its share of low-carbon products and/or services (e.g., if the company states this qualitatively), then "Advanced" should be assigned.

Question	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weighting
Associated score	***0%***	***25%***	***50%***	***75%***	***100%***	

Share of revenue from low-carbon products and/or services* in reporting year	≤ 25% of the company's revenue is from low-carbon products and/or services	26 to 50% of the company's revenue is from low-carbon products and/or services	51 to 75% of the company's revenue is from low-carbon products and/or services	76 to 95% of the company's revenue is from low-carbon products and/or services	> 95% of the company's revenue is from low-carbon products and/or services	***70%***
Trend over time (RY-3 to RY)	Share of the company's revenue from low-carbon products and services is decreasing by at least 1% on average annually (RY-3 to RY)	-	Share of the company's revenue from low-carbon products and services is not changing significantly (increasing or decreasing by less than 1% on average annually) (RY-3 to RY)	-	Share of the company's revenue from low-carbon products and services is increasing by at least 1% on average annually (RY-3 to RY)	***30%***

See the section "Definition of low-carbon products and services" in the module 9 introduction.

RELEVANCE OF THE INDICATOR

See module 9 introduction.

- **EU 9.2 CHANGES TO BUSINESS MODELS**

SHORT DESCRIPTION OF INDICATOR

This indicator assesses the specific changes the company is making to its business to achieve its low-carbon transition. These changes include introducing and expanding new, low-carbon business models, and decarbonizing or terminating existing, high-carbon business models.

DATA REQUIREMENTS

The relevant data for this indicator are:

- For each business model: description, size (such as a percentage of total FTE, revenue, or relevant activity-based metric of size), and growth potential and timelines
- For each decarbonisation action: description, growth potential and timelines, life cycle phases impacted

- For high-carbon business models: commitments to terminate/phase out existing, termination/phase-out date, percentage of existing model to be terminated/phased out

CDP Questionnaire 2023 mapping to this indicator:

- C2.4
- C2.4a
- C4.3
- C4.3a
- C4.3b

CDP Questionnaire 2024 and 2025 mapping to this indicator:

- 3.6
- 7.55

Public sources of data used for the analysis of this indicator include, but are not limited to:

- Company financial/sustainability reports
- Company low-carbon transition plan
- External sources to determine the importance of each business model for the global low-carbon transition. For example:
- ETP Clean Energy Technology Guide – Data Tools - IEA;
- Protecting People and Planet | Systems Change Lab;
- Sector decarbonisation reports identifying the key action levers for a sector to decarbonise.

HOW THE ASSESSMENT WILL BE DONE

The assessment is based on two dimensions. The analyst scores each of the company's decarbonisation initiatives (including creation/expansion of low-carbon business models and actions to decarbonise activities within existing business models) against the relevant dimension. The section "Calculation of the score" explains how the final score for the indicator is calculated.

CATEGORIES OF LOW-CARBON BUSINESS MODEL AND LOW-CARBON BUSINESS ACTIVITY

The relevant categories of low-carbon business model and low-carbon business activities for the sector will be listed here. At least one example from each category must be identified by the analyst for the company to be eligible to score 100% in this indicator (see the section "Calculation of the score" for more detail).

DIMENSION 1 – CREATION/EXPANSION OF LOW-CARBON BUSINESS MODELS (50%)

This dimension assesses the size and scheduled growth of new (started *within* RY-5) and existing (started *before* RY-5) low-carbon business models, as well as the business models' relative importance for the global low-carbon transition. The weighting of the subdimensions within the maturity matrix depend on whether the business model in question is new or existing – new business models are scored on the first subdimension ("Size of business model (if started *within* RY-5)") with a 40% weighting, with the second subdimension ("Size of business model (if started before RY-5)") given a 0% weighting. For existing business models, this weighting is reversed. The rationale for having distinct subdimensions for new and existing low-carbon business models is that newer business models are not expected to be as large as existing ones, meaning the thresholds differ between the subdimensions.

Since ACT's focus is on company-level decarbonisation, "creation/expansion of low-carbon business models" may include acquiring existing low-carbon assets or business divisions from another entity, as well as organically growing a new, low-carbon business model within the company.

- For example: A developer offers low-carbon buildings with energy performance guarantees; a lessor offers electric vehicle re-charging services to its tenants; a construction company upcycles construction materials and waste to optimize construction costs.

Question	Basic	Advanced	Low-carbon aligned	Weighting
Associated score	***0%***	***50%***	***100%***	
Size of business model (if started within RY-5)	Business model represents <1% of total FTE, revenue, or relevant activity-based metric of size	Business model represents 1 to 5% of total FTE, revenue, or relevant activity-based metric of size	Business model represents >5% of total FTE, revenue, or relevant activity-based metric of size	***40% (if BM was started within RY-5)*** ***or*** ***0% (if BM was started before RY-5)***
Size of business model (if started before RY-5)	Business model represents 0 to <5% of total FTE, revenue, or relevant activity-based metric of size	Business model represents 5 to 20% of total FTE, revenue, or relevant activity-based metric of size	Business model represents >20% of total FTE, revenue, or relevant activity-based metric of size	***0% (if BM was started within RY-5)*** ***or*** ***40% (if BM was started before RY-5)***

Scheduled growth of business model	Business model not scheduled to grow (based on total FTE, revenue, or relevant activity-based metric of size)	Business model scheduled to grow (based on total FTE, revenue, or relevant activity-based metric of size)	Business model scheduled to at least double in size within RY+5 (based on total FTE, revenue, or relevant activity-based metric of size)	***30%***
Importance of business model for global low-carbon transition*	The business model is of low importance to the global low-carbon transition	The business model is of medium importance to the global low-carbon transition	The business model is of high importance to the global low-carbon transition	***30%***

DIMENSION 2 – ACTIONS TO DECARBONISE ACTIVITIES WITHIN EXISTING BUSINESS MODELS (10%)

This dimension relates to changes (actions) the company is making to decarbonise the activities which make up its existing business model (and may be high- or low-carbon) in order to make the overall business a lower-carbon model.

- For example: Integrating solar PV, heat pumps, battery storage, or district energy into building assets; establishment of recovery systems of secondary raw materials in the proximity of the constructions site; leasing space from and sub-letting it flexibly to multiple tenants.

Question	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weighting
Associated score	***0%***	***25%***	***50%***	***75%***	***100%***	
What percentage of the activity does this decarbonisation action apply to?*	Decarbonisation action applies to ≤ 25% of the activity being considered	Decarbonisation action applies to 26 to 50% of the activity being considered	Decarbonisation action applies to 51 to 75% of the activity being considered	Decarbonisation action applies to 76 to 95% of the activity being considered	Decarbonisation action applies to > 95% of the activity being considered	***25%***
Scheduled growth of decarbonisation action	Decarbonisation action is not scheduled to grow (based on total FTE, spend, or relevant activity-based metric of size)	-	Decarbonisation action is scheduled to grow (based on total FTE, spend, or relevant activity-based metric of size)	-	Decarbonisation action is scheduled to at least double in size within RY+5 (based on total FTE, spend, or relevant activity-based metric of size)	***25%***

Relevance of the decarbonisation action†	Action does not impact any of the most relevant activities/life-cycle phases of the business model being considered in terms of GHG emissions	-	Action impacts a relevant activity/life-cycle phase of the business model being considered in terms of GHG emissions	-	Action clearly targets and impacts the most relevant activity(ies)/life-cycle phase(s) of the business model being considered in terms of GHG emissions	***25%***
Importance of business model decarbonisation for global low-carbon transition‡	The business model decarbonisation is of low importance to the global low-carbon transition	-	The business model decarbonisation is of medium importance to the global low-carbon transition	-	The business model decarbonisation is of high importance to the global low-carbon transition	***25%***

* Example:

- What percentage of the company's new buildings is low-carbon?
- How many buildings generate renewable energy for their own consumption?
- What is the share of steel replaced by timber in new buildings' construction?

† Example:

- The action to offer low-carbon buildings with energy performance guarantees is of high importance as it will directly target the most relevant activity of the business model (scores "Low-carbon aligned").
- The action to install battery storage in building assets targets has a relevant impact in the life-cycle phase of the company's business but is less relevant that the previous example (may score "Basic" or "Advanced" depending if implemented on existing buildings that were retrofitted, or as part of new-building offering in which it is optimized to function with smart systems)
- The actions promoting material towards the use of carbon-intensive materials affect are "Advanced" as they directly affect the demand reduction of energy-intensive materials such as cement and steel.

‡ How to determine whether the change the company is making to its activities is of high, medium, or low importance to the global low-carbon transition: as per dimension 1 of indicator EU 9.2 Changes to business models.

RELEVANCE OF THE INDICATOR

See module 9 introduction.

6. Assessment

6.1. SECTOR BENCHMARK

6.1.1. DESCRIPTION OF THE BENCHMARK

Given the challenges related to data availability and inconsistencies in emissions calculation and allocation across the sector, this methodology prioritises alignment with established benchmarks, notably those developed by CRREM and SBTi. The aim of this approach is to enhance consistency and robustness of assessments across different actors and allow for comparability within the sector (CRREM, 2026; SBTi, 2026).

As outlined in section 4, the ACT Buildings methodology distinguishes between different types of emissions across the building lifecycle, namely: upfront embodied emissions, in-use embodied emissions, in-use operational emissions and end-of-life embodied emissions.

As will be detailed in the following section, sector-specific pathways are applied to upfront embodied emissions and in-use operational emissions, where robust and sufficient data is available. For the other two emission categories, sector-specific pathways are not available due to limited data and variability in practices across. In these cases, cross-sectoral pathways are applied, aligning with SBTi and ensuring a comprehensive coverage. Nevertheless, upfront embodied and operational emission sources reflect the most significant share of the sector's carbon footprint.

