

Assessing low-Carbon Transition

Generic



VERSION 2.0 | December 2023

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TECHNICAL COORDINATION	ADEME – CDP	ADEME - CDP - WBA	
LEAD AUTHORS	Edouard Fourdrin (ADEME) Esther Stoakes (CDP)	Andy Ross (CDP) Laura Hurtado-Verazaín (WBA) Marlène Dresch (ADEME) Oliver Racher (CDP) Sophie Proust (ADEME) Yann Rosetti (WBA)	
TECHNICAL ASSISTANCE	I CARE & Consult EKODEV	-	
ACT CO-FUNDER	ADEME CDP	ADEME CDP World Benchmarking Alliance	
SUPPORTER	ADEME	ADEME World Benchmarking Alliance	
QUALITY ASSURANCE AND QUALITY CONTROL	ClimateCHECK Eco2 Initiative	/	



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Table of content

Т	able c	of content	3
1	In	troduction	6
2	Pr	rinciples	6
3	Sc	cope	7
	3.1	Scope of the document	7
	3.2	Scope of the Generic methodology	7
4	Вс	oundaries	9
	4.1	Reporting Boundaries	9
	4.2	Rationale	14
5	С	onstruction of the data infrastructure	15
	5.1	Data sources	15
	5.2	Company Data request	16
	5.3	Performance indicators	17
	Modu	ule 1: Targets	19
	•	GE 1.1 Alignment of scope 1+2 emissions reduction targets	19
	•	• GE 1.2 Alignment of upstream scope 3 emissions reduction targets	26
	(GE 1.3 Alignment of downstream scope 3 emissions reduction targets	29
	0	GE 1.4 Time horizon of targets	31
	(GE 1.5 Achievement of past and current targets	35
	Modu	ule 2: Material investment	40
	(• GE 2.1 Trend in past emissions	40
	(• GE 2.2 Trend in future emissions	45
	(GE 2.3 Share of low-carbon CAPEX	50
	(GE 2.4 Locked-in emissions from own fleet and buildings	52
	Modu	ule 3: Intangible investment	62
	(• GE 3.1 R&D spending in low-carbon technologies	62
	(GE 3.2 Company Low-carbon Patenting Activity	65
	Modu	ule 4: Sold product performance	68
	,	GE 4.1 Product / Service-specific interventions	68

•	GE 4.2 Trend in past product / service specific performance	72
•	GE 4.3 Locked-in emissions from sold products	76
•	GE 4.4 Sub-contracted transport service performance	80
Module 5	: Management	87
•	GE 5.1 Oversight of climate change issues	87
•	GE 5.2 Climate change oversight capability	90
•	GE 5.3 Low-carbon transition plan	92
•	GE 5.4 Climate change management incentives	99
•	GE 5.5 Climate change scenario testing	102
Module 6	: Supplier engagement	106
•	GE 6.1 Strategy to influence suppliers to reduce their GHG emissions	106
•	GE 6.2 Activities to influence suppliers to reduce their GHG emissions	112
Module 7	: Client engagement	116
•	GE 7.1 Strategy to influence customer behaviour to reduce their GHG emissions	116
•	GE 7.2 Activities to influence customer behaviour to reduce their GHG emissions	120
Module 8	: Policy engagement	123
•	GE 8.1 Company policy on engagement with associations, alliances, coalitions or think	tanks 123
•	GE 8.2 Associations, alliances, coalitions and thinktanks supported do not have climate	e-negative
activ	ities or positions	128
•	GE 8.3 Position on significant climate policies	130
•	GE 8.4 Collaboration with local public authorities	133
Module 9	: Business model	137
•	GE 9.1 Revenue from low-carbon products and/or services	141
•	GE 9.2 Changes to business models	143
•	GE 9.3 Share of product/service sales used in client low-carbon products/services	151
6 Asses	sment	153
6.1 E	3enchmarks	153
6.1.1	General considerations on decarbonisation benchmarks	153
•	Sector specific benchmarks and Sectoral Decarbonization Approach (SDA)	154
•	SBTi Absolute Contraction Approach benchmarks	154
•	Connection with other ACT methodologies	155
6.1.2	General rules to calculate company decarbonisation benchmarks	157

	٠	Using existing sector benchmarks	157
	٠	Using SBTi Absolute Contraction Approach Benchmarks	160
	6.1.3	Benchmarks for scope 1+2 emissions	160
	6.1.4	Benchmarks for upstream Scope 3 emissions	162
	6.1.5	Benchmarks for downstream Scope 3 emissions	163
6	.2	Other benchmarks used for indicators	164
6	.2	Weightings	164
6	.3	Data request	172
7	Ratir	ng	174
7	.1	Performance scoring	175
7	.2	Narrative scoring	175
7	.3	Trend scoring	175
8	Aligr	ned state	176
9	Sour	ces	177
10	Glos	sary	179
11	Арре	endix	190
1	1.1	Updates in ACT Generic methodology v2.0	190
1	1.2	Illustrative graphs for trend in future emissions intensity indicators	192

1 Introduction

The 2015 United Nations Climate Conference (COP21) in Paris led to a new international climate agreement aiming to limit global warming to well-below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C. The goal of the 'Assessing low-Carbon Transition' (ACT) Initiative is to drive companies' actions to move their strategies, business models, investments, operations, and GHG emissions management to 1.5°C compatible pathways. ACT determines the extent to which companies' are transitioning themselves toward a low-carbon economy and highlights areas for improvement.

For companies operating in the most highly emitting industry sectors ACT applies sector specific assessment methodologies to ensure that most relevant and appropriate actions are assessed. However, many companies operating outside the main highly emitting sectors also have significant emissions impact. This ACT Generic Methodology has been developed to cover these companies.

2 Principles

The selection of principles to be used for the methodology development and implementation is explained in the general ACT Framework (1).Table 1 recaps the ACT 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 Generic methodology for the companies operating in sectors not covered by other specific ACT methodologies. It includes rationales, definitions, indicators and guidance for performance assessment.

The framework of performance indicators is similar for all the companies assessed by the ACT Generic methodology, but the weightings may differ to reflect the specific levers of each type of company depending on their hotspots in terms of GHG emissions and main decarbonization levers.

3.2 SCOPE OF THE GENERIC METHODOLOGY

As all the companies have their role to play in the low-carbon transition, the ACT initiative developed the ACT Generic methodology so that companies not included in a specific sector or multi-activity companies can assess their climate strategy in relation to the requirements of a low-carbon economy. Therefore, the present ACT Generic methodology refers to all sectors not covered by other ACT methodologies (existing or future).

Available ACT methodologies	Upcoming ACT methodologies
Auto Building Construction Real Estate Property Development Retail Electric Utilities Oil & Gas Transport Cement Iron & Steel Glass Pulp & Paper Aluminium Glass	Agriculture & Agrifood Chemicals Finance (Banks & Investors)

TABLE 2: AVAILABLE AND UPCOMING ACT METHODOLOGIES (AS PER NOVEMBER 2023)

The ACT Generic methodology can be used to assess companies operating in a large and various range of activities all along the value chain such as the following categories¹:

¹ It should be noted that this list is not intended to be exhaustive. Also, some sectors might be partly covered by existing or to be developed ACT methodologies that have been excluded of the scope of ACT Generic.

- Extraction activities: Mining & Quarrying
- Industry: Specific methodologies have been developed for some industries². Therefore, ACT Generic methodology focuses on other types of industries such as manufacturing, wholesale, and repair of vehicles and infrastructure construction,
- Waste and water management: water transportation and utilities as well as solid waste management.
- Services with high GHG impact: accommodation and food service activities, information and communication, human health & social work activities, arts, entertainment and recreation, defence.
- Services with low impact: Education, professional, scientific, and technical activities, administrative and support activities, public administration, compulsory social security, activities of households as employers, extraterritorial and other services.

Figure 1 suggests a mapping of the sectors covered by the ACT Generic methodology. The sectoral breakdown presented below is based on the NACE taxonomy. This breakdown has no impact on the methodology and is purely illustrative.



FIGURE 1 : MAPPING OF SECTORS COVERED BY THE ACT GENERIC METHODOLOGY

Source: NACE classification (section level), World Circular Gap Report

² Refer to Figure 1 : Mapping of sectors covered by the ACT Generic to check the industries covered by specific ACT methodologies.

4 Boundaries

The scope of the ACT Generic methodology is very broad and heterogeneous. Based on the principle of relevance, ACT methodologies focus on the main emissions sources throughout the value chain. Thus, depending on the company's activity, the main emissions sources can relate to upstream, direct, or downstream activities. That is the reason why all emissions (direct and significant indirect) need to be considered in the ACT Generic methodology in order to cover the impact of all the companies being assessed.

4.1 REPORTING BOUNDARIES

Sources of emissions analysed

The ACT Generic methodology considers all significant emissions sources related to companies' activities. This includes both direct emissions and indirect emissions.

Scope 1 + 2 emissions: In most of cases, the company has levers to reduce these emissions, especially when it comes to the activities listed below:

- Building (energy consumption of the buildings operated/owned by the company)
- Transport (emissions of the company's operated/owned fleet)
- Industry energy consumption (for plants operated/owned by the company), including scope 2
- Industrial process (direct emissions from industrial processes and waste management including fugitive emissions (e.g.: refrigerant leakage))

Emissions from agriculture / land use are excluded from the scope of direct emissions. These emissions are covered by the ACT Agriculture & Agrifood methodology, which should be used to assess companies with significant related activities.

Significant scope 3 emissions are also to be taken into account:

- Upstream activities through emissions due to products / raw material and services purchased by the company
- Downstream activities through the emissions due to the sold products / services performance
- Emissions due to subcontracted transportation activities (upstream or downstream)

Category of emissions	Source of emissions	Mandatory	Optional
	Direct emissions from stationary combustion	Х	
	Direct emissions from mobile combustion	Х	
Category 1: direct emissions and	Direct process emissions and removals from industrial processes	Х	
removals	Direct fugitive emissions from the release of GHGs in anthropogenic systems	Х	
	Direct emissions from land use, land use change and forestry (LULUCF)		х
Category 2: indirect GHG emissions from	Indirect emissions from imported electricity/heat consumption	х	
imported energy	Indirect emissions from imported energy	х	
	Emissions from upstream transport and distribution for goods	х	
Category 3: indirect	Emissions from downstream transport and distribution for goods	Х	
transportation	Emissions from employee commuting		х
	Emissions from client and visitor transport		х
	Emissions from business travel	х	
Category 4: Indirect GHG emissions from	Indirect GHG emissions from goods purchased by an organization (purchased goods, capital goods)	х	
products used by an organization	Indirect GHG emissions from services used by organization (disposal of waste, equipment leased, other services)		х
Category 5: Indirect	Emissions or removals from the use stage of the product	х	
GHG emissions	Emissions from downstream leased assets		х
use of products from	Emissions from end-of-life stage of the product	Х	
the organization	Emissions from investments		Х
Category 6: Indirect GHG emissions from other sources			Х

Table 3 list the sources of emissions that should be considered when assessing a company with the ACT Generic methodology, using both ISO 14064 and GHG protocol framework.

Companies are encouraged to report their optional emissions, especially if they are considered as significant by the analyst. The coverage of scope 1+2 shall be at least 95%; the coverage of scope 3 shall be at least 67%.

	TABLE 2: EMISSIONS	BOUNDARIES FOR	R THE ACT GENERIC	METHODOLOGY (ISO	14064 FRAMEWORK)
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Category of emissions	Source of emissions	Mandatory	Optional
	Direct emissions from stationary combustion	х	
Category 1: direct emissions and removals	Direct emissions from mobile combustion	х	
	Direct process emissions and removals from industrial processes		
	Direct fugitive emissions from the release of GHGs in anthropogenic systems	х	

	Direct emissions from land use, land use change and forestry (LULUCF)		х
Category 2: indirect GHG emissions from	Indirect emissions from imported electricity/heat consumption	х	
imported energy	Indirect emissions from imported energy	х	
	Emissions from upstream transport and distribution for goods	х	
Category 3: indirect	Emissions from downstream transport and distribution for goods	х	
transportation	Emissions from employee commuting		х
	Emissions from client and visitor transport		х
	Emissions from business travel	х	
Category 4: Indirect GHG emissions from	Indirect GHG emissions from goods purchased by an organization (purchased goods, capital goods)	х	
products used by an organization	Indirect GHG emissions from services used by organization (disposal of waste, equipment leased, other services)		х
Category 5: Indirect	Emissions or removals from the use stage of the product	х	
GHG emissions	Emissions from downstream leased assets		х
use of products from	Emissions from end-of-life stage of the product	х	
the organization	Emissions from investments		х
Category 6: Indirect GHG emissions from other sources			х

TABLE 3: EMISSIONS BOUNDARIES FOR THE ACT GENERIC METHODOLOGY (GHG PROTOCOL FRAMEWORK)

Scope of emissions	Source of emissions	Mandatory	Optional
Scope 1	Direct	Х	
Scope 2	Indirect from electricity/heat consumption	Х	
Scope 3 category 1	Purchased goods and services	Х	
Scope 3 category 2	Capital goods	Х	
Scope 3 category 3	Fuel-and-energy-related activities		Х
Scope 3 category 4	Upstream transportation and distribution	х	
Scope 3 category 5	Waste generated in operations		Х
Scope 3 category 6	Business travel	х	
Scope 3 category 7	Employee commuting		Х
Scope 3 category 8	Upstream leased assets		Х
Scope 3 category 9	Downstream transportation and distribution	х	
Scope 3 category 10	Processing of sold products	х	
Scope 3 category 11	Use of sold products	х	
Scope 3 category 12	End of life treatment of sold products	х	
Scope 3 category 13	Downstream leased assets		Х
Scope 3 category 14	Franchises		Х
Scope 3 category 15	Investments		Х



Figure 2 illustrates all the GHG emissions considered in the ACT Generic methodology:

Tuning the assessment depending on the company emissions' profile

The most significant emissions sources for companies being assessed under the ACT Generic methodology will vary from company to company depending on each company's own specific activity profile. Therefore, the Generic methodology allows flexibility for the analyst to focus the assessment on the most significant emissions (direct and indirect) occurring all along the value chain and on the main decarbonization levers. The weighting of performance modules and indicators is tuned according to the company's activity profile. Refer to 6.2 Weightings for more information.

Here are some examples to illustrate the assessment principle, for scope 3 emissions:



The main challenge for this company is the products and raw materials procurement. Therefore, the assessment will focus mainly on the sources of emissions related to the upstream activities.



This company has more challenges to face from its purchased products to the use of the products as well as the transportation. The analysis will consider all significant indirect emissions included in ACT Generic boundaries.

FIGURE 3: EXAMPLE OF COMPANY A, SOLUTIONS FOR INSTALLATION & MAINTENANCE OF ELEVATORS





This company has more challenges to face from its direct activities and its emissions related to the waste management. The analysis will consider relevant direct emissions included in ACT Generic boundaries.

The connection with other ACT methodologies is described in section 6.

4.2 RATIONALE

ACT boundaries refer to which aspects of the organizational scope are included in the analysis.

The ACT initiative aims to engage companies in a low-carbon transition and can be considered as a useful tool to structure and evaluate the company's strategy. The ACT Generic methodology is therefore very flexible in order to suit different companies challenges and stakes.

Because of the heterogeneity of the activities that can be assessed thanks to the ACT Generic methodology (see section 3.2), a large range of emissions sources must be considered for the assessment:

- Scope 1+2 GHG emissions are relevant whatever the step of the value chain, and are under the control of the companies;

- Scope 3 GHG emissions often are significant (if not the most important ones for a company). It is key to consider them in order to integrate efforts of companies, for instance to source low-carbon solutions and products (upstream), or to limit the impact of the use of sold products (downstream).

By the principle of relevance, it is important to note that the ACT Generic methodology focuses on material sources of emissions. Indeed, ACT methodologies aim to select the most relevant information (core business and stakeholders) to assess how companies contribute to the low-carbon transition.

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 narrative assessment.

The ACT assessment uses the data sources listed in Table 4:

TABLE 4: ACT ASSESSMENT DATA SOURCES

DATA SOURCE	MAIN USE
Company data from survey	Calculation of performance indicators score
Company data from models and simulations	Calculation of performance indicators score
Company data from life cycle assessment	Calculation of performance indicators score
Company data from econometric data	Calculation of performance indicators score
Contextual and financial information on company and events related to the company that could impact the ACT assessment from contextual and financial information database sources (e.g. online and press news, RepRisk, InfluenceMap)	Calculation of the narrative indicators score

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 5 are requested from companies to conduct an ACT Generic assessment. This description is high-level, for further details please refer to section 6.3 Data request.

TABLE 5: DATA REQUESTED FOR AN ACT GENERIC ASSESSMENT

Data requested to the company
GHG emissions (on scopes defined in modules 1, 2 & 4 in quantitative indicators)
Activity data
Reduction targets (absolute and intensity)
Low-Carbon CAPEX
R&D in low-carbon technologies
Low-carbon Patenting Activity
Environmental policy and details regarding governance
Management incentives
Scenario testing
List of environmental/CSR contract clauses when purchasing & selecting suppliers
List of initiatives implemented to influence suppliers to reduce their GHG emissions, green purchase policy or track record, supplier code of conduct
Client policy
List of initiatives implemented to influence clients to reduce their GHG emissions
Company policy on engagement with associations, alliances, coalitions or thinktanks
Position of the company on significant climate policies (public statements, etc.)
List and turnover or invested capital (or other financial KPI) of activities in new businesses related to low- carbon business models
Current position and action plan of the company towards the identified low-carbon business models

5.3 PERFORMANCE INDICATORS

MODULES AND INDICATORS:

Table 6 illustrates the performance modules and indicators included in the ACT Generic methodology.

TABLE 6: PERFORMANCE INDICATORS IN ACT GENERIC METHODOLOGY

MODULE	PAST	PRESENT	FUTURE
1. TARGETS		GE 1.5 Achievement of previous and current targets	GE 1.1 Alignment of scope 1+2 emissions reduction targets GE 1.2 Alignment of upstream scope 3 emissions reduction targets GE 1.3 Alignment of downstream scope 3 emissions reduction targets GE 1.4 Time horizon of targets
2. MATERIAL INVESTMENT		GE 2.1 Trend in past emissions	GE 2.2 Trend in future emissions GE 2.3 Share of low carbon CAPEX GE 2.4 Locked-in emissions from own fleet and buildings
3. INTANGIBLE INVESTMENT		GE 3.1 R&D in low-carbon GE 3.2 Company low	and mitigation technologies carbon patenting activity
4. SOLD		GE 4.1 Product / serv	ice specific intervention
PRODUCT PERFORMANCE		GE 4.2 Trend in past product / service specific performance GE 4.4 Sub-contracted transport service performance	GE 4.3 Locked-in emissions from sold products
5. MANAGEMENT		GE 5.1 Oversight of climate change issues GE 5.2 Climate change oversight capability GE 5.4 Climate change management incentives	GE 5.3 Low-carbon transition plan GE 5.5 Climate change scenario testing
6. SUPPLIER	G	E 6.2 Activities to influence suppliers to reduce their GHG emissions	GE 6.1 Strategy to influence suppliers to reduce their GHG emissions
7. CLIENT	(GE 7.2 Activities to influence clients to reduce their GHG emissions	GE 7.1 Strategy to influence clients to reduce their GHG emissions

MODULE	PAST	PRESENT	FUTURE
8. POLICY ENGAGEMENT		GE 8.1 Company policy on engagement with associations, alliances, coalitions or thinktanks GE 8.2 Associations, alliances, coalitions or thinktanks supported do not have climate-negative activities or positions GE 8.3 Position on significant climate policies GE 8.4 Collaboration with local public authorities	
9. BUSINESS MODEL		GE 9.1 Revenue from low-car GE 9.2 Changes to GE 9.3 Share of product/service sales us	bon products and/or services business models ed in client low-carbon products/services

MATURITY MATRIX:

To score qualitative indicators, 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 7 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 7: ACT MATURITY LEVELS

Evaluation level	Basic	Standard	Advanced	Next practice	Low-carbon transition aligned
Score	0	0,25	0,5	0,75	1

MODULE 1: TARGETS

GE 1.1 ALIGNMENT OF SCOPE 1+2 EMISSIONS REDUCTION TARGETS •

DESCRIPTION & GE - 1.1 ALIGNMENT OF SCOPE 1+2 EMISSIONS REDUCTION TARGETS

REQUIREMENTS

SHORT A measure of the alignment of the company's near- and long-term scope 1+2 emissions reduction targets with its decarbonization pathway. **DESCRIPTION OF** The indicator will compare the trend of the company's target pathway to the trend of the company's benchmark pathway and thus identify INDICATOR the gap between both pathways at the target year. This is expressed as the company's commitment gap.

DATA The relevant data for this indicator are:

REQUIREMENTS

- Targets information for each relevant scope 1+2 GHG emissions sources (Target year, emission reduction between reporting year ٠ and target year, coverage)
- Share of scope 1+2 emission sources in total scope 1+2 emissions [%] ٠

CDP Questionnaire 2023 mapping to this indicator:

- C4.1a (absolute targets)
- C4.1b (intensity targets) ٠

The benchmark indicators involved are the following:

Target type	Parameter	Intensity metric	Methodological sources
Building	Elbb	kgCO ₂ /m ²	ACT Real Estate (2)
Transport	Elbt	kgCO2/p.km kgCO2/t.km	ACT Auto (3) / ACT Transport (4)
Industry energy consumption	Elbie	% of absolute emissions	SBT absolute contraction approach (ACA) (5)
Industry direct process – Refrigerant leakage	Elbrl	[gCO2e refrigerant leaked]/[kg refrigerant in cold equipment]	RGR (Reduce GWP Refrigerant) EU15 scenario for 2030 (6)- Zero leakage tolerance in 2050
Industry direct process – Other industrial process, including fugitive emissions and waste management	Elbip	% of absolute emissions	SBT absolute contraction approach (ACA) (5)
Electricity emissions intensity	Elbelec	gCO ₂ /kWh	ACT Electricity (7)
Total scope 1+2 emissions – ACA target		% of absolute emissions	SBT absolute contraction approach (ACA) (5)

These benchmarks correspond to the main sources of scope 1+2 emissions a corporate organization usually generates. They should be applied depending on the sources of scope 1+2 emissions.

