ACT

SECTOR METHODOLOGY

Assessing low-Carbon Transition

Generic

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Contents

1. Introduction

The 2015 United Nations Climate Change Conference (COP21) in Paris further strengthened the global recognition of limiting climate change. Political agreement was reached on limiting warming to 2 degrees above pre-industrial levels. The project 'Assessing low-carbon Transition' (ACT) measures a company's alignment with a future low-carbon world. The goal is to drive action by companies and encourage businesses to move to a 2-degrees compatible pathway in terms of their climate strategy, business model, investments, operations and GHG emissions management. The general approach of ACT is based on the Sectoral Decarbonization Approach (SDA) developed by the Science-Based Targets initiative (SBTi) in order to compare company's alignment with a 2-degree world, the application of which is described in the ACT Framework document [5] (*Sectoral Decarbonization Approach (SDA): A method for setting corporate emission reduction targets in line with climate science*, 2015)

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In order to make human activities compatible with limited global warming, companies and the whole economy are required to take urgent actions. The objective of the ACT initiative is to determine the extent to which companies are in line with a transition towards a low-carbon economy.

This ACT Generic methodology is unique in the context of the ACT initiative. Indeed, previously, the focus has been brought on developing methodologies for specific sectors for the following reasons: certain sectors have more actions to do and a more direct role to play in reducing emissions to close the emissions gap as they operate in high emitting sectors. Thus, the sectoral approach enables us to make sure that relevant and appropriate actions are assessed according to the company's activity. However, a large number of companies also have a significant impact on emissions and do not necessarily operate within one of the high emitting sectors covered by a specific ACT sector methodology. In order to cover all economic sectors, this ACT Generic methodology has been developed for companies operating in economic sectors that are not covered by a specific ACT sector methodology.

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 a 2° maximum global warming.
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 this 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 ACT 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).

Existing ACT methodologies	To be developed ACT methodologies
Auto Building Construction Real Estate Property Development Retail Electric Utilities Oil & Gas Transport Cement	Iron & Steel Food Agriculture & Agrifood Glass Chemicals Pulp & Paper Aluminium

TABLE 2: EXISTING AND TO BE DEVELOPED ACT METHODOLOGIES

This ACT Generic methodology should be used to assess companies operating in a large and various range of activities all along the value chain such as the following categories [1]:

- Extraction activities: Mining & Quarrying
- Industry: Specific methodologies have been developed for some industries [2]. 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 [3].
- Services with high GHG impact [4]: Financial and insurance activities, accommodation and food service activities, information and communication, human health & social work activities, arts, entertainment and recreation.
- Services with low impact: Education, professional, scientific and technical activities, administrative and support activities, public administration and defence, compulsory social security, activities of households as employers, extraterritorial and other services.

The figure below suggests a mapping of the sectors covered by the ACT Generic methodology. The sectoral breakdown presented below is based on the NACE taxonomy[6]. This decomposition has no impact on the methodology and is purely illustrative. A table of correspondence with CDP ACS is included in the appendix in order to give a better understanding.

[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.

[2] Please refer to "Table 2: Existing and to be developed ACT methodologies" to check the industries covered by specific ACT methodologies.

[3] This taxonomy is based on "Sector codes - CDP" available in the appendix

[4] Financial insurance and IT sectors are under discussion and specific ACT methodologies might be developed for these two sectors.

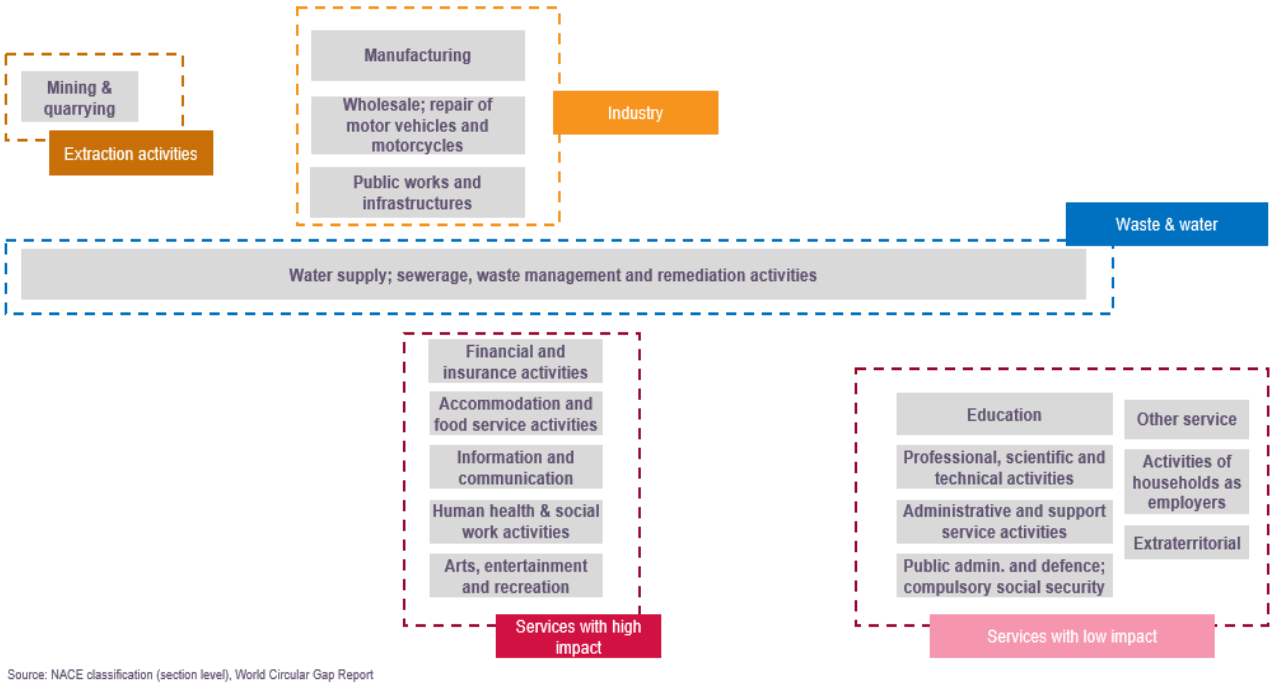

FIGURE 1: MAPPING OF THE SECTORS COVERED BY ACT GENERIC

4. Boundaries

The Boundaries section specifies which emission sources are included in this methodology. [1]

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- Hereafter, the term “emissions” will refer to all GHG emissions (not only CO2) which shall be measured in CO2 equivalent.
- ACT provides guidelines concerning the scope and boundaries of the sectors covered by this methodology to determine which type of GHG emissions are included or excluded. However, it does not provide tools and databases to measure and compute these emissions. In particular, the choice of emission factors does not fall under the responsibility of the ACT methodology. The methodology will not require the use of specific emission factors but may recommend emission factors that are aligned and consistent with the ones used in the reference pathway or benchmark. However, emission factors should be consistent with emission factors’ and GWP’s used to compute the reference pathways and benchmark scenarios for the quantitative indicators in order to be relevant.

The scope of ACT Generic 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 be upstream, direct or downstream. That is the reason why all emissions (direct and significant indirect) need to be considered in ACT Generic in order to cover the impact of all the companies included in the previous section.

4.1. REPORTING BOUNDARIES

For most of the companies, a low-carbon transition will lead to a transformation of the company's activities and assets as well as the entire value chain, from upstream activities to downstream activities.

Sources of emissions analyzed

Initially, the objective of the ACT Generic methodology is to consider all the emissions sources due to the heterogeneity of activities. Therefore, both direct and significant indirect emissions are included in the methodology.

Direct emissions: In most of cases, the company has levers in order to act on reducing these emissions, especially through the following sources analyzed in ACT Generic:

- Building (energy consumption of the buildings used by the company)
- Transport (emissions of the company's fleet)
- Industry energy consumption (energy consumptions of the plants operated by the company)
- Industrial process (emissions directly linked to the industrial process (e.g.: refrigerant leakage))
- Waste (emissions related to waste sector)

Emissions from agriculture / land use are excluded from the scope. These emissions are covered by ACT Agriculture methodology and concern very few companies operating in sectors covered by ACT Generic.

Significant indirect 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)

Emissions boundaries of ACT Generic

Mandatory	Excluded
Direct emissions	**Indirect emissions**: Business travel, employee commuting, waste generated in operations, franchises, fuel and energy-related activities (not included in Direct emissions), upstream leased assets, downstream leased assets.
Upstream indirect emissions: Purchased goods and services, capital goods, upstream transportation and distribution	
Downstream indirect emissions: Processing of sold products, use of sold products, end-of-life treatment of sold products, downstream transportation and distribution, business travels	

Companies are encouraged to report their optional GHG emissions, especially if they are considered as significant by the analyst.