The identified pathways are aligned with a 1.5℃ level of ambition in following the ACT principle of Conservativeness. Next, the geographical zone coverage and the reference pathway definition and classification are presented.

6.1.2. GEOGRAPHICAL COVERAGE

The geographical coverage differs depending on the type of emissions being assessed. Sector-specific upfront embodied emissions pathways are global and do not have a regional granularity (SBTi, 2025). In-use operational emissions pathways cover 44 countries spanning across 5 regions globally (CRREM, 2025). Specifically, the geographical coverage includes the following regions, sub-regions and countries:

- Americas: Brazil, Canada, Mexico, USA (Any, Austin, Boston, Chicago, Dallas, Houston, Jacksonville, Los Angeles, New York, Philadelphia, Phoenix, San Antonio, San Diego, San Francisco, San Jose, Washington DC)
- Europe: Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of Cyprus, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom
- Asia: China, Hong Kong, India, Japan, Malaysia, Philippines, Singapore, South Korea
- Oceania: Australia (Any: Continental average climate, Zone 1: Hot humid summer, warm winter, Zone 2: Warm humid summer, mild winter, Zone 3: Hot dry summer, warm winter, Zone 5: Warm temperate, Zone 6: Mild temperate, Zone 7: Cool temperate), New Zealand

6.1.3. REFERENCE PATHWAYS

In alignment with SBTi and CRREM, this methodology refers to 5 overarching pathways, three of which being sector-specific and the other two cross-sectoral (Table 18).

TABLE 18: SUMMARY LIST OF REFERENCE PATHWAYS

PATHWAY CATEGORY	PATHWAY NAME	AUTHORS	REGIONAL BREAKDOWN	METRIC
Sector Specific	SDA In-use Operational Emissions	CRREM	Yes	$kgCO_2e/m^2$ of floor area
	SDA Upfront Embodied Emissions	SBTi	No	$kgCO_2e/m^2$ of area built
	ACA Upfront Embodied Emissions	SBTi	No	$kgCO_2e$
Cross-sectoral	Absolute Emissions 1.5℃	SBTi	No	$kgCO_2e$
	Physical Intensity 1.5℃	SBTi	No	$kgCO_2e$/custom physical unit

SECTOR SPECIFIC PATHWAYS

As shown in Table 18 above, this methodology adopts three sector-specific pathways; two of which follow the Sectoral Decarbonisation Approach (SDA) and one the Absolute Contraction Approach (ACA). For operational emissions, a single method is applied following intensity-based pathways created by CRREM and capturing emissions intensity per internal floor area (CRREM, 2025). Whereas for embodied emissions, two methods are provided and created by SBTi: an SDA-based pathway which captures emissions intensity per gross floor area built or delivered, and an ACA-based pathway which reflects absolute emissions from construction activities (SBTi, 2024).

Table 19 below outlines the key characteristics of the sector-specific SDA pathways for both operational and upfront embodied emissions, including temporal and spatial boundaries, metrics and detailed regional and building typology breakdowns. Operational emissions pathways include fugitive emissions, unintended emissions from the leakage of gases such as refrigerants used in heating, ventilation, and cooling systems Where direct data on these emissions is not available, reasonable estimates should be applied and transparently disclosed. The 'Other' pathway applies to buildings and regions not covered by existing CRREM pathways and is derived from the remaining carbon budget and projected floor area growth in those areas (CRREM and SBTi, 2022; SBTi, 2024).

As for the ACA Upfront embodied emissions pathway, it is a sector-specific application of the general absolute contraction method, whereby emissions are reduced in absolute terms over time rather than through intensity metrics. As defined by SBTi, under this approach, emissions must decrease at a rate that aligns with building sector 1.5℃ pathway at the minimum. Specifically, the minimum annual reduction rate for upfront embodied emissions is 3.1%. Unlike intensity-based approaches, the ACA does not account for changes in activity levels, which here entails gross floor area built and/or developed, and requires consistent year-on-year reductions in total emissions (SBTi, 2024).

TABLE 19: MAIN CHARACTERISTICS OF SDA SECTOR-SPECIFIC PATHWAYS

SECTOR-SPECIFIC PAYHWAYS		
Name	SDA Upfront embodied emissions	SDA In-use Operational emissions
Authors	SBTi	CRREM
Climate ambition	1.5℃ - Aligned	1.5℃ - Aligned
Temporal Boundaries (EN15978:2011)	A1 to A5	B6
Spatial Boundaries	Building structure, envelope, internal walls, internal finishes and technical installations	Whole-building approach including both tenant and landlord-controlled spaces.
Sources of Emissions	Emissions from the sourcing and production of construction materials, transportation to site and emissions from the construction site	Direct emissions generated on site through the combustion of fossil fuels for heating and Indirect emissions from the use of electricity and/or district heating.
Baseline Year	2020	2020
Metric	$kgCO_2e/m^2$ of area built	$kgCO_2e/m^2$ of floor area
Floor Area Definition	Gross floor area	Gross internal area
Total Number	4	650+
Regional Breakdown	Global	44 countries spanning across 5 regions
Building Typology*	Residential, Office, Retail, Other	Single-family property, Multi-family property, Office, Retail high street, Retail shopping center, Retail warehouse, Hotel, Industrial distribution warehouse cold storage, Industrial distribution warehouse warm storage, Healthcare, Medical office, Lodges/leisure and recreation Other

* For mixed-use assets, the building should be classified according to the typology representing the largest share of floor area. Where one typology accounts for at least 90% of the total floor area, the asset may be treated entirely as that typology.

CROSS-SECTORAL PATHWAYS

The cross-sectoral pathways are global pathways applicable to almost all sectors (except for companies operating in the power generation and FLAG sectors, which are required to use sector-specific pathways). Companies can set targets using any of the two methods available:

- Absolute emissions 1.5°C (cross-sector absolute reduction): also known as “absolute contraction approach” (ACA), in this method companies have to reduce emissions in absolute terms, independent of the activity growth over the years. It can be used for all scopes and for near- and long-term targets.
  - For near-term targets, the ambition is calculated as a linear reduction rate of 4.2% per year for scope 1 and scope 2, and 2.5% per year for scope 3. The total reduction depends on the company’s target base year and target year (so for example if the company sets a scope 1+2 emissions target for 2030 with a base year of 2020, the reduction ambition shall be 42%)
  - For long-term targets, the ambition is a 90% absolute emissions reduction, applicable to all scopes (most sector-specific pathways also reduce emissions by at least 90% in the long-term, so this threshold is the expectation for many companies).
- Physical intensity (scope 3): this method is applicable only to scope 3 emissions, and it’s used when companies want to set targets using their own physical intensity metric (for example procured m^2, leased m^2, etc.). Emissions intensity should be reduced in line with limiting global warming to well-below 2˚C for near-term targets and 1.5°C for long-term targets.
  - For near-term targets, the ambition is calculated as a minimum intensity reduction of 7% year-on-year (adjusted if the base year is later than 2020)
  - For long-term targets, the ambition is calculated as a minimum reduction of 97%.

TABLE 20: CROSS-SECTORAL PATHWAYS REDUCTION AMBITION AS ADAPTED FROM (SBTI, 2026)

METHOD	MINIMUM ANNUAL LINEAR REDUCTION RATE OVER TARGET PERIOD
Cross-sector absolute reduction method with 1.5°C long-term temperature goal for scopes 1 and 2	$Absolute\ reduction\ target\ Scope\ 1{,}2 = 4.2\%\ (Target\ year - Base\ year)$
Cross-sector absolute reduction method with well-below 2°C long-term temperature goal for scope 3	$Absolute\ reduction\ target\ Scope\ 3 = 2.5\%\ x\ (Target\ year - Base\ year)$
Physical intensity reduction method with well-below 2°C long-term temperature goal for scope 3	$Physical\ intensity\ target\ Scope\ 3 =$ $\begin{cases} Base\ year\ \leq 2020, (100\% - 7\%)^{(Target\ year - Base\ year)} \\ Base\ year\ > 2020, (100\% - 7\%)^{(Target\ year - 2020)} \end{cases}$

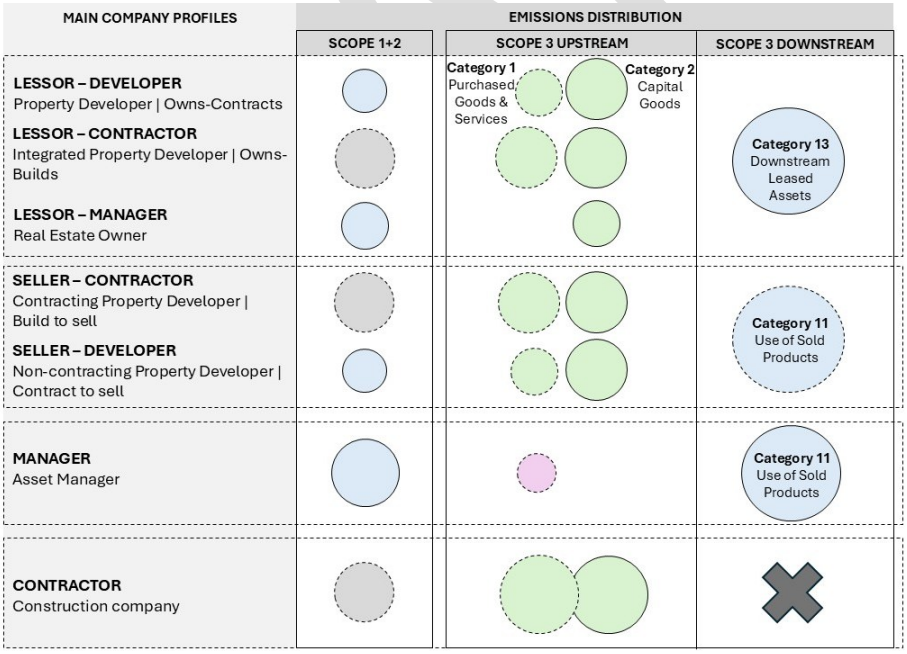
TABLE 21: MAIN CHARACTERISTICS OF CROSS-SECTORAL PATHWAYS

CROSS-SECTOR PATHWAYS		
Name	Absolute emissions 1.5°C (ACA)	Physical intensity 1.5°C
Authors	SBTi	SBTi
Climate ambition	1.5°C - Aligned	Well-below 2°C for near-term and 1.5°C-aligned for long-term targets