The choice of the benchmark also depends on the availability of sectoral scenarios/pathways. The selection is made according to the following process:

- If a specific pathway based on carbon intensity from a low-carbon scenario is available, a target in carbon intensity will be asked and analysed;
- If such a pathway does not exist to date, a default pathway based on contraction of absolute emissions is applied.

See section 6.1 Benchmarks for more information.

Also, if needed and justified, the analyst can propose a reference pathway meeting ACT requirement (data sourcing, assumptions robustness ...). All the benchmarks used by the ACT initiative are aligned at minimum with the ambition of the Beyond-2-Degree Scenario (B2DS) from the International Energy Agency (IEA). If various scenarios are available, the most ambitious one should be used, and must meet at minimum the ambition requirements of the B2DS.

HOW THE	The englysis has two dimensions
ASSESSMENT	The analysis has two dimensions.
WILL BE DONE	 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 scope 1+2 emissions target and the company benchmark. Trends are

The analysis is based on a trend ratio between the company's scope 1+2 emissions target and the company benchmark. Trends are computed between reporting year and the longest time horizon of the target.

The company's target pathway is the decarbonisation over time, defined by the company's scope 1+2 emissions reduction target. 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 scope 1+2 emissions low-carbon benchmark pathway. See section 6.1 Benchmarks 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 and also if the targets are covering most of the company's scope 1+2 emissions at reporting year.

CALCULATION OF SCORE:

1) 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 reporting year and the target year through the trend ratio:

 $Trend \ ratio = \frac{Company's \ commitment \ trend}{Benchmark \ pathway \ trend} = \frac{EI_C(TY) - EI_C(RY)}{EI_B(TY) - EI_B(RY)}$

Where:

5

- Elc(TY) is the company scope 1+2 emissions intensity at target year,
- Elc (RY) is the company scope 1+2 emissions intensity at reporting year,
- Elb(TY) is the company's benchmark scope 1+2 emission intensity at target year
- Elb(RY) is the company's benchmark scope 1+2 emission intensity at reporting year (equals to Elc (RY))

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 3).



FIGURE 3: TREND RATIO AND COMMITMENT GAP

2) Final Score

The final score assigned to the indicator is calculated as follows (see Appendix 11.2 for a graphic illustration of the different cases):

Conditions	Score
Company's target trend > 0	0%
Increase in company emissions intensity	
$Company's target trend \le 0$	
$0 \leq trend \ ratio \leq 1$	Trend ratio $ imes 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 $EI_{C}(RY) \ge EI_{B}(2050)$	
trend ratio > 1	100%
Decrease in company emissions intensity and company's commitment equals or exceeds the company's benchmark ambition	
Company's target trend ≤ 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%

Targets that do not cover > 95% of scope 1+2 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 for the same emission source, the score will be the average of target scores.
- If the company has set targets on different emissions sources, the consolidation of the scores will be based on the share of emissions covered by the targets.

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

ACA SPECIFIC CASE

If the company benchmark pathway is built using the absolute contraction approach (ACA), calculations are the same as above, but using absolute emissions instead of emission intensities.

RATIONALE GE 1.1 ALIGNMENT OF SCOPE 1+2 EMISSIONS REDUCTION TARGETS

RATIONALE OF RELEVANCE OF THE INDICATOR:

THE INDICATOR

Targets are included in the ACT assessment for the following reasons:

- 1. Targets are an indicator of corporate commitment to reduce emissions and are a meaningful metric of the company's internal planning towards the transition.
- 2. 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.
- For some sectors covered by ACT Generic, scope 1+2 emissions might represent a high share of company's emissions. A GHG emissions reduction target should be assigned to them.

SCORING RATIONALE:

Targets for each sub-sector are quantitatively interpreted and directly compared to the company's low-carbon benchmark.

Relevant scope 1+2 emissions sources of the company shall be identified by the analyst, with corresponding low-carbon scenario among those available in ACT sectoral methodologies or an absolute contraction approach. Specific information on company emissions sources might be needed to choose the most relevant low-carbon scenario (e.g. geography, type...).

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 longterm but also in the near-term. The Science Based Targets initiative's Net Zero Standard requires companies to set both near-term and longterm 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" (8). The recent 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 (9).

• GE 1.2 ALIGNMENT OF UPSTREAM SCOPE 3 EMISSIONS REDUCTION TARGETS

DESCRIPTION & GE 1.2 ALIGNMENT OF UPSTREAM SCOPE 3 REDUCTION TARGETS

REQUIREMENTS

DATA

SHORT	
DESCRIPTION OF	A measure of the alignment of the company's upstream emissions reduction targets with its decarbonization pathway. The indicator will compare the trend of company's targeted pathway to the trend of company's benchmark and thus identify the gap between both pathways
INDICATOR	at the target year, which is expressed as the company's commitment gap

The relevant data for this indicator are:

- Targets information for each relevant upstream scope 3 GHG emissions sources (Target year, emission reduction between reporting year and target year, coverage)
 - Share of upstream emission sources in total upstream scope 3 emissions [%]

Upstream scope 3 emissions cover purchased goods and services, capital goods, upstream transportation and distribution.

CDP Questionnaire 2023 mapping to this indicator:

- C4.1a (absolute targets)
- C4.1b (intensity targets)

The benchmark indicators involved are:

Target type	Parameter	Intensity metric	Benchmark
Vehicle emissions intensity (Scope 1+2+3)	CB _{PP1}	gCO2e/tonne.km or gCO2e/passenger.km	ACT Auto (3)
Cement emissions intensity	CB _{PP2}	gCO ₂ /tonne of cement	ACT Cement (10)
Oil & Gas products emissions intensity	CB _{PP3}	tCO ₂ /TJ	ACT Oil & Gas (11)
Glass products emissions intensity	CB_{PP4}	index	ACT Glass (12)
Pulp & Paper products emissions intensity	CB _{PP5}	tCO2/t paper&board	ACT Pulp & Paper (12)
Iron & Steel emissions intensity	CB_{PP6}	tCO2/t crude steel	ACT Iron & Steel (13)
Food products emissions	CB _{PP7}	absolute emissions	SBT FLAG (14)
Aluminium emissions intensity	CB _{PP8}	tCO2e/t aluminium	ACT Aluminium (15)
Purchased or sold products/services	CB_{Other}	% of absolute emissions	SBT absolute contraction (5)
Total upstream emissions – ACA Target	CB_{Total}	% of absolute emissions	SBT absolute contraction (5)

The choice of the benchmark depends on the availability of sectoral scenarios/pathways. The selection is made according to the following process:

- If a specific pathway based on carbon intensity from a low-carbon scenario is available for products and materials purchased, and if the emissions related to these purchases represent a high source of emissions for the company upstream scope, a target in carbon intensity will be requested and analysed (E.g.: purchase/use of cement, steel.);
- If such a pathway does not exist to date, a default pathway based on contraction of absolute emissions is applied.

See section 6.1 Benchmarks for more information.

All the benchmarks used by the ACT initiative are aligned at minimum with the ambition of the Beyond-2-Degree Scenario3 (B2DS). If the analyst/company has the choice between two benchmarks, the most ambitious scenario should be used, and must meet at minimum the ambition requirements of the B2DS.

 How THE
 Relevant upstream emissions sources of the company shall be identified by the analyst, with corresponding low-carbon scenario among

 ASSESSMENT
 those available in ACT sectoral methodologies. Specific information on company emissions sources might be needed to choose the most relevant low-carbon scenario (e.g. geography, type...).

 WILL BE DONE
 the company scenario (e.g. geography, type...).

Same calculation as indicator GE 1.1 Alignment of scope 1+2 emissions reduction targets.

RATIONALE	GE 1.2 ALIGNMENT OF UPSTREAM SCOPE 3 REDUCTION TARGETS				
RATIONALE OF	Rele	VANCE OF THE INDICATOR:			
THE INDICATOR	Upstr	eam reduction targets are included in the ACT Generic assessment 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 plans 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.			
	•	For some sectors covered by ACT Generic, indirect upstream emissions might represent a high share of company's emissions. A GHG emissions reduction target should be assigned to them.			
	Scor	RING RATIONALE:			
	As pe	er indicator GE 1.1 Alignment of scope 1+2 emissions reduction targets.			

³ In the IEA ETP 2017, the more ambitious Beyond-2-Degree scenario (B2DS) was proposed in order to limit the rise of global temperature by 1.75 degrees by 2100.

• GE 1.3 ALIGNMENT OF DOWNSTREAM SCOPE 3 EMISSIONS REDUCTION TARGETS

DESCRIPTION & GE 1.3 ALIGNMENT OF DOWNSTREAM SCOPE 3 EMISSIONS REDUCTION TARGETS

REQUIREMENTS

SHORT	
	A measure of the alignment of the company's downstream emissions reduction targets with its decarbonization pathway. The indicator will
DESCRIPTION OF	compare the trend of company's targeted pathway to the trend of company's benchmark and thus identify the gap between both pathways
INDICATOR	at the target year, which is expressed as the company's commitment gap

DATA

REQUIREMENTS

The relevant data for this indicator are:

- Targets information for each downstream GHG emissions sources (Target year, emission reduction between reporting year and target year, coverage)
- Share of downstream emission sources in total downstream emissions [%]

Downstream indirect emissions cover processing of sold products or services, use of sold products or services, end-of-life treatment of sold products or services, downstream transportation and distribution.

CDP Questionnaire 2023 mapping to this indicator:

- C4.1a (absolute targets)
- C4.1b (intensity targets)

The benchmark indicators involved are:

Target type	Parameter	Intensity metric		Methodological sources
Transport vehicles emissions intensity	EIbt	kgCO ₂ e/ton.km kgCO ₂ e/passenger.km	or	ACT Transport (4) / ACT Auto (3)

Produced electricity emissions intensity	CB _{SP2}	gCO ₂ /kWh	ACT Electricity (7)
Other downstream indirect emissions	Elbabs	% of absolute emissions	SBT absolute contraction (5)
Total downstream emissions – ACA target	CB_{Total}	% of absolute emissions	SBT absolute contraction (5)

The choice of the benchmark depends on the scenario availability. The selection is made according to the following process:

- A benchmark using emissions intensity is applied if the company meets the following requirements:
 - The use of sold products or services represents a high source of downstream emissions;
 - The company produces ready-to-use products or services and is able to measure their emissions intensity;
 - A specific pathway based on emissions intensity from a low-carbon scenario is available.
 E.g.: ACT transport for transport vehicles manufacturers.
- If such a pathway does not exist to date, a default pathway based on contraction of absolute emissions is applied.

See section 6.1 Benchmarks for more information.

HOW THE

ASSESSMENT Relevant downstream emissions sources of the company shall be identified by the analyst, with corresponding low-carbon scenario among those available in ACT sectoral methodologies. Specific information on company emissions sources might be needed to choose the most relevant low-carbon scenario (e.g. geography, type...).

Same computation as indicator GE 1.1 Alignment of scope 1+2 emissions reduction targets.

RATIONALE GE 1.3 ALIGNMENT OF DOWNSTREAM SCOPE 3 EMISSIONS REDUCTION TARGETS

RATIONALE OF RELEVANCE OF THE INDICATOR:

THE INDICATOR Downstream emissions reduction targets are included in the ACT Generic assessment 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 plans 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.
- For some sectors covered by ACT Generic, indirect downstream emissions might represent a high share of company's emissions. A GHG emissions reduction target should be assigned to them.

SCORING RATIONALE:

As per indicator GE 1.1 Alignment of scope 1+2 emissions reduction targets.

• **GE 1.4 TIME HORIZON OF TARGETS**

REQUIREMENTS

DESCRIPTION & GE 1.4 TIME HORIZON OF TARGETS REQUIREMENTS

 SHORT
 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.

 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 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 (absolute targets)
- C4.1b (intensity targets)

HOW THE The analysis has two dimensions:

- ASSESSMENT

A comparison of: (a) the longest time horizon of the company's targets, and (b) the long-term point fixed by ACT assessment ٠ methodology. WILL BE DONE

> ٠ 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 the long-term point (*LT*), which is fixed at 2050 minus the reporting year, aligned with low-carbon scenario. The company is allowed to present another LT point (closer to the present) but it must be duly justified (eg: based on the average lifetime of emitting assets, sold products or services, purchased contracts, etc).

LT = 2050 - reporting year

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
$T_e > LT$	50%	Score
$33\% * LT < \mathbf{T}_e < LT$	$75\% imes rac{T_e}{LT} - 25\%$	
$T_e \leq 33\% * LT$	0%	$0\% \qquad \qquad$

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 LT.

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

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

An example is illustrated in Figure 4.



FIGURE 4 : EXAMPLES OF HORIZONS OF INTERMEDIATE TARGETS SET BY THE COMPANY AND CORRESPONDING SCORES ON DIMENSION 2 OF THE INDICATOR 1.4

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

FOR ALL CALCULATIONS:

 Targets that do not cover > 95% of generation emissions are not preferred in the calculations. If only such targets are available, then the score will be adjusted downwards in proportion with % coverage.

Targets that do not cover > 95% of scope 1+2 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.

RATIONALE	GE 1.4 TIME HORIZON OF TARGETS			
RATIONALE OF	RELEVANCE OF THE INDICATOR:			
THE INDICATOR	 The time horizon of targets is included in the ACT Generic assessment 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. 			
GE 1.5 ACHIEVEMENT OF PAST AND CURRENT TARGETS				
DESCRIPTION & REQUIREMENTS	GE 1.5 ACHIEVEMENT OF PAST AND CURRENT TARGETS			
SHORT DESCRIPTION OF INDICATOR	A measure of the company's historic target achievements and current progress towards active emission 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 reduction target achieved in absolute emissions Percentage of reduction target from base year in emissions intensity Percentage of reduction target achieved in emissions intensity Percentage of reduction target achieved in emissions intensity Percentage of reduction target achieved by the targets 			

CDP Questionnaire 2023 mapping to this indicator:

- C4.1a (absolute targets)
- C4.1b (intensity targets)

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

WILL BE DONE DIMENSION 1: PAST TARGETS

HOW THE

ASSESSMENT

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:

$$a = \frac{E(t_{ref}) - E(t_{horizon})}{E(t_{ref}) - T(t_{horizon})} \ge 0.5$$

where:

- $E(t_{ref})$ is the level of emissions of the company on the base year,
- $T(t_{horizon})$ is the target the company set (a given level of emission at a given horizon year, now past),
- $E(t_{horizon})$ is the effective level of emission reached by the company on the year of horizon of the target.

A threshold is set for scoring at 0.5: if the company has achieved less than 50% of its own past target, it shall 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 kept for scoring.


DIMENSION 2: RUNNING TARGETS

Assess whether the company is currently on track to meet an existing emissions reduction target. The assessment is based on the progress ratio *p*:

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

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

$$\% time = \frac{t_{ref} - t_{reporting}}{t_{ref} - t_{horizon}}$$

Where

- t_{ref} is the year during which the target was set
- $t_{reporting}$ is the reporting year
- $t_{horizon}$ is the year of horizon of the target

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

Progress ratio	Score
$p \ge 1$	100%
<i>p</i> < 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%



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 that do not cover >95% of the company's GHG emissions scope are not preferred in the calculation of dimension 2, but are not penalized, as other indicators already penalize for not having a large coverage in the target.
- If the company has multiple targets in different scopes 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 only 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.

RATIONALE GE 1.5 ACHIEVEMENT OF PAST AND CURRENT TARGETS

RATIONALE OF RELEVANCE OF THE INDICATOR:

THE INDICATOR The historic target ambition and company performance is included in the ACT Generic for the following reasons:

- The ACT assessment looks only to the past to the extent where it can inform on the future. This indicator is future-relevant by providing information on the organizational capability to set and meet emission 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 makes no judgement of past target ambition and leaves it to the assessment narrative 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 less 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 actions to reduce scope 1 and 2 emissions from the company's assets and operations. Comparing the company's trend in past and projected scope 1 and 2 emissions intensity with its 1.5°C pathway provides a good measure of its transition progress. Comparing capital expenditure (CAPEX) allocated to low-carbon technologies against the total CAPEX provides an indication of future emissions reductions, while locked-in direct emissions from the company's assets show the amount by which the company is likely to exceed its carbon budget.

• GE 2.1 TREND IN PAST EMISSIONS

DESCRIPTION & GE 2.1 TREND IN PAST EMISSIONS REQUIREMENTS

SHORT						
DESCRIPTION OF	A me will c	asure of the alignment of the past trend of the company's scope 1+2 emissions with its low-carbon benchmark pathways. The indicator oppare the gradient of this trend over a 5-year period to the reporting year (reporting year minus 5 years) with the low-carbon				
INDICATOR	bench	benchmark pathway trend over a 5-year period after the reporting year. (reporting year minde of year) with the low earborn				
DATA	The r	elevant data for this indicator are:				
REQUIREMENTS	•	Carbon intensity and activity at reporting year and RY-5 for each relevant emissions area				
		OR				
	•	Total scope 1+2 emissions and activity at reporting year and RY-5.				
	CDP	Questionnaire 2023 mapping to this indicator:				
	•	C6.1				
	•	C6.3				
	•	C6.10				
	•	C7.3b				

The benchmark indicators involved are:

Source of emissions	Parameter	Intensity metric	Methodological sources
Building	Elbb	kgCO ₂ /m ²	ACT Real Estate (2) Service buildings benchmark
Transport	Elbt	kgCO₂/p.km kgCO₂/t.km	ACT Auto (3) / ACT Transport (4)
Industry energy consumption	Elbie	% of absolute emissions	SBT absolute contraction (5)
Industry direct process – Refrigerant leakage	Elbri	[gCO2e refrigerant leaked]/[kg refrigerant in cold equipment]	RGR (Reduce GWP Refrigerant) EU15 scenario for 2030 (6)- Zero leakage tolerance in 2050
Industry direct process – Other industrial process, fugitive emissions, waste management	Elbip	% of absolute emissions	SBT absolute contraction (5)
Electricity emissions intensity	Elbelec	gCO ₂ /kWh	ACT Electricity (7)
Total scope 1+2 emissions	AE _{total}	% of absolute emissions	SBT absolute contraction (5)

As for alignment of the targets, the choice of the benchmark depends on the scenario availability. The selection will be made according to the following process:

- Option A: If a specific pathway based on carbon intensity from a low-carbon scenario is available, the trend in carbon intensity will be asked and analyzed.
- Option B: If such a pathway does not exist to date, a default pathway based on contraction of absolute emissions is applied (5).
- Option C: If needed and justified, the analyst can propose a reference pathway meeting ACT requirement (data sourcing, assumptions robustness ...).

See section 6.1 Benchmarks for more information.

How THEThe analysis is done for each significant sources of emissions (scope 1+2 emissions) or only for the total scope 1+2 emissions. DependingASSESSMENTon the emissions sources and the associated benchmark, the analysis can be conducted using emissions intensity or absolute emissions.WILL BE DONEThe indicator description below is related to an intensity analysis.

The analysis is based on the comparison between the company's recent (RY-5) emissions intensity trend gradient (CR'_{source}) and the company's decarbonization pathway trend gradient (CB'_{source}) in the short-term (RY+5). The emissions intensity of the company at the reporting year (CEI_{RY}) and the sectoral benchmark value of emissions intensity in 2050 (SB₂₀₅₀) are also considered to calculate the company's score.

CALCULATION OF SCORE

CR'source is the gradient of the linear trend-line of the company's recent "source" emissions intensity over time.

CB'_{Source} is the gradient of the linear trend-line of the company benchmark pathway for emissions intensity. See section 6.1 Benchmarks for details on the computation of the company specific decarbonization pathway.

The difference between CR'_{source} and CB'_{source} will be measured by their ratio (r_{source}). This is the scope 1+2 emissions Transition ratio, which is calculated by the following equation, with the symbol 'used to denote gradients:

$$R_{source} = \frac{CR'_{source}}{CB'_{source}}$$

Four different cases are to be taken into consideration:

- Case #1: CR'_{source} is positive \rightarrow Score = 0 (whatever the source and CEI_{RY} values)
- Case #2: CR'_{source} is negative and 0 < r_{Source} <1 and CEI_Y is higher than SB₂₀₅₀ → Score = r_{source} (expressed as a percentage)
- Case #3: CR'_{source} is negative and $r_{\text{Source}} \ge 1$ and CEI_Y is higher than SB₂₀₅₀ \rightarrow Score = 100 %
- Case #4: CR'_{source} is negative and CEI_Y is lower than SB₂₀₅₀ \rightarrow Score = 100 % (whatever the r_{Source} value)





AGGREGATION OF SCORES

If the company has several relevant emissions areas, the consolidation of the scores assigned to each area will be based on the share of emissions covered by the areas.

For instance, a company has two types of relevant emissions areas. Area 1 generates 30% of the scope 1+2 emissions and area 2 generates 70% of the emissions. Both area types are rated against a specific benchmark. The company gets two scores (1 and 2) for this indicator. Then, final score = 30%*score 1 + 70%*score 2.

RATIONALE	GE 2.1 TREND IN PAST EMISSIONS				
RATIONALE OF	RELEVANCE OF THE INDICATOR:				
THE INDICATOR	Trend in past emissions indicator is included in this ACT methodology for the following reasons:				
	Trend in past emissions shows the speed at which the company has been reducing its emissions or its emissions intensity over the recent past. Comparing this to the decarbonization pathway gives an indication of the speed of the change that needs to be made within the company to bring it onto a low-carbon pathway.				
	While ACT aims to be as future-oriented as possible, it does not want to rely solely on projections, 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.				
	This indicator is future-relevant by providing information on the organizational capability to deliver emissions reductions that are aligned with the benchmark.				