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

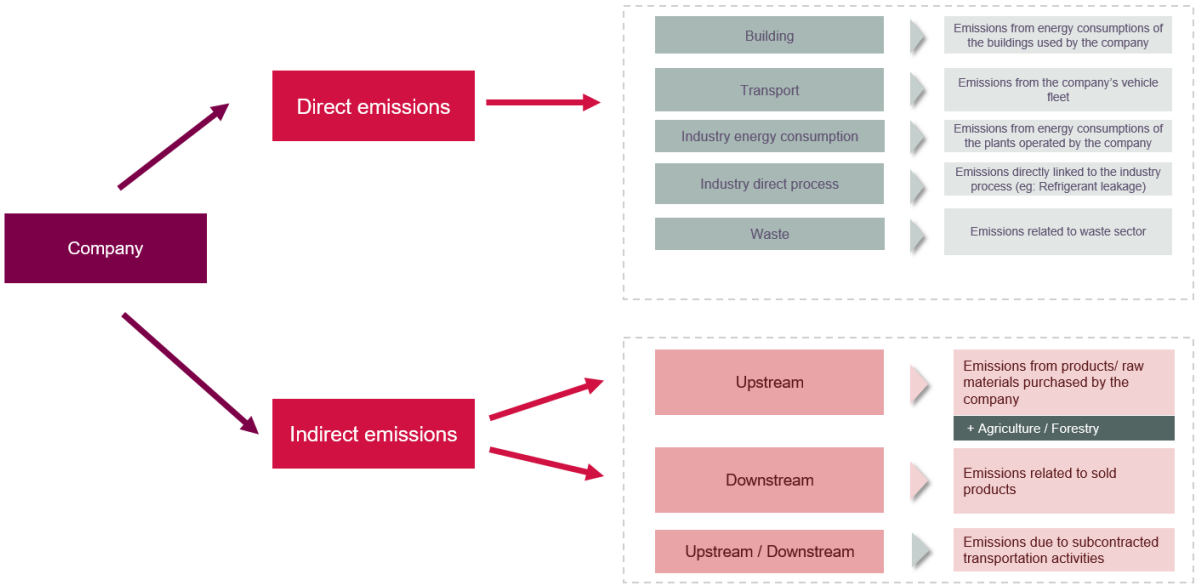


FIGURE 2: GHG EMISSIONS CONSIDERED IN ACT GENERIC

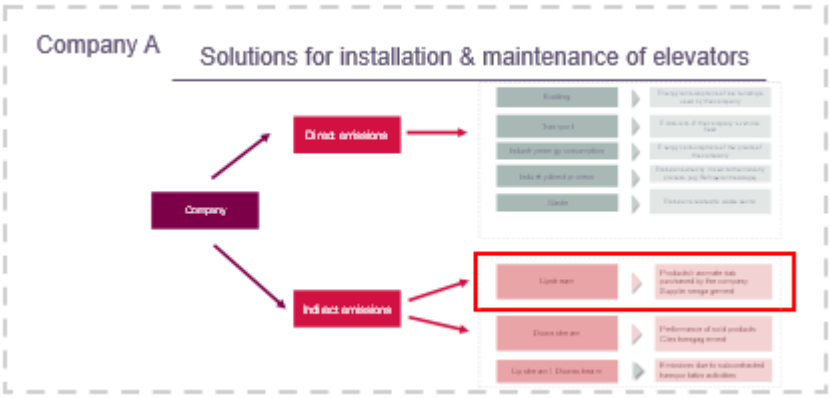
Assessment adapted to the company emissions' profile

Considering the magnitude of the total direct, upstream and downstream emissions for the entire value chain, the analysis will necessarily have to focus on the most relevant aspects based on the company's main sources of emissions. Thus, a focus will be brought regarding the company's specific challenges. The assessment will be adapted to each company depending on its activities and on its main sources of emissions. This method enables the analyst to assess a company based on its own specificities and stakes.
In a nutshell, the ACT Generic methodology will not explicitly define boundaries but propose an assessment methodology tailored to each company regarding its hotspots in order to capture the most significant emissions sources (direct and significant indirect) or substantial emissions occurring all along the value chain, and its main decarbonization levers. Accordingly, the weighting of modules and choice of indicators will be adapted based on the company's profile. [5]

[5] Please, refer to the "Weightings section" for more information

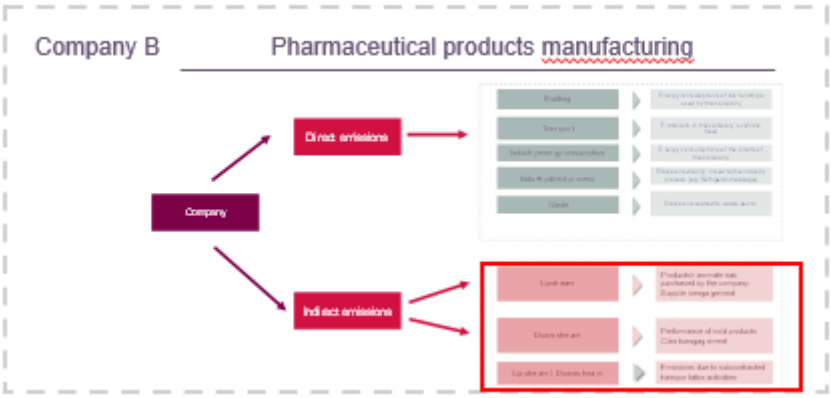
Here are some examples to illustrate the assessment principle:

FIGURE 3: EXAMPLE OF COMPANY A



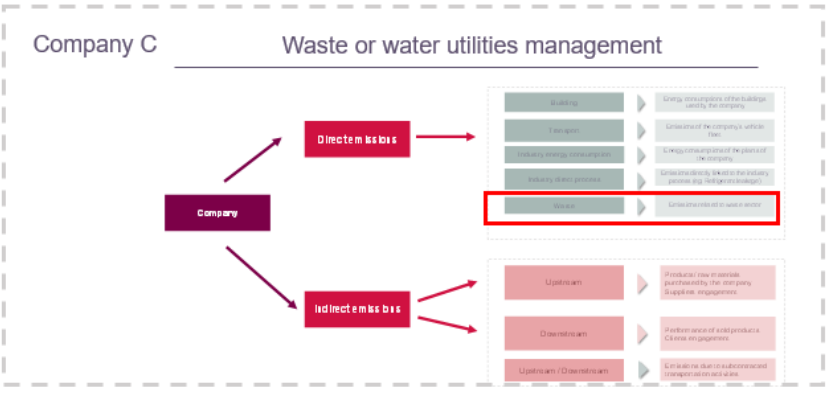
The main challenge for this company is the products and raw materials procurement. Therefore, the assessment will focus mainly on the sources of emissions related to the upstream activities.

FIGURE 4: EXAMPLE OF COMPANY B



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 5: EXAMPLE OF COMPANY C



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 the Assessment chapter.

4.2. RATIONALE

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

ACT 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. ACT Generic is therefore very flexible in order to be adapted to the company's challenge and reality.
Because of the heterogeneity of ACT Generic and the need to cover all the sectors described in the chapter "scope", it has been proposed to include almost all GHG sources in the reporting boundaries:

- Direct GHG emissions are relevant at every step of the value chain, and are under the control of the companies,
- Significant indirect GHG emissions are key in order to integrate efforts of companies to source low-carbon solutions and products (upstream) as well as the use of the product (downstream).

By the principle of relevance, it is important to note that ACT Generic focuses on main material sources of emissions. Indeed, ACT aims to select the most relevant information (core business and stakeholders) to assess low-carbon transition. Therefore, some sources of emissions have been excluded from the boundaries of ACT Generic.

RATIONALE FOR EMISSIONS BOUNDARIES OF ACT GENERIC

ACT initiative aims to target materiality and assess if the company uses its levers to transition to a low-carbon economy. Due to the sectoral heterogeneity presented in ACT Generic, materiality can differ from a company to another. However, in order to address the relevant challenges for most of the companies, some emissions have been pre-selected in order to focus on the relevant sources of emissions. Other emissions are considered as excluded from the boundaries of the ACT Generic methodology.

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 which can be sourced from various locations. Principally, ACT relies on the voluntary provision of data by the participating companies. The data provided by the companies may be of different types. Alongside this, however, external data sources are consulted where this would streamline the process, ensure fairness, and provide additional value for verification and validation.

The ACT assessment uses the following data sources:

TABLE 2: ACT ASSESSMENT DATA SOURCES

DATA SOURCE	MAIN USE
Company data from survey	Data source for calculating indicators.
Company data from models and simulations	Data source for calculating indicators.
Company data from life cycle assessment	Data source for calculating indicators.
Company data from econometric data	Data source for calculating indicators.
Contextual and financial information database sources (E.g. Online and press news, RepRisk)	Contextual and financial information on company and events related to the company that could impact the ACT assessment

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

5.2. COMPANY DATA REQUEST

The data request will be presented to companies in a comprehensive data collection format. The following data will be requested:

Data requested to the company
GHG emissions (direct, upstream indirect and downstream indirect)
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 in purchasing & suppliers' selection process
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 client behaviour to reduce their GHG emissions
Company policy on engagement with trade associations
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

MATURITY MATRIX:

Some modules are scored using a maturity matrix, as the assessment is qualitative. The maturity matrix contains five levels of evaluation that are associated to scores given to the company for each indicator. For some indicators, all 5 levels of the matrix are used to score the company, while for other indicators only some levels are used, in a simpler and less granular approach (ex: level 1, 3 and 5 only). Some of the indicators might be divided into sub-dimension that are evaluated individually before the score is aggregated to obtain the indicator score.

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

MODULES AND INDICATORS:

Erreur ! Source du renvoi introuvable. illustrates the performance indicators used by the ACT Generic methodology.

TARGETS (WEIGHTING: 15%)

• GE 1.1 ALIGNMENT OF DIRECT EMISSIONS REDUCTION TARGETS (WEIGHTING: 0-12%)

DESCRIPTION & REQUIREMENTS	GE 1.1 ALIGNMENT OF DIRECT EMISSIONS REDUCTION TARGETS (WEIGHTING: 0-12%)
SHORT DESCRIPTION OF INDICATOR	A measure of the alignment of the company's direct emissions reduction targets with their low-carbon benchmark pathway. The indicator will identify the gap between the company's targets and the low-carbon benchmark pathway, which is expressed as the company's commitment gap.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ Targets information for each relevant direct GHG emissions sources (Target year, emission reduction between reporting year and target year, coverage) ♦ Share of direct emission sources in total direct emissions [%] ♦ (Optional) – Base year, emissions at base year The benchmark indicators involved are the following :

Target type	Parameter	Intensity metric	Methodological sources
Building	EI_{bb}	$kgCO_2/m^2$	ACT Real Estate[9] / SDA service building [17]
Transport	EI_{bt}	$kgCO_2/p.km$ $kgCO_2/t.km$	ACT Auto / ACT Transport [11]

Industry energy consumption	EI_{ben}	% of absolute emissions	SBT absolute contraction [15]
Industry direct process – Refrigerant leakage	EI_{rl}	[gCO_2e refrigerant leaked]/[kg refrigerant in cold equipment]	RGR EU15 scenario for 2030 [7] - Zero leakage tolerance in 2050Form.
Industry direct process – Other industrial process	EI_{ip}	% of absolute emissions	SBT absolute contraction[15]
Waste Management	Elw	% of absolute emissions	SBT absolute contraction [15]
Renewable energy share in electricity	EI_{re}	Share of renewable energy[1]	SDA power generation [16]

These benchmarks correspond to the main sources of direct emissions a corporate organization usually generates. They will be applied depending on the type of direct emissions identified by the analyst.