Scope of emissions	Scope 1, 2 and 3	Only Scope 3
Reduction principle	Linear annual rate that is base-year-dependent - contraction	SDA convergence approach
Baseline Year	Any	Calculations adjusted if the base year is later than 2020
Metric	$kgCO_2e$	$kgCO_2e$/custom physical unit
Regional Breakdown	Global	Global

6.1.4. PATHWAY ALLOCATION

Pathway allocation differs depending on the actor's role in the sector value chain as well as the building's life cycle. Figure 10 illustrates how emissions across the building life cycle are distributed for each profile defined in this methodology. It also indicates where sector-specific pathways are available or cross-sectoral pathways apply. As shown, the mapping of emissions is not always straightforward and certain categories may include a mix of building-related and non-building related emissions. While all emissions sources are relevant, the largest share of emissions in the building sector remains from construction and operation activities. These emissions are therefore prioritised within the methodology and are required for the assessment. This is also where sector-specific pathways are available and should be applied. More importantly, sector-specific pathways are more ambitious than cross-sectoral pathways. Thus, they take precedence where applicable.



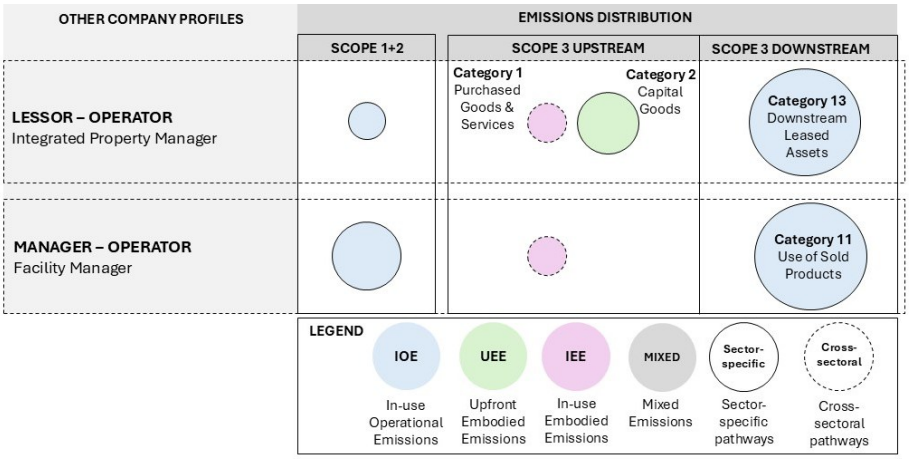


FIGURE 10: COMPANY PROFILES AND RELATED EMISSIONS

Another important aspect to highlight regarding emissions distribution and accounting is that this methodology adopts the whole-building approach in alignment with both CRREM and SBTi (SBTi, 2025; CRREM, 2025). This approach leads to a partial reallocation of emissions across scopes and categories. Figure 11 illustrates the resulting pathway allocation which gives precedence to sector-specific pathways and is in line with the whole-building approach.

For example, from an operational emissions perspective, this approach considers the energy performance of a building as a whole, without distinguishing between landlord and tenant-controlled areas or between common and private spaces. This ensures that the full operational impact of the building is captured, regardless of how responsibilities are split contractually. As a result, there is no need to differentiate between Scope 1, 2 and 3 emissions at the building level, as all operational emissions are accounted for together. This translates in most operational emissions being attributed to Scope 3, with emissions for lessors (developer, contractor, and/or manager) falling under Category 13: Downstream Leased Assets, and for managers under Category 11: Use of sold products rather than being split between Scope 1+2 and Scope 3.

From an embodied emissions perspective, the whole-building approach accounts for emissions coming from the product and construction stages (A1-A5) at the point of project completion rather than on an annual basis. In other words, the upfront embodied emissions of all buildings in the portfolio are accounted for where responsibility for development or construction lies and/or where first ownership is established. In alignment with sector-specific pathways, upfront embodied emissions at project completion are treated under Scope 3 Category 2: Capital Goods, rather than Category 1: Purchased Goods and Services where annual upfront embodied emissions would be. It is acknowledged that the whole-building approach introduces a time lag between when emissions occur and when they are reported, as well as potentially significant variability from one year to another depending on project completions (SBTi, 2025). However, given the prioritisation of sector-specific pathways in this methodology, companies are expected to report upfront embodied emissions at project completion. Where this is not feasible due to data limitations, emissions may instead be assessed using cross-sectoral pathways.

Still, sector-specific pathways cannot be applied uniformly across all emission categories. For example, the GHG protocol requires companies to report expected lifetime emissions of buildings sold[2] (for seller-developers or

[2] These emissions should be calculated based on an assumed minimum building lifetime of 60 years. Where buildings are sold after a period of use, the years already in operation may be deducted from the total assumed lifetime.

contractors) under Scope 3 Category 11: Use of sold products. Thus, they are typically assessed using cross-sectoral pathways. By contrast, yearly operational emissions associated with managed buildings, which also fall under Category 11, are treated as a service and can therefore be aligned with sector-specific pathways.

Overall, the whole-building approach better reflects the availability of sectoral data that looks more commonly at the whole-building level rather than disaggregated spaces. It also aligns with life-cycle accounting principles applied across the sector recognising that upfront embodied emissions are accounted for at project completion rather than annually. In that way, adopting this approach would ensure consistency and improve comparability overall.

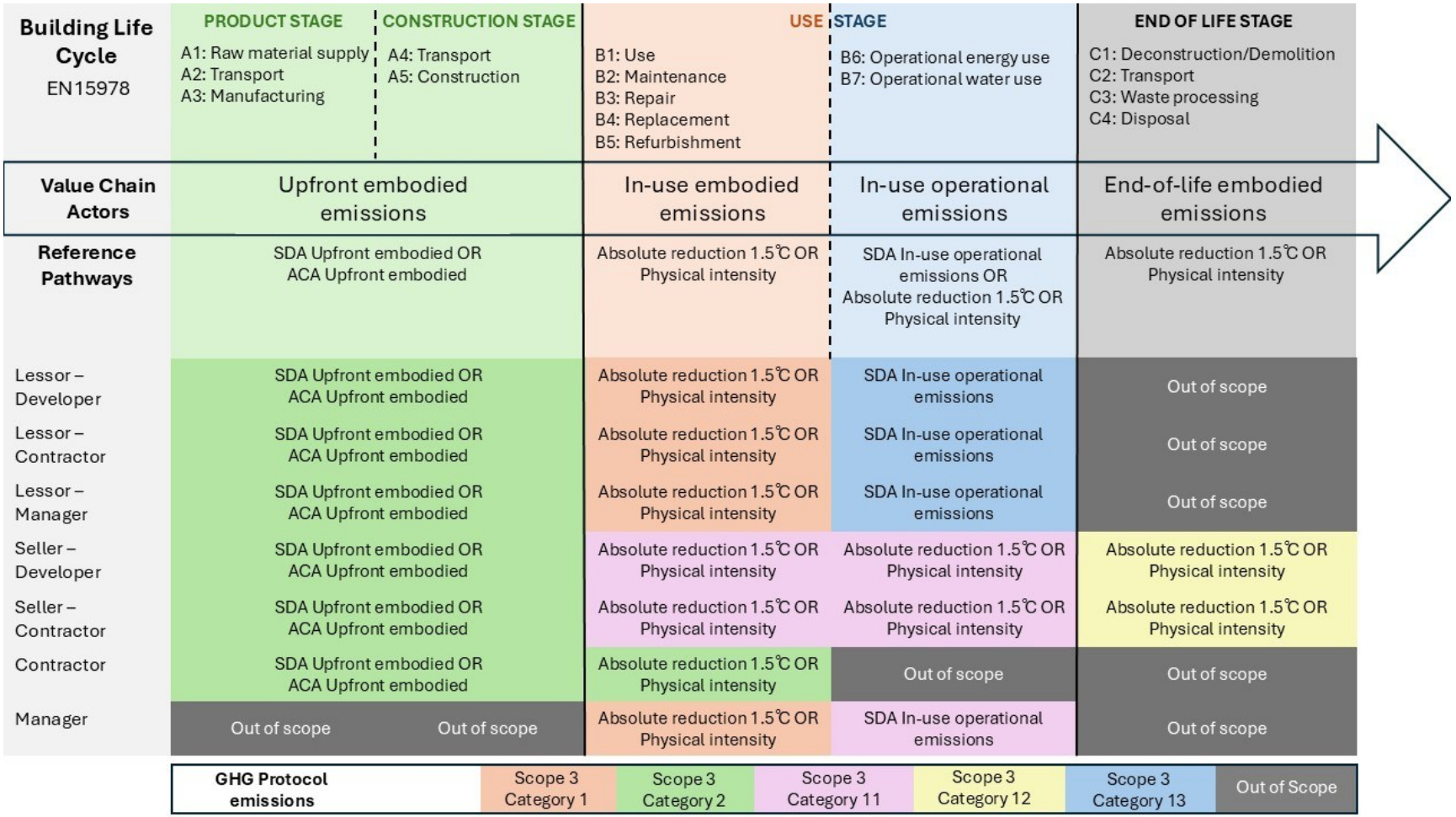


FIGURE 11: PATHWAY ALLOCATION

6.1.5. MECHANISMS TO COMPUTE THE COMPANY BENCHMARK

The mechanism to derive the company specific pathway, from the sectoral low-carbon pathway, is based on the principles of the Sectoral Decarbonization Approach (SDA) allocation method, developed by the Science Based Targets initiative (SBTi, 2015).