• **GE 2.2 TREND IN FUTURE EMISSIONS**

DESCRIPTION & GE 2.2 TREND IN FUTURE EMISSIONS

REQUIREMENTS

SHORT DESCRIPTION OF	A me	easure of the alignment of the future trend of the company's scope 1+2 emissions with the low-carbon benchmark pathway. The ator will compare the gradient of this trend with the low-carbon benchmark pathway trend over a 5-year period after the reporting year.			
INDICATOR					
DATA	The relevant data for this indicator are:				
REQUIREMENTS	 Carbon intensity at reporting year and RY+5 for each relevant emissions area OR 				
	•	Total scope 1+2 emissions at reporting year and RY+5			

Future emissions should be estimated from company assets and their expected produced activity. If future emissions can't be estimated from company assets, expected trend in future emissions should be estimated by using company's short-term plans to decrease scope 1+2 emissions. If no information is available, the analyst shall give a score of 0.

CDP Questionnaire 2023 mapping to this indicator:

◆ C4.1c

The benchmark indicators involved are:

Source of emissions	Parameter	Intensity metric	Methodological sources
Building	Elbb	kgCO ₂ /m ²	ACT Real Estate (2)
Transport	Elbt	kgCO₂/p.km kgCO₂/t.km	ACT Auto (3) / ACT Transport (4)
Industry energy consumption	Elbie	% of absolute emissions	SBT absolute contraction (5)
Industry direct process – Refrigerant leakage	Elbri	[gCO2e refrigerant leaked]/[kg refrigerant in cold equipment]	RGR (Reduce GWP Refrigerant) EU15 scenario for 2030 (6)- Zero leakage tolerance in 2050
Industry direct process – Other industrial process, fugitive emissions, waste management	Elbip	% of absolute emissions	SBT absolute contraction (5)

Electricity emissions intensity	Elbelec	gCO ₂ /kWh	ACT Electricity (7)
Total scope 1+2 emissions	AE _{total}	% of absolute emissions	SBT absolute contraction (5)

As for alignment of the targets, the choice of the benchmark depends on the scenario availability. The selection will be made according to the following process:

- Option A: If a specific pathway based on carbon intensity from a low-carbon scenario is available, the trend in carbon intensity will be asked and analyzed.
- Option B: If such a pathway does not exist to date, a default pathway based on contraction of absolute emissions is applied (5)..
- Option C: If needed and justified, the analyst can propose a reference pathway meeting ACT requirement (data sourcing, assumptions robustness ...).

See section 6.1 Benchmarks for more information.

How THEAs for indicator 2.1, the analysis is done for each significant sources of emissions (scope 1+2 emissions) or only for the total scope 1+2ASSESSMENTemissions. Depending on the emissions sources and the associated benchmarks, the analysis can be conducted using emissions intensityWILL BE DONEor absolute emissions. The indicator description below is related to an intensity analysis.

The analysis is based on the Future Action ratio (A_{future}) which represents the ratio between the company's future (RY+ 5) scope 1+2 emissions intensity trend gradient and the company's future benchmark (RY+5) emission intensity trend gradient, as shown in Figure 6.



FIGURE 6: 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 company's future scope 1+2 emissions intensity trend (between RY and RY+ 5) and the future benchmark emission intensity (between RY and RY+ 5):

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

Where:

- $EI_c(RY_R)$ is the company emission intensity at RY,
- $EI_c(RY + 5)$ is the company emission intensity at RY+5,
- $EI_B(RY)$ is the benchmark emission intensity at RY, equals to $EI_c(RY)$,
- $EI_B(RY + 5)$ is the benchmark emission intensity at RY+5.

The action gap of the company is equal to $(1 - A_{future})$. Thus, when the company's future 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 6).

Conditions	Score
Company's future trend > 0	0%
Increase in company emissions intensity	
<i>Company's future trend</i> ≤ 0 and $EI_{C}(RY) > EI_{B}(2050)$	
$0 \le A_{future} \le 1$	$A_{future} imes 100\%$
Decrease in company emissions intensity but company's pathway does not go beyond the company's benchmark ambition	
Company's future trend < 0	
$A_{future} > 1$	100%
Decrease in company emissions intensity and company's pathway equals or exceeds the company's benchmark ambition	
Company's future trend ≤ 0 and $EI_CEI_B(RY) \leq EI_B(2050)$	
No increase in company emissions intensity and company's emissions intensity is already below the company's benchmark ambition for 2050	100%

The final score assigned to the indicator is calculated as follows (see Appendix 11.2 for a graphic illustration of the different cases):

Aggregation of scores

If the company has several relevant emissions areas, the consolidation of the scores assigned to each area will be based on the share of emissions covered by the areas.

For instance, a company has two types of relevant emissions areas. Area 1 generate 30% of the scope 1+2 emissions and area 2 generate 70% of the emissions. Both area types are rated against a specific benchmark. The company gets two scores (1 and 2) for this indicator. Then, final score = 30%*score 1 + 70%*score 2.

RATIONALE GE 2.2 TREND IN FUTURE EMISSIONS

RATIONALE OF RELEVANCE OF THE INDICATOR:

THE INDICATOR Trends in future emissions are included in the ACT Generic assessment for the following reasons:

- The trend shows the speed at which the company needs to reduce its 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 emissions intensity and absolute emissions, forms part of a holistic view of company 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. The indicator looks at a fixed point in the future and assesses the impact of planned assets deployment in reducing emissions.

• GE 2.3 SHARE OF LOW-CARBON CAPEX

DESCRIPTION & REQUIREMENTS	GE 2.3 SHARE OF LOW-CARBON CAPEX			
SHORT	An analysis of the share of CAREX invested in Low Carbon & Mitigation technologies			
DESCRIPTION OF	An analysis of the share of CAPEX invested in Low-Carbon & Mitigation technologies.			
INDICATOR				

DATA The relevant data for this indicator are:

REQUIREMENTS • 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:

♦ C3.5a

HOW THE

ASSESSMENT

WILL BE DONE

Question	Basic	Standard	Advanced	Next practice	Low- carbon aligned	Subscore
Associated score	0%	25%	50%	75%	100%	
What is the share of CAPEX invested in Low-Carbon & Mitigation technologies (% of CAPEX)?	Below 20%	Between 21% and 40%	Between 41% and 60%	Between 61% and 80%	Above 80%	100%

The assessment will assign a maturity score based on the company's share of planned low-carbon CAPEX, expressed in a maturity matrix.

A company that is placed in the 'aligned' category will receive the maximum score. Companies who are at lower levels 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. Companies' responses will be scrutinized by the analyst and then placed on the level in the matrix where the analyst deems it most appropriate.

DEFINING LOW-CARBON & MITIGATION TECHNOLOGIES

A low-carbon or mitigation technology must be widely considered to contribute substantially to climate change mitigation (following the definition in the section Defining "low-carbon business activity").

RATIONALE GE 2.3 SHARE OF LOW-CARBON CAPEX

RATIONALE OF THE INDICATOR Planned investments in low-carbon capex are included in this ACT methodology for the following reasons: 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 ratio in other ACT methodologies, no benchmarks are available for this sector. Therefore, thresholds have been defined accordingly.

• GE 2.4 LOCKED-IN EMISSIONS FROM OWN FLEET AND BUILDINGS

DESCRIPTION & REQUIREMENTS	GE 2	2.4 Locked-in Emissions from own fleet and buildings		
SHORT DESCRIPTION OF INDICATOR	Measure of the company's cumulative GHG emissions implied by the company's installed and planned assets over a time period from the reporting year. These locked-in emissions are compared to the carbon budget allocated to the company according to the benchmark. A secured activity ratio, considering both secured and projected activities, completes the scoring to ensure there is consistency between companies' concrete plans and long-term projections.			
PREREQUISITE	The	types of assets covered by this indicator are the following: buildings, transport fleet.		
D ATA	The	relevant data for this indicator are:		
REQUIREMENTS	 Building portfolio: Description of buildings owned (carbon intensity, surface) and renovation / purchase planned. OR estimate of absolute emissions linked to buildings, from RY to 2050 Expected growth of activity Transport fleet: Description of the current and planned fleet (number of units, emissions intensity, activity per year, lifespan) at RY OR estimate of absolute emissions linked to transport fleet, from RY to RY+15 			

CDP Questionnaire 2023 mapping to this indicator:

◆ C7.3b

The benchmark indicators involved are:

Target type	Parameter	Intensity metric	Benchmark
Building	CBre CBb	kgCO ₂ /m2	ACT Real Estate ((2)
Transport	CBtr	kgCO ₂ /p.km kgCO ₂ /t.km	ACT Auto (3)/ ACT Transport ((4)

This metric needs to rely on a physical unit for assets. Therefore, this indicator is only applied for buildings and vehicles in order to be compliant with the principle of relevancy described earlier in this document and part of the ACT Framework. Also, this indicator requires a high level of details in terms of data collection.

Assumptions:

Locked-in emission should be computed from company's assets, if the company hasn't published any plan, assets activity and GHG intensity should be considered constant from reporting year until expected decommissioning year of the asset. Decommissioning is estimated by using assumptions on average sectoral asset lifetime if not scheduled by the company.

How THEFor transport: the analysis is based on the ratio between the company's installed and planned emissions for the 15 years after the reportingASSESSMENTyear $[LE_F(RY + 15)]$, and the emissions budget entailed by the company's carbon budget B(RY + 15) over the same period of time. Specific
case of fleet composed of leasing vehicles: the locked-in emissions are calculated up to the end of the longest leasing contract instead of
RY + 15.

For building: the analysis is based on the ratio between the company's installed and planned emissions until 2050 $LE_F(2050)$ and the emissions budget entailed by the company's carbon budget B(2050) over the same period of time.

Calculations are presented for the transport case. They are the same for buildings, with a time period from RY to 2050 instead of RY to (RY+15).

 $LE_F(t)$ is calculated as the total cumulative emissions implied by the lifetimes of currently active assets and assets which are planned and confirmed.

 $LE_F(t)$ is calculated as the company's locked-in carbon emissions, from reporting year (RY) to reporting year plus fifteen years (RY+15), which is derived by taking the area under the company's future locked-in emissions curve. This curve in turn is derived from the company's intensity pathway *CA*, multiplied by secured activity A_S :

$$LE_F(t) = \int_{RY}^{(RY+15)} A_S * CA$$

Figure 7 illustrates locked-in emissions of one facility and of the whole company.



FIGURE 7: COMPUTING LOCKED-IN EMISSIONS FROM FACILITY

B(RY + 15) is calculated as the company's carbon budget up to RY+15, which is derived by taking the area under the absolute emissions reduction curve. This curve is derived from the company benchmark pathway (*CB*) by multiplying it by the projected activity A_P for the company:

$$B(RY+15) = \int_{RY}^{(RY+15)} A_p * CB$$

The company's benchmark is computed from the company's current emissions at reporting year and the level of carbon intensity defined by the sectoral benchmark presented in section 6.1. The carbon budget is illustrated in Figure 8 Figure 8 below.



FIGURE 8: CARBON BUDGET DERIVED FROM THE COMPANY'S BENCHMARK

Depending on the data availability, the computation of these areas may not be as straightforward as the equations shown and will be estimated, but the principles will hold.

The locked-in ratio (r_{LB}) is illustrated in Figure 9, and calculated as follows:

$$r_{LB}(t) = \frac{LE_F(t)}{B(t)}$$

ACT Generic | ACT Initiative | Version 2.0 | page 56



FIGURE 9: ILLUSTRATION OF THE LOCKED-IN RATIO

To calculate a score regarding the amount of carbon budget consumed, the level of activity from existing and planned assets needs to be taken into account. Therefore, in a similar way to locked-in emissions, the level of activity that the company is able to perform thanks to its existing and planned assets up to RY+15 is calculated. This is called the secured activity and is illustrated in Figure 10.



FIGURE 10: SECURED ACTIVITY BY THE COMPANY

The secured activity is compared to the level of activity projected by the company up to RY+15. If the company does not have any projections or no projections up to RY+15, it will be assumed that its market share will remain constant and its activity will evolve at the same rate as the sector (see section 6.1 Benchmarks). The company's projected activity is illustrated in Figure 11Erreur ! Source du renvoi introuvable.



FIGURE 11: PROJECTED ACTIVITY

The secured activity ratio $r_{SA}(RY + 15)$ compares the secured activity up to (RY + 15) with the projected activity up to (RY + 15). It is illustrated in Figure 12.

$$r_{SA}(RY+15) = \int_{RY}^{(RY+15)} \frac{A_S(RY+15)}{A_P(RY+15)}$$



FIGURE 12: SECURED ACTIVITY RATIO

CALCULATION FOR THE SCORE

The case $r_{SA} > 1$ is unlikely to happen as the company is unlikely to have existing or planned assets able to meet or exceed the projection of activity until (RY + 15). r_{SA} will thus be lower than 1, meaning that the company will need more investments / assets to be able to meet the projection of activity. The lower r_{SA} , the more the company will need new assets, which can be either low- or high-carbon.

Assessing only the locked-in ratio r_{LB} implies that new assets are considered as low-carbon. r_{SA} is thus used as a threshold value for the scoring. If the locked-in ratio r_{LB} does not exceed the secured activity ratio r_{SA} , the company stands within its carbon budget and gets a 100% score. When the locked-in ratio exceeds the secured activity ratio, that means that the company exceeds its carbon budget, and the score decreases. If the locked-in ratio r_{LB} is more than 1.5, that means that the company exceeds its carbon budget by more than 50% and receives a 0% score.



AGGREGATION OF SCORES

When both transport and building assets are included in locked-in calculations, the global score is the weighted average of building and transport locked-in scores by share of emissions.

RATIONALE GE 2.4 LOCKED-IN EMISSIONS FROM OWN FLEET AND BUILDINGS

RATIONALE OF

Relevance of the indicator

THE INDICATOR

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

- Absolute GHG emissions over time are the definitive measure of a company's contribution to global warming.
- Analysing a company's locked-in emissions alongside science-based budgets also gives a means to scrutinise the potential cost of inaction, including the possibility of stranded assets.

- Examining absolute emissions, along with recent and short-term emissions intensity trends, forms part of a holistic view of a company's emissions performance in the past, present, and future.
- The approach using the secured-activity ratio is a coherence check between the company's emissions reduction ambition, and its investments (and the inevitable emissions associated). It shows the discretion the company has over future investments.

This indicator only applies for Building and Transport because:

- these assets have been the only ones covered by a specific benchmark in order to calculate locked-in emissions.
- a huge majority of sectors that have large locked-in emissions linked to process assets are already covered by an ACT sectoral methodology.

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), low-carbon and mitigation technologies, training and patent development. 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.

• GE 3.1 R&D SPENDING IN LOW-CARBON TECHNOLOGIES

DESCRIPTION & REQUIREMENTS	GE 3.1 R&D SPENDING IN LOW-CARBON TECHNOLOGIES					
SHORT						
DESCRIPTION OF	A measure of the ratio of R&D costs/investments in low-carbon technologies. The indicator identifies the ratio between the company's R&D					
	investment in low carbon technologies and total R&D investments.					
INDICATOR						
PREREQUISITE	The company operates in a sector where there are technological stakes regarding low-carbon transition.					

DATA Relevant and external sources of data used for the assessment of this indicator: REQUIREMENTS

- R&D costs/investments in low-carbon technologies of the company.
- Total R&D costs/investments of the company

CDP Questionnaire 2023 mapping to this indicator:

◆ C-9.6a

How THE R&D INVESTMENT SHARE

ASSESSMENT The assessment is based on the ratio of the company's 'R&D expenditure on low-carbon technologies over the last 3 years' to the company's 'total capital expenditure in R&D over the last 3 years'.

DEFINING 'LOW-CARBON TECHNOLOGIES':

Relevant sectoral roadmaps should be used to define a list of low-carbon technologies for the sector. It may include technologies to decarbonise the production assets and improvements of sold product carbon performance. These technology avenues shall be compatible with a 1.5°C scenario.

A low-carbon or mitigation technology must be widely considered to contribute substantially to climate change mitigation (following the definition in the section Defining "low-carbon business activity").

FINAL SCORE

The ratio will be compared to the maturity matrix developed to guide the scoring and a greater number of points will be allocated for companies indicating a higher level of maturity, which means a higher share in R&D costs/investments in these technologies.

The matrix is provided below:

Question	Basic	Standard	Advanced	Next practice	Low-carbon Aligned	Subscore
Associated score	0%	25%	50%	75%	100%	Caboolo
What is the share of R&D costs/investments in low-carbon technologies compared to the total R&D	The share of low-carbon R&D is below 20% of total R&D investments	The share of low- carbon R&D is between 21% and 40% of total R&D investments	The share of low- carbon R&D is between 41% and 60% of total R&D investments	The share of low-carbon R&D is between 61% and 80% of total R&D investments	The share of low-carbon R&D is above 80% of total R&D investments.	100%

RATIONALE GE 3.1 R&D SPENDING IN LOW-CARBON TECHNOLOGIES

RELEVANCE OF THE INDICATOR:

RATIONALE OF

THE INDICATOR

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

- To enable the transition, the sector where there are technological stakes relies heavily on the development of low-carbon solutions to replace its currently high emitting systems
- R&D is the main 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 into R&D on operational practices to optimize the carbon impact where they have direct responsibility.

Although this indicator may be based on a specific external benchmark in other ACT methodologies, no benchmark is available for ACT Generic to cover a wide range of sectors. Therefore, thresholds have been used instead.

Expenditures over the 3 last years are used for the indicator to consider that expenditure for major R&D projects may not be linear over years.

• GE 3.2 COMPANY LOW-CARBON PATENTING ACTIVITY

DESCRIPTION & REQUIREMENTS	GE 3.2 COMPANY LOW-CARBON PATENTING ACTIVITY				
SHORT DESCRIPTION OF INDICATOR	A measure of the company patenting activity related to low-carbon technologies. The indicator identifies the ratio between the company' patenting activity dedicated to climate change mitigation technologies over the last 5 years, and the company's total patenting activity over the same time span, and compares this against a maturity matrix.				
PREREQUISITE	The company operates in a sector where there are technological stakes regarding low-carbon transition.				
DATA REQUIREMENTS	 Relevant and external sources of data used for the assessment of this indicator: Patenting activity in climate change mitigation technologies of the company over the last 5 years. Total patenting activity of the company over the last 5 years CDP Questionnaire 2023 mapping to this indicator: None 				
How THE	PAST LOW-CARBON PATENTS ACTIVITY RATIO				
ASSESSMENT WILL BE DONE	The assessment is based on the ratio of the company's patenting activity dedicated to climate change mitigation technologies over the last 5 years to the company's total patenting activity over the same time span. If the company is developing open source patents or makes them publicly available, this should be positively reflected in the narrative score.				

DEFINING CLIMATE CHANGE MITIGATION TECHNOLOGIES PATENTS:

The indicator focuses on patents that mitigate climate change. The European Patent Office (EPO) and the US Patent and Trademark Office (USPTO) have developed a dedicated patent classification scheme (Cooperative Patent Classification - CPC) which details patents for climate change mitigation technologies (CCMT) (16):

- ◆ Y02B CCMTs related to buildings
- Y02C CCMTs related to capture, storage, sequestration or disposal of greenhouse gases
- Y02E CCMTs related to reduction of greenhouse gas emissions, related to energy generation, transmission or distribution
- Y02P CCMTs relating to production in energy intensive industries
- Y02T CCMTs related to transportation
- Y02W CCMTs related to wastewater treatment or waste management
- Y04S Systems integrating technologies related to power network operation, communication or information technologies for improving the electrical power generation, transmission, distribution, management or usage, i.e. smart grids

If the technology described by the company is not listed below, then the analyst must check further external sources to determine whether it is a relevant low-carbon technology (e.g. relevant sectoral roadmaps). It may include technologies to decarbonise the production assets and improvements of sold product carbon performance. These technology avenues shall be compatible with a 1.5°C scenario. A low-carbon or mitigation technology must be widely considered to contribute substantially to climate change mitigation (following the definition in the section Defining "low-carbon business activity").

FINAL SCORE

The ratio will be compared to the maturity matrix developed to guide the scoring and a greater number of points will be allocated for companies indicating a higher level of maturity, which means a higher share in low-carbon patenting activity.

he matrix is provided below:						
Question	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Subscore
Associated score	0%	25%	50%	75%	100%	
What is the share of patents in low-carbon technologies compared to the total patent activity over the last 5 years?	The share of CCMTs patents is below 20% of total patents	The share of CCMTs patents is between 21% and 40% of total patents	The share of CCMTs patents is between 41% and 60% of total patents	The share of CCMTs patents is between 61% and 80% of total patents	The share of CCMTs patents is above 80% of total patents	100%

RATIONALE GE 3.2 COMPANY LOW-CARBON PATENTING ACTIVITY

RATIONALE OF

THE INDICATOR RELEVANCE OF THE INDICATOR:

The indicator on patenting activity is complementary to indicator 3.1, R&D spending on low-carbon technologies, as it encourages R&D spending and subsequent technological advances or breakthroughs.

It is included in this ACT methodology for the following reasons:

- Low-carbon patenting activity is an important indicator of a company's ability to transition and develop new low-carbon business models in an era of decarbonisation (17)
- Patent data are commensurable because patents are based on an objective standard (18)
- Patent data measure the intermediate outputs of an inventive process, where R&D data expenditures measure the input (18)
- Patent data can be disaggregated into specific technological fields (18)

RELEVANCE OF THE INDICATOR'S 5-YEAR TIME HORIZON

Patents applications are typically disclosed 18 months after their filing date (18). To avoid the effects of this "publication lag" and smooth the ratio used for the assessment, the indicator monitors the last 5 years of the company's patenting activity.

MODULE 4: SOLD PRODUCT PERFORMANCE

Module 4, "Sold product performance", assesses action to reduce emissions from the company's value chain, 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 products they produce and sell. 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 products through increasing the share of low-carbon products and improving energy efficiency.