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

- If a specific pathway based on carbon intensity from an ETP 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 in contraction is applied.

Also, if needed and justified, the analyst can propose a reference pathway meeting ACT requirement (data sourcing, assumptions robustness …). Except for some of the first ACT sectoral methodologies developed, all the benchmarks used by the ACT initiative are aligned at minimum with the ambition of the Beyond-2-Degree Scenario[2] (B2DS). If the analyst/company has the choice between two benchmarks, the most ambition scenario should be used, and must meet at minimum the ambition requirements of the B2DS.

[1] The original metric has been reworked for ACT Retail and has been taken from this methodology.

[2] 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.

HOW THE ANALYSIS WILL BE DONE

The analysis is based on a trend ratio between the company's direct emissions target and the company benchmark. Trend 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 direct 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 direct emissions low-carbon benchmark 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 direct emissions at reporting year.

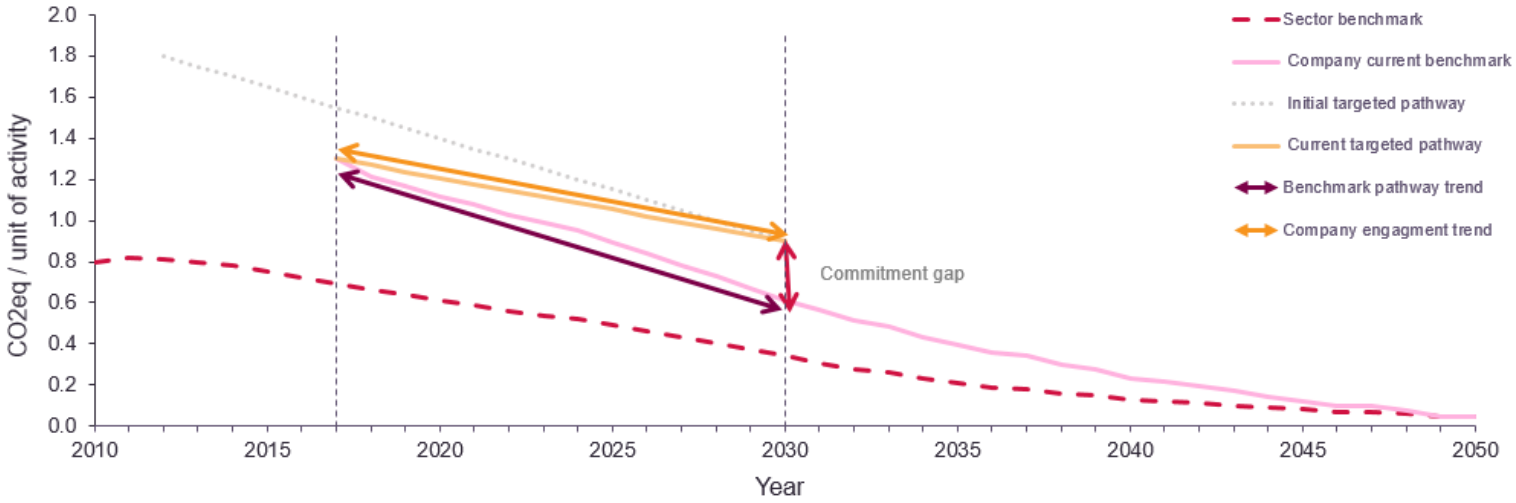
CALCULATION OF SCORE:

- **Trend ratio**

The score is calculated by dividing the company engagement of reduction by the specific benchmark emission intensity reduction between the reporting year and the target year through the trend ratio:

$$Trend\ ratio = \frac{Company's\ engagment\ trend}{Benchmark\ pathway\ trend} = \frac{EI_C(Y_T) - EI_C(Y_R)}{EI_B(Y_T) - EI_B(Y_R)}$$

where EIc(Yt) is the company direct emissions intensity at target year, EIc (Yr) is the company direct emissions intensity at reporting year, EIb(Yt) is the benchmark direct emission intensity at target year and EIb(Yr) is the benchmark direct emission intensity at reporting year.
The target intermediate score (Ts) is equal to 0 if the trend ratio is less than 0. It means company's commitment is equal or less to business as usual.
The target intermediate score receives 1 if the trend ratio is superior to 1. It means company's commitment is equal or more than the company's benchmark ambition.
Otherwise, the target intermediate score (Ts) is equal to the trend ratio, It means company's commitment is between business as usual and company's benchmark ambition.



- **Final Score**

The final score assigned to the indicator is calculated as follows:
If the target coverage of total company emissions at reporting year (Cyr) represents more than 95%, the final score is equal to:
Score = Trend ratio x Target coverage of total company emissions (C_{Yr}))

Otherwise final score of the indicator is equal to:
Score = 1 – Trend ratio

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.

- Targets that do not cover > 95%[3] 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.

RATIONALE	GE 1.1 ALIGNMENT OF FUTURE TARGETS WITH LOW-CARBON SCENARIO

RATIONALE OF THE INDICATOR

RELEVANCE OF THE INDICATOR:

Targets are included in the ACT 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 low-carbon transition.
- Targets are one of the few metrics that can predict a company's long-term plan beyond that which can be projected in the short-term, satisfying ACT's need for indicators that can provide information on the long-term future of a company.
- For some sectors covered by ACT Generic, direct emissions might represent a high source of 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 a low-carbon benchmark build from the company's current level of emissions at reporting year and converging toward the 2050 value of the sectoral benchmark relevant for this source.

Relevant direct 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…).

The measurement of the commitment gap was chosen for its relative simplicity in interpretation and powerful message.

NB: In previous ACT methodologies, the commitment gap calculation was based on the difference between the company's target and the company benchmark 5 years after the reporting year. The analysis is now based on the difference between the company's target and the company benchmark at the target year. The previous version assumed that the emission reduction would be linear between reporting year and reporting year + 5, which could affect the result as the low-carbon pathway is not linear, the new version avoid this assumption by using directly data at target year.

[3] This threshold is in line with other ACT methodologies, such as the Auto manufacturing methodology.

- **GE 1.2 ALIGNMENT OF UPSTREAM EMISSIONS REDUCTION TARGETS (WEIGHTING: 0-12%)**

DESCRIPTION & REQUIREMENTS	GE 1.2 ALIGNMENT OF UPSTREAM EMISSIONS REDUCTION TARGETS (WEIGHTING: 0-12%)
SHORT DESCRIPTION OF INDICATOR	A measure of the alignment of the company's upstream emissions reduction targets with their low-carbon benchmark pathway. The indicator will identify the gap between the company's targets and the low-carbon benchmark pathway, which is expressed as the company's commitment gap.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ Targets information for each relevant upstream GHG emissions sources (Target year, emission reduction between reporting year and target year, coverage) ♦ Share of upstream emission sources in total upstream emissions [%] ♦ (Optional) – Base year, emissions at base year Upstream indirect emissions cover purchased goods and services, capital goods, upstream transportation and distribution. The benchmark indicators involved are:

Target type	Parameter	Intensity metric	Methodological sources
Cement emissions intensity	CB_{PP2}	$kgCO_2$/ton of cement	ACT Cement [12]
Oil & Gas products emissions intensity	CB_{PP3}	tCO_2/TJ	ACT Oil & Gas [13]
Glass products emissions intensity	CB_{PP4}	TBD	ACT Glass
Pulp & Paper products emissions intensity	CB_{PP5}	TBD	ACT Pulp & Paper
Iron & Steel emissions intensity	CB_{PP6}	TBD	ACT Iron & Steel

Food products emissions intensity	CB_{PP7}	TBD	ACT Food
Aluminium emissions intensity	CB_{PP8}	TBD	ACT Aluminium
Upstream indirect emissions	EI_{babs}	% of absolute emissions	SBT absolute contraction [15]

NB: When finished, all upcoming sectors covered by a specific ACT methodology will be integrated in ACT Generic methodology

The choice of the benchmark depends on the scenario availability. The selection will be made according to the following process:
If a specific pathway based on carbon intensity from a ETP 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 asked and analysed, (E.g.: purchase/use of cement, steel.)
Otherwise, a default pathway in absolute contraction is applied.

Except for some of the first ACT sectoral methodologies developed, all the benchmarks used by the ACT initiative are aligned at minimum with the ambition of the Beyond-2-Degree Scenario[4] (B2DS). If the analyst/company has the choice between two benchmarks, the most ambition scenario should be used, and must meet at minimum the ambition requirements of the B2DS.

[4] 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.

HOW THE ANALYSIS WILL BE DONE

The analysis is based on a trend ratio between the company's upstream emissions target and the company benchmark. Trend are computed between reporting year and the longest time horizon of the target.

The company's target pathway is the decarbonization over time, defined by the company's upstream 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 upstream emissions low-carbon benchmark 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 upstream emissions at reporting year.