The SDA uses a convergence mechanism, which takes the company's emissions intensity in the reporting year (RY) and converges it to the sector's emissions intensity in 2050 at a rate that ensures that the corresponding sectoral carbon budget is not exceeded. Figure 12 illustrates the convergence mechanism and compares the company's target pathway with its benchmark/specific pathway as obtained with the SDA allocation method.

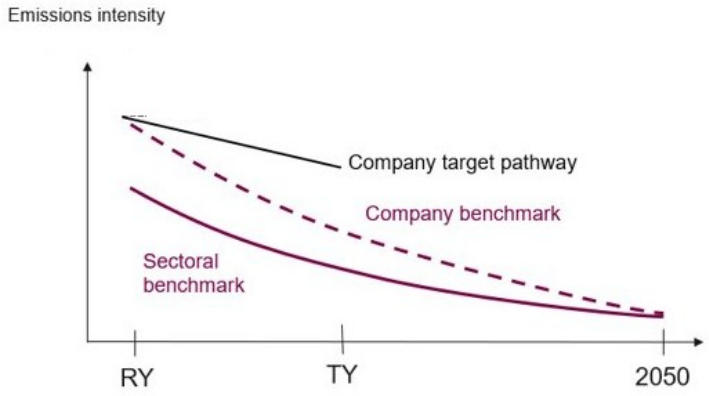


FIGURE 12: CONVERGENCE MECHANISM ILLUSTRATION

Thus, companies starting from a lower intensity will have a shallower decarbonization pathway than companies starting from a higher intensity. In this way, past action or inaction to reduce intensity is taken into consideration.

6.2. OTHER QUANTITATIVE BENCHMARKS USED FOR INDICATORS

BENCHMARK FOR THE SHARE OF ZERO-CARBON-READY BUILDINGS

This methodology adopts the definition of zero-carbon-ready buildings as established by the IEA to replace the previously used term of "low-carbon buildings". According to the IEA, a zero-carbon-ready building is a "highly energy-efficient building that either relies on renewable energy directly or on an energy supply that can be fully decarbonized by 2050" (IEA, 2023). This definition reflects a forward-looking approach making sure that buildings developed or built today are designed to be compatible with the expected decarbonization of the built environment thus aligning with the net-zero emissions pathway.

Additionally, this methodology aligns with the IEA benchmark scenario for the projected shares of zero-carbon-ready buildings. This scenario underlines a key milestone requiring that 100% of all new construction to be zero-carbon-ready by 2030. Considering that the share of zero-carbon-ready buildings in 2022 was at 1% only, there is a significant gap that needs to be compensated for in the coming years to reach the 100% target (IEA, 2023). Accordingly, this trajectory is used as the reference benchmark for assessing the alignment of the growth of zero-carbon-ready buildings in new construction (Table 22).

TABLE 22: ZERO-CARBON-READY BUILDINGS SHARE BENCHMARK FOR NEW BUILDINGS

2022	2023	2024	2025	2026	2027	2028	2029	2030
1%	13.4%	25.8%	38.1%	50.5%	62.9%	75.3%	87.6%	100%

BENCHMARK FOR THE SHARE OF MAJOR RENOVATIONS

The terminology used to describe interventions in existing buildings varies across literature, with terms renovation, refurbishment and retrofitting often used interchangeably. Previous studies have highlighted the differences between them mostly in relation to the scope and the objectives of the interventions. For instance, refurbishment was defined as the process of returning a building to its original state and that could include its structure, envelope and/or systems. Renovation is considered as a step further from refurbishment and more specifically related to improving a building's physical parameters. Retrofitting is the term used to specifically imply improving the operational energy efficiency of a building (Che Husin, Mohd Zaki, & Abu Husain, 2019). However, these distinctions are not standardized in practice and are still used interchangeably, recalling the EU renovation wave "a key initiative to drive energy efficiency in the sector" (European Commission, 2026).

While acknowledging the distinctions between the three terms renovation, refurbishment and retrofitting, this methodology does not seek to commit to a specific definition more than another. Instead, it focuses on sustainability-driven renovations and defines them as interventions aimed primarily at improving the energy performance of buildings and reducing associated emissions. In terms of specific threshold, the IEA states the following: "Deep retrofits and efficient devices lower energy intensity in buildings by 60% compared to today; electricity, district heat and direct renewables displace fossil fuels by 2050" (IEA, 2023). While this is clear, the depth of interventions needed to achieve this decrease in energy intensity can vary greatly depending on the state of the building. Consequently, this methodology distinguished between minor and major renovations aligning with the GRESB definition which is

also consistent with SBTi. As per GRESB, a renovation is considered major when it involves more than 50% of the building's total floor area or results in the relocation of 50% if its tenants.

When it comes to the share of major renovations, this methodology also aligns with the IEA projections. In the IEA Net Zero Emissions scenario, retrofitting existing buildings is a critical decarbonisation lever, requiring a significant change in the uptake of renovations both in terms of rate and depth. Specifically, the IEA sets a benchmark where 20% of the existing building stock needs to be retrofitted to a zero-carbon-ready level by 2030. Beyond 2035, the pathway requires the majority of existing buildings to be renovated, with more than 85% being zero-carbon-ready by 2050. Considering that the share of renovations was 5% in 2022, this benchmark requires annual renovations rates to at least double to achieve the 20% level set for 2030((IEA, 2023). Depending on the regional context, this rate may vary from 2% in emerging and developing economies to 2.5% in advanced economies (IEA, 2021) (Table 23).

TABLE 23: MAJOR RENOVATION SHARE BENCHMARK FOR EXISTING BUILDINGS

2022	2030	2035	2050
5%	20%	35%	80%

BENCHMARK FOR THE CAPEX IN LOW-CARBON & MITIGATION TECHNOLOGIES

There is no science-based benchmark identified as of June 2026 for the share of CAPEX dedicated to low-carbon technologies for the buildings sector and so indicator 2.4 Share of low-carbon CAPEX is based on a qualitative assessment which is also used in other ACT sectoral methodologies.

BENCHMARK FOR THE R&D IN LOW-CARBON & MITIGATION TECHNOLOGIES

There is no science-based benchmark identified as of June 2026 for the share of R&D investments in low-carbon technologies for the buildings sector and so indicator 3.1 R&D spending on low-carbon technologies is based on a qualitative assessment which is also used in other ACT sectoral methodologies.

6.3 WEIGHTINGS

RATIONALE FOR WEIGHTINGS

The selection of weightings for both the modules and the individual indicators was guided by a set of principles in the ACT framework (ACT Initiative, 2024).

PRINCIPLE	EXPLANATION
Value of information	The value of the information that an indicator gives about the outlook for a company's low-carbon transition is the primary principle for the choice of the weighting.
Impact of variation	A high impact of variation in an indicator means that a poor performance for this indicator has a large impact on the likely success of the company's low-carbon transition, and this makes it more relevant for the assessment.
Future orientation	Indicators that measure the future, or a proxy for the future, are more relevant for the ACT assessment than past & present indicators, which serve only to inform about the likelihood and credibility of the transition.
Data quality sensitivity	Indicators that are highly sensitive to likely data quality variations are not recommended for highly weighted indicators, unless there is no other way to measure a particular dimension of the transition.

The weightings have been designed for each type of company covered by the ACT Buildings methodology to reflect the strategic stakes which are different from one company to another.

Targets **15%**

Material Investment **5%**

Intangible Investment **5%**

Sold product performance **30%**

Management **10%**

Management is a multi-faceted module that makes up 10% of the score, because it incorporates many different smaller indicators that together paint a picture of the company's management and strategic approach to the low-

carbon transition. The majority of this weight is placed on the oversight of climate change issues and the climate change oversight capability, which are weighted XX% each. These two indicators measure the ability of the company to integrate sustainability to its strategy and to embrace the main challenges related to low-carbon transition. Besides, according to the principle of future orientation, the transition plan provides more information on how this company will specifically deal with the transition and has a weight of XX%.

The remaining indicators (climate change management incentives and climate change scenario testing) have a low weight of XX%, as they are contextual indicators whose outcome can either strengthen or undermine the company's ability to carry out the transition plan and meet ambitious science-based targets.

Supplier engagement 10%

In order to decarbonize the whole economy, it is essential that all stakeholders get involved.

Client engagement 10%

In order to decarbonize the whole economy, it is essential that all stakeholders get involved.

Policy engagement 5%

In line with the rationale for the management indicators of low weight, the policy engagement indicators are also contextual aspects which tell a narrative about the company's stance on climate change and how the company expresses it in their engagement with policy makers and trade associations.

Business model 10%

The module captures many elements and aspects that cannot otherwise be captured in any of the other modules. It includes those aspects that are relevant to the transition but are not directly a part of the primary activities. It is future oriented by asking the companies on its narrative on certain future directions it can/has to take is standard to enable the transition.

7. Rating

The ACT rating shall comprise:

- → A performance score
- → A narrative score
- → A trend score

These pieces of information shall be represented within the ACT rating as follows:

a. **Performance score** as a number from 0 (lowest) to 100 (highest)

b. **Narrative score** as a letter from E (lowest) to A (highest)

c. **Trend score** as either "+" for improving, "-" for worsening, or "=" for stable.

The highest rating is thus represented as "100A+", the lowest as "0E-" and the midpoint as 50C=".

TABLE 24: HIGHEST SCORE FOR EACH ACT SCORE TYPE

The highest available ACT rating is 100 A +	A **performance rating** of **100**: the company received maximum scores against all the methodology indicators.
	An **assessment rating** of **A:** the information reported by the company and available from public sources is consistent and shows that the company is well aligned to transition to the low-carbon economy
	A **trend rating** of +: the information provided shows the company will be better placed to transition to the low-carbon economy in future.