• GE 4.1 PRODUCT / SERVICE-SPECIFIC INTERVENTIONS

DESCRIPTION & REQUIREMENTS	GE 4.1 PRODUCT / SERVICE-SPECIFIC INTERVENTIONS					
SHORT						
DESCRIPTION OF	An analysis of the company's reporting of recent and planned interventions to reduce upstream & downstream scope 3 GHG emissions for					
INDICATOR	the most relevant purchased and produced products / services.					
DATA	The relevant data for this indicator are:					
REQUIREMENTS	• Scope 3 emissions linked to the most impactful scope 3 products / services (except transport services covered by GE 4.4). Including scope 3 transport emissions, 67% of scope 3 emissions shall be covered.					
	 List and description of recent (RY-1, RY) and planned interventions (until RY+5), reported by product / service 					
	CDP Questionnaire 2023 mapping to this indicator:					
	◆ C12.1					
How THE	CALCULATION OF SCORE:					
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 product/service category, the analyst identifies interventions that determine the most ambitious impacts achievable by a company and highlights the GHG hotspots for the different product categories in accordance with best practices (LCA, PCR, PEFCR, etc.). 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.

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.

Evaluation level	Basic	Advanced	Low-carbon practice		
Score	0%	50%	100%	Subscore	
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%	

AGGREGATION OF SCORES

The analyst assigns a scoring to all interventions reported and keep the best score for each product / service.

The scorings for the product/service categories reported on (covering at least 67% of total product/service emissions – transport emissions covered in GE 4.4 are included in the % calculation) are then aggregated into a numerical value, using the share of covered emissions.

RATIONALE **GE 4.1 PRODUCT/SERVICE-SPECIFIC INTERVENTIONS**

RATIONALE OF

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 purchased and sold products / services, i.e. the actions taken to reduce the carbon impact of its THE INDICATOR purchased and sold products / services. This indicator is applicable either for companies that are multiproduct/service, or for companies that are mono-product. 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.

> Indicator GE 4.1 Product / Service-specific interventions is complementary to indicator GE 4.2 Trend in past product / service specific performance, which is a "trend in past" indicator type, based on existing sectoral trajectories or ACA benchmark. It intends to assess qualitatively future emissions trend.

> 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 may not be 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.

Rationale on measuring GHG reductions:

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.

• GE 4.2 TREND IN PAST PRODUCT / SERVICE SPECIFIC PERFORMANCE

DESCRIPTION & GE 4.2 TREND IN PAST PRODUCT / SERVICE SPECIFIC PERFORMANCE REQUIREMENTS

SHORT A measure of the alignment of the past trend of the company's emissions (emissions related to purchased and sold product/service's) with the low-carbon benchmark pathway. The indicator will compare the gradient of this trend over a 5-year period to the reporting year (RY- 5) with the low-carbon benchmark pathway trend over a 5-year period after RY.

DATA The relevant data for this indicator are:

REQUIREMENTS • Carbon intensity of the purchased or sold products/services (for products/services with a sectoral benchmark) at Y-5 and reporting year.

• Absolute emissions of the purchased or sold products/services (for other products/services) at Y-5 and reporting year.

CDP Questionnaire 2023 mapping to this indicator:

- ♦ C6.5
- C6.5a
- ♦ C6.6
- C-CG6.6a (for capital goods companies)

The benchmark indicators involved are:
Target type	Parameter	Intensity metric	Benchmark
Vehicle emissions intensity (Scope 1+2+3) Or transport	CB _{PP1}	gCO2e/tonne.km or gCO2e/passenger.km	ACT Auto (3) ACT Transport (4)
Cement emissions intensity	CB _{PP2}	gCO ₂ /tonne of cement	ACT Cement (10)
Oil & Gas products emissions intensity	СВ _{РРЗ}	tCO ₂ /TJ	ACT Oil & Gas (11)
Glass products emissions intensity	CB _{PP4}	index	ACT Glass (12)
Pulp & Paper products emissions intensity	CB _{PP5}	tCO2/t paper&board	ACT Pulp & Paper (12)
Iron & Steel emissions intensity	СВ _{РР6}	tCO2/t crude steel	ACT Iron & Steel (13)
Food products emissions	CB _{PP7}	absolute emissions	SBT FLAG (14)
Aluminium emissions intensity	CB _{PP8}	tCO2e/t aluminium	ACT Aluminium (15)
Purchased or sold products/services	СВ	% of absolute emissions	SBT absolute contraction (5)

As for alignment of the other quantitative indicators, the choice of the benchmark depends on the scenario availability. The selection is made according to the following process:

- Option A: If a specific pathway based on carbon intensity from a low-carbon scenario is available, the trend in carbon intensity will be asked and analysed,

- Option B: If such a pathway does not exist to date, a default pathway based on contraction of absolute emissions is applied. See section 6.1 Benchmarks for more information.

How THEThe analysis is done for each significant sources of emissions (scope 3 emissions) or only for the total scope 3 emissions. Depending on
the emissions sources and the associated benchmark, the analysis can be conducted using emissions intensity or absolute emissions.ASSESSMENT

WILL BE DONE For each of the purchased or sold products/services, the analysis is based on the difference between the purchased or sold products/services' recent (RY-5) emissions intensity or absolute emissions (of total purchased or sold products/services) trend gradient (CR'_{ii}) and the purchased or sold products/services' low-carbon benchmark pathway trend gradient (CB'_{ii}) in the short-term (RY+5).

This indicator uses the same computation as indicator 2.1 - Trend in past emissions.

CALCULATION OF FINAL SCORE

If the company has several relevant emissions areas, the consolidation of the scores assigned to each area will be based on the share of emissions covered by the areas.

For instance, a company has two types of relevant emissions areas. Area 1 generate 30% of the scope 1+2 emissions and area 2 generate 70% of the emissions. Both area types are rated against a specific benchmark. The company gets two scores (1 and 2) for this indicator. Then, final score = 30%*score 1 + 70%*score 2.

RATIONALE GE 4.2 TREND IN PAST PRODUCT / SERVICE SPECIFIC PERFORMANCE

RATIONALE OF RELEVANCE OF THE INDICATOR:

THE INDICATOR This methodology covers heterogeneous sectors with companies situated at different levels of the value chain. This heterogeneity can therefore also be encountered in the levers that each company has to decarbonize its activities. To assess the upstream and downstream emissions of all those companies, a general qualitative indicator is relevant (cf. GE 4.1 Product / Service-specific interventions). However, wherever it is possible the ACT methodology prefers to assess companies through quantitative indicators. That is the purpose of the product/service specific performance indicator. This indicator gathers quantitative benchmarks built during the development of other ACT methodologies.

Trend in past product / service specific performance is included in this ACT methodology for the following reasons:

- The trend shows the speed at which the company has been reducing its emissions 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 as future-oriented, it nevertheless does not want to solely rely 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.

This indicator is where the main differences between the company's purchases and sales and the relevant benchmarks are assessed. Ideally, this would be done on a future date, whereby the company's sales and purchases projections would dictate the company's pathways. However, because of the confidentiality/uncertainty of such data, this is not a very robust approach. While it may be possible to do with improvements in data availability, we are aiming to use more available past data.

• GE 4.3 LOCKED-IN EMISSIONS FROM SOLD PRODUCTS

DESCRIPTION REQUIREMENTS	&	GE 4.3 LOCKED-IN EMISSIONS FROM SOLD PRODUCTS					
SHORT DESCRIPTION OF INDICATOR		A measure of the company's cumulative GHG emissions from sold products deriving from sales over the short-term. The indicator will compare these cumulative emissions to the emissions budget entailed by the company's sold product emissions decarbonization pathway and projected sales, over a 5-year period from the reporting year (RY) to reporting year plus 5 years (RY+5).					
PREREQUISITE		The company sells ready-to-use products with a long lifespan (≥ 10 years) whose use leads to GHG emissions AND those emissions are significant in the company's GHG emissions.					
DATA		The relevant data for this indicator are:					
REQUIREMENTS		• Forecast sales (from RY to RY+5) - if such forecast is not available, sales from RY-5 to RY should be used to calculate a proxy, keeping the same trend in sales growth - for ready-to-use products that have a lifespan longer than 10 years and whose use leads to GHG emissions, that are significant in the company's GHG emissions					
		 Annual expected GHG emissions from one year of sales. If transport equipment fleet emission intensity (gCO₂/t.km, gCO₂/p.km, gCO₂/km) + annual activity (t.km, p.km or km). CDR Questionnaire 2023 mapping to this indicator: 					
		 C 6.5 SC 4.2b 					

	Company profile	Emissions	Parameter	Metric	Benchmark				
	Transport equipment manufacturers	Fleet emissions	B _{SP. 5 years}	t CO ₂	ACT transport methodology (4)				
	Industrial process equipment manufacturers Household appliance manufacturers Other	Emissions over the use phase	B _{SP. 5 years}	t CO2	Absolute Contraction Approach (SBT (5))				
Ном тне	The analysis is based on th	e difference between the c	ompany's locked-in emissi	ons of sold products over th	pe short-term (I == =) with				
ASSESSMENT WILL	the emissions budget entail	iled by the company's carbo	on budget ($B_{SP.5 years}$).		(LSP. 5 years) with				
BE DONE	For transport equipment m	or transport equipment manufacturers (available sectoral benchmark):							
	$L_{SP.5 years}$ is calculated as the total cumulative emissions implied by sales from RY+1 up until RY+5, calculated as the cumula of the sales volume multiplied by the annual fleet emissions. If the data is not available, the fleet emissions intensity pathwa pathway over the 5-year period can be calculated from the respective trends over the 5-year period up to the reporting year.								
	B _{SP.5 years} is calculated as the company's carbon budget over the 5 years after the reporting year, based on								
	Any overshoot of this budget will have to be compensated for at a later date, which is penalized for in the score.								
	For other companies:								
	$L_{SP.5 years}$ is calculated as the total cumulative emissions implied by sales in the near future from RY+1 up until RY+5, calculated as the								
	cumulative annual emissions entailed by the annual sales. If the data is not available, the pathway for the annual emissions over the 5- year period can be calculated from the sales and emissions trends over the 5-year period up to the reporting year								
	$L_{SP.5 years} = \sum_{x=1}^{5} (6-x) \times annual GHG \text{ emissions from products sold in } (RY+x)$								

 $B_{SP.5 years}$ is calculated as the company's carbon budget over the 5 years after the reporting year, based on an Absolute Contraction Approach (source SBT (5)). Any overshoot of this budget will have to be compensated for at a later date, which is penalized for in the score.



FIGURE 13: ILLUSTRATION OF COMPANY'S LOCKED-IN EMISSIONS FROM SOLD PRODUCTS CALCULATION

2 assumptions are made:

- GHG emissions linked to the use of sold products will not vary over the 5-year timespan (whatever the source of energy used. For
 instance, it is expected that the carbon intensity of electricity globally decreases over time. This is not reflected in the calculation)
- all products operate throughout the 5-year timespan (no loss)

The 'Lock in ratio' (r_{LB}) is calculated as follows:

$$r_{LB} = \frac{L_{SP. 5 years}}{B_{SP. 5 years}}$$

CALCULATION OF THE SCORE:

The highest score is attained if r_{LB} is 1 or higher. A percentage score is assigned for any value between 1 and 1.1.



RATIONALE GE 4.3 LOCKED-IN EMISSIONS FROM SOLD PRODUCTS

RATIONALE OF THE RELEVANCE OF THE INDICATOR:

INDICATOR Locked-in emissions from sold products is included in the ACT assessment for the following reasons:

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

SCORING RATIONALE:

- The calculation uses a forecast (or an estimate) of equipment sales. 5 years is a good compromise between a forward-looking indicator and the accuracy of the forecast / estimate.
- To give a focus on the main lifetime GHG emissions a lifespan of at least 10 years is set for the products. 10 years is a likely minimum lifespan of industrial equipment and the biggest household appliances.

A 5 year lifespan would include smaller appliances e.g. hair dryer, vacuum cleaner, kettle... that are not so energy-consuming during their lifespan. Some of the smaller appliances are used only from time to time: e.g., a drill is used on average only 12 minutes in France during its lifespan (source: ADEME (19)). It is a good compromise between capturing the main emissions sources and streamlining the data collection process.

 A leeway of 10% in carbon budget exceedance is allowed before the score drops to 0, which is aligned with the threshold used in ACT Transport methodology (4).

• GE 4.4 SUB-CONTRACTED TRANSPORT SERVICE PERFORMANCE

DESCRIPTION REQUIREMENTS	GE 4.4 SUB-CONTRACTED TRANSPORT SERVICE PERFORMANCE			
SHORT				
DESCRIPTION OF	This indicator is a qualitative assessment of the degree of knowledge the company has about its transport service subcontractors' performance, and about the subcontractors' performance itself.			
PREREQUISITE	The company is provided with transport services by a subcontractor AND transport is significant in the company's GHG emissions.			
DATA	The relevant data for this indicator are:			
REQUIREMENTS	 The reporter shall provide details on its knowledge of its subcontractors' projected emissions (metric tonne CO2e) [Future] The reporter shall provide details on its knowledge of its future activity sub-contracted (tonne.km) [Future] 			

	The reporter shall provide details on its knowledge of its subcontractors' low-carbon vehicles [Future]
	The reporter shall provide details on its knowledge of its subcontractors' actions for emissions reduction [Future]
	CDP Questionnaire 2023 mapping to this indicator:
	None
How THE	
ASSESSMENT WILL	The analysis will look at the following dimensions:
	 If the company has a good forecast on the subcontracted activity
BEDONE	• If the company is able to determine future emissions from its subcontractors, and if the intensity follows the low-carbon benchmark
	pathway
	 If the subcontractors fleet include low-carbon vehicles
	• If the subcontractors carry out actions of GHG emissions reduction on its vehicles (other than purchasing new ones) and on
	operations
	The analysis uses the following matrix:

Question	Basic	Standard	Advanced	Next practice	Low-carbon aligned	
Associated score	0%	25%	50%	75%	100%	weighting
Future emissions assessment: Are you able to determine with certainty (verified) future CO2 emissions intensity linked to subcontracting?	No knowledge of subcontractor's fleet carbon intensity	The company requires its subcontractors to report their GHG emissions linked to their activity on the reporting year	Robust CO ₂ data on subcontracted current activity (reporting year) is certified by third party	Robust CO ₂ data on subcontracted current activity (reporting year) is certified by third party Future CO ₂ emissions intensity of subcontractors is forecast but the intensity is not 2°C aligned	Robust CO ₂ data on subcontracted current activity (reporting year) is certified by third party Future CO ₂ emissions intensity of subcontractors is forecast, and the intensity is aligned with a well-below 2°C scenario	20%
Future activity assessment: Are you able to forecast the level of your activity performed by subcontractors in the future?	No knowledge of future subcontracted activity.	Future subcontracted activity known for the next 3 years	Future subcontracted activity known for the next 5 years	-	Future subcontracted activity known for the next 10 years	20%
Low-carbon vehicles: Does the projected fleet include low- carbon vehicles and energies? (100% elec, hybrid, H2, BioGNV)	No knowledge of the share of low- carbon vehicles in the subcontractors' fleets	The share of low- carbon vehicles in the sub-contracted fleet is at least 20% of the low-carbon benchmark value over the next 3 years after reporting year.	The share of low- carbon vehicles in the sub-contracted fleet is at least 60% of the low-carbon benchmark value over the next 3 years after reporting year.	The share of low- carbon vehicles in the sub-contracted fleet is at least 80% of the low-carbon benchmark value over 5 years after reporting year.	The share of low- carbon vehicles in the sub-contracted fleet is equal to the low-carbon benchmark value over 10 years after reporting year.	20%

GHG emissions reduction on material: Are your subcontractors implementing significant actions for GHG emissions reduction of the material other than purchase of new vehicles?	No action of reduction planned	2 actions at most are currently implemented by subcontractors that aggregate into at least 20% of GHG emissions from subcontracted activity	3 to 4 actions are currently implemented or planned in near future by subcontractors that aggregate into at least 40% of GHG emissions from subcontracted activity	5 actions are currently implemented or planned in near future by subcontractors that aggregate into at least 50% of GHG emissions from subcontracted activity	At least 5 actions are currently implemented or planned in near future by subcontractors that aggregate into at least 80% of GHG emissions from subcontracted activity	20%
GHG emissions reduction on operation: Are your subcontractors implementing significant actions for GHG emissions reduction of operations?	No action of reduction planned	2 actions at most are currently implemented by subcontractors that aggregate into at least 20% of GHG emissions from subcontracted activity	3 to 4 actions are currently implemented or planned in near future by subcontractors that aggregate into at least 40% of GHG emissions from subcontracted activity	5 actions are currently implemented or planned in near future by subcontractors that aggregate into at least 50% of GHG emissions from subcontracted activity	At least 5 actions are currently implemented or planned in near future by subcontractors that aggregate into at least 80% of GHG emissions from subcontracted activity	20%

Actions eligible for the dimension "GHG emissions reduction on material" are the following (4):

- Fuel efficiency devices
- Preventive maintenance
- Speed limitation devices
- Predictive cruise control devices
- Real-time fuel economy monitors (linked to driving methods)
- Tire pressure monitoring systems
- Low rolling resistance tires
- Improvement of ship hull surface / hull cleaning
- Air lubrication of the hull

- Waste heat recovery from ship engine or exhaust gas
- Reduce weight of internal equipment and interior design in aircrafts

Actions eligible for the dimension "GHG emissions reduction on operation" are the following (4):

- Eco-driving
- Routing optimization
- Load factor optimization
- Reduction of empty runs
- Improve backhauling
- Speed regulation with Intelligent Speed Adaptation
- Platooning
- Re-timing urban deliveries to off-hours
- Co-loading
- Speed limitation in shipping
- Participate in smoother ship-port interface to reduce waiting time of ship and optimize berths planning
- Onshore power supply for ships in ports

Other actions than the ones listed above may be eligible, if judged relevant by the analysts, for each action reported, the company shall describe:

- The type of action
- The goals
- The implementation process
- The monitoring of the action
- The results obtained for the reporting year

CALCULATION OF FINAL SCORE

Spot contract is a common subcontracting practice in the transport sector, and it makes data collection very difficult for companies. Therefore, the maturity matrix of this indicator shall be used only to score subcontractors under "long-term" contract. The score obtained is then adjusted with the share of GHG emissions represented by spot contracts. The final score is computed as follows:

Share of GHG emissions from SPOT contracts	Finale Score
0% - 24%	100% * matrix score
25% - 49%	80% * matrix score
50% - 74 %	60% * matrix score
75 % - 100%	40% * matrix score

RATIONALE GE 4.4 SUB-CONTRACTED TRANSPORT SERVICE PERFORMANCE

RATIONALE OF THE RELEVANCE OF THE INDICATOR

INDICATOR This indicator is used in the ACT Transport methodology (4).

It mirrors indicator 2.1 assessing the material investments of the company for its direct emissions from transport activities, but here it assesses the performance of the subcontractors.

It is necessary that the company investigates its transport services subcontractors' performance, especially if a large part of the transportation activity is subcontracted, because its own performance depends on it. Some focus is on the capacity of the company to

collect data from its transport services subcontractors, because it is the first necessary step toward a full picture of its carbon impact, and it shows commitment for a low-carbon transition.

SCORING RATIONALE

This indicator is assessed by a maturity matrix, because companies subcontracting their transport service face a lack of data from their subcontractors. Nonetheless, this indicator encourages companies to dialogue with their subcontractors and to set up a data collection process. Therefore, high levels of the matrix correspond to the ability to collect data that would be necessary to compute indicator from module 2. The aim of this indicator is to value companies that have transport services subcontractors with good carbon performance, so the highest level of the matrix corresponds to subcontractor's performance aligned with the low-carbon benchmark pathway.

It was decided to exclude spot contracts from the assessment with this maturity matrix, as it seemed hardly feasible to collect relevant data from such subcontractors, or to design adequate but nonetheless as ambitious maturity levels as for long-term contracts. Having few or poor-quality data should not be an excuse for bad carbon performance.

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.

• GE 5.1 OVERSIGHT OF CLIMATE CHANGE ISSUES

DESCRIPTION	&	GE 5.1 OVERSIGHT	OF	CLIMATE	CHANGE	ISSUES
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REQUIREMENTS

SHORT		
DESCRIPTION OF	The c the co	ompany discloses that responsibility for climate change mitigation within the company lies at the highest level of decision-making within oppany structure.
INDICATOR		
DATA	The re	elevant data for this indicator are:
REQUIREMENTS	٠	Environmental policy and details regarding governance
	•	The reporter shall provide details on where the highest level of direct responsibility for climate change is within the organization.
	CDP	Questionnaire 2023 mapping to this indicator:
	•	C1.1
	•	C1.1a
	•	C1.2

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 is 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	
Associated score	0%	25%	50%	75%	100%	weighting
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)
 - o 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
- o Level 4
 - Person/committee that is three or more steps in the corporate structure from the highest level of decisionmaking of the organization. No responsibility or accountability for business unit strategy development.
 - Examples: Officer, Senior Officer

RATIONALE GE 5.1 OVERSIGHT OF CLIMATE CHANGE ISSUES

RATIONALE 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. 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.

• GE 5.2 CLIMATE CHANGE OVERSIGHT CAPABILITY

DESCRIPTION & REQUIREMENTS	GE 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	The relevant data for this indicator are:					
REQUIREMENTS	 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					
	Questionnaire 2023 mapping to this indicator:					
	 C1.1 C1.1a C1.1d C1.2 					
How THE	External sources of data may also be used for the analysis of this indicator.					
ASSESSMENT WILL BE DONE	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 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.					

Question	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weighting
Associated score	0%	25%	50%	75%	100%	Weighting
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/commit tee does not meet any of the characteristics of climate change- and low-carbon transition-related expertise*.	The employee/commit tee meets 1 of the characteristics of climate change- and low-carbon transition-related expertise*.	The employee/commit tee meets 2 of the characteristics of climate change- and low-carbon transition-related expertise*.	The employee/commit tee meets 3 or more of the characteristics of climate change- and low-carbon transition-related expertise*.	The employee/commit tee 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%

The maturity matrix used for the assessment is the following:

- * "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 the last 10 years) professional experience related to climate change and the low-carbon transition (e.g., previous employment in a climate change/low-carbon transition-related role, or with a climate change/low-carbon transition-related organisation, etc.)