CALCULATION OF SCORE:

- **Trend ratio**

The score is calculated by dividing the company engagement of reduction by the specific benchmark emission intensity reduction between the reporting year and the target year through the trend ratio:

$$Trend\ ratio = \frac{Company's\ engagment\ trend}{Benchmark\ pathway\ trend} = \frac{EI_C(Y_T) - EI_C(Y_R)}{EI_B(Y_T) - EI_B(Y_R)}$$

where EIc(Yt) is the company upstream emissions intensity at target year, EIc (Yr) is the company upstream emissions intensity at reporting year, EIb(Yt) is the benchmark upstream emission intensity at target year and EIb(Yr) is the benchmark upstream emission intensity at reporting year.
The target intermediate score (Ts) is equal to 0 if the trend ratio is less than 0. It means company's commitment is equal or less to business as usual.
The target intermediate score receives 1 if the trend ratio is superior to 1. It means company's commitment is equal or more than the company's benchmark ambition.
Otherwise, the target intermediate score (Ts) is equal to the trend ratio, It means company's commitment is between business as usual and company's benchmark ambition.

- **Final Score**

The final score assigned to the indicator is calculated as follows:

If the target coverage of total company emissions at reporting year (Cyr) represents more than 95%, the final score is equal to:
Score = Trend ratio x Target coverage of total company emissions (C_{Yr}))

Otherwise final score of the indicator is equal to:
Score = 1 – Trend ratio

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.

- Targets that do not cover > 95%[5] 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.

RATIONALE	GE 1.2 ALIGNMENT OF UPSTREAM EMISSIONS REDUCTION TARGETS
RATIONALE OF THE INDICATOR	**RELEVANCE OF THE INDICATOR:** Upstream 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, upstream emissions might represent a high source of emissions. A GHG emissions reduction target should be assigned to them.

[5] This threshold is in line with other ACT methodologies, such as the Auto manufacturing methodology.

SCORING RATIONALE:

Targets for each sub-sector are quantitatively interpreted and directly compared to a low-carbon benchmark build from the company's current level of emissions at reporting year and converging toward the 2050 value of the sectoral benchmark relevant for this source.

Relevant upstream 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…).

The measurement of the commitment gap was chosen for its relative simplicity in interpretation and powerful message.

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• GE 1.3 ALIGNMENT OF DOWNSTREAM EMISSIONS REDUCTION TARGETS (WEIGHTING: 0-12%)

DESCRIPTION & REQUIREMENTS	GE 1.3 ALIGNMENT OF DOWNSTREAM EMISSIONS REDUCTION TARGETS

SHORT DESCRIPTION OF INDICATOR

A measure of the alignment of the company's upstream emissions reduction targets with their low-carbon benchmark pathway. The indicator will identify the gap between the company's targets and the low-carbon benchmark pathway, 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 [%]
- (Optional) – Base year, emissions at base year

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

The benchmark indicators involved are:

Target type	Parameter	Intensity metric	Methodological sources
Transport vehicles emissions intensity	$EIbt$	$kgCO_2e$/ton.km or $kgCO_2e$/passenger.km	ACT Transport [11] / ACT Auto
Produced electricity carbon intensity	CB_{SP2}	gCO_2/kWh	ACT Electric Utilities [14]
Downstream indirect emissions	EIbabs	% of absolute emissions	SBT absolute contraction [15]

NB: When finished, all upcoming sectors covered by a specific ACT methodology will be integrated in ACT Generic methodology

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 or services represents a high source of downstream emissions,
  - The company produces ready-to-use products or services and is able to measure their carbon intensity,
  - A specific pathway based on carbon intensity from an ETP scenario is available.
    Eg: ACT transport for transport vehicles manufacturers.

Otherwise, a default pathway in absolute contraction is applied.

Except for some of the first ACT sectoral methodologies developed, all the benchmarks used by the ACT initiative are aligned at minimum with the ambition of the Beyond-2-Degree Scenario[6] (B2DS). If the analyst/company has the choice between two benchmarks, the most ambition scenario should be used, and must meet at minimum the ambition requirements of the B2DS.

HOW THE ANALYSIS WILL BE DONE

The analysis is based on a trend ratio between the company's downstream emissions targets and the company benchmark. Trend are computed between reporting year and the longest time horizon of the target.

The company's target pathway is the decarbonization over time, defined by the company's upstream 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 upstream emissions low-carbon benchmark 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 downstream emissions at reporting year.

CALCULATION OF SCORE:

- **Trend ratio**

The score is calculated by dividing the company engagement of reduction by the specific benchmark emission intensity reduction between the reporting year and the target year through the trend ratio:

$$Trend\ ratio = \frac{Company's\ engagment\ trend}{Benchmark\ pathway\ trend} = \frac{EI_C(Y_T) - EI_C(Y_R)}{EI_B(Y_T) - EI_B(Y_R)}$$

[6] 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.

where EIc(Yt) is the company downstream emissions intensity at target year, EIc (Yr) is the company downstream emissions intensity at reporting year, EIb(Yt) is the benchmark downstream emission intensity at target year and EIb(Yr) is the benchmark downstream emission intensity at reporting year.
The target intermediate score (Ts) is equal to 0 if the trend ratio is less than 0. It means company's commitment is equal or less to business as usual.
The target intermediate score receives 1 if the trend ratio is superior to 1. It means company's commitment is equal or more than the company's benchmark ambition.
Otherwise, the target intermediate score (Ts) is equal to the trend ratio, It means company's commitment is between business as usual and company's benchmark ambition.

- **Final Score**

The final score assigned to the indicator is calculated as follows:

If the target coverage of total company emissions at reporting year (Cyr) represents more than 95%, the final score is equal to:
Score = Trend ratio x Target coverage of total company emissions (C_{Yr}))

Otherwise final score of the indicator is equal to:
Score = 1 – Trend ratio

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.
Targets that do not cover > 95%[7] 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.

[7] This threshold is in line with other ACT methodologies, such as the Auto manufacturing methodology.

RATIONALE	GE 1.3 ALIGNMENT OF DOWNSTREAM EMISSIONS REDUCTION TARGETS
RATIONALE OF THE INDICATOR	**RELEVANCE OF 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, downstream emissions might represent a high source of 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 a low-carbon benchmark build from the company's current level of emissions at reporting year and converging toward the 2050 value of the sectoral benchmark relevant for this source. 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…). The measurement of the commitment gap was chosen for its relative simplicity in interpretation and powerful message.

• GE 1.4 TIME HORIZON OF TARGETS (WEIGHTING: 2%)

DESCRIPTION & REQUIREMENTS	GE 1.4 TIME HORIZON OF TARGETS
SHORT DESCRIPTION OF INDICATOR	A measure of the time horizons of company targets. The ideal set of targets is forward looking enough to include a long-time horizon that includes the majority of a company's asset lifetimes, but also includes short-term targets that incentivize action in the present.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Target year information for each relevant emissions sources (Year for each reported , target id)

HOW THE ANALYSIS WILL BE DONE

The analysis has two dimensions:

- A comparison of: (a) the longest time horizon of the company's targets, and (b) the long-term point fixed by ACT assessment methodology.
- The company has interval targets that ensure both short and long-term targets are in place to incentivize short-term action and communicate long-term commitments.

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

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:

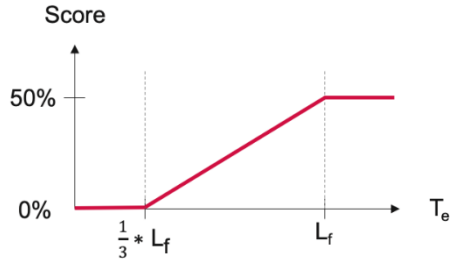
$$T_e = Longest\ target\ time\ horizon - reporting\ year$$

The analysis compares Te 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%
$33\% * LT < T_e <$Lt	$75\% * \frac{T_e}{LT} - 25\%$
$T_e \leq 33\% * LT$	0%



DIMENSION 2 - INTERMEDIATE HORIZONS: All company targets and their endpoints are calculated and plotted. The ideal scoring company does not have intervals between target endpoints larger than 5 years from the reporting year.

Measurements are done in five-year intervals between the reporting year and LT.

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

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

An example is illustrated in Figure 1.

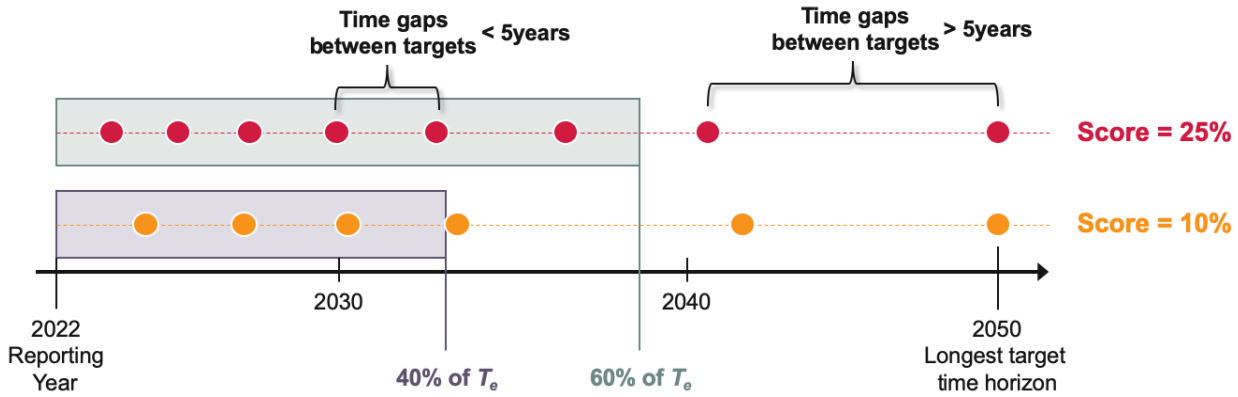


FIGURE 1 : EXAMPLES OF HORIZONS OF INTERMEDIATE TARGETS SET BY THE COMPANY AND CORRESPONDING SCORES ON DIMENSION 2 OF THE INDICATOR 1.4

FOR ALL CALCULATIONS:

- If the company reports 'year of target establishment' in the data request, then the calculations may be redone using this as the baseline instead of the reporting year. The company can attain up to 80% of the maximum score with this alternate calculation. The baseline that results in the higher score will be used for the final score.
- Targets that do not cover > 95%[8] 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.