Each company assessed using an ACT methodology receives not only an ACT rating but a commentary on its performance across the three aspects of the rating. This gives a nuanced picture of the company's strengths and weaknesses. Detailed information on the ACT rating is available in the ACT Framework document (ACT Initiative, 2024).

7.1. PERFORMANCE SCORING

Performance scoring shall be performed in compliance with the ACT Framework (ACT Initiative, 2024). The list of performance modules and indicators is provided in Table 6.

7.2. NARRATIVE SCORING

Narrative scoring shall be performed in accordance with the ACT Framework (ACT Initiative, 2024). The ACT Framework provides a detailed methodology and maturity matrix for completing the Narrative scoring process.

No other sector-specific issues impacting the narrative scoring for this sector have been identified to date.

7.3. TREND SCORING

Scoring shall be performed in compliance with the ACT Framework (ACT Initiative, 2024).

To apply the trend scoring methodology presented in the ACT Framework, the analyst should identify the trends based on the data points and/or indicators that indicate the future direction of change within the company.

Table 26 highlights which indicators/data points contain valuable information about future direction.

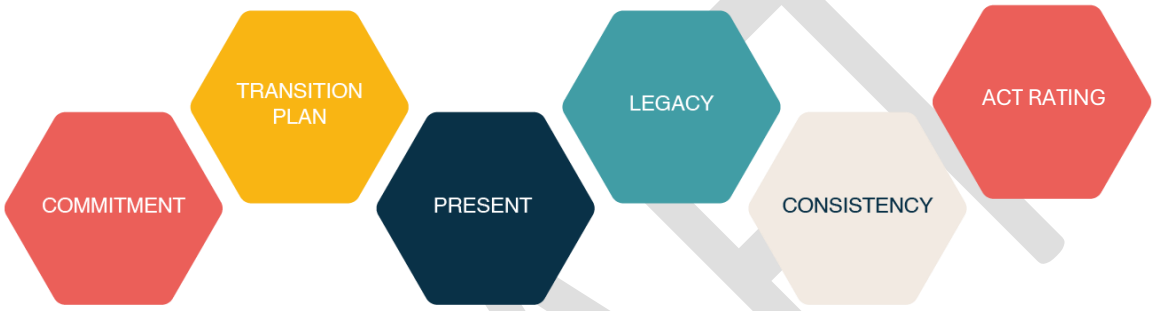
TABLE 25: RELEVANT PERFORMANCE INDICATORS FOR TRENDS IDENTIFICATION

MODULE	INDICATOR

8. Aligned state

Figure 13 below presents the response of a low-carbon aligned company of the sector to the 5 questions of ACT:

- What is the company planning to do? [Commitment]
- How is the company planning to get there? [Transition Plan]
- What is the company doing at present? [Present]
- What has the company done in the recent past? [Legacy]
- How do all of these plans and actions fit together? [Consistency]



1	2	3	4	5
The company has set science-based emissions reduction targets for its operational emissions and upfront and in-use embodied emissions. All targets cover both near and long terms.	The company discloses a transition plan that details a growing share of low-carbon buildings and operation steps to achieve their objectives.	Current investment strategies and R&D place clear focus on low-carbon buildings and related research.	The company has reduced the GHG emissions intensity of its buildings over the last five years aligning with the requirements of the low-carbon scenario. The company has successfully increased the share of its low-carbon buildings and renovations.	The company's targets, transition plan, present and past actions show a consistent willingness to achieve the goals of the transition. The company does not lobby against GHG emissions regulations in the building sector and in fact supports more stringent standards and improved GHG emissions measurement.

FIGURE 13: ALIGNED STATE FOR COMPANIES

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10. Glossary

ABSOLUTE CONTRACTION APPROACH (ACA)	The absolute contraction approach is a general method to set emission reduction targets in line with global decarbonization pathways and based on linear reduction in absolute emissions. It assumes a minimum percentage of emission reduction which is equal for every company, independently of their activity sector. All companies can set their reduction targets with the ACA method. Businesses in sectors for which a sectoral methodology exist are encouraged to use the SDA approach.
ACT	The ACT Initiative, founded by ADEME in partnership with CDP in 2015 is now hosted by WBA. It has been the pioneer international initiative creating a business climate accountability framework with sectoral methodologies to assess their strategies and transition plans. Formally launched at COP21, the ACT initiative has published various sector specific methodologies over years. Covering now, assessment methodologies of transition plan and adaptation plan to climate change effects, and support to transition planning, ACT has been renamed Accelerate Climate Transition Initiative in 2024 (**ACT website**).
ACTION GAP	In relation to emissions performance and reduction, the action gap is the difference between what a given company has done in the past plus what it is doing now, and what has to be done. For example, companies with large action gaps have done relatively little in the past, and their current actions point to continuation of past practices.
ACTIVITY DATA	Activity data is quantitative or numeric data on the activity of the company which results in emissions or removals taking place during a given period of time (**IPCC definitions**).
ADEME	Agence de la Transition Ecologique; The French Agency for Ecological Transition (**ADEME webpage**).
ALIGNMENT	The ACT initiative seeks to gather information that will be consolidated into a rating that that is intended to provide a general metric of the alignment of a given organization regarding the emission reduction target set by the Paris Agreement

	Goal. The wider goal is to provide the organization specific feedback on their general alignment with a 1.5°C pathway in the short and long term.
ANALYST	Person undertaking and scoring the ACT assessment.
ASSESS	Under the ACT Initiative, to evaluate and determine the low-carbon alignment of a given company. The ACT assessment and rating are based on a range of indicators. Indicators may be reported directly by companies or collected, calculated, modelled or otherwise derived from different data sources supplied by the company. The ACT Initiative measures 3 gaps (Commitment, Horizon and Action gaps – defined in this glossary) in the GHG emissions performance of companies. This model closely follows the assessment framework. It starts with the future, with the goals companies want to achieve, followed by their plans, current actions and past actions.
ASSET	A resource owned by a company which has value because of its ability to generate revenues, cash, profits through time. Tangible assets include 1) fixed assets, such as machinery and buildings, and 2) current assets, such as inventory. Intangible assets are nonphysical such as patents, trademarks, copyrights, goodwill and brand value.
BARRIER	A circumstance or obstacle preventing progress (e.g. lacking information on supplier emissions and hotspots can be a barrier to companies managing and reducing their upstream indirect emissions).
BASE YEAR	According to the GHG Protocol and ISO14064-1, a base year is “a historic datum (a specific year or an average over multiple years) against which a company’s emissions are tracked over time”. Setting a base year is an essential GHG accounting step that a company must take to be able to observe trends in its emissions information (**GHG Protocol Corporate Standard**).
BENCHMARK	A standard, pathway or point of reference against which things may be compared. In the case of pathways for sector methodologies, a sector benchmark is a low-carbon pathway for the sector average value for emissions intensity indicator(s) driving the sector performance. A company’s benchmark is a company specific pathway that starts at the company performance for the reporting year and converges towards the sector benchmark in 2050 (or other relevant date), based on a principle of convergence or contraction of emissions intensity.

BOARD	Also “Board of Directors” or “Executive Board”; the group of persons appointed with joint responsibility for directing and overseeing the affairs of a company.
BUSINESS MODEL	A company’s core strategy for generating value. It includes sources of revenue, the intended client base, products, and details of financing. Under ACT, evidence of the existing and new business models shall be taken from a range of specific financial and other metrics relevant to the sector and an assessment made on its alignment with the low-carbon transition.
BUSINESS-AS-USUAL	An assumption that activity and emissions remain the same into the future. The business-as-usual pathway assumes constant activity and emissions from the initial year onwards. In general, the initial year – which is the first year of the pathway/series – is the reporting year (targets indicators) or the reporting year minus 5 years (certain performance indicators).
CAPITAL EXPENDITURE	Money spent by a company on acquiring or maintaining fixed assets, such as land, buildings, and equipment.
CARBON CAPTURE AND STORAGE (CCS)	The process of trapping carbon dioxide produced by burning fossil fuels or other chemical or biological processes and storing it in such a way that it cannot contribute to climate warming.
CARBON OFFSETS	Carbon offsets are avoidance of GHG emissions or GHG suppressions made by a company, sector, or economy to compensate for emissions made elsewhere in the economy where the marginal cost of decarbonization proves to be lower.
CDP	CDP is an international, not-for-profit organization providing the only global system for companies and cities to measure, disclose, manage and share vital environmental information. CDP works with market forces, including 827 institutional investors with assets of over US$136 trillion, to motivate companies to disclose their impacts on the environment and natural resources and take action to reduce them. More than 23,000 companies worldwide disclosed environmental information through CDP in 2023. CDP holds the largest collection globally of primary climate change, water and forest risk commodities information and puts these insights at the heart of strategic business, investment and policy decisions (**CDP website**).

CLIMATE CHANGE	A change in climate, attributed directly or indirectly to human activity, caused by the alteration of the composition of the atmosphere and that is, in addition to natural climate variability, observed over comparable time periods (**UNFCCC Article 1**).
COMMITMENT GAP	In relation to emissions performance, the difference between what a company needs to do and what it says it will do.
COMPANY	A commercial business.
COMPANY PATHWAY	A company's past emissions intensity performance pathway up until the present.
COMPANY TARGET PATHWAY	The GHG emissions intensity performance pathway that the company has committed to follow from an initial year until a future year, for which it has set a performance target.
CONFIDENTIAL INFORMATION	Any non-public information pertaining to a company's business.
CONSERVATIVENESS	A principle of the ACT project; whenever the use of assumptions is required, the assumption shall err on the side of achieving well-below 2°C maximum global warming and pursuing efforts to limit the temperature increase to 1.5°C.
CONSISTENCY	A principle of the ACT project; whenever time series data is used, it should be comparable over time. In addition to internal consistency of the indicators reported by the company, data reported against indicators shall be consistent with other information about the company and its business model and strategy found elsewhere. The analyst shall consider specific, pre-determined data points and check that these give a consistent measure of performance when measured together.
CONTRACTOR	In this methodology, a contractor refers to an entity whose business is the construction, renovation or structural alteration of a building in whole. Activities include construction site management; site analysis and assessment; project management; preparing a site for construction (which may include demolition of a pre-existing structure); construction execution; and safety management (SBTi, 2025). Entities which are involved partly in any construction activities such as sub-contractors fall outside of the scope of this methodology.