 Recent (i.e., within the last 10 years)/active membership of organization(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 the last 10 years) published outputs written by the individual/committee (e.g., statements, reports, etc.)

RATIONALE GE 5.2 CLIMATE CHANGE OVERSIGHT CAPABILITY

RATIONALE OF Effective management of the low-carbon transition requires specific expertise related to climate change and its impacts, and their likely direct
 THE INDICATOR and indirect effects 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.

• GE 5.3 LOW-CARBON TRANSITION PLAN

DESCRIPTION & REQUIREMENTS	GE 5.3 LOW-CARBON TRANSITION PLAN
SHORT	The company has a plan on how to transition the company to a business model compatible with a low carbon economy
DESCRIPTION OF	
INDICATOR	
DATA	The relevant data for this indicator are:
REQUIREMENTS	Environmental policy and details regarding governance
	 The reporter should provide the following 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 scenario testing influenced the transition plan
	Timescale for implementation of the transition plan

- Who has responsibility for its implementation (at the strategic, not operational, level)
- 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

ASSESSMENT

HOW THE

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 netzero by 2050 at the latest, thereby limiting global warming to 1.5°C." (20). Other initiatives also develop their own definition, which are quite similar (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:

Subdimensi on	Basic	Standard	Advanced	Next practice	Low-carbon aligned		
Associated score	Associated 0%		50%	75%	100%	Weighting	
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 emissions).	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). Any exclusions from the plan must not be material to the organization in terms of GHG emissions.	10%

Implementati on 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%
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- * A measure of success is considered "fully SMART" if it meets each of the following SMART elements (21):
 - 1. Specific: the measure of success is explicit, with no room for misinterpretation.
 - 2. Measurable: the measure of success is measurable, and it will be clear when it has been achieved.
 - 3. Achievable: the measure of success is stretching and ambitious, but not so much that it is unachievable.
 - 4. Relevant: the measure of success contributes to the organisation's overall objectives and complements other measures of success.
 - 5. 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 2019, Annex B, p 758 (22). CO₂ prices are displayed by world regions, predicted values in 2030 and 2050.

RATIONALE GE 5.3 LOW-CARBON TRANSITION PLAN

RATIONALE OF All the sectors will require substantial changes to their business to align to a low-carbon economy, over the short, medium and long term,
 THE INDICATOR 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.

• GE 5.4 CLIMATE CHANGE MANAGEMENT INCENTIVES

DESCRIPTION & GE 5.4 CLIMATE CHANGE MANAGEMENT INCENTIVES

REQUIREMENTS

he 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										
lefined by a series of relevant indicators.										
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 										
he analyst verifies if the company has compensation incentives set for senior executive compensation and/or bonuses, that directly and										
but neighbors reductions of tons of carbon emitted by the company in the preceding year and/of the future										
than ment of emissions reduction targets, or other metrics related to the company's low-carbon transition plan. For small companies, or or										
ases 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										

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 (23).

Question	Subdimensio n	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, within annual bonuses (or other short- term incentive plans).		The company has introduced climate metrics (key performance indicators (KPIs)), including metrics related to GHG emissions reductions, within its long- term incentive plan (likely to include equity in the company).	The company has introduced climate metrics, (key performance indicators (KPIs)), including metrics related to GHG emissions reductions, 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.	50%

* Further guidance for each level of seniority is given below:

o 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)
- o 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
- o 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 decisionmaking of the organization. No responsibility or accountability for business unit strategy development.
 - Examples: Officer, Senior Officer

RATIONALE GE 5.4 CLIMATE CHANGE MANAGEMENT INCENTIVES

 RATIONALE OF
 Executive compensation should be aligned with overall business strategy and priorities. As well as commitments to action the company

 THE INDICATOR
 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.

• GE 5.5 CLIMATE CHANGE SCENARIO TESTING

DESCRIPTION	&	GE 5.5	CLIMATE C	CHANGE	SCENARIO	TESTING
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REQUIREMENTS

SHORT											
DESCRIPTION OF	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.										
INDICATOR											
D ATA	he relevant data for this indicator are:										
REQUIREMENTS	• The reporter shall provide the details and supporting documents on the organization's climate change scenario testing										
	CDP Questionnaire 2023 mapping to this indicator:										
	◆ C2.2										
	◆ C2.3a										
	◆ C3.2										
	◆ C3.2a										
	◆ C3.2b										
How THE	The analyst evaluates the description and evidence of the low-carbon economy scenario testing for the presence of best-practice elements										
ASSESSMENT	and consistency with the other reported management indicators. The company description and evidence are compared to the maturity matrix										
WILL BE DONE	developed to guide the scoring and a greater number of points is 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	Subdimens ion	Basic	Standard	Advanced	Next practice	Low carbon aligned	Maighting
Associat	ed score	0%	25%	50%	75%	100%	weighting
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 organization in terms of GHG emissions.	25%
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/opport unities*?	Climate- related risks/opport unities*	The materiality of climate- related risks/opportuni ties* is not assessed	The materiality of 1 category of climate- related risks/opportuni ties* is assessed	The materiality of 2 categories of climate- related risks/opportuni ties* is assessed	The materiality of 3 categories of climate- related risks/opportuni ties* is assessed	The materiality of 4 categories of climate- related risks/opportuni ties* 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	10%

						low-carbon	
						economy	
						scenario	
						Considers 5 or	
						narameters/as	
						sumptions	
What				Considers 3-4		together	
parameters/	Parameters/	Considers 1-2		parameters/as		related to	
assumption	assumption	different		sumptions		changing	15%
s are	S	parameters/as		together		climate	
considered?	considered	sumptions		(multivariate)		conditions in	
				. ,		combination	
						with changes	
						in operating	
						conditions	
A						Expressed in	
Are the					Everegged in	qualitative,	
results			Expressed	Expressed in		quantitative	
aualitativo/	Resultst	No results	only in	qualitative and	quantitative,	and financial	10%
quantitative/	ncouns	available	qualitative	quantitative	and financial	terms and	1070
financial			terms	terms	terms	results are	
terms?					tonno	translated into	
						value-at-risk	
						The carbon	
						price used is	
				A carbon price		aligned with	
Is a carbon	Carbon	No carbon		is used as one		the	1001
price	price	price is		of the main		parameters/as	10%
considered?		considered		parameters/as		sumptions of a	
				sumptions		iow-carbon	
						economy	
						scenano+	

- * Climate-related risk categories (24):
 - 1. Market and Technology shifts
 - 2. Reputation
 - 3. Policy and Legal

- 4. Physical Risks
- + Results of scenario analysis should be presented as business impacts which can include (24):
 - 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 years)?
- Refer for instance to International Energy Agency (IEA), World Energy Outlook 2019, Annex B,
 p 758 (22). CO₂ prices are displayed by world regions, predicted values in 2030 and 2050.

RATIONALE GE 5.5 CLIMATE CHANGE SCENARIO TESTING

RATIONALE OFThere 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.

• GE 6.1 STRATEGY TO INFLUENCE SUPPLIERS TO REDUCE THEIR GHG EMISSIONS

DESCRIPTION & GE 6.1 STRATEGY TO INFLUENCE SUPPLIERS TO REDUCE THEIR GHG EMISSIONS

REQUIREMENTS

SHORT DESCRIPTION OF INDICATOR	This indicator assesses the strategic policy and the process which are formalized and implemented into business decision making-process to influence, enable or otherwise shift suppliers' choices and behaviours in order to reduce its GHG emissions.						
DATA	The relevant data for this indicator are:						
REQUIREMENTS	 Methods of supplier engagement, strategy to prioritizing supplier engagements 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 						

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

WILL BE DONE

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
Associate	ed score	0%	25%	50%	75%	100%	Weighting
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 to the company.	Quantified emissions reduction target included in key procurement templates* and the supplier is required to report progress to the company.	Quantified, science-based emissions reduction target (that is aligned with the sector/industry pathway) included in key procurement templates* and the supplier is required to report progress to the company.	20%

To what extent are other low- carbon transition- related requirements/re commendations [†] integrated in engagement with suppliers?	Other low- carbon transition- related requirements/re commendations	No other low- carbon transition- related requirements/ recommendat ions [†] included in key procurement templates.*		1 or more other low-carbon transition-related requirements/reco mmendations [†] 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/re commendations ?	Reporting	No requirement included in key procurement templates* for suppliers to publicly report on their GHG emissions or other low- carbon transition- related requirements/ recommendat ions.	Requirement included in key procurement templates* for suppliers to publicly report on their GHG emissions but not any other low-carbon transition- related requirements/ recommendat ions.	Requirement included in key procurement templates* for suppliers to publicly report on their GHG emissions and other low-carbon transition-related requirements/reco mmendations.	5%			
Are GHG emissions reduction/report ing requirements included in selection of new suppliers, renewal of contract with existing suppliers, neither or both?	New suppliers/existi ng 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%			
Ho re suj cc v e r req	ow does the company espond to pplier non- ompliance with GHG emissions reduction puirements?	Non- compliance	No response to supplier non- compliance.		Company retains/suspe nds/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/s anctions and engages non- compliant suppliers, and permanently excludes those that fail to show significant improvement after the period of engagement.	5%
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W le em the si	/hat action evers [‡] are nbedded in company's trategy 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, Engagemen t & Incentivisati on, Innovation & collaboratio n) used. [‡]	Strategy includes action levers from two of the three engagement types (Information collection, Engagement & Incentivisatio n, Innovation & collaboration) used. [‡]	Strategy includes action levers from all of the three engagement types (Information collection, Engagement & Incentivisatio n, Innovation & collaboration) used. [‡]	Strategy includes action levers from all of the three engagement types (Information collection, Engagement & Incentivisation, Innovation & collaboration) used. [‡] Strategy includes regular audits of the supplier by the company or a representative.	30%

- * Key procurement templates" include but are not limited to (25):
 - New supplier contracts
 - Supplier Code of Conduct

- o 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.
 - o Management
 - For example, the company requires its suppliers to conduct climate change scenario testing.
 - o Policy engagement
 - For example, the company only selects suppliers not opposed to relevant climate policies.
 - o 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 (sources: 2022 CDP climate change questionnaire C12.1a (26) (27),):
 - 1. Information collection (understanding supplier behaviour)
 - Collect climate change and carbon information at least annually from suppliers
 - 2. Engagement & incentivization (changing supplier behaviour)
 - Run an engagement campaign to educate suppliers about climate change/GHG emissions reductions/sciencebased targets/other low-carbon transition-related topics such as scenario testing, policy engagement, etc.
 - Provide climate-related training, support, and best practices
 - Directly work with suppliers on climate-related topics, such as defining common GHG emission reduction plans (i.e., both companies commit to reduce together X tCO2e), or exploring corporate renewable energy sourcing mechanisms
 - 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
- 3. Innovation & collaboration (changing markets)
 - Run a campaign to encourage innovation to reduce climate impacts on products and services
 - Collaborate with suppliers on innovative low-carbon business models/R&D projects (providing resources experts, financial support, building, laboratories etc.)

RATIONALE GE 6.1 STRATEGY TO INFLUENCE SUPPLIERS TO REDUCE THEIR GHG EMISSIONS

RATIONALE OF RELEVANCE OF THE INDICATOR:

- **THE INDICATOR** Supplier engagement is included in this ACT methodology for the following reasons:
 - It might have a significant impact in terms of GHG emission, achieving decarbonization of the whole supply chain is also key to reach the ambitious goals in most of the companies
 - Engaging suppliers through contract clauses and sales incentives is necessary to take them on board.

SCORING THE INDICATOR:

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 Supplier Engagement.

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

DESCRIPTION & GE 6.2 ACTIVITIES TO INFLUENCE SUPPLIERS TO REDUCE THEIR GHG EMISSIONS

REQUIREMENTS

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	The relevant data for this indicator are:						
REQUIREMENTS	• 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 						
How THE	The assessment will assign a maturity score based on the company's demonstration of recent and current activities and initiatives with its						
ASSESSMENT	suppliers, expressed in a maturity matrix.						
WILL BE DONE	company that is placed in the 'Low-carbon aligned' category will receive the maximum score. A company which is at a lower level will ceive 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	Subdime nsion	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weighting
Associated score		0%	25%	50%	75%	100%	weighting
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 & Incentivisatio n, 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 by the company or a representative.	30%
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 engageme nt [†]	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%
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- 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 6.1). "Action levers" include, but are not limited to, the following examples, which are grouped into three engagement types (sources: 2022 CDP climate change questionnaire C12.1a (26), (27)):
 - 1. Information collection (understanding supplier behaviour)
 - Collect climate change and carbon information at least annually from suppliers
 - 2. Engagement & incentivization (changing supplier behaviour)
 - Run an engagement campaign to educate suppliers about climate change/GHG emissions reductions/sciencebased targets/other low-carbon transition-related topics such as scenario testing, policy engagement, etc.
 - Provide climate-related training, support, and best practices
 - Directly work with suppliers on climate-related topics, such as defining common GHG emission reduction plans (i.e., both companies commit to reduce together X tCO2e), or exploring corporate renewable energy sourcing mechanisms
 - Climate change performance is featured in supplier awards scheme
 - Offer financial incentives for suppliers who reduce your operational emissions (Scopes 1 & 2)
 - Offer financial incentives for suppliers who reduce your downstream emissions (Scopes 3)
 - Offer financial incentives for suppliers who reduce your upstream emissions (Scopes 3)
 - Offer financial incentives for suppliers who increase the share of renewable energy in their total energy mix
 - 3. Innovation & collaboration (changing markets)

- Run a campaign to encourage innovation to reduce climate impacts on products and services
- Collaborate with suppliers on innovative low-carbon business models/R&D projects (providing resources experts, financial support, building, laboratories etc.)
- + 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
 - o 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%
 - o Quantitative example: The percentage of engaged suppliers conducting scenario testing has increased annually by X%

Rationale GE 6.2 ACTIVITIES TO INFLUENCE SUPPLIERS TO REDUCE THEIR GHG EMISSIONS

RATIONALE OF RELEVANCE OF THE INDICATOR:

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

- It might have a significant impact in terms of GHG emission, achieving decarbonization of the whole supply chain is also key to reach the ambitious goals in most of the companies
- Engaging suppliers through contract clauses and sales incentives is necessary to bring them on board.

SCORING THE INDICATOR:

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 emission 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.

• GE 7.1 STRATEGY TO INFLUENCE CUSTOMER BEHAVIOUR TO REDUCE THEIR GHG EMISSIONS

DESCRIPTION & REQUIREMENTS	GE 7.1 STRATEGY TO INFLUENCE CUSTOMER BEHAVIOUR TO REDUCE THEIR GHG EMISSION							
SHORT	The company has a strategy, ideally governed by policy and integrated into business decision making, to influence, enable, or otherwise							
DESCRIPTION OF shift customer choices and behaviour in order to reduce GHG emissions.								
INDICATOR								
DATA	The relevant data for this indicator are:							
REQUIREMENTS	Strategy to influence customer GHG emissions							
	% of products/services							
	 Data on customer' choices and preferences towards reducing GHG emissions 							
	CDP Questionnaire 2023 mapping to this indicator:							
	◆ C12.1b							
How THE	The assessment will assign a maturity score based on the company's formalized, written strategy regarding its engagement with its							
ASSESSMENT	customers, expressed in a maturity matrix.							
WILL BE DONE	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	Subdimen sion	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Woighting
Associated score		0%	25%	50%	75%	100%	weighting
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 recommendation s* integrated in client engagement strategy?	Other low- carbon transition- related recommen dations*	No other low- carbon transition-related recommendation s* included in client engagement strategy.				1 or more other low-carbon transition-related recommendations * included in client engagement strategy.	10%
What action levers [†] are embedded in the company's strategy to encourage clients to reduce their emissions?	Action levers† embedded in strategy	No action levers [†] embedded in strategy.	Strategy includes action lever(s) from one of the four engagement types (Education/in	Strategy includes action lever(s) from two of the four engagement types (Education/infor mation sharing; Collaboration &	Strategy includes action lever(s) from three of the four engagement types (Education/infor mation sharing; Collaboration &	Strategy includes action lever(s) from all four of the four engagement types (Education/inform ation sharing; Collaboration & innovation:	30%

formation sharing; Collaboration & innovation; Compensatio n; Customer motivation via marketing	innovation; Compensation, Customer motivation via marketing and choice architecture) [†] .	innovation; Compensation, Customer motivation via marketing and choice architecture) [†] .	Compensation, Customer motivation via marketing and choice architecture) [†] .	
via marketing and choice architecture) [†]	architecture).	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:

- o Intangible investment
 - For example, the company recommends that its clients increase their R&D spend in low-carbon technologies.
- o Management
 - For example, the company encourages its clients to conduct climate change scenario testing.
- o Policy engagement
 - For example, the company encourages its clients to support relevant climate policies.
- o 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 (sources: 2022 CDP climate change questionnaire C12.1a (26), (28):
 - o 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
- o Collaboration & innovation
 - Run a campaign to encourage innovation to reduce climate change impacts
 - Collaborate with downstream segments of the value chain to foster circular end-of-life treatment of products and downstream logistic efficiency
 - Organize multi-party working group with meetings taking place at least annually
- o Compensation
 - Provide rebates for environmentally friend actions
- Customer motivation via marketing and choice architecture ("nudging")
 - Design marketing campaigns/choice architecture aiming to indirectly encourage customers to reduce their emissions

RATIONALE GE 7.1 STRATEGY TO INFLUENCE CUSTOMER BEHAVIOUR TO REDUCE THEIR GHG EMISSIONS

	RELEVANCE OF THE INDICATOR:
RATIONALE OF	Strategies to influence sustemer are included in this ACT methodology for the following reasons:
THE INDICATOR	Strategies to initidence customer are included in this ACT methodology for the following reasons.

- Companies usually have the ability to influence the strategy and performance of customer regarding climate thanks to their products or services.
- The downstream can represent the largest source of emissions for some companies throughout the value chain and clients should be engaged through a proper ambitious strategy.

SCORING THE INDICATOR:

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 emission 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.

• GE 7.2 ACTIVITIES TO INFLUENCE CUSTOMER BEHAVIOUR TO REDUCE THEIR GHG EMISSIONS

DESCRIPTION & REQUIREMENTS	GE 7.2 ACTIVITIES TO INFLUENCE CUSTOMER BEHAVIOUR TO REDUCE THEIR GHG EMISSIONS					
SHORT						
DESCRIPTION OF	This indicator assesses the extent to which the company implements activities and initiatives that help, influence or otherwise enable customer to reduce their GHG emissions. The indicator aims to be a holistic measure of these activities and initiatives, with evidence of					
INDICATOR	implementation and outcomes in the value chain across all products/services.					
DATA	ne relevant data for this indicator are:					
REQUIREMENTS	 Activities to influence clients GHG emissions 					
	♦ % of products/services					
	 Data on clients' choices and preferences towards reducing GHG emissions 					
	CDP Questionnaire 2023 mapping to this indicator:					
	 ♦ C12.1b 					
How THE	The assessment will assign a maturity score based on the company's demonstration of recent and current activities and initiatives with its					
ASSESSMENT	clients, expressed in a maturity matrix.					
WILL BE DONE	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	Woighting
Associa	Associated score		25%	50%	75%	100%	Weighting
What action levers* does the company use in practice to encourage clients to reduce their emissions?	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 attempting to change the existing customer demand towards low- carbon alternatives.	Evidence of company using action lever(s) from ONE of the four engagement types (Education/info rmation sharing; Collaboration; Compensation; Customer motivation via marketing and choice architecture).*	Evidence of company using action lever(s) from TWO of the four engagement types (Education/info rmation sharing; Collaboration; Compensation; Customer motivation via marketing and choice architecture).*	Evidence of company using action lever(s) from AT LEAST THREE of the four engagement types (Education/info rmation sharing; Collaboration; Compensation; Customer motivation via marketing and choice architecture).*	30%
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%

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.

- * 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
 - o Quantitative example: Evidence that engaged clients have reduced their use-phase GHG emissions by X%

RATIONALE GE 7.2 ACTIVITIES TO INFLUENCE CLIENTS TO REDUCE THEIR GHG EMISSIONS

RATIONALE OF RELEVANCE OF THE INDICATOR:

THE INDICATOR

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

- Companies usually have the ability to influence the strategy and performance of clients regarding climate thanks to their products or services.
- The downstream can represent the largest source of emissions for some companies throughout the value chain and clients should be engaged through low-carbon solutions.

SCORING THE INDICATOR:

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 emission 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.

• GE 8.1 COMPANY POLICY ON ENGAGEMENT WITH ASSOCIATIONS, ALLIANCES, COALITIONS OR THINKTANKS

DESCRIPTION &	& GE 8.1	COMPANY POLICY	ON ENGAGEMENT WITH	ASSOCIATIONS	, ALLIANCES	, COALITIONS	OR THINKTANKS
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REQUIREMENTS

SHORT							
DESCRIPTION	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						
OF INDICATOR	provides support are found to be opposing "climate-friendly" policies.						
DATA	The r	elevant data for this indicator are:					
REQUIREMENTS	•	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					

How THE The analyst will evaluate the description and evidence of the policy on associations, alliances, coalitions or thinktanks of which the company is ASSESSMENT 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	Weightinge
Associa	ted score	0%	25%	50%	75%	100%	weightings
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 publicly available.		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 publicly available.		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%
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	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	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%

				implementation of the process lies below Level 3*.	the process lies at Level 3 or above*.		
Does the company have an action plan addressing 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? [†]	Action plan	No action plan exists.	Action plan sets out which actions are to be taken when associations, alliances, coalitions or thinktanks are found to be opposing "climate- friendly" policies. Action plan does not include any of the actions listed [†] .	Action plan includes making public statements challenging associations, alliances, coalitions and thinktanks*. Does not include either of the other actions listed [†] .	Action plan includes engaging with associations, alliances, coalitions or thinktanks to change their position [†] . May include making public statements, but does not include withdrawing funding for/suspending or ending membership [†] .	Action plan includes withdrawing funding for/suspending or ending membership of the association, alliance, coalition or thinktank*. May include both other actions listed [†] .	20%

- * 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)
 - o 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
- o 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
- o Level 4
 - Person/committee that is three or more steps in the corporate structure from the highest level of decisionmaking 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: (29), (30)):
 - 1. 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 emission reduction goals and with its support for climate policy.
 - 2. 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.
 - 3. 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.