RATIONALE	GE 1.4 TIME HORIZON OF TARGETS
RATIONALE OF THE INDICATOR	**RELEVANCE OF 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.

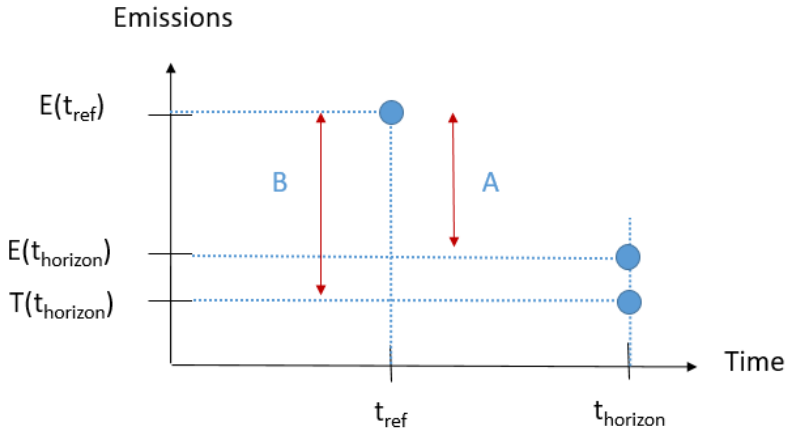
[8] This threshold is in line with other ACT methodologies, such as the Auto manufacturing methodology.

- Aside from communicating long-term commitments, short-term action needs to be incentivized. This is why short time intervals between targets are needed

• GE 1.5 ACHIEVEMENT OF PAST AND CURRENT TARGETS (WEIGHTING: 1%)

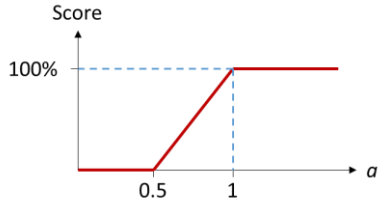
DESCRIPTION & REQUIREMENTS	GE 1. 5 ACHIEVEMENT OF PAST AND CURRENT TARGETS
SHORT DESCRIPTION OF INDICATOR	A measure of the company's historic target achievements and current progress towards active emission reduction targets. All the scopes of the company are considered. The ambition of the target is qualitatively assessed and is not included in the performance indicators.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ 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 absolute emissions intensity ♦ Percentage of direct emissions covered by the targets
HOW THE ANALYSIS WILL BE DONE	For the performance score, this indicator is assessed on two dimensions, whereby companies achieve the maximum score if: **DIMENSION 1:** The company has achieved all previous emissions reduction targets with a target year in the past 10 years. If all past targets are achieved, the highest score is obtained. If not, the achievement ratio a is computed as follows:

$$a = \frac{E(t_{ref}) - E(t_{horizon})}{E(t_{ref}) - T(t_{horizon})} = \frac{A}{B}$$



Where:

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

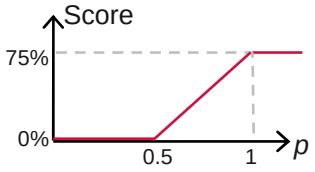
Achievement ratio	Score	
$a \geq 1$	100%	
0.5 < a< 1	100%*(2*a-1)	
$a \leq 0.5$	0%	

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

DIMENSION 2: The company is currently on track to meet an existing emissions reduction target, whereby the ratio between the remaining time period and the level remaining to target achievement (Progress Ratio p) is not lower than 0.5:

$$p = \frac{1 - \%\ time}{1 - \%\ complete} \geq 0.5$$

The highest score is attained if p is 1 or higher. A percentage score is assigned for any value between 0.5 and 1.

Progress ratio	Score	
$p \geq 1$	75%	
$0.5 < p < 1$	75%*(2*p-1)	
$p \leq 0.5$	0%	

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.
- 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 take another look at 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 THE INDICATOR

RELEVANCE OF 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 adds credibility to any company claim to commit to a science-based reduction pathway.
- Dimension 2 of this indicator adds value to the assessment of comparison to the company's performance with respect to their targets in the reporting year.

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. Thus, Dimension 1 of the performance score will penalize companies who have not met past targets in the past 10 years, as this means the company has lower credibility when setting ambitious science-based targets

MATERIAL INVESTMENTS (WEIGHTING: 0 - 35%)

• GE 2.1 TREND IN PAST EMISSIONS INTENSITY FROM MATERIAL INVESTMENT (WEIGHTING: 0-8,75%)

DESCRIPTION & REQUIREMENTS	GE 2.1 TREND IN PAST EMISSIONS INTENSITY FROM MATERIAL INVESTMENT
SHORT DESCRIPTION OF INDICATOR	This metric assesses the alignment of the company's recent direct emission intensity trend for emissions within the boundaries with the trend of its decarbonization pathway. The recent emission intensity trend is computed over a 5-year period to the reporting year (reporting year minus 5 years).
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ Carbon intensity at reporting year and Y-5 and other information if necessary (geography, …) regarding material investment OR ♦ Total direct emissions at reporting year and Y-5. The benchmark indicators involved are:

Target type	Parameter	Intensity metric	Methodological sources
Building	Elbb	$kgCO_2/m2$	ACT Real Estate [9] / SDA service building [17]
Transport	Elbt	$kgCO_2/p.km$ $kgCO_2/t.km$	ACT Auto / ACT Transport [11]
Industry energy consumption	Elbie	% of absolute emissions	SBT absolute contraction [15]
Industry direct process – Refrigerant leakage	Elbrl	[gCO2e refrigerant leaked]/[kg refrigerant in cold equipment]	RGR EU15 scenario for 2030 [7] - Zero leakage tolerance in 2050.

Industry direct process – Other industrial process	Elbip	% of absolute emissions	SBT absolute contraction [15]
Waste Management	Elbw	% of absolute emissions	SBT absolute contraction [15]

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:

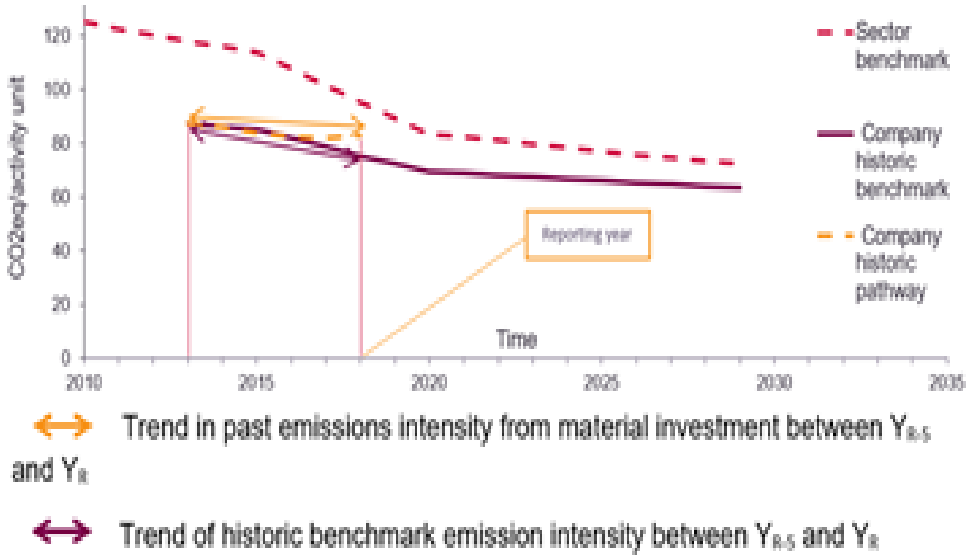
- Option A: If a specific pathway based on carbon intensity from a ETP scenario is available, the trend in carbon intensity will be asked and analyzed.
- Option B: If such a pathway does not exist to date, a default pathway in absolute contraction is applied.
- Option C: If needed and justified, the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

Except for some of the first ACT sectoral methodologies developed, all the benchmarks used by the ACT initiative are aligned at minimum with the ambition of the Beyond-2-Degree Scenario[9] (B2DS). If the analyst/company has the choice between two benchmarks, the most ambition scenario should be used, and must meet at minimum the ambition requirements of the B2DS.

HOW THE ANALYSIS WILL BE DONE

The analysis is based on the Past Action ratio (Apast) which represents the ratio between the company's recent (reporting year minus 5 years) emissions intensity from material investment trend gradient and the company's benchmark recent (reporting year minus 5 years) emission intensity trend gradient.

[9] 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.



COMPARISON OF TREND IN PAST EMISSIONS AND TREND IN COMPANY'S BENCHMARK

CALCULATION OF SCORE:

Past Action ratio is calculated by dividing the company's emission intensity from material investment trend (between reporting year and reporting year minus 5 years) and the historic benchmark emission intensity (between reporting year and reporting year minus 5 years):

$$A_{past} = \frac{\mathrm{EI}_C(\mathrm{Y}_R) - \mathrm{EI}_C(\mathrm{Y}_{R-5})}{\mathrm{EI}_B(\mathrm{Y}_R) - \mathrm{EI}_B(\mathrm{Y}_{R-5})}$$

Where EIc(Yr) is the company emission intensity at reporting year, EIc (Yr-5) is the company emission intensity at reporting year minus 5, EIb(Yr) is the benchmark emission intensity at reporting year and EIb(Yr-5) is the benchmark emission intensity at reporting year minus 5.