COP21	The 2015 United Nations Climate Change Conference, held in Paris, France from 30 November to 12 December 2015 (**COP21 webpage**).
DATA	Facts and statistics collected together for reference and analysis (e.g. the data points requested from companies for assessment under the ACT project indicators).
DECARBONIZATION	A complete or near-complete reduction of GHG emissions over time (e.g. decarbonization in the building sector through an increased share of renovations towards zero-carbon-ready buildings, as well as decreasing emissions related to the construction and use of buildings).
DECARBONIZATION PATHWAY	Benchmark pathway (See 'Benchmark')
DEVELOPER	An entity which contracts for the construction of a building with the intent to either own or transfer ownership. Activities include project planning and design; site selection; project financing; construction management; regulatory compliance risk management; and aftercare (SBTi, 2025).
EMBODIED EMISSIONS	Embodied emissions are associated with the production, transportation, and disposal of building materials, equipment, and other products over their entire life cycle, including extraction, processing, manufacturing, and end-of-life disposal or recycling (GRESB, 2023).
EMISSIONS	The GHG Protocol defines ***direct*** GHG emissions as emissions from sources that are owned or controlled by the reporting entity, and ***indirect*** GHG emissions as emissions that are a consequence of the activities of the reporting entity but occur at sources owned or controlled by another entity (**GHG Protocol**). In this methodology, "emissions" refers to greenhouse gas emissions.
END-OF-LIFE EMBODIED EMISSIONS	The emissions associated with deconstruction/demolition, transport from site, waste processing and disposal phases of a building or infrastructure's lifecycle which occur after its use (GRESB, 2023). They are classified as stages C1 to C4 as per the EN 15978:2011 standard (European Committee for Standardization, 2011).

ENERGY	Power derived from the utilization of physical or chemical resources, especially to provide light and heat or to work machines.
ENERGY PERFORMANCE CONTRACTING	Energy performance contracting (EPC) is a mechanism for energy efficiency financing. The EPC involves an Energy Service Company (ESCO) which provides various services, such as finances and guaranteed energy savings.
FOSSIL FUEL	A fossil-based fuel such as coal, oil or gas, formed in the geological past from the remains of living organisms.
FTE	Full-Time Equivalent, a unit of measurement that converts the total hours worked by all employees—full-time, part-time, and temporary—into the number of equivalent full-time staff.
GREENHOUSE GAS (GHG)	Carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O) and three groups of fluorinated gases (sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs) are the major anthropogenic GHGs and are regulated under the Kyoto Protocol. Nitrogen trifluoride (NF_3) is now considered a potent contributor to climate change and is therefore mandated to be included in national inventories under the United Nations Framework Convention on Climate Change (UNFCCC).
GUIDANCE	Documentation defining standards or expectations that are part of a rule or requirement (e.g. **CDP reporting guidance for companies**).
HORIZON GAP	In relation to emissions performance, the difference between the average lifetime of buildings and the time-horizon of a company's commitments. Companies with small-time horizons do not look far enough into the future to properly ensure the transition of their assets and business models.
INCENTIVE	Something, for example money, that motivates or encourages an individual or organisation to do something (e.g. a monetary incentive for company board members to set emissions reduction targets).
INDICATOR	An ACT indicator is a quantitative or qualitative piece of information that can provide insight on a company's current and future ability to reduce its carbon intensity.

INTENSITY (EMISSIONS)	The average emissions rate of a given pollutant from a given source relative to the level of activity; for example, tonnes of carbon dioxide released per MWh of energy produced by a power plant.
INTERVENTION	Methods available to companies to influence and manage emissions in their value chain, both upstream and downstream, which are out of their direct control (e.g. a retail company may use consumer education as an intervention to influence consumer product choices in a way that reduces emissions from the use of sold products).
IN-USE EMBODIED EMISSIONS	Emissions associated with materials and processes needed to maintain the building or infrastructure during use such as for refurbishments (GRESB, 2026). They are classified as stages B1 to B5 as per the EN 15978:2011 standard (European Committee for Standardization, 2011).
IN-USE OPERATIONAL EMISSIONS	In-use operational emissions refer to the day-to-day use of a building or product, including energy consumption for heating, cooling, lighting, and other activities (GRESB, 2023). They are classified as stage B6 as per the EN 15978:2011 standard (European Committee for Standardization, 2011).
LESSOR	In this methodology, a lessor represents an entity that owns the building but does not occupy it. This entity leases it to a third party for total or partial occupancy and use of the property. Activities include financial ownership; authority over property management; authority over contract management; authority over leasing decisions; leasing the property; rent collection; financial management of building operations (SBTi, 2025). As per the whole-building approach, it is assumed that a lessor has full operational control over the building and no distinction is made between landlord and tenant-controlled spaces (CRREM, 2025).
LIFETIME	The duration of something's existence or usefulness (e.g. a physical asset such as a building).
LONG-TERM	Occurring over or relating to a long period of time; under ACT this is taken to mean until the year 2050. The ACT project seeks to enable the evaluation of the long-term performance of a given company while simultaneously providing insights into short- and medium-term outcomes in alignment with the long-term.

LOW-CARBON BENCHMARK PATHWAY	Benchmark pathway (See 'Benchmark')
LOW-CARBON BUILDING	In this methodology a low-carbon building is defined as a zero-carbon-ready building in alignment with the IEA's definition. Refer to Zero-carbon-ready building definition below.
LOW-CARBON CLIENT	Client that uses the company's sold products to provide low-carbon products/services.
LOW-CARBON PRODUCTS/SERVICES	Low-carbon products/services are provided by an economic activity that contributes substantially to climate change mitigation, as defined in the European taxonomy.
LOW-CARBON SCENARIO (OR PATHWAY)	A low-carbon scenario (or pathway) is a well-below 2°C or a 1.5°C scenario or a scenario with higher decarbonization ambition.
LOW-CARBON SOLUTION	A way to contribute to the low-carbon transition (e.g. energy, technology, process, product, service, etc.)
LOW-CARBON TRANSITION	The low-carbon transition is the transition of the economy a low-carbon state.
MANAGER	In this methodology, a manager refers to an entity whose business involves overseeing the operational, financial, or investment management of a building on behalf of the building's owner without occupying or owning the property. In addition to leasing the property; rent collection; contract management and legal compliance; financial management of building operations, activities also include property inspections; repairs and maintenance (SBTi, 2025).
MATURITY MATRIX	A maturity matrix is essentially a "checklist", the purpose of which is to evaluate how well advanced or "mature" a particular process, program or technology is according to specific definitions.
MATURITY PROGRESSION	An analysis tool used in the ACT project that allows both the maturity and development over time to be considered with regards to how effective or advanced a particular intervention is.

MITIGATION (EMISSIONS)	The action of reducing the severity of something (e.g. climate change mitigation through absolute GHG emissions reductions)
MODEL	A program designed to simulate what might or what did happen in a situation (e.g. climate models are systems of differential equations based on the basic laws of physics, fluid motion, and chemistry that are applied through a 3-dimensional grid simulation of the planet Earth).
NEW BUILDING	Also referred to as new construction. Development of new buildings and additions to existing buildings that affect 50% or more of usable space can be treated as new constructions (GRESB, 2025). In this methodology, emissions coming from new buildings are accounted for projects which have been delivered at reporting year, not those coming from ongoing projects.
OPERATIONAL EMISSIONS	Operational emissions, also referred to as "in-use operational" emissions, consist of emissions released during the period of time when the building is in operation, classified as stage B6 as per the EN 15978:2011 standard (GRESB, 2023; European Committee for Standardization, 2011).
PARIS AGREEMENT GOAL	The Paris Agreement Goal sets out a global framework to avoid dangerous climate change by limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C. It also aims to strengthen countries' ability to deal with the impacts of climate change and support them in their efforts.
PATHWAY (EMISSIONS)	A way of achieving a specified result; a course of action (e.g. an emissions reduction pathway).
PERFORMANCE	Outcomes and results. ACT methodologies attempt to assess performance using a variety of indicators.
PLAN	A detailed proposal for doing or achieving something.
POINT	A mark or unit of scoring awarded for success or performance.
POWER	Energy that is produced by mechanical, electrical, or other means and used to operate a device (e.g. electrical energy supplied to an area, building, etc.).