RATIONALE GE 8.1 COMPANY POLICY ON ENGAGEMENT WITH ASSOCIATIONS, ALLIANCES, COALITIONS OR THINKTANKS

RATIONALE OF Associations, alliances, coalitions and thinktanks are a key instrument by which companies can indirectly influence policy on climate. thus,
 THE INDICATOR 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.

• GE 8.2 Associations, Alliances, COALITIONS AND THINKTANKS SUPPORTED DO NOT HAVE CLIMATE-NEGATIVE ACTIVITIES OR POSITIONS

DESCRIPTION & REQUIREMENTS	GE 8.2 Associations, alliances, coalitions and thinktanks supported do not have climate-negative activities or positions
SHORT	
DESCRIPTION OF	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	The relevant data for this indicator are:
REQUIREMENTS	 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

ASSESSMENT WILL BE DONE

HOW THE

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 (31)). (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	Standar d	Advanced	Next practice	Low-carbon aligned	Mainhtin a
Associated score		0%	25%	50%	75%	100%	weighting
Does the company support associations, alliances, coalitions or thinktanks that have climate negative activities/posi tions?	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%

RATIONALE	GE 8.2 A ssociations, alliances, coalitions and thinktanks supported do not have climate-negative activities or positions
RATIONALE OF	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.
• GE 8.3 P OSITI	ON ON SIGNIFICANT CLIMATE POLICIES
DESCRIPTION & REQUIREMENTS	GE 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 External sources of data shall also be used for the analysis of this indicator (e.g. RepRisk database, press news, actions in standard

How THEThe analyst evaluates the description and evidence on company position on relevant climate policies for the presence of best practiceASSESSMENTelements, 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%	weighting
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 against climate change*.	60%
Does the company have a monitoring and review process to ensure that its policy positions are consistent with the goals of the Paris Agreement?	Des the any have a toring and w process is user that spolicy itions are istent with oals of the Paris geement? 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. A 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.		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	A monitoring and review process to ensure that the company's policy positions are consistent with the goals of the Paris Agreement exists.	40%		

ACT Generic | ACT Initiative | Version 2.0 | page 131

	The process is not necessarily implemented.	Level 1 [†] , or implemented, but oversight of the process lies below Level 1 [†] , and implementatio n of the process lies below Level 3 [†] .	Level 1 [†] , and implementation of the process lies at or above Level 3 [†] .	
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- * 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:
 - o 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)
 - o 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

	o 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 				
	o 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 				
RATIONALE	GE 8.3 POSITION ON SIGNIFICANT CLIMATE POLICIES				
RATIONALE OF	Policy and regulation that acts to promote transition to a low-carbon economy is key to the success of the transition. Companies should not				
THE INDICATOR	oppose effective and well-designed regulations in these areas but should support them.				
• GE 8.4 COLLA	RORATION WITH LOCAL PUBLIC AUTHORITIES				
DESCRIPTION &	GE 8.4 COLLABORATION WITH LOCAL PUBLIC AUTHORITIES				
REQUIREMENTS					
SHORT	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				

DESCRIPTION OF INDICATOR 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 The relevant data for this indicator are:

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

CDP Questionnaire 2023 mapping to this indicator:

♦ C12.3

ACT Generic | ACT Initiative | Version 2.0 | page 133

◆ C12.3a

HOW THE

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:

- 1. Electrification and energy (including demand management and grid flexibility)
- 2. Transport
- 3. Circular economy
- 4. 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
Associated score
Does the company collaborate with and support local authorities to achieve local emissions reductions?

				_
			policies/partnership	
			s 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).

RATIONALE GE 8.4 COLLABORATION WITH LOCAL PUBLIC AUTHORITIES

RATIONALE OF Collaboration with local authorities can be a key instrument by which companies can indirectly influence policy on climate on their THE INDICATOR 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:

- 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).
- specifically in the Generic methodology, a measure of the company contribution to decarbonize its value chain (when upstream of a high emissive value chain) through the share of its products/services used by final low-carbon products/services/activities (indicator 9.3)

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.

As the ACT Generic methodology aims to assess a wide range of sectors, it is not possible to provide a list of low-carbon business models ; 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.⁴ 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 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.
 - E.g., generating electricity from renewable sources; producing steel or aluminium using a process that emits significantly less emissions than the industry average;
 - An example of a business model that would not be classed as low-carbon, would be manufacturing internal combustion engine (ICE) vehicles using a process with GHG emissions that are substantially lower than the sector or industry average. While the company's activities may be low-carbon in themselves, they lead to a lock-in of assets incompatible with the objective of climate change mitigation (due to the in-use emissions from ICE vehicles).
- 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.
 - E.g., producing batteries for renewable energy storage; building transmission & distribution infrastructure to enable the shift to renewable generation; providing sustainability services to the buildings sector, reducing energy demand, etc.

DEFINING "HIGH-CARBON BUSINESS MODEL"

Indicator 9.2, dimensions 2 and 3 require companies to decarbonise or commit to phasing out their existing, high-carbon business models. A high-carbon business model is one which is not based primarily around a set of inputs, activities and/or outputs which are considered to contribute substantially to climate change mitigation. As such, a high-carbon business model may:

- have GHG emissions that are not substantially lower than the sector or industry average, and may be substantially higher;
- hamper the development and deployment of low-carbon alternatives;
- lead to a lock-in of assets incompatible with the objective of climate change mitigation, considering the economic lifetime of those assets.

DEFINING "LOW-CARBON BUSINESS ACTIVITY"

⁴ Definitions are partially based on the EU Taxonomy regulation: <u>https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020R0852</u>

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'").

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.

For example, a steel manufacturer may produce steel with GHG emissions that are not substantially lower than the sector or industry average. By
introducing low-carbon activities such as increasing the share of scrap-based electric arc furnaces and developing carbon capture, use and storage
(CCU/CCS) technologies, the company may contribute to reducing the GHG emissions of its business model such that they are substantially lower than
the sector or industry average.

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").

CALCULATION OF THE SCORE

- Indicator 9.1: The analyst uses the maturity matrix to calculate the company score for indicator 9.1.
- 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.
 - For example, if the company has introduced multiple new, low-carbon business models within the last 5 years, these should all be scored individually in dimension 1. If the company is also expanding another low-carbon business model, which it started more than 5 years ago, 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. Finally, if the company has committed to phasing out its existing, high-carbon business model(s), this should be scored in dimension 3.
 - The final score for indicator 9.2 is calculated based on the highest scoring example from each dimension.
 - For example, if the analyst identifies three examples of business models for dimension 1, two examples of decarbonisation actions for dimension 2, and one commitment to phase out a high-carbon business model for dimension 3, 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: 10%
- Dimension 3: 40%
- There are two routes to calculating the indicator weightings:
 - 1. 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%
 - 2. 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 which already have a high share of low-carbon products and services (i.e., which score 80% or above in indicator 1) have less need to be developing 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 the indicator 9.2 dimensions weightings 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 between the 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 decarbonization is already partially taken into account in various 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 easily be decarbonized. For this reason, dimension 3 has a relatively high weighting (40%).

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

DESCRIPTION &

REQUIREMENTS GE 9.1 REVENUE FROM LOW-CARBON PRODUCTS AND/OR SERVICES

SHORT 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.

INDICATOR

DATA

The questions comp	prising the information reque	est that are relevant to this	indicator are (from RY-3 to RY):
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REQUIREMENTS

- 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

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.

CDP Questionnaire 2023 mapping to this indicator:

- ♦ C3.5b
- ♦ C4.5
- ♦ C4.5a

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

How THE	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
ASSESSMENT	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.
WILL BE DONE	The sources of information used to identify the share of low-carbon revenue in 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 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 awarded.

The maturity matrix is provided below:

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

RATIONALE GE 9.1 REVENUE FROM LOW-CARBON PRODUCTS AND/OR SERVICES

RATIONALE OF

See module 9
THE INDICATOR

See module 9 introduction.

SHORT	This indicator assesses the specific changes the company is making to its business in order to achieve its low-carbon transition. These					
DESCRIPTION OF	changes include introducing and expanding new, low-carbon business models, and decarbonizing or terminating existing, high-carbon business models. The questions comprising the information request that are relevant to this indicator are:					
INDICATOR						
D ATA						
REQUIREMENTS	 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 					
	 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 					
	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;

o Sector decarbonisation reports identifying the key action levers for a sector to decarbonise.

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

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

This dimension assesses the size and scheduled growth of new (started *within* five years before the reporting year) and existing (started *before* five years before the reporting year) 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.
	Basic	Advanced	Low-carbon aligned	
Associated score	0%	50%	100%	Weighting
Size of business model (if started <i>within</i> 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 <i>within</i> RY-5) or 0% (if BM was started <i>before</i> 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 <i>within</i> RY-5) or 40% (if BM was started <i>before</i> RY-5)
Scheduled growth of business model	Scheduled growth of business modelBusiness model not scheduled to grow (based on total FTE, revenue, or relevant activity-based metric of size)Business modelScheduled growth of scheduled to grow (based on total FTE, revenue, or relevant activity-based metric of size)Business model		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 Th		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%

- * How to determine whether a business model is of high, medium, or low importance to the global low-carbon transition:
 - The analyst may base their assessment on various sources, including:
 - ETP Clean Energy Technology Guide Data Tools IEA
 - If the business model is listed as a technology in the IEA ETP Clean Energy Technology Guide with an "Importance for net-zero emissions" score of "Low", it scores "Basic"; "Moderate" scores "Advanced"; "High" or "Very high" scores "Low-carbon aligned".

- For other, non-technological business models, such as those aimed at reducing structural barriers to market penetration, or creating synergies with other industries, improving circularity, etc., other sources will need to be consulted to determine relative importance for low-carbon transition. For example:
 - Protecting People and Planet | Systems Change Lab
 - If the business model relates to one of the Systems Change Lab "Shifts" (critical changes that can help deliver systemwide transformations), it should generally be considered to have high importance, and score "Low-carbon aligned".
 - Sector decarbonisation reports identifying the key action levers for a sector to decarbonise. For example:
 - o Iron and Steel Analysis IEA
 - ACT methodology usually identifies the key action levers in the "Introduction" section
 - Other relevant sources

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 (which may be high- or low-carbon) in order to make the overall business model lower-carbon.

• E.g., A company electrifying its production processes and switching to 100% renewable energy, to reduce the emissions from its production activities.

	Basic	Standard	Advanced	Next practice	Low-carbon aligned	
Associated score	0%	25%	50%	75%	100%	Weighting
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-	The business model decarbonisation is of low	-	The business model decarbonisation is of medium	-	The business model decarbonisation is of high	25%

carbon	importance to the	importance to the	importance to the	
transition [‡]	global low-carbon	global low-carbon	global low-carbon	
	transition	transition	transition	

- Examples:
 - o what percentage of the company's electricity consumption has been switched to renewables?
 - What percentage of the company's production capacity has been electrified?
 - o what percentage of the company's process emissions is being captured by CCUS?
- + Examples:
 - the action to switch 100% of the company's electricity consumption to renewables clearly targets the most relevant activity of its production business model (scores "Low-carbon aligned"). If the renewable electricity is only used to power company offices while its processes remain un-electrified, this does not impact the company's most relevant activities (scores "Basic").
 - the action to switch to 100% recycled steel for a company producing high-fossil fuel consuming products does not target the most impactful life-cycle phase of the company's business model (the use phase) (may score "Basic" or "Advanced" depending on how significant the emissions from purchased steel are)
- + 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:
 - \circ $\;$ The analyst may base their assessment on various sources, including:
 - ETP Clean Energy Technology Guide Data Tools IEA
 - If the activity is listed as a technology in the IEA ETP Clean Energy Technology Guide with an "Importance for net-zero emissions" score of "Low" or "Moderate", it scores "Basic"; "High" scores "Advanced"; "Very high" scores "Low-carbon aligned".
 - For other, non-technological business activities, such as those aimed at reducing structural barriers to market penetration, or creating synergies with other industries, improving circularity, etc., other sources will need to be consulted to determine relative importance for low-carbon transition. For example:
 - Protecting People and Planet | Systems Change Lab
 - If the business activity relates to one of the Systems Change Lab "Shifts" (critical changes that can help deliver systemwide transformations), it should generally be considered to have high importance, and score "Low-carbon aligned".
 - Sector decarbonisation reports identifying the key action levers for a sector to decarbonise. For example:

- o Iron and Steel Analysis IEA
- ACT methodology usually identifies the key action levers in the "Introduction" section
- Other relevant sources

DIMENSION 3 - TERMINATION/PHASE-OUT OF EXISTING HIGH-CARBON BUSINESS MODELS (40%)

This dimension relates to commitments the company has to terminating/phasing out one or several of its existing, high-carbon business models.

Since ACT's focus is on company-level decarbonisation, "termination/phase-out of high-carbon business models" may include selling highemitting assets or business divisions from a company's portfolio to other entities. However, decommissioning assets and closing down business divisions are preferred forms of divestment since they are more likely to drive emissions reductions in the real world. If a company's commitment to terminate/phase out its existing, high-carbon business model(s) relies exclusively on selling high-emitting assets or business divisions, this should be reflected negatively in the Narrative section of the assessment (Business model and strategy criterion).

For example, if a vehicle manufacturer has committed to phasing out production of ICE vehicles by 2035, this is relevant to consider. Or if a company producing dry alfalfa has committed to phasing out coal from its generation mix.

		Basic	Standard	Advanced	Next practice	Low-carbon aligned	
A	ssociated score	0%	25%	50%	75%	100%	Weighting
(tr	Commitment to erminate/phase out existing, high-carbon ousiness model	The company has a commitment to terminate/phase out ≤ 25% of its existing, high- carbon business model(s) (based on FTE, revenue, or relevant activity-based metric of size) or The company has no commitment	The company has a commitment to terminate/phase out 26 to 50% of its existing, high- carbon business model(s) (based on FTE, revenue, or relevant activity- based metric of size)	The company has a commitment to terminate/phase out 51 to 75% of its existing, high- carbon business model(s) (based on FTE, revenue, or relevant activity- based metric of size)	The company has a commitment to terminate/phase out 76 to 95% of its existing, high- carbon business model(s) (based on FTE, revenue, or relevant activity-based metric of size)	The company has a commitment to terminate/phase out > 95% of its existing, high-carbon business model(s) (based on FTE, revenue, or relevant activity- based metric of size) or The company has already terminated/phased out the entirety of its existing, high-carbon business model(s)	70%
т	ermination/phas e-out date	The company's commitment has a phase-out date from RY+21 onwards or The company has no commitment	The company's commitment has a phase-out date between RY+16 and RY+20	The company's commitment has a phase-out date between RY+11 and RY+15	The company's commitment has a phase-out date between RY+6 and RY+10	The company's commitment has a phase-out date between RY and RY+5 or The company has already terminated/phased out the entirety of its existing, high-carbon business model(s)	30%

RATIONALE GE 9.2 CHANGES TO BUSINESS MODELS

RATIONALE OF

THE INDICATOR

See module 9 introduction.

• GE 9.3 SHARE OF PRODUCT/SERVICE SALES USED IN CLIENT LOW-CARBON PRODUCTS/SERVICES

DESCRIPTION & GE 9.3 SHARE OF PRODUCT/SERVICE SALES USED IN CLIENT LOW-CARBON PRODUCTS/SERVICES

REQUIREMENTS

SHORT	
DESCRIPTION OF	A measure of the company contribution to decarbonize its value chain through the share of its product/service sales used by final low- carbon products/services/activities.
PREREQUISITE	This indicator is only applicable for a company operating upstream of an emissive activity (i.e. sectors covered by an ACT sectoral methodology ⁵), producing a part of the final product (e.g. transport equipment manufacturer).
DATA	The relevant data for this indicator are:
REQUIREMENTS	 The company's revenues share from products/services used by final low-carbon products/services/activity.
	CDP Questionnaire 2023 mapping to this indicator:
	None

⁵ Retail, electricity, automotive, buildings, cement, transport, oil & gas, agriculture, iron & steel, aluminium, glass, chemicals, pulp & paper.

How THEThe analyst will evaluate the share of the company's products/services used by final low-carbon products/services/activities, as defined inASSESSMENT WILLthe sections Defining "low-carbon business activity" and Defining "low-carbon products and services" in the module 9 introduction.

BE DONE

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	Basic	Standard	Advanced	Next practice	Low- carbon aligned	Sub score
Associated score	0%	25%	50%	75%	100%	
What is the share of company's product / service sales used in client low-carbon products / services / activities?	Below 20%	Between 21% and 40%	Between 41% and 60%	Between 61% and 80%	Above 80%	100%

RATIONALE GE 9.3 SHARE OF PRODUCT/SERVICE SALES USED IN CLIENT LOW-CARBON PRODUCTS/SERVICES

RATIONALE OF ACT Generic also aims to engage all the companies operating in the value chain of emissive sectors, specifically those covered by a sectoral ACT methodology. This indicator is for companies operating in an emissive value chain, upstream of an intensive activity, supplying part of the final product (e.g., transport equipment manufacturer). A company that supplies part of a highly emitting final product bears some responsibility for the emissions linked to this product, but is also at risk in a low-carbon world. This indicator aims to capture the share of a company's products/services use in low-carbon products and/or services and/or activities. For example, a company that produces equipment for the automotive sector can increase its share of products for electric vehicles, thus contributing to the promotion of low-carbon vehicles and reducing its risk linked to thermal vehicles in a low-carbon world.

While indicator GE 9.1 (revenue from low-carbon products and/or services) rewards companies providing directly low-carbon products and/or services), indicator GE 9.3 intends to reward companies providing elements for companies providing low-carbon products and/or services. In other words, companies that are upstream of an intensive value chain and contribute to the value chain decarbonization.

6 Assessment

6.1 BENCHMARKS

Results from an assessment using the ACT Generic methodology shall clearly mention which benchmark(s)has been used and the rationale for this choice.

6.1.1 GENERAL CONSIDERATIONS ON DECARBONISATION BENCHMARKS

To address the heterogeneity of sectors and activities covered by ACT Generic, we need benchmark decarbonisation pathways covering a company's most relevant emissions across all GHG emissions reporting scopes. The most relevant emissions for a company could be:

- a. Direct emissions caused by the company activities (scope 1 emissions)
- b. Indirect emissions caused by upstream activities (scope 2 emissions + scope 3 upstream emissions)
- c. Indirect emissions caused by upstream and downstream activities (scope 3 emissions)

See Sections 3 (Scope) and 4 (Boundaries) for more information on the activities and emissions assessed under this methodology.

All the benchmarks used by the ACT initiative are aligned at a minimum with a "well below 2°C" ambition, using the Beyond-2-Degree Scenario (B2DS) and Sustainable Development Scenario (SDS) from the International Energy Agency (IEA). The most recent developed or updated ACT methodologies benefit from benchmark pathways aligned with a 1.5°C ambition.

Benchmarks for sector specific ACT methodologies such as the cement or oil and gas or electricity use sector specific emissions intensity metrics based on physical units of activity as economic intensity metric presents strong biases. For example, the cement sector benchmark pathway is expressed in units of tonnes of CO₂e per tonne of cement produced.

For companies assessed under ACT Generic there is no single benchmark pathway, for the following reasons:

- There is no one physical unit of activity that is relevant to all companies covered by the ACT Generic methodology. Companies engaged in activities as diverse as mining, electrical equipment manufacturers and pharmaceutical companies are all assessed under ACT Generic.
- At the company-scale, no single activity indicator captures all of the assessed company's emissions sources. For instance, tonnes of CO₂e per unit of floor space may cover the emissions performance of a company's building use but it does not provide any information about the emissions performance of the company's transport activities or its industrial processes.

To address those challenges, the ACT Generic methodology implements a combination of strategies to establish company benchmark decarbonisation pathways. These include:

- applying a mix of different relevant benchmarks
- selecting from appropriate available sector specific benchmarks

 where there is no existing benchmark, the absolute contraction approach developed by the SBTi is applied to establish a benchmark pathway (5).

• SECTOR SPECIFIC BENCHMARKS AND SECTORAL DECARBONIZATION APPROACH (SDA)

When a sector benchmark is available, company specific benchmark pathways are calculated from sector benchmark pathways following the principles of the Sectoral Decarbonization Approach (SDA) allocation method. This method was developed by the Science Based Targets initiative (32).

The SDA uses a convergence mechanism. This takes the company's emissions intensity in the reporting year (RY) and converges it to the required sector emissions intensity in 2050. The rate of change for the sector ensures that the corresponding sectoral carbon budget is not exceeded. Figure 14 illustrates how the convergence mechanism is applied to compare a company's sector specific benchmark pathway (as obtained with the SDA allocation method) to a company target pathway for Module 1 of the performance assessment.



FIGURE 14: CONVERGENCE MECHANISM ILLUSTRATION

Companies starting from a lower emissions intensity in the reporting year will have a less steep benchmarked decarbonization pathway compared to companies starting with a higher intensity. As a result, past action or inaction to reduce intensity is taken into consideration.

• SBTI ABSOLUTE CONTRACTION APPROACH BENCHMARKS

When no sectoral benchmark is available, the company benchmark pathway is calculated using the Absolute Contraction Approach developed by SBTi (5).

This method requires all companies to reduce their absolute emissions at the same rate, as required by a given scenario. The benchmark follows the IPCC Special Report on Global Warming of 1.5°C (SR15) for a 1.5°C trajectory (33). To calculate the extent by which a company is expected to reduce its absolute emissions, two different cases can be identified:

 From the company's reporting year to 10 years later (until 2030), an annual linear decrease rate of 4.2% per year is applied. For target settings purpose, should the base year be more than 2020, an overall 42% reduction is required until 2030. For the following years out to 2050, the benchmark applies whatever on-going annual linear decrease is required to achieve an overall absolute emissions reduction of 90% by 2050 (or 72% for agriculture sector) (8).