If the past action ratio (Apast) is a negative number, a zero score is assigned by default.
If the past action ratio (Apast) is above 1, the maximum score is obtained. Maximum score is 1.
Otherwise, the final score is equal to the value of the past action ratio (Apast).
If the company has several types of assets, the consolidation of the scores assigned to each type of assets will be based on the share of emissions covered by the assets.

For instance, a company has two types of assets. Assets of type 1 generate 30% of the direct emissions and the asset of type 2 generate 70% of the emissions. Both types of assets 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 INTENSITY FROM MATERIAL INVESTMENT
RATIONALE OF THE INDICATOR	**RELEVANCE OF THE INDICATOR:** Trends in past emissions intensity from material investment are included in the ACT Generic assessment for the following reasons: ♦ The trend shows the speed at which the company has been reducing its emissions intensity over the recent past. Comparing this to the low-carbon benchmark pathway on the same historical period gives an indication of the scale of the change that should has been made within the company to bring it onto a low-carbon pathway. Recent emissions intensity performance indicates the company's progression towards the future emissions intensity necessary to decarbonize in-line with a low-carbon scenario. ♦ The analysis is on the emissions that come from the entire value chain of the company. Therefore, the company's own emissions might be impactful. As this is also the emissions source that the company has the most control over, the analysis can expect efforts in decarbonization here. **SCORING RATIONALE:** While 'gap' type scoring is preferred for any indicator where possible, this indicator only looks at past emissions, and would therefore require a different baseline in order to generate a gap method. Therefore, instead the two trends are compared. Another advantage of the trend analysis is that it does not require the use of a 'business as usual' pathway to anchor the data points and aid interpretation, as trends can be compared directly and a score can be directly correlated to the resulting ratio.

- **GE 2.2 TREND IN FUTURE EMISSIONS INTENSITY FROM MATERIAL INVESTMENT (WEIGHTING: 0-26,25%)**

DESCRIPTION & REQUIREMENTS	GE 2.2 TREND IN FUTURE EMISSIONS INTENSITY FROM MATERIAL INVESTMENT

SHORT DESCRIPTION OF INDICATOR

This metric assesses the alignment of the company's recent direct emission intensity trend for emissions within the boundaries with the trend of its decarbonization pathway. The company emission intensity trend is computed over a 5 year period from the reporting year (reporting year plus 5 years).

DATA REQUIREMENTS

The relevant data for this indicator are:

- Carbon intensity at reporting year and Y+5, other information if necessary (geography, …), regarding material investment
  OR
- Total direct emissions at reporting year and Y+5

The benchmark indicators involved are:

Target type	Parameter	Intensity metric	Methodological sources
Building	Elbb	$kgCO_2/m2$	ACT Real Estate [9] / SDA service building [17]
Transport	Elbt	$kgCO_2/p.km$ $kgCO_2/t.km$	ACT Auto / ACT Transport [11]
Industry energy consumption	Elbie	% of absolute emissions	SBT absolute contraction [15]
Industry direct process – Refrigerant leakage	Elbrl	[gCO_2e refrigerant leaked]/[kg refrigerant in cold equipment]	RGR EU15 scenario for 2030 [7] - Zero leakage tolerance in 2050.
Industry direct process – Other industrial process	Elbip	% of absolute emissions	SBT absolute contraction [15]
Waste Management	Elbw	% of absolute emissions	SBT absolute contraction [15]

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 ETP 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 in absolute contraction is applied.
- Option C: If needed and justified, the analyst can propose a reference pathway meeting ACT requirement (data sourcing, assumptions robustness …).

Except for some of the first ACT sectoral methodologies developed, all the benchmarks used by the ACT initiative are aligned at minimum with the ambition of the Beyond-2-Degree Scenario[10] (B2DS). If the analyst/company has the choice between two benchmarks, the most ambition scenario should be used, and must meet at minimum the ambition requirements of the B2DS.

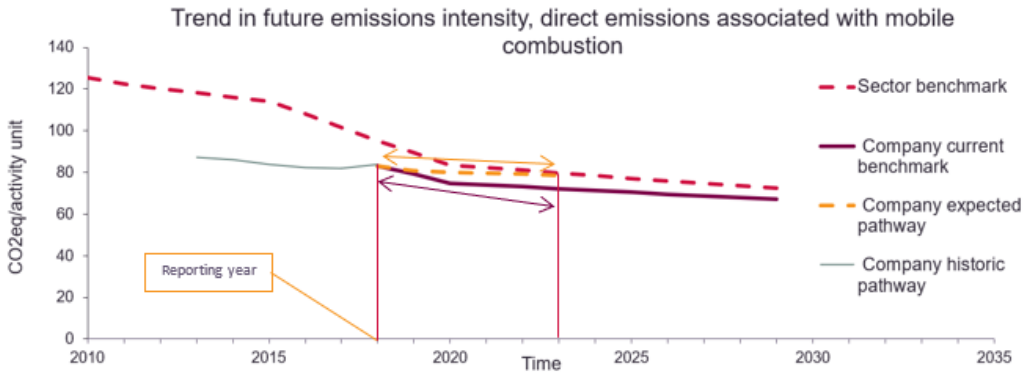
Other assumptions:

Future emission intensity should be estimated from company assets and their expected produced activity. If future emissions intensity can't be estimated from company assets, expected trend in future emissions intensity should be estimated by extrapolating the trend from the last 5 years before the reporting year.

HOW THE ANALYSIS WILL BE DONE

The analysis is based on the Future Action ratio (Afuture) which represents the ratio between the company's future (reporting year plus 5 years) emissions intensity from material investment trend gradient and the company's future benchmark (reporting year plus 5 year) emission intensity trend gradient.

[10] 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.



↔ Trend in future emissions intensity from material investment between Y_R and Y_{R+5}

↔ Trend of current benchmark emission intensity between Y_R and Y_{R+5}

COMPARISON OF TREND IN FUTURE EMISSIONS AND TREND IN COMPANY'S BENCHMARK

CALCULATION OF SCORE:

Future Action ratio (Afuture) is calculated by dividing the company's future emission intensity from material investment trend (between reporting year and reporting year plus 5 years) and the future benchmark emission intensity (between reporting year and reporting year plus 5 years):

$$A_{future} = \frac{EI_c(Y_R) - EI_c(Y_{R+5})}{EI_B(Y_R) - EI_B(Y_{R+5})}$$

Where EIc(Yr) is the company emission intensity at reporting year, EIc (Yr+5) is the company emission intensity at reporting year plus 5 years, EIb(Yr) is the benchmark emission intensity at reporting year and EIb(Yr+5) is the benchmark emission intensity at reporting year plus 5 years.

If the future action ratio (Afuture) is a negative number, a zero score is assigned by default. In fact, a negative number means that the company's emission intensity is increasing over the period. The company thus gets a score of 0.

If the future action ratio (Afuture) is above 1, the maximum score is obtained. Maximum score is 1. In fact, a ratio equal or superior to 1 means that the emission intensity of the company is reducing at a same or superior rate than the benchmark. The maximum score is thus obtained.
Otherwise, the final score is equal to the value of the future action ratio (Afuture).
If the company has several types of assets, the consolidation of the scores assigned to each type of assets will be based on the share of emissions covered by the assets.

For instance, a company has two types of assets. Assets of type 1 generate 30% of the direct emissions and the asset of type 2 generate 70% of the emissions. Both types of assets 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 EMISSIONS INTENSITY FROM MATERIAL INVESTMENT
RATIONALE OF THE INDICATOR	**RELEVANCE OF THE INDICATOR:** Trends in future emissions intensity from material investment 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. ♦ The analysis is on the emissions that come from the entire value chain of the company. Therefore, the company's own emissions might be impactful. As this is also the emissions source that the company has the most control over, the analysis can expect efforts in decarbonization here. **SCORING RATIONALE** The scoring rationale follows the same narrative as indicator 2.1, so refer to the rationale of this indicator to understand the choices made.

• GE 2.3 SHARE OF LOW-CARBON CAPEX (WEIGHTING: 0-8.75%)

DESCRIPTION & REQUIREMENTS	GE 2.3 SHARE OF LOW-CARBON CAPEX
SHORT DESCRIPTION OF INDICATOR	An analysis of the share of CAPEX invested in Low-Carbon & Mitigation technologies.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ Average share of low-carbon CAPEX (out of total CAPEX) planned for the next three years.
HOW THE ANALYSIS WILL BE DONE	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.

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

	DEFINING LOW-CARBON & MITIGATION TECHNOLOGIES
	• Low-carbon & mitigation technologies are the ones meeting the mitigation criteria of the EU Green Taxonomy. The list of eligible products or services will be detailed in an appendix and is set to be updated with the further development of this taxonomy. A list of technologies related to energy is also available in the ACT Oil & Gas sector.
RATIONALE	**GE 2.3 SHARE OF LOW-CARBON CAPEX**
RATIONALE OF THE INDICATOR	**RELEVANCE OF THE INDICATOR:** Investments planning related to the company's low-carbon capex are included in the ACT Generic assessment for the following reasons: ♦ CAPEX planification 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 is based on a specific ratio in other ACT methodologies, no benchmarks are available for ACT Generic. Therefore, thresholds have been defined accordingly.

• GE 2.4 LOCKED-IN EMISSIONS (WEIGHTING: 0-17.5%)

DESCRIPTION & REQUIREMENTS	**GE 2.4 LOCKED-IN EMISSIONS**
SHORT DESCRIPTION OF INDICATOR	Measure of the emissions implied by the company assets portfolio. Locked-in emissions are compared to a theoretical portfolio with a similar locked activity per year and benchmark emission intensity.
PREREQUISITE	The types of assets covered by this indicator are the following: buildings, transport fleet.