POWER GENERATION	The process of generating electric power from other sources of primary energy.
PRIMARY ENERGY	Primary energy is an energy form found in nature that has not been subjected to any conversion or transformation process. It is energy contained in raw fuels, and other forms of energy received as input to a system. Primary energy can be non-renewable or renewable.
PROGRESS RATIO	An indicator of target progress, calculated by normalizing the target time percentage completeness by the target emissions or renewable energy percentage completeness.
RELEVANT / RELEVANCE	In relation to information, the most appropriate information (core business and stakeholders) to assess low-carbon transition.
RENEWABLE ENERGY	Energy from a source that is not depleted when used, such as wind or solar power.
REPORTING YEAR	Year under consideration.
RESEARCH AND DEVELOPMENT (R&D)	A general term for activities in connection with innovation; in industry; for example, this could be considered work directed towards the innovation, introduction, and improvement of products and processes.
SELLER	A company involved in selling the buildings it built or developed.
SCENARIO	A plausible representation of future climate that has been constructed for explicit use in investigating the potential impacts of anthropogenic climate change. Climate scenarios often make use of climate projections (descriptions of the modelled response of the climate system to scenarios of greenhouse gas and aerosol concentrations), by manipulating model outputs and combining them with observed climate data. (IPCC, 2018)
SCENARIO ANALYSIS	A process of analysing possible future events by considering alternative possible outcomes.
SCIENCE-BASED TARGET	To meet the challenges that climate change presents, the world's leading climate scientists and governments agree that it is essential to limit the increase in the global average temperature at below 2°C and ideally 1.5°C . Companies making

	this commitment, working toward this goal and setting an emissions reduction target that is aligned with climate science can have their targets verified by the **Science-Based Targets Initiative**.
SCOPE 1 EMISSIONS	All direct GHG emissions (**GHG Protocol Corporate Standard**).
DIRECT GHG EMISSIONS AND REMOVALS	Category 1 from ISO 14064-1:2018*: Direct GHG emissions and removals occur from GHG sources or sinks inside organizational boundaries and that are owned or controlled by the* [reporting] *organization. Those sources can be stationary (e.g. heaters, electricity generators, industrial process) or mobile (e.g. vehicles).*
SCOPE 2 EMISSIONS **INDIRECT GHG EMISSIONS FROM IMPORTED ENERGY**	Indirect GHG emissions from consumption of purchased electricity, heat or steam (**GHG Protocol Corporate Standard**). Category 2 from ISO 14064-1:2018: *GHG emissions due to the fuel combustion associated with the production of final energy and utilities, such as electricity, heat, steam, cooling and compressed air* [imported by the reported company]. *It excludes all upstream emissions (from cradle to power plant gate) associated with fuel, emissions due to the construction of the power plant, and emissions allocated to transport and distribution losses.*
SCOPE 3 EMISSIONS **INDIRECT GHG EMISSIONS**	Other indirect emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. T&D losses) not covered in Scope 2, outsourced activities, waste disposal, etc. (**GHG Protocol Corporate Standard**). Scope 3 also encompass the emissions related to the use of sold products. ISO 14064-1:2018: *GHG emission that is a consequence of an organization's operations and activities, but that arises from GHG sources that are not owned or controlled by the* [reporting] *organization. These emissions occur generally in the upstream and/or downstream chain.* *Category 3: indirect GHG emissions from transportation* *Category 4: Indirect GHG emissions from products used by an organization* *Category 5: Indirect GHG emissions associated with the use of products from the organization* *Category 6: Indirect GHG emissions from other sources*

SECTOR	A classification of companies with similar business activities, e.g. automotive manufacturers, power producers, retailers, etc.
SECTORAL DECARBONIZATION APPROACH (SDA)	To help businesses set targets compatible with 2-degree climate change scenarios, the **Sectoral Decarbonization Approach** (SDA) was developed. The SDA takes a sector-level approach and employs scientific insight to determine the least-cost pathways of mitigation and converges all companies in a sector towards a shared emissions target in 2050.
SHORT-TERM	Occurring in or relating to a relatively short period of time in the future.
STRATEGY	A plan of action designed to achieve a long-term or overall aim. In business, this is the means by which a company sets out to achieve its desired objectives; long-term business planning.
STRESS TEST	A test designed to assess how well a system functions when subjected to greater than normal amounts of stress or pressure (e.g. a financial stress test to see if an oil & gas company can withstand a low oil price).
SUPPLIER	A person or entity that is the source for goods or services (e.g. a company that provides engine components to an automotive manufacturing company).
TARGET	A quantifiable goal (e.g. to reduce GHG emissions). ♦ The following are examples of absolute targets: ○ metric tonnes CO_2e or % reduction from base year ○ metric tonnes CO2e or % reduction in product use phase relative to base year ○ metric tonnes CO_2e or % reduction in supply chain relative to base year ♦ The following are examples of intensity targets: ○ metric tonnes CO2e or % reduction per passenger kilometre ○ metric tonnes CO2e or % reduction per square foot relative to base ○ metric tonnes CO2e or % reduction per MWh

TECHNOLOGY	The application of scientific knowledge for practical purposes, especially in industry (e.g. low-carbon power generation technologies such as wind and solar power, in the electric power generation sector).
TRADE ASSOCIATION	Trade associations (sometimes also referred to as industry associations or industry bodies) are an association of people or companies in a particular business or trade, organized to promote their common interests. Their relevance in this context is that they present an "industry voice" to governments to influence their policy development. The majority of organizations are members of multiple trade associations, many of which take a position on climate change and actively engage with policymakers on the development of policy and legislation on behalf of their members. It is acknowledged that in many cases companies are passive members of trade associations and therefore do not actively take part in their work on climate change (**CDP climate change guidance**).
TRANSITION	The process or a period of changing from one state or condition to another (e.g. from an economic system and society largely dependent on fossil fuel-based energy, to one that depends only on low-carbon energy).
TRANSITION PLAN	Aspect of an undertaking's overall strategy that lays out a set of targets, actions, and accountability mechanisms to align an organization's business activities with a pathway for net zero greenhouse gases emissions that delivers real economy emissions reductions toward limiting climate change to 1.5°C by the end of 21st century.
TREND	A general direction in which something (e.g., GHG emissions) is developing or changing.
UPFRONT EMBODIED EMISSIONS	The emissions released during the product stage and construction process caused by the supply and transport of raw materials (A1, A2), construction materials manufacturing and transportation to site (A3, A4) and construction on site (A5) (European Committee for Standardization, 2011). These emissions have already been released into the atmosphere before the building is occupied or the infrastructure begins operation (GRESB, 2019).
VERIFIABLE / VERIFIABILITY	To prove the truth of, as by evidence or testimony; confirm; substantiate. Under the ACT project, the data required for the assessment shall be verified or verifiable.

WEIGHTING	Relative importance given to each performance modules and indicators, in order to reflect the more important/significant aspects and the decarbonisation potential of different actions.
WORLD BENCHMARKING ALLIANCE	Founded in 2018, the World Benchmarking Alliance is a non-profit organisation holding 2,000 of the world's most influential companies accountable for their part in achieving the Sustainable Development Goals. It does this by publishing free and publicly available benchmarks on their performance and showing what good corporate practice looks like. The benchmarks provide companies with a clear roadmap of what commitments and changes they must make to put our planet, society and economy on a more sustainable and resilient path. They also equip everyone – from governments and financial institutions to civil society organisations and individuals – with the insights that they need to collectively incentivise leading companies to keep going and pressure the laggards to catch up (**WBA website**).
ZERO-CARBON-READY BUILDING	A zero-carbon-ready building is a building that is highly advanced in terms of energy efficiency using either renewable energy directly or an energy supply that will be fully decarbonised by 2050, such as electricity or district heat. In other words, a zero-carbon-ready building is one that can become a zero-carbon building by 2050, without requiring any additional changes to the building envelope or technical equipment (IEA, 2021).

11. Appendix

11.1. TWG MEMBERS

This ACT methodology has been developed with inputs and feedbacks of the Technical Working Group, which met five times over the course of the development phase.

TABLE 26: LIST OF TWG MEMBERS

ORGANISATION	INVOLVEMENT

11.2. COMPANIES INVOLVED IN THE ROADTEST

TABLE 27: LIST OF COMPANIES INVOLVED IN THE ROADTEST

COMPANIES

11.3. UPDATES TO THE ACT BUILDINGS METHODOLOGY

Table 28 lists the main changes to the ACT Buildings methodology arising from the merging of ACT Construction, ACT Property Developer and ACT Real Estate methodologies.

TABLE 28: UPDATES TO ACT BUILDINGS

SECTION	SUBSECTION	CHANGES
Introduction	/	Description of updated methodology
Scope	/	Different company profiles have been designed to include most significant emissions arising from the building lifecycle. Updated presentation of sectoral scope (excluding construction material suppliers, sub-contractors, architecture and engineering companies).

Boundaries	/	Updated reporting boundaries and rationale to consider whole-building approach and includes upfront and in-use embodied emissions and full in-use operational emissions.
Construction of the data infrastructure	Data request	Updates to account for new and amended performance modules and indicators.
	Module 1	No longer distinguishes between buildings owned, managed, delivered and renovated. Instead, a distinction is made between buildings managed, leased and sold. Another distinction is made between upfront embodied, in-use embodied and operational emissions for target ambition alignment. Now also considers absolute emissions reduction targets alongside emissions intensity targets.
	Module 2	Previously not included in ACT Construction/Property Developer, now applicable to all profiles. Low-carbon CapEx indicator added. Trend in past emissions, trend in future emissions and locked-in emissions indicators removed considering that the share of Scope 1 and 2 emissions is less significant than Scope 3 emissions.
	Module 3	Previously not included in ACT Real Estate/Property Developer, now applicable to all profiles. Only includes low-carbon R&D considering that non-mature technologies and patents are not applicable.
	Module 4	Previously not included in ACT Real Estate, now applicable to all profiles considering the whole-building approach. Now includes the product-specific interventions indicator. The definition of low-carbon buildings and the indicator assessing it has been updated. The indicator assessing renovation share has been updated.
	Module 5	Inclusion of the updated module as published by the ACT initiative in 2022
	Module 6	Inclusion of the updated module as published by the ACT initiative in 2022
	Module 7	Inclusion of the updated module as published by the ACT initiative in 2022
	Module 8	Inclusion of the updated module as published by the ACT initiative in 2022
	Module 9	Inclusion of the updated module as published by the ACT initiative in 2023
Assessment	Sector Benchmark	Up-to-date and relevant low-carbon scenarios / sectoral pathways have been identified from literature. Only 1.5°C aligned pathways are considered.
	Other Quantitative Benchmarks	Use of data from IEA - Net Zero by 2050 Report to obtain a sectoral value regarding low-carbon buildings shares and renovation shares.
	Weightings	Update of the performance weighting schemes according to new company profiles and added/amended performance modules and indicators.
Rating	Narrative/Trend	Updates according to new company profiles and added performance modules and indicators.
ACT Aligned State	/	Updates according to new company profiles and added performance modules and indicators.
Glossary	/	Addition of useful definitions.