FIGURE 15:ABSOLUTE CONTRACTION MECHANISM ILLUSTRATION

• CONNECTION WITH OTHER ACT METHODOLOGIES

For many company activities assessed under ACT Generic, the most significant emissions may be part of a value chain for which an ACT sectoral methodology is available.

For example:

- Infrastructure and road construction activities involve significant cement procurement so the ACT Cement benchmark can be applied to assess upstream Scope 3 emissions
- Aircraft manufacturers operate upstream of transport operators so the ACT Transport benchmark for air transportation can be applied to assess their downstream Scope 3 emissions

Significant scope 1+2 emissions can be assessed using the appropriate ACT sectoral methodology benchmark. Where no specific relevant sector benchmark exits, the SBTi absolute contraction approach (ACA) can be used to establish a benchmark.



Existing relevant sector specific intensity benchmarks can also be applied for companies operating in value streams with significant upstream and/or downstream Scope 3 emissions. Remaining scope 3 emissions can be assessed using a benchmark established via the SBTi absolute contraction approach (ACA (5)) or by applying a maturity matrix approach. Both upstream and downstream scope 3 emissions can be benchmarked in this way.



Upstream scope 3 emissions:

- If significant emissions relate to company purchases of products whose climate performance can be assessed against existing sector benchmarks, these sector benchmarks can be applied to benchmark the company's upstream emissions.



Downstream scope 3 emissions:

- If significant emissions result from the sold use of the company's products in a sector with a sector benchmark, these sector benchmarks can be applied for the company's downstream emissions.



6.1.2 GENERAL RULES TO CALCULATE COMPANY DECARBONISATION BENCHMARKS

Companies assessed under ACT Generic may have various sources of emissions – some much more significant than others.

For any company assessed with ACT Generic, the assessor first needs to establish the most significant areas of the company's emissions profile. Benchmarks for each emissions area are then established and the emissions or target performance assessed separately. The scores for each area will be combined (weighted average based on proportion of emissions) to arrive at the total indicators scores.

• USING EXISTING SECTOR BENCHMARKS

We focus here on 3 emissions sources where the company's benchmark is less straightforward to calculate.

Benchmarking emissions from buildings use

There are two options for sector benchmarks for emissions from building use. For office, hotel, retail and or domestic buildings the sector benchmarks from the ACT Real Estate methodology should be used wherever possible (Option A). For other buildings, the sector benchmark pathway "Services Buildings" from the IEA NZE report (34) should be used (Option B). Both options use an emissions intensity metric based on a physical unit of activity, i.e. kgCO₂ per square metre of floor space.

Option A enables a more accurate assessment of the emissions of buildings owned by a company. However, it requires a high level of detail in the data provided by the company as the sector benchmark applies regional weighting so the split of the company's building floor space by building type and by location is needed. Option B requires less detailed data and may also be used for all building types if location data is not available.



FIGURE 16: OPTIONS FOR BUILDING DECARBONISATION BENCHMARKS

Option A and Option B can be combined as described in the following steps:

- Firstly, the company identifies the option A pathway for each building type and geographical area within its portfolio.
- Then the company identifies the remaining floor area to be benchmarked to the default option B pathway.
- And finally, the 'company activity mix weighted' sector benchmark is built as a weighted (buildings' current floor area) sum of a combination of relevant option A and option B pathways.

For example, a company has an office building in Germany (Option A) and an education building (Option B), with respectively 1000 m² and 2000 m² of floor areas.

To determine the 'company activity mix weighted' sector pathway:

'Company activity mix weighted' sector benchmark

 $= \frac{floor area office Germany}{Total company floor area} \times Office_{Europe_{Germany}}$

+ $\frac{floor area other buildings}{Total company floor area} imes Default Service Buildings Benchmark$

Benchmarking emissions from transport activities

The sectoral benchmarks for transport emissions are taken from ACT Auto (3) for Light Duty passenger vehicles and from ACT Transport (4) methodologies for other vehicles.



Company owns a vehicule fleet



FIGURE 17: OPTIONS FOR TRANSPORT DECARBONISATION BENCHMARKS (EXAMPLE FOR PAST EMISSIONS INDICATOR, WHEN THE COMPANY OWNS A FLEET)

Two distant company benchmarks maybe built – one for own fuel use efficiency when using vehicles manufactured by others and one, if the company manufacturers vehicles other than PLDVs, for the fuel use efficiency of its sold vehicle fleet.

For own vehicle use:

- The company's emissions from consumption of transport fuel needs to be established for each type of vehicle (PLDV or other transport vehicles) for each region to establish the mix of its own transport emissions
- The sector benchmarks involved are then combined by weighting each individual pathway by the proportion each vehicle type and region contributes to the company's total own vehicle use emissions
- The resulting 'company mix weighted' sector benchmark is applied to assess the company's own transport activity performance and target setting.

For sold vehicle use:

- If the company manufactures transport vehicles, the number of vehicles sold needs to be established for each type of vehicle for each region and the sold fleet emissions for each vehicle type and region needs to be established
- The sector benchmarks involved are then combined by weighting each individual pathway by the proportion each vehicle type and region contributes to the company's total vehicle sales (number of vehicles not sale revenue)
- The resulting 'company mix weighted' sector benchmark is applied to assess the company's sold vehicles performance

Benchmarking emissions from refrigerant leakage

The HFC (hydrofluorocarbons) and related gases globally leak from refrigerators and other cold equipment and have high global warming potentials (GWP) of up to 2,000. This is a problem for a few specific sectors. Therefore, the Generic approach of ACT would like to incentivise companies, where relevant, to take actions on this matter by instating a separate, ambitious benchmark that reduces refrigerant leakage drastically in the short term.

No identified pathway is available from the IEA via the SDA approach. The default sectoral benchmark for refrigerant leakage is therefore taken from the Reduced GWP Refrigerant Scenario for 15 European Union countries (RGR EU15 scenario (6)) until 2030 and linearly extended to zero GHG emissions from leakage in 2050.

Using SBTI Absolute Contraction Approach Benchmarks

Benchmarking emissions from Industry energy consumption

The benchmark for industry energy consumption emissions is based on the absolute contraction approach of the Science-Based Targets initiative (5). This method requires all companies to reduce their emissions by the same percentage of absolute emissions reductions as required for a given scenario. See above section for further information on the absolute contraction approach.

Benchmark pathways established using ACA assess absolute emissions. Intensity metrics based on revenues introduce strong biases (related to pricing variances) and may therefore not be used.

Benchmarking emissions from Industry direct processes

The benchmarks for industry direct process emissions are based on the best available scenarios. Where possible, the industry direct process emissions are benchmarked against specific scenarios. As of this stage of methodological development, only one specific scenario has been identified: refrigeration (refrigerant leakage). The benchmark for other industry direct process emissions (including fugitive emissions) is based on the absolute-contraction approach of the Science-Based Targets initiative.

6.1.3 BENCHMARKS FOR SCOPE 1+2 EMISSIONS

For companies for which Scope 1 and 2 emissions are predominate, the analyst should calculate company benchmark(s) for the most relevant existing ACT sector benchmark(s) or, when no such pathway exists, from the absolute contraction approach.

There are 3 options for calculating a company's Scope 1 and 2 emissions benchmark under ACT Generic. The option to choose depends on the availability of relevant sector benchmarks and the relative significance of the emissions from each source.



OPTION 1: SPLITTING SCOPE 1 + 2 EMISSIONS PER SOURCE

This option is the best to choose when one or more sources of Scope 1 plus 2 emissions are predominant. The analyst should focus on the most relevant sources. In particular, this option shall be chosen if building use emissions and/or transport emissions are significant.

OPTION 2: GLOBAL CUSTOM BENCHMARK

If needed and justified, the analyst can propose a reference pathway for the company sector scope 1+2 emissions, meeting ACT requirements:

- 1.5°C ambition
- No or limited overshoot
- Widely adopted at international level, by the sector and stakeholders of the sector
- Robustness of assumptions
- The scenario discloses absolute emissions trajectory or intensity and activity trajectories, until 2050 at least.
- Intensity metric shall be on a physical unit as economic intensity metric presents strong biases.

OPTION 3: GLOBAL ACA APPROACH

The option can be chosen if the there is no breakdown available of the sources of the company's Scope 1+2 emissions or if the Scope 1+2 emissions do not make up a significant proportion of the company's total emissions profile.

The option is easier to implement but is less informative for the analyst and the company.

The global scope 1+2 emissions are benchmarked against a default absolute benchmark, based on the absolute-contraction approach of the Science-Based Targets initiative (5). See details in Section "SBTi Absolute Contraction Approach benchmarks".

6.1.4 BENCHMARKS FOR UPSTREAM SCOPE 3 EMISSIONS

Two options are available, depending on the weight of upstream scope 3 emissions and the availability of benchmarks.



OPTION 1: SPLITTING UPSTREAM SCOPE 3 EMISSIONS PER PRODUCT

Given the heterogeneity of the sectors covered by the ACT Generic methodology, two distinct types of benchmarks are necessary to assess the upstream scope 3 emissions:

Sector benchmarks (emissions intensity) or SBTi Absolute Contraction Approach benchmark.

The choice of the benchmark depends on the scenario availability.

If a company operates downstream on the value chain of a sector covered by a specific ACT methodology and the emissions related to these purchases represent a high source of emissions for the company upstream scope, its sold product performance will be assessed using that specific sector benchmark.

For example, a company buying cement to build road and other infrastructures can be assessed on the carbon intensity of this cement. If the company asks its supplier for the carbon intensity of the cement, this data will be compared to the ACT Cement benchmark. Otherwise, average carbon intensity of the sector will be used.

If a company operates downstream on the value chain of a sector not covered by a specific ACT methodology and the emissions related to these purchases represent a high source of emissions for the company upstream scope, its sold product performance will be assessed using a default benchmark pathway established from the SBTi absolute contraction approach.

Important: Economic intensity metrics present strong biases and are therefore not used for benchmarks.

OPTION 2: GLOBAL ACA APPROACH

The option can be chosen if the company's data lack granularity or if the upstream scope 3 emissions are not a major issue for the company.

The option is easier to implement but is less informative for the analyst and the company.

The global upstream scope 3 emissions are benchmarked against a default absolute benchmark, based on the absolute-contraction approach of the Science-Based Targets initiative (5). See details in Section "SBTi Absolute Contraction Approach benchmarks".

6.1.5 BENCHMARKS FOR DOWNSTREAM SCOPE 3 EMISSIONS

Two options are available, depending on the weight of downstream scope 3 emissions and the availability of benchmarks.



OPTION 1: SPLITTING DOWNSTREAM SCOPE 3 EMISSIONS PER PRODUCT

Given the heterogeneity of the sectors covered by the ACT Generic methodology, two distinct types of benchmarks are necessary to assess the downstream scope 3 emissions targets (GE 1.3) and performance (GE 4.2): sectoral scenarios (emissions intensity) or SBT Absolute contraction.

The choice of the benchmark depends on the scenario availability. The selection will be made according to the following process:

- A benchmark in carbon intensity is applied if the company meets the following requirements:
 - The use of sold products represent a high source of downstream emissions;
 - The company produced ready-to-use products and is able to measure their carbon intensity;
 - A specific pathway based on carbon intensity is available;

E.g.: A plane manufacturer knows the carbon intensity of the products (planes) it sells. The company will be evaluated on the carbon intensity of its planes, thanks to the benchmark developed in ACT Transport.

• Otherwise, a default pathway in absolute contraction is used as the benchmark. The pathway relies on absolute emissions. Economic intensity metric presents strong biases and was therefore not chosen.

OPTION 2: GLOBAL ACA APPROACH

The option can be chosen if the company's data lack granularity or if the downstream scope 3 emissions are not a major issue for the company.

The option is easier to implement but is less informative for the analyst and the company.

The global downstream scope 3 emissions are benchmarked against a default absolute benchmark, based on the absolute-contraction approach of the Science-Based Targets initiative (5). See details in Section "SBTi Absolute Contraction Approach benchmarks".

6.2 OTHER BENCHMARKS USED FOR INDICATORS

Benchmark for the CAPEX and R&D Low-carbon & mitigation technologies

Relevant sectoral roadmaps should be used to define a list of low-carbon technologies for the sector. It may include technologies to decarbonise the production assets and improvements of sold product carbon performance. These technology avenues shall be compatible with a 1.5°C scenario.

A low-carbon or mitigation technology must be widely considered to contribute substantially to climate change mitigation (following the definition in the Module 9 section Defining "low-carbon business activity".

Benchmark for the Company patenting activity in low-carbon & mitigation technologies

The European Patent Office (EPO) and the US Patent and Trademark Office (USPTO) have developed a dedicated patent classification scheme (Cooperative Patent Classification - CPC) which details patents for climate change mitigation or technologies (CCMT) (16):

- Y02B CCMTs related to buildings
- Y02C CCMTs related to capture, storage, sequestration or disposal of greenhouse gases
- Y02E CCMTs related to reduction of greenhouse gas emissions, related to energy generation, transmission or distribution
- Y02P CCMTs relating to production in energy intensive industries
- Y02T CCMTs related to transportation
- Y02W CCMTs related to wastewater treatment or waste management
- Y04S Systems integrating technologies related to power network operation, communication or information technologies for improving the electrical power generation, transmission, distribution, management or usage, i.e. smart grids

This classification is used for this ACT methodology.

6.2 WEIGHTINGS

As substantial emissions may occur all along the value chain depending on the company that is assessed, ACT Generic needs to capture all of each company's significant sources of emissions impact, i.e. Scope 1&2 emissions and Scope 3 upstream and/or downstream emissions as relevant. Unlike other frameworks, the ACT Generic methodology does not explicitly define emissions boundaries, but proposes a weighting matrix to define a performance weighting scheme that is tailored to each company. The flexibility of this method enables the analyst to stick to the initial objective of the ACT initiative by assessing companies considering sectoral specificities. This matrix allows to determine the company's profile, based on three criteria:

- The company's main sources of GHG emissions
- The company's levers to decarbonize its activities
- The emissions profile of the company value chain

TABLE 8: PERFORMANCE WEIGHTING SCHEME MATRIX (NEXT PAGE)

		Not relevant	x	Low	x	Medium	x	High	x	Potential range
1	Targets									15%
		The company has very low climate challenges related to scope 1+2 emissions		Scope 1+2 emissions represent low climate issues for the company		Scope 1+2 emissions represent significant climate issues for the company		The most important climate challenges of the company are related to scope 1+2 emissions		
2	Material investment	The company emissions related to scope 1+2 emissions represent less than 10% of total emissions and less than 10,000 teqCO2		Emissions related to scope 1+2 emissions represent less than 25% of total emissions (or less than 10% but more than 10,000 teqCO2)		Scope 1+2 emissions represent less than 50% of total emissions		Scope 1+2 emissions represent more than 50% of total emissions		0%-35%
		The company has very few levers to reduce emissions related to material investment		The company has some levers to reduce emissions related to material investment		The company has sensitive levers to reduce emissions related to material investment		The company has strong levers to reduce emissions related to material investment		
3	Intangible investment	The company does not operate in a sector in which the R&D levers are important for the transition		The company operates in a sector in which the R&D levers are important for the transition				0%-5%		
		The company has very low climate challenges related to scope 3 emissions		Scope 3 emissions represent low climate issues		Scope 3 emissions represent significant climate issues		The most important climate challenges of the company are related to scope 3 emissions		
4	Sold product performance	Emissions related to scope 3 emissions represent less than 10% of total emissions and less than 10,000 teqCO2		Emissions related to scope 3 emissions represent less than 25% of total emissions (or less than 10% but more than 10,000 teqCO2)		Emissions related to scope 3 emissions represent less than 50% of total emissions		Emissions related to scope 3 emissions represent more than 50% of total emissions		0%-35%
		The company has very few levers to reduce its scope 3 emissions		The company has some levers to reduce its scope 3 emissions		The company has sensitive levers to reduce its scope 3 emissions		The company has strong levers to reduce its scope 3 emissions		
								The company operates in an intensive value chain		
5	Management									10%
		The company has very low climate challenges located upstream		Upstream emissions represent low climate issues		Upstream emissions represent significant climate issues		The most important climate challenges are located upstream		
6	Suppliers	The emissions related to suppliers represent less than 10% of total emissions and less than 10,000 teqCO2		The emissions related to suppliers represent less than 25% of total emissions (or less than 10% but more than 10,000 teqCO2)		The emissions related to suppliers represent less than 50% of total emissions		The emissions related to suppliers represent more than 50% of total emissions		0%-20%
		The company has very few levers to reduce its upstream emissions		The company has some levers to reduce its upstream emissions		The company has sensitive levers to reduce its upstream emissions		The company has strong levers to reduce its upstream emissions		
		The company has very low climate challenges located downstream		Downstream emissions represent low climate issues		Downstream emissions represent significant climate issues		The most important climate challenges are located downstream		
7	Clients	The emissions related to clients represent less than 10% of total emissions and less than 10,000 teqCO2		The emissions related to clients represent less than 25% of total emissions (or less than 10% but more than 10,000 teqCO2)		The emissions related to clients represent less than 50% of total emissions		The emissions related to clients represent more than 50% of total emissions		0%-20%
		The company has very few levers to reduce its downstream emissions		The company has some levers to reduce its downstream emissions		The company has sensitive levers to reduce its downstream emissions		The company has strong levers to reduce its downstream emissions		
8	Policy engagement									5%
9	Business model									10%-15%

Steps to define the performance weighting scheme:

- When starting the assessment, the analyst is required to complete the company's GHG emissions
 profile, if available. With this data, the materiality line of each module will be automatically filled in the
 performance weighting scheme matrix. If the company's emissions are not available or not
 detailed/robust enough, the analyst will manually fill in the materiality line of each module. Even if the
 materiality line is automatically filled, the evaluator will be free to modify it. The materiality line aims to
 evaluate the company on its most materials sources of emissions.
- The analyst needs then to fill in the levers line of each module. This criterion aims at fine tuning the weight of the modules depending on the levers the company has in order to reduce its GHG emissions.
- An additional question is asked regarding module 4: "Does the company operates in a GHG emissions intensive value chain?". If the answer is yes, the weight of the module is increased, to ensure enough weight is allocated to the risks related to the clients of companies operating in a high-emissive value chain.

The weight of each module (noted Mi, i being the module number) is then subdivided between the different indicators that make it up, according to their own rules.

GE	Module	Indicator	Module weight	Indicator weight
1.1		Alignment of scope 1+2emissions reduction targets		share of scope 1+2 emissions *12%
1.2	Targets	Alignment of upstream scope 3 emissions reduction targets		share of scope 3 upstream emissions * 12%
1.3		Alignment of downstream scope 3 emissions reduction targets	10%	share of scope 3 downstream emissions * 12%
1.4		Time horizon of targets		2%
1.5		Achievement of past and present targets		1%
2.1		Trend in past emissions		1/12*M2*L +1/8*M2*(1-L)
2.2	Material	Trend in future emissions	M2	1/4*M2*L +3/8*M2*(1-L)
2.3	Investment	Share of low-carbon CAPEX		1/3*M2*L +1/2*M2*(1-L)
2.4		Locked-in emissions		1/3*M2*L
3.1	Intangible	R&D in low-carbon technologies	MO	0% or 2.5%
3.2	Investment	Company low-carbon patenting activity	IVIS	0% or 2.5%
4.1		Product/service-specific interventions		M4*1/4 or M4*1/3 or M4*1/2
4.2	Sold Product Performance	Trend in past product / service specific performance	M4	M4*1/4 or M4*1/3 or M4*1/2
4.3		Locked-in from sold products		0% or M4*1/4 or M4*1/3

TABLE 9: PERFORMANCE INDICATOR WEIGHTINGS

4.4		Sub-contracted transport service performance		0% or M4*1/4 or M4*1/3
5.1		Oversight of climate change issues		3%
5.2		Climate change oversight capability		3%
5.3	Management	Low-carbon transition plan	10%	2%
5.4		Climate change management incentives		1%
5.5		Climate change scenario testing		1%
6.1	Complian	Strategy to influence suppliers to reduce their GHG emissions	MG	1/2*M6
6.2	Supplier	Activities to influence suppliers to reduce their GHG emissions	IVIO	1/2*M6
7.1		Strategy to influence clients to reduce their GHG emissions		1/2*M7
7.2	Client	Activities to influence clients to reduce their GHG emissions	M7	1/2*M7
8.1		Company policy on engagement with associations, alliances, coalitions or thinktanks		1%
8.2	Policy engagement	Associations, alliances, coalitions or thinktanks supported do not have climate-negative activities or positions	5%	2%
8.3		Position on significant climate policies		1%
8.4		Collaboration with local public authorities		1%
9.1		Revenue from low-carbon products and/or services		[1/3*M9 or 2/3*70% M9] or [50%*M9 or 70%*M9]
9.2	Business model	Changes to business models	M9	[1/3*M9 or 2/3*30% M9] or [50%*M9 or 30%*M9]
9.3		Share of product/service sales used in client low- carbon products/services		1/3*M9 or 0%

Indicator with fixed weight
Indicator with variable weight based on weighting
scheme tool
Indicator with variable weight based on other
auestions

L is the share of company's scope 1+2 emissions linked to its own buildings and/or its own fleet (see indicator GE 2.4 Locked-in emissions from own fleet and buildings for more information).

For module 1, scope 1+2 and/or upstream scope 3 and/or downstream scope 3 emissions are considered to assess the assessed company's reduction target(s) only if these emissions represent more than 10% of the company's overall emissions, or if they are higher than 10,000 tCO2eq.

For modules 2, 4 and 9, various weightings can be allocated to indicators within each of these modules. This is due to the fact that some indicators can be activated or not depending on the assessed company's profile and activities. The distribution of the module weighting between the indicators it contains thus depends on the number of activated indicators.