DATA REQUIREMENTS

The relevant data for this indicator are:

- Building portfolio: average carbon intensity of buildings owned, in the past 5 years and renovation planned.
- Transport fleet:
  - Year described
  - Number of units deployed / planned to be deployed in the year [Present and future]
  - Number of units decommissioned/planned to be decommissioned in the year [Present and future]
  - Number of net total units in operation in the year [Present and future]
  - Annual secured/planned activity [Future]
  - Planned activity [Future]
  - Emissions from present and planned assets [Present and future]

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

- ACT Transport methodology
- ACT Real Estate methodology[9]
- SDA – sectoral benchmark pathway definition for service building

The benchmark indicators involved are:

Target type	Parameter	Intensity metric	Benchmark
Building	CBre CBb	$kgCO_2/m2$	ACT Real Estate[9] / SDA service building [17]
Transport	CBtr	$kgCO_2/p.km$ $kgCO_2/t.km$	ACT Auto[10] / ACT Transport [11]

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 are estimated by using assumptions on average sectoral asset lifetime if not scheduled by the company.

HOW THE ANALYSIS WILL BE DONE

The analysis is based on the ratio between the company's existing and planned assets' emissions from the reporting year [LG (t)] to 2050, and the emissions budget entailed by the company's carbon budget [BG (t)] over the same period of time.

CALCULATION OF SCORE:

In order to discover the calculation methodology, please refer to the detailed explanation presented in ACT Transport and ACT Real Estate methodologies. Refer to the Appendix to have a detailed presentation of the locked-in emissions indicator in the ACT Transport and ACT Real Estate methodologies.

RATIONALE **GE 2.4 LOCKED-IN EMISSIONS FROM MATERIAL INVESTMENT**

RATIONALE OF THE INDICATOR

RELEVANCE OF THE INDICATOR:

Locked-in emissions are included in the ACT Generic assessment for the following reasons:

- Absolute GHG emissions over time are the most relevant measure of emissions performance for assessing a company's contribution to global warming. Furthermore, the concept of Locked-in emissions allows a judgement to be made about the company's outlook in more distant time periods than ones of the investment plans.
- Analysing a company's locked-in emissions alongside science-based budgets also introduces the 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.

This indicator only applies for Building and Transport as these assets have been the only ones covered by specific benchmark in order to calculate Locked-In emissions

INTANGIBLE INVESTMENTS (WEIGHTING: 0 – 5%)

• GE 3.1 R&D IN LOW-CARBON TECHNOLOGIES (WEIGHTING: 0-2.5%)

DESCRIPTION & REQUIREMENTS	GE 3.1 R&D SPENDING IN LOW-CARBON TECHNOLOGIES
SHORT DESCRIPTION OF INDICATOR	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.
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: ♦ R&D costs/investments in low-carbon technologies of the company. ♦ Total R&D costs/investments of the company
HOW THE ANALYSIS WILL BE DONE	1) R&D Investment Share The assessment is based on the ratio of the company's 'annual R&D expenditure on low-carbon technologies' to the company's 'total annual capital expenditure in R&D'. 2) 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. **DEFINING 'LOW-CARBON TECHNOLOGIES':** A taxonomy has been established by the OECD (OECD Environment Working Papers No. 89 (2015)) [1] in order to quantify the patents in environment-related technologies. It can be used to measure environmental innovation, if restricted to climate change mitigation technologies. It is based on the seven following categories: • Environmental management

- Water-related adaptation technologies
- Biodiversity protection & ecosystem health
- Climate change mitigation related to energy
- CCS of GHG
- Climate change mitigation related to transportation
- Climate change mitigation related to building

The matrix is provided below:

Question	Basic	Standard	Advanced	Next practice	Low-carbon Aligned	Weight
Associated score	*0%*	*25%*	*50%*	*75%*	*100%*	
What is the share of R&D costs/investments in low-caron technologies compared to the total R&D costs/investments?	*The share of low-carbon R&D is below 20% of total R&D investments*	*The share of low-carbon R&D is between 20% and 40% of total R&D investments*	*The share of low-carbon R&D is between 40% and 60% of total R&D investments*	*The share of low-carbon R&D is between 60% 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**

RATIONALE OF THE INDICATOR

RELEVANCE OF THE INDICATOR:

R&D in low-carbon technologies is included in the ACT Generic assessment 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.
- 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.
- Lastly, the R&D investment of a company into non-mature technologies and practices allows for direct insight in the company's commitment to alternative technologies that may not currently be part of its main business model.

- Although this indicator is based on a specific ratio in other ACT methodologies, no benchmark are available for ACT Generic. Therefore, thresholds have been defined accordingly.

• GE 3.2 COMPANY LOW-CARBON PATENTING ACTIVITY (WEIGHTING: 0-2.5%)

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's patent activity for the last 5 years and average patenting activity linked to climate change of the sector.
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
HOW THE ANALYSIS WILL BE DONE	1) Past low-carbon patents activity ratio 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 span of time. 2) 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 Climate Change Mitigation Technologies (CCMTs) patenting activity. **DEFINING CLIMATE CHANGE MITIGATION TECHNOLOGIES PATENTS:** The indicator focuses on patents that mitigate climate change. The European Patent Office (EPO)[2] and the US Patent and Trademark Office (USPTO)[3] have developed a dedicated patent classification scheme (Cooperative Patent Classification - CPC) which details patents for climate change mitigation or technologies:

Y02B – CCMTs related to buildings
Y02C – Capture, storage, sequestration or disposal of greenhouse gases
Y02E – 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

(EPO, 2017)

The matrix is provided below:

Question	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weight
Associated score	***0%***	***25%***	***50%***	***75%***	***100%***	
What is the share of patents in climate change mitigation 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 20% and 40% of total patents***	***The share of CCMTs patents is between 40% and 60% of total patents***	***The share of CCMTs patents is between 60% 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 CCMTs patenting activity is complementary to the one dedicated to R&D in low-carbon technologies, as it monitors the technology diffusion whereas R&D expenditures monitor the technology development.

It is included in the ACT Generic assessment 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
- Patent data are commensurable because patents are based on an objective standard (OECD 2015)
- Patent data measure the intermediate outputs of an inventive process, where R&D data expenditures measure the input (OECD 2015)
- Patent data can be disaggregated into specific technological fields (OECD 2015)

RELEVANCE OF THE INDICATOR'S 5-YEAR TIME HORIZON

Patents applications are typically disclosed 18 months after their filing date (OECD 2015). 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.

SOLD PRODUCT PERFORMANCE (WEIGHTING: 0 – 32%)

• GE 4.1 PRODUCT/SERVICE-SPECIFIC INTERVENTIONS (WEIGHTING: 0-11,66%)

DESCRIPTION & REQUIREMENTS	GE 4.1 PRODUCT AND SERVICE-SPECIFIC INTERVENTIONS
SHORT DESCRIPTION OF INDICATOR	An analysis of the company's reporting of mature interventions to reduce GHG emissions (upstream & downstream) for its products and services and in each category determined as being high GHG impact, compared to other categories of products and services relevant to the company.
DATA REQUIREMENTS	The questions comprising the information request that are relevant to this indicator are: ♦ Intervention on products and services reporting tool
HOW THE ANALYSIS WILL BE DONE	**CALCULATION OF SCORE:** 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 influence to reduce GHG emissions. For each product/service category, the company 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
- Level of ambition
- Carbon mitigation potential
- Extent or size of the intervention
- Correspondence between the product/service life cycle phase the intervention targets and the highest GHG impact life cycle phase of the product/service
- Contribution to the overall potential emissions (Optional)

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 is no energy-using product).

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.

The scorings for the product/service categories reported on (covering at least 70% of total product/service emissions) are then aggregated into a numerical value. The analyst assigns a scoring to all interventions reported. This exercise can make future analyses more robust, as better understanding is developed of how the RT sector is undertaking activities to reduce emissions in the value chain.

Contribution to the overall potential emissions (Optional)

This indicator is relevant for companies that operate upstream in a value chain of a product/service that can be considered "low-carbon" referring to the EU Green taxonomy. This indicator evaluates the contribution of a semi-finished product/service or an equipment in the reduction of a final product/service. (e.g., contribution of tires in the reduction of emissions of a vehicle).

Evaluation level	Basic	Advanced	Low-carbon practice	Weight
Score	*0%*	*50%*	*100%*	
Intervention maturity scoring	*Intervention is common practice and not backed with success factors like planning, adequate resources, clear goals, performance tracking and measures of success.*	*Intervention is an advanced practice and backed with some success factors like planning, adequate resources, clear goals, performance tracking, and measures of success.*	*Intervention is cutting-edge innovation practice and backed with all relevant success factors like planning, adequate resources, clear goals, performance tracking and measures of success.*	*20% or 16,6%*
Level of ambition	*Incremental improvement*	*Product/service redesign*	*Breakthrough innovation*	*20% or 16,6%*
Carbon mitigation potential	*Not significant or not verifiable*	*Significant and verifiable*	*Drastic and verifiable*	*20% or 16,6%*

Extent or size of the intervention	*Intervention involves products/services that together represent a marginal share of the sold product/service emissions in the category.*	*Intervention involves products/services that together represent a significant share of the sold product/service emissions in the category.*	*Intervention involves products/services that together represent the major share of the sold product/service emissions in the category.*	*20% or 16,6%*
Correspondence between the product/service life cycle phase the intervention targets and the highest GHG impact life cycle phase of the product/service (*)	*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 a 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% or 16,6%*
What is the contribution to overall potential emissions (Optional)?*	*Below 20%*	*Between 20 and 50%*	*Above 50%*	*0% or 16,6%*

* Only for companies that operate upstream in a value chain of a product/service that can be considered “low-carbon” referring to the EU Green taxonomy.