11.4. ILLUSTRATIVE GRAPHS FOR TREND IN FUTURE EMISSIONS INTENSITY INDICATORS

CASE 1

Conditions	Score
$Company's\ trend > 0$ Increase in company emissions intensity	0%

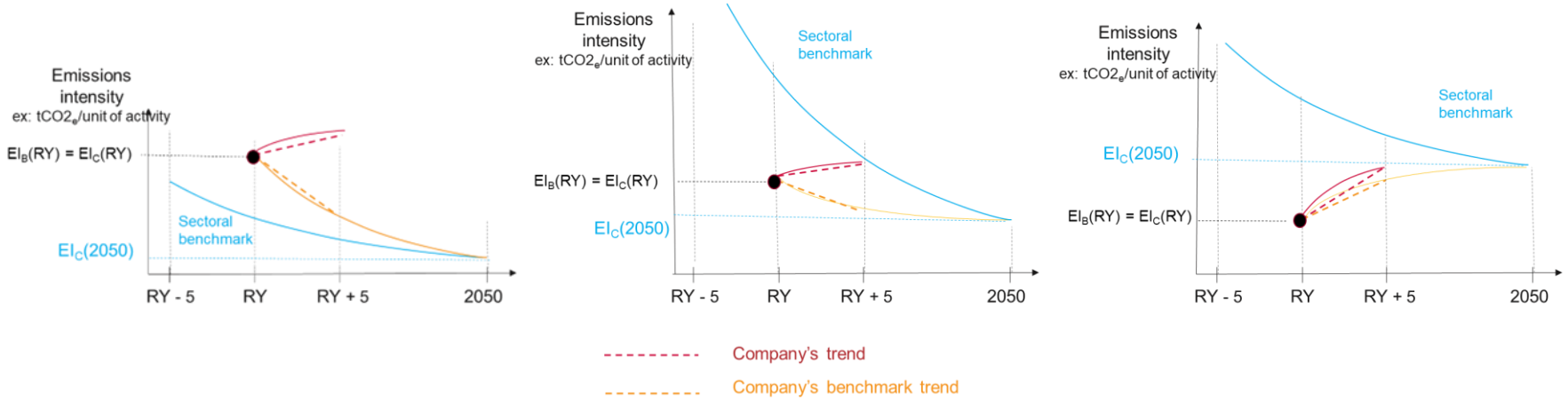

FIGURE 14: TREND RATIO - CASE 1

CASE 2

Conditions	Score
$Company's\ trend \leq 0$ and $EI_C(RY\ ) \geq EI_B(2050)$ $0 \leq trend\ ratio \leq 1$ Decrease in company emissions intensity but company's pathway does not go beyond the company's benchmark ambition	$Trend\ ratio \times 100\%$

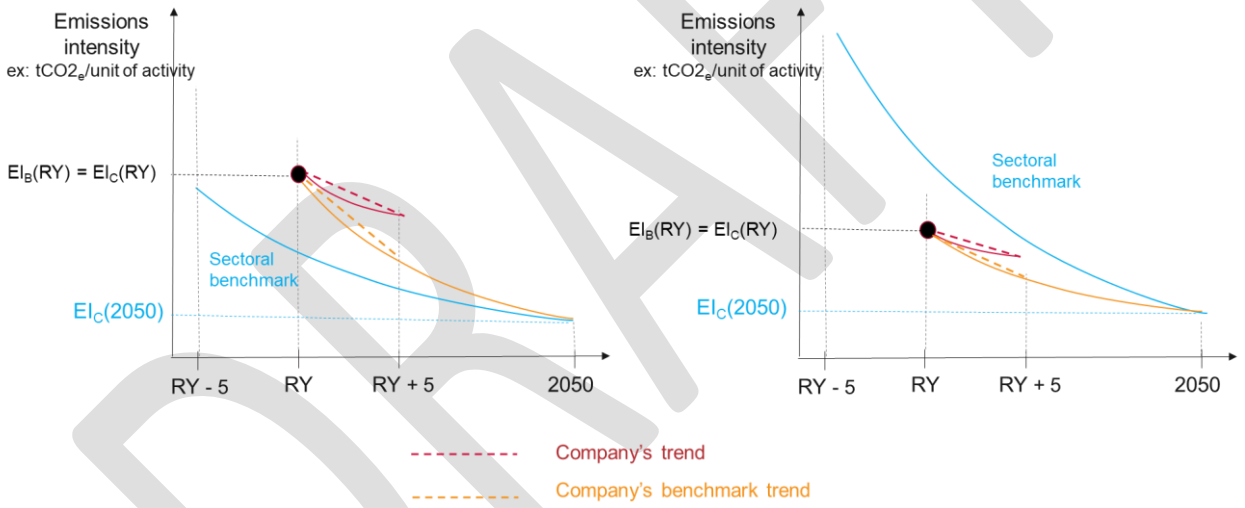

FIGURE 15: TREND RATIO - CASE 2

CASE 3

Conditions	Score
$Company's\ trend < 0$ $trend\ ratio > 1$ Decrease in company emissions intensity and company's pathway equals or exceeds the company's benchmark ambition	100%

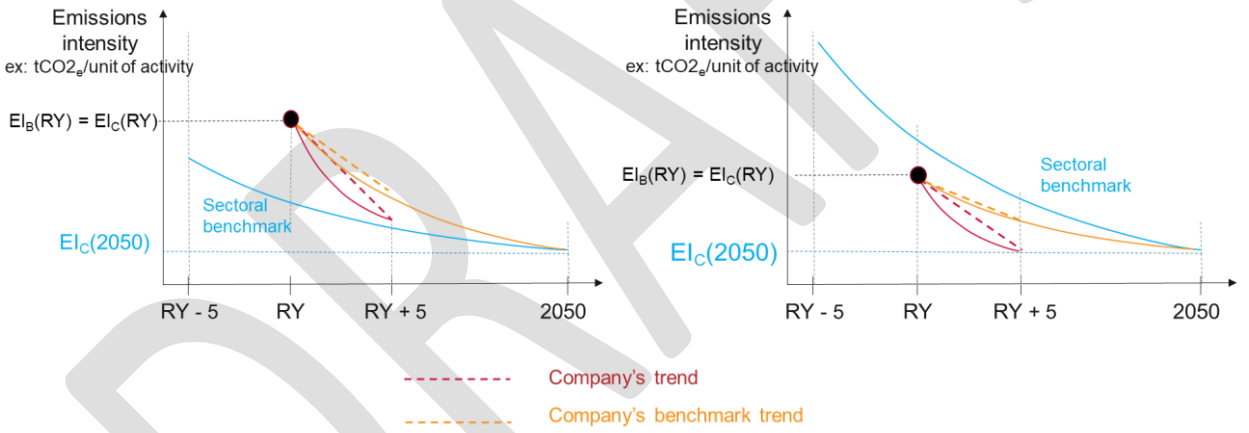

FIGURE 16: TREND RATIO - CASE 3

CASE 4

Conditions	Score
$Company's\ target\ trend \leq 0\ and\ EI_C(RY\ ) \leq EI_B(2050)$ No increase in company emissions intensity and company's emissions intensity is already below the company's benchmark ambition for 2050	100%

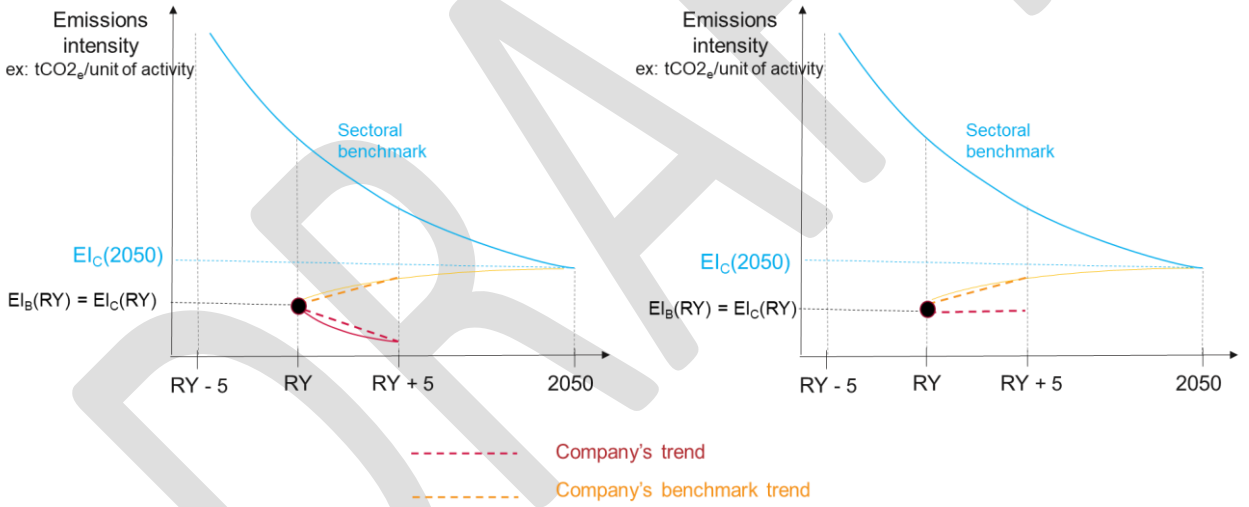

FIGURE 17: TREND RATIO - CASE 4