- Module 2: indicator GE 2.4 is only activated if the company has its own transport fleet and/or owns buildings.
- Module 4:
 - indicator GE 4.3 is only activated if the company sells ready-to-use products with a long lifespan, whose use will lead to GHG emissions (linked to energy consumption or process emissions), and these emissions are significant in the company's GHG emissions.
 - indicator GE 4.4 is only activated if the company subcontracts transport services.
- Module 9: indicator GE 9.3 is only activated if the company operates upstream of an emissive activity (i.e. sectors covered by an ACT sectoral methodology⁶), producing a part of the final product (e.g. transport equipment manufacturer).

The quantitatively scored modules (Targets, Material Investments, Intangible investment, Sold product performance) carry 50% to 55% of the final weight, and the qualitatively scored modules (Management, Client engagement, Supplier Engagement, Policy engagement, Business model) carry 45% to 50%.

RATIONALE FOR WEIGHTINGS

The setting of weights for both performance modules and indicators was guided by a set of principles (see the ACT Framework for more information (1)). These principles helped defining the weighting scheme of the performance modules and indicators.

Principle	Explanation
Value of information	The value of the information that an indicator gives about
	a company's outlook for the low-carbon transition is the
	primary principle for the selection of the weights.
Impact of variation	A high impact of variation in an indicator means that not
	performing in such an indicator has a large impact on the
	success of a 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 expected data
	quality variations are not recommended for a high weight
	compared to other indicators, unless there is no other
	way to measure a particular dimension of the transition.

⁶ Retail, electricity, automotive, buildings, cement, transport, oil & gas, agriculture, iron & steel, aluminium, glass, chemicals, pulp & paper.

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

Targets

15%

The Targets module has a relatively large weight of 15%. Most of it (12%) is shared between three indicators: alignment of scope 1+2 emissions, alignment of upstream scope 3 emissions and alignment of downstream scope 3 emissions. Those 12% are allocated on a pro-rata basis according to the emissions breakdown between scope 1+2 emissions, upstream scope 3 emissions and downstream scope 3 emissions.

The Time horizon of targets and Achievement of past and current targets indicators have a low weighting of 2% and 1% respectively. The Time horizon of targets is encouraging near term and interim targets to ensure companies are not only relying on long term ones. Finally, the Achievement of past and current targets indicator measures the company's past performance setting and achieving targets, which provides more contextual information on the company's ability to meet ambitious future targets.

Material Investment

0-35%

The Material Investment module has a variable weight that ranges from 0% to 35%. In all cases, 35% of the performance weight t is distributed on a pro rata basis between module 2 (Material Investment) and module 4 (Sold Product Performance), depending on the relative importance of scope 1+2 and scope 3 emissions as well as associated levers the company can used to tackle these emissions.

The ACT assessments are mostly future-oriented, justifying a higher weight for the indicator "Trend in future emissions" than for the indicator "Trend in past emissions". The four indicators within this module "trend in past emissions", "trend in future emissions", "share of low-carbon CAPEX" and "locked-in emissions" are weighted as follows, given M2 the weight of the module and L the share of total direct emissions covered by sources categories that can be assessed using the "locked-in emissions" indicator:

Indicator	Weight
GE 2.1 Trend in past emissions	1/12*M2*L +1/8*M2*(1-L)
GE 2.2 Trend in future emissions	1/4*M2*L +3/8*M2*(1-L)
GE 2.3 Share of low-carbon CAPEX	1/3*M2*L +1/2*M2*(1-L)
GE 2.4 Locked-in emissions	1/3*M2*L

Intangible Investment

0% or 5%

The Intangible Investment module is made of 2 equally weighted indicators: R&D investments in climate change mitigation technologies indicator and low-carbon patenting activity.

For companies operating in value chains with high stakes regarding low-carbon transition, R&D investments towards low-carbon technologies and low-carbon patenting activity are crucial. For those companies, the module is given a weight of 5%.

For companies within the scope of the ACT Generic methodology that are not operating in a carbon intensive value chain or for companies operating in sectors that are not very technology-dependent, this module is not relevant and is therefore weighted 0%. In that case, the 5% are allocated to module 9 (Business Model). The

companies that cannot rely on R&D to decarbonize their activities are expected to develop new business models compatible to a low-carbon economy.

The general information collected about the company will allow to determine whether this module is relevant or not.

Sold product performance

The Sold product performance module has a variable weight that ranges from 0% to 35%. In all cases, 35% of the performance weight is distributed on a pro rata basis between module 2 (Material Investment) and module 4 (Sold Product Performance), depending on the relative importance of scope 1+2 and scope 3 emissions as well as associated levers the company can used to tackle these emissions.

The indicators within this module will have a variable weight since the sources of GHG emissions may be significantly different from a company to another in this Generic methodology of ACT. Therefore, the weight of each indicator will be determined by the performance weighting scheme matrix (GE 4.1 and GE 4.2) and specific questions (GE 4.3 and GE 4.4). This will enable the assessment of the most material sources of emissions for each company.

Given M4 the weight of the module, the indicators weight are:

Indicator	Weight
GE 4.1 Product/service-specific interventions	M4*25% or M4*33% or M4*50%
GE 4.2 Product/service-specific performance	M4*25% or M4*33% or M4*50%
GE 4.3 Locked-in emissions from sold products	0% or M4*25% or M4*33%
GE 4.4 Sub-contracted transport service performance	0% or M4*25% or M4*33%

Management

10%

0-35%

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. Most of this weight is placed on the oversight of climate change issues and the climate change oversight capability, which are weighted 3% 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 2%.

The remaining indicators (climate change management incentives and climate change scenario testing) have a low weight of 1%, 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

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

Depending on their significant scope 3 emissions breakdown (upstream emissions vs. downstream emissions) and levers, companies will have to focus on either their supplier's engagement or their client's engagement towards decarbonization. The modules "Supplier engagement" and "Client engagement" are therefore weighted on a pro-rata basis, determined by the performance weighting scheme matrix.

0% to 20%

0% to 20%

The two indicators within the "Supplier engagement" module (strategy to influence suppliers to reduce their GHG emissions and activities to influence suppliers to reduce their GHG emissions) are equally weighted.

Client engagement

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

Depending on their significant scope 3 emissions breakdown (upstream emissions VS downstream emissions), companies will have to focus on either their supplier's engagement or their client's engagement towards decarbonization. The modules "Supplier engagement" and "Client engagement" are therefore weighted on a pro-rata basis, determined by the performance weighting scheme matrix.

The two indicators within the "Supplier engagement" module (strategy to influence clients to reduce their GHG emissions and activities to influence clients to reduce their GHG emissions) are equally weighted.

Policy engagement

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. The total weight for this module is therefore medium at 5%. The company policy on engagement with trade associations, the company's position on relevant climate policy and the company's collaboration with local public authorities make up the bulk of this, with 1% each. Finally, 2% is allocated to the indicator 'GE 8.2 Associations, alliances, coalitions and thinktanks supported do not have climate-negative activities or positions'.

Business model

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.

The weighting breakdown between the three indicators is detailed in module 9 - Calculation of the score. GE 9.3 is triggered only if the company operates upstream of an intensive value chain.

Nota Bene: For companies operating in sectors that are not very technology-dependent, module 3 is weighted 0%. The 5% normally allocated to it are allocated to module 9. The companies that cannot rely on R&D to decarbonize their activities are expected to develop new business models compatible to a low-carbon economy.

10-15% vise be ca

5%

6.3 DATA REQUEST

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

Table 1Table 10 introduces the list of information that will be requested to companies through a questionnaire, as well as the corresponding indicators.

TABLE 10: DATA REQUEST PER INDICATOR

		ACT	
Module	Indicators	Questionnaire	Data request
	1.1, 1.2 & 1.3	GE 0.L, GE 1.A, GE 1.B & GE 1.C	Reduction targets in carbon intensity, carbon intensity at reporting year, Reduction targets in absolute contraction, absolute emissions at reporting year
			Percentage of relevant emissions covered by the target
1 - Targets	1.4	GE 1.A, GE 1.B & GE 1.C	targets, and (b) the long-term point fixed by ACT assessment methodology.
			long-term targets are in place to incentivize short-term action and communicate long-term commitments.
		GE 1.A,	Base year
		GE 1.B & GE	Start year
		1.0	Reporting year
			Target year
	1.5		Percentage of reduction target from base year in absolute emissions / emission intensity
			Percentage of reduction target achieved in absolute emissions / emission intensity
			Percentage of relevant emissions covered by the target
	2.1	GE 0.L & GE	Emission intensity at reporting year, RY-5
		2.A	Total emissions at reporting year and RY-5.
	2.2	GE 0.L, GE 2.A & GE 2.B	Emission intensity at reporting year and RY+5
2 - Matorial			Total emissions at reporting year and RY+5.
2 - Material investment	2.3	GE 2.C	Average share of low-carbon CAPEX (out of total CAPEX) for the next 3 years
	2.4	GE 0.L & GE 2.D	Building portfolio: average carbon intensity of building owned, in the past 5 years and renovation planned.
			Transport fleet information (annual activity, emissions from present and planned assets, number of units per year)
3 - Intangible investment	3.1	GE 3.A	R&D costs/investments in climate change mitigation
			Total R&D costs/investments of the company over the last 3 years.
	3.2	GE 3.B	Patenting activity in climate change mitigation technologies of the company over the last 5 years
			Total patenting activity of the company over the last 5 years
4 - Sold	<u>4</u> 1	GE 4.A	Intervention on products/service
Product Performance	7.1	GE 0.L, GE 4.B	Carbon intensity of the purchased products/service (if relevant)
	4.2	& GE 4.C	at RY-5 and RY+5:

	4.3	GE 0.I, GE 4.D	Forecast sales (from RY to RY+5)
		& GE 4.E	Annual expected GHG emissions from one year of sales.
	4.3		If transport equipment fleet emission intensity and annual activity
		GE 0.J, GE 4.F	Information on subcontractors (projected emissions, activity, time
	4.4	& GE 4.G	norizon investments, low-carbon venicles actions for emissions
	т.т	GE 5.A	Highest level of responsibility for climate change within the
	5.1	01 0	company
		GE 5.B	Level of expertise in climate change for the person holding this
5-	5.2		responsibility
Management	5.3	GE 5.C	Details regarding the company's transition plan
	5.4	GE 5.D	Management incentives linked to climate change issues
	5.5	GE 5.E, GE 5.F & GE 5.G	Details on climate change scenario testing
		GE 6.A & GE 6.B	Methods of supplier engagement, strategy to prioritizing supplier engagements and measures of success
	6.1		Proportion of total procurement spend and/or supplier-related scope 3 emissions covered by the strategy
6 - Suppliers			Data on suppliers' GHG emissions and climate change strategies
engagement			Key procurement templates
	6.2	GE 6.C	List of initiatives implemented to influence suppliers to reduce their GHG emissions, green purchase policy or track record, supplier code of conduct
		GE 7.A	Strategy to influence clients GHG emissions
	7 1		% of clients covered by the strategy
7 - Client	7.1		Data on clients' choices and preferences towards reducing GHG emissions
engagement		GE 7.B	Activities to influence clients GHG emissions
	7.2		% of clients covered by the activities
			Data on clients' choices and preferences towards reducing GHG emissions
		GE 8.A	Public climate change policy positions
	8.1		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
8- Policy		GE 8.B	Company policy on engagement with associations, alliances,
engagement	8.2		coalitions or thinktanks
	83	GE 8.C & GE	Position of the company on significant climate policies (public statements etc.)
	0.0	GE 8.E	Participation in meetings/collaborations with public
	8.4		authorities/local actors
			Contracts with public authorities/local actors
	9.1	GE 9.A & GE	Share of revenue from low-carbon products/services in reporting
		9.E	year
			I rend of the share of revenue from lox-carbon products/services
	9.2	GE 9.B.	For each business model: description, size (as a percentage of
9 – Business Model		GE 9.C,	total FTE, revenue, or relevant activity-based metric of size), and
		GE 9.D	growth potential and timelines
		& GE 9.E	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
	03	GE 0.K & GE	revenue share of the company's products and/or services used
	5.0	9.E	by final low-carbon products/services/activity

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 1 (lowest) to 20 (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.

In some situations, trend scoring may reveal itself to be unfeasible depending on data availability. In this case, it should be replaced with a "?".

The highest rating is thus represented as "20A+", the lowest as "1E-" and the midpoint as "10C=".

TABLE 6: HIGHEST SCORE FOR EACH ACT SCORE TYPE

	A performance rating of 20 : the company received high scores in its assessment against the methodology indicators.	
I he highest available		
ACT rating is	An assessment rating of A: the information reported by the compan	
20 A +	and available from public sources was consistent and showed 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 received not only an ACT rating but a commentary on their performance across the three aspects of the rating. This gave a nuanced picture of the company's strengths and weaknesses. Detailed information on the ACT rating is available in the ACT Framework document.

7.1 PERFORMANCE SCORING

Performance scoring shall be performed in compliance with the ACT Framework.

7.2 NARRATIVE SCORING

Narrative scoring shall be performed in compliance with the ACT Framework.

The information reported in Module 2, Module 4 and Module 9 shall be considered with peculiar attention for the narrative analysis and narrative scoring: with this information, the analyst can take a holistic view on the company's actions to perform a low-carbon transition and assess the consistency of actions taken with respect to targets and engagement with other stakeholders.

7.3 TREND SCORING

Scoring shall be performed in compliance with the ACT Framework.

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

The table below includes an overview of which indicators/data points could possibly have valuable information about future directions.

Module	Indicator
	GE 1.1 Alignment of scope 1+2 emissions reduction targets
Targets	GE 1.2 Alignment of upstream scope 3 emissions reduction targets
Targets	GE 1.3 Alignment of downstream scope 3 emissions reduction targets
	GE 1.4 Time horizon of targets
Material investment	GE 2.2 Trend in future emissions
Intangible investment	GE 3.1 R&D in low-carbon technologies
Sold product performance	GE 4.1 Product/services specific interventions
	GE 4.3 Locked-in emissions from sold products
Management	GE 5.3 Low-carbon transition plan
	GE 5.5 Climate change scenario testing
Business model	GE 9.2 Changes to business model

TABLE 11: RELEVANT PERFORMANCE INDICATORS FOR TRENDS IDENTIFICATION

8 Aligned state

The table 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]



FIGURE 3: 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.
АСТ	The Assessing low-Carbon Transition (ACT) initiative was jointly developed by ADEME and CDP. ACT assesses how ready an organization is to transition to a low-carbon world using a future-oriented, sector-specific methodology (<u>ACT</u> <u>website</u>).
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.
Αςτινίτη δατα	Activity data are defined as data on the magnitude of human activity resulting in emissions or removals taking place during a given period of time (UNFCCC 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 is intended to provide a general metric of the alignment of a given organization regarding the emission reduction target set by Paris Agreement Goal. The wider goal is to provide organization specific feedback on their general alignment in the short and long term.
ANALYST	Person undertaking and scoring the ACT assessment.
Assess	Under the ACT project, to evaluate and determine the low-carbon alignment of a given company. The ACT assessment and rating will be based on consideration of a range of indicators. Indicators may be reported directly from

companies. Indicators may also be calculated, modelled, or otherwise derived from different data sources supplied by the company. The ACT project will measure 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 presented above. It starts with the future, with the goals companies want to achieve, followed by their plans, current actions and past actions.

Asset An item of property owned by a company, regarded as having value and available to meet debts, commitments, or legacies. 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 of the emissions intensity indicator(s) driving the sector performance. A company's benchmark is a pathway for the company value of the same indicator(s) that starts at the company performance for the reporting year and converges towards the sector benchmark in 2050, based on a principle of convergence or contraction of emissions intensity.

 BOARD
 Also the "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).
CAPACITY (POWER)	In relation to power generation, nameplate capacity is the power output number, usually expressed in megawatts (MW), and registered with authorities for classifying the power output of a power station.
CAPITAL EXPENDITURE	Money spent by a business or organization 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 process and storing it in such a way that it is unable to affect the atmosphere.
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	Formerly the "Carbon Disclosure Project", 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\$100 trillion, to motivate companies to disclose their impacts on the environment and natural resources and take action to reduce them. More than 5,500 companies worldwide disclosed environmental information through CDP in 2015. CDP now 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, that alters the composition of the global atmosphere and that is, in addition to natural climate variability, observed over comparable time periods (UNFCCC).

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 emissions intensity performance pathway that the company has committed to follow from the initial year on 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 pairs of data points and check that these give a consistent measure of performance when measured together.	
COP21	The 2015 United Nations Climate Change Conference, held in Paris, France from 30 November to 12 December 2015 (COP21 webpage).	
Dата	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 greenhouse gas emissions over time (e.g. decarbonization in the electric utilities sector by an increased share of low- carbon power generation sources, as well as emissions mitigating technologies like Carbon Capture and Storage (CCS)).	

EMISSIONS	The GHG Protocol defines <i>direct</i> GHG emissions as emissions from sources that are owned or controlled by the reporting entity, and <i>indirect</i> 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 (<u>GHG</u> <u>Protocol</u>).
	In this methodology, "emissions" refers to greenhouse gas emissions.
Energy	Power derived from the utilization of physical or chemical resources, especially to provide light and heat or to work machines.
FLEET	A group of vehicles (e.g. all the automobiles manufactured by an automotive manufacturing company and currently in use by private individuals).
FOSSIL FUEL	A fossil-based fuel such as coal, oil or gas, formed in the geological past from the remains of living organisms.
FUTURE	A period of time following the current moment; time regarded as still to come.
GREENHOUSE GAS (GHG)	Carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O) 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 electricity production assets (particularly carbon intensive) and the time-horizon of a company's commitments. Companies with small-time ACT Electricity ACT Initiative Version 2.0 page 163 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 someone 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 intensity of a specific activity; for example, grams 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).	
LIFETIME	The duration of a thing's existence or usefulness (e.g. a physical asset such as a power plant).	
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 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.	

MANUFACTURE	Making objects on a large-scale using machinery.	
MATURITY MATRIX	A maturity matrix is essentially a "checklist", the purpose of which is to evaluate how well advanced 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).	
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.	
Ροιντ	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.	

P RIMARY 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.	
P ROGRESS 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.	
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 (35).	
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. Companies making this commitment will be working toward this goal by agreeing to set an emissions reduction target that is aligned with climate science and meets the requirements of the <u>Science-Based Targets Initiative</u> .	
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 consumption of purchased electricity, heat or steam (GHG Protocol Corporate Standard).
INDIRECT GHG EMISSIONS FROM IMPORTED ENERGY	Category 2 from ISO 14064-1:2018: <i>GHG emissions due to the fuel combustion</i> 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	Other indirect emissions, such as the extraction and production of purchased
INDIRECT GHG EMISSIONS	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.
	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 <u>Sectoral Decarbonization Approach</u> (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 CO₂e or % reduction from base year metric tonnes CO₂e or % reduction in product use phase relative to base year metric tonnes CO₂e or % reduction in supply chain relative to base year The following are examples of intensity targets: metric tonnes CO₂e or % reduction per passenger. Kilometre (also per km; per nautical mile) relative to base year metric tonnes CO₂e or % reduction per square foot relative to base year 		
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) 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 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).		
TRANSPORT	To take or carry (people or goods) from one place to another by means of a vehicle, aircraft, or ship.		
TREND	A general direction in which something (e.g., GHG emissions) is developing or changing.		
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.		

11 Appendix

11.1 UPDATES IN ACT GENERIC METHODOLOGY V2.0

Table 12 lists the main changes to the ACT Generic methodology arising from the update from v1.1 to v2.0.

TABLE 12: UPDATES TO ACT GENERIC 2.0

Section updated	Sub section	Changes compared to ACT Generic v1.1	
Introduction	1	Description of updated methodology	
Scope	1	Refresh of the scope introducing the latest ACT sectoral methodologies release	
Boundaries	1	/	
Construction of the data infrastructure	Module 1	Added possibility of using a unique ACA approach to assess alignment of each type of targets (scope 1+2, upstream scope 3, downstream scope 3 emissions) (indicators 1.1, 1.2 & 1.3)	
		Split the indicators 1.1 to 1.3 into 2 dimensions to assess short- and long-term targets separately.	
		Harmonised indicator 1.5 calculation with the latest methodologies	
	Module 2	Added possibility of using a unique ACA approach to assess past and future trend in scope 1+2 emissions (indicators 2.1 & 2.2)	
		Harmonise indicator 2.1 calculation with the latest methodologies	
	Module 3	Harmonised indicator 3.1 calculation with latest methodologies (taking into account R&D spending over the last 3 years)	
		Removed the subdimension linked to non-mature technologies.	

		Removed former indicator 4.3 about share of low-carbon products/services because it overlapped with indicator 9.1
	Module 4	Added a new indicator 4.3 assessing locked-in emissions from sold products (triggered only for companies selling ready-to-use products with a long lifespan whose use leads to GHG emissions that are significant in the company's GHG emissions, e.g. transport, industrial process and household equipment)
	Module 5	Inclusion of the updated module as published by the ACT initiative in 2022
	Module 6	Inclusion of updated module as published by the ACT initiative in 2022
	Module 7	Inclusion of updated module as published by the ACT initiative in 2022
	Module 8	Inclusion of updated module as published by the ACT initiative in 2022
	Module 9	Inclusion of updated indicators 9.1 and 9.2 as published by the ACT initiative in 2023 Clarified indicator 9.3
	Sector benchmark	Updated according to indicator update + clarified section
Assessment	Other quantitative benchmarks used for indicators	Updated according to indicator update
	Weightings	Update of the performance weighting schemes according to added/removed performance indicators
	Data request	Updated according to added/removed indicators
Rating	Narrative scoring	Updated according to added/removed indicators
	Trend scoring	Updated according to added/removed indicators
ACT aligned state	1	-
Glossary	1	Addition of useful definitions

11.2 ILLUSTRATIVE GRAPHS FOR TREND IN FUTURE EMISSIONS INTENSITY INDICATORS

CASE 1



ACT Generic | ACT Initiative | Version 2.0 | page 192

CASE 2

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



FIGURE 19: TREND RATIO - CASE 2

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



FIGURE 20: TREND RATIO - CASE 3

ACT Generic | ACT Initiative | Version 2.0 | page 194

Conditions	Score
Company's target trend ≤ 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 21: TREND RATIO - CASE 4