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

RATIONALE OF THE INDICATOR

RELEVANCE OF THE INDICATOR:

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

While other sectors in the ACT Initiative have activity-specific indicators (e.g. generation emissions for electric utilities, fleet emissions for car companies) that can account for the majority of their total emissions, this is not the case for the Generic approach, where emissions

sources are scattered across the value chain and have different points of origin. To address all emissions, different types of actions are necessary to address different types of emissions sources. Furthermore, this multidimensionality means that large efforts, such as Life Cycle Assessments (LCA), are needed to accurately gain insight and information on exactly where the significant emissions sources are and what can be done about them from each company's point of view. It is commonly understood that this information is scarce among companies, which operate in many different sectors and often have a large number of different tiers in their supply chains, requiring large transaction costs and research to obtain complete information.

SCORING RATIONALE:

A key issue with the interventions approach is that if interventions have no measurable impact on GHG emissions, they are effectively assimilated to "greenwashing". However, we recognise that, when attempting to influence GHG emissions outside of direct operations, measurement may be difficult. It could be technically feasible yet impractical because of time or cost considerations. GHG emissions reductions may also not occur immediately, or methodological approaches for measurement may be lacking. Barriers to measurement should not be barriers to action, therefore the analysis will consider interventions where the GHG emissions mitigation has not been measured. Nonetheless, companies should describe the rationale for emissions reduction connected to the intervention so that it is clear this potential exists.

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

• GE 4.2 PRODUCT/SERVICE SPECIFIC PERFORMANCE (WEIGHTING: 0-11,66%)

DESCRIPTION & REQUIREMENTS	GE 4.2 PRODUCT/SERVICE SPECIFIC PERFORMANCE
SHORT DESCRIPTION OF INDICATOR	An analysis of the company's purchased or sold products/service performance for products/service with existing and reliable benchmark.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ 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. The benchmark indicators involved are:

Target type	Parameter	Intensity metric	Benchmark
Vehicle emissions intensity (Scope 1+2+3)	CB_{PP1}	gCO_2e/tonne.km or gCO_2e/passenger.km	ACT Auto[10]
Cement emissions intensity	CB_{PP2}	gCO_2/tonne of cement	ACT Cement [12]
Oil & Gas products emissions intensity	CB_{PP3}	tCO_2/TJ	ACT Oil & Gas [13]

Glass products emissions intensity	CB_{PP4}	TBD	ACT Glass
Pulp & Paper products emissions intensity	CB_{PP5}	TBD	ACT Pulp & Paper
Iron & Steel emissions intensity	CB_{PP6}	TBD	ACT Iron & Steel
Food products emissions intensity	CB_{PP7}	TBD	ACT Food
Aluminium emissions intensity	CB_{PP8}	TBD	ACT Aluminium
Purchased products/services	TBC	% of absolute emissions	SBT absolute contraction

NB: When finished, all upcoming methodologies covered by a specific ACT methodology will be integrated in ACT Generic methodology

As for alignment of the other quantitative indicators, 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 ETP 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 in absolute contraction is applied.

HOW THE ANALYSIS WILL BE DONE

For each of the following purchased or sold products/services, the analysis is based on the difference between the purchased or sold products/services' recent (reporting minus 5 years) 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 (reporting year plus 5 years)

CR'_{ii} is the gradient of the linear trendline of the purchased or sold products/services' recent emissions intensity or absolute emissions (CR_{ii})

CB'_{ii} is the gradient of the linear trendline of the purchased or sold products/services' benchmark pathway for emissions intensity (CB_{ii}). The purchased or sold products/services' benchmark is defined from the purchased or sold products/services' current emissions on reporting year, and from the relevant sectoral benchmark (cf. relevant ACT sectoral methodology)

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

$$r_{Tii} = \frac{CR'_{ii}}{CB'_{ii}}$$

If the transition ratio is a negative number, it means the company's purchased or sold product/service's recent emissions intensity has increased (positive CR'_{ii}) and a zero score is awarded by default. If the company's purchased or sold product/service's recent emissions intensity has decreased, the transition ratio will be a positive number. The value of the ratio is capped at 1, which represents the maximum score. A score is assigned as a percentage value equal to the value of (1 = 100%).

In particular for the following items, the assessment method is implemented as follow:

Purchased products/services

CR'_{PP} is the gradient of the linear trendline of the purchased products/services' recent emissions intensity or absolute emissions (CR_{PP})

CB'_{PP} is the gradient of the linear trendline of the purchased products/services' benchmark pathway for emissions intensity (CB_{PP}).

Sold products/services

- Transport

CR'_{SP1} is the gradient of the linear trend line of the sold vehicles' recent emissions intensity (CR_{SP1}).

$CB'_{SP1}$is the gradient of the linear trend line of the sold vehicles' benchmark pathway for emissions intensity (CB_{SP1}). The sold vehicles' benchmark is defined from the sold vehicle's current emissions on reporting year, and from the relevant sectoral benchmark (cf. ACT Transport methodology)

- Electric Utilities

CR'_{SP2} is the gradient of the linear trend-line of the company's recent sold products/services' generation emissions intensity (gCO_2e/kWh) of gross electricity generation over time.
CB'_{SP2} is the gradient of the linear trend-line of the company's sold products/services' performance benchmark pathway. Refer to the ACT Electric Utilities methodology for details on the computation of the company's sold products/services performance specific low-carbon benchmark pathway and its trend line.

For other sold or purchased products/services, the assessment method presented is implemented.

The score of the indicator is obtained by weighting the different sub-scores by the weight of the products/services assessed in the total emissions of purchased and sold products/services.

RATIONALE	GE 4.2 PRODUCT/SERVICE SPECIFIC PERFORMANCE
RATIONALE OF THE INDICATOR	**RELEVANCE OF 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. 4.1. Product 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. **SCORING RATIONALE** 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 on data availability, we are aiming to use more available past data.

• GE 4.3 SHARE OF LOW-CARBON PRODUCTS/SERVICES (WEIGHTING: 0-11,66%)

DESCRIPTION & REQUIREMENTS	GE 4.3 SHARE OF LOW-CARBON PRODUCTS/SERVICES
SHORT DESCRIPTION OF INDICATOR	An analysis of the company's share of low-carbon products/services
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ Share of turnover generated by low-carbon products/services (out of total turnover) at Y
HOW THE ANALYSIS WILL BE DONE	The assessment is based on the share of low-carbon products/services, i.e. for instance products meeting the mitigation criteria of the EU Green Taxonomy in sectors covered by the EU Green Taxonomy. **CALCULATION OF SCORE:** The share of low-carbon products/services 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 of low-carbon products/services. **DEFINING LOW-CARBON PRODUCT/SERVICE** • If the company is a sector covered by the EU Green Taxonomy, then low-carbon products/services are the ones meeting the mitigation criteria of the EU Green Taxonomy. The list of eligible products/services will be detailed in an appendix and is set to be updated with the further development of this taxonomy. • If the company is in a sector not covered by the EU Green Taxonomy, the company can introduce its definition of low-carbon products/services, justifying it with proofs and using existing frameworks (e.g. EU Ecolabels, Life-cycle assessment (LCA) / Product Environmental Footprint (PEF) analyses) • The analyst will check the robustness of the definition proposed

The matrix is provided below:

Question	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weight
Associated score	*0%*	*25%*	*50%*	*75%*	*100%*	
What is the share of low-carbon products/services (% of revenue)?	*The share of low-carbon products/services is below 20% of total revenue*	*The share of low-carbon products/services is between 20% and 40% of total revenue*	*The share of low-carbon products/services is between 40% and 60% of total revenue*	*The share of low-carbon products/services is between 60% and 80% of total revenue*	*The share of low-carbon products/ services is above 80% of total revenue*	*100%*

RATIONALE — **GE 4.3 SHARE OF LOW-CARBON PRODUCTS/SERVICES**

RATIONALE OF THE INDICATOR

RELEVANCE OF THE INDICATOR:

Share of low-carbon product/service in the total turnover of the company is included in the ACT Generic assessment for the following reasons:

- Low-carbon sales are an indicator of corporate commitment to a low-carbon transition, and are a meaningful metric of the company's performance towards the transition. It indicates how its products/services will contribute to decarbonize the downstream of the value chain.

SCORING RATIONALE

As there is no quantitative definition available regarding the share of low-carbon products/services in the total revenue of companies, the best way to assess the performance in this indicator is to compare the share of low-carbon products/services to a maturity matrix.

With the further development of EU Green Taxonomy, quantitative benchmarks are likely to be built. The methodology may be updated to integrate such benchmarks as soon as they are available.

• GE 4.4 SUB-CONTRACTED TRANSPORT SERVICE PERFORMANCE (WEIGHTING: 0-8,75%)

DESCRIPTION & REQUIREMENTS — **GE 4.4 SUB-CONTRACTED TRANSPORT SERVICE PERFORMANCE**

SHORT DESCRIPTION OF INDICATOR

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 ("General information sheet")

DATA REQUIREMENTS

The relevant data for this indicator are:

- 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]

HOW THE ANALYSIS WILL BE DONE

The analysis will look at the following dimensions:

- If the company has a good forecast on the subcontracted activity
- 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	Weight
Associated score	*0%*	*25%*	*50%*	*75%*	*100%*	

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 CO2 data on subcontracted current activity (reporting year) is certified by third party***	***Robust CO2 data on subcontracted current activity (reporting year) is certified by third party Future CO2 emissions intensity of subcontractors is forecast but the intensity is not 2°C aligned***	***Robust CO2 data on subcontracted current activity (reporting year) is certified by third party Future CO2 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 [5] [17] [18] [37] [38]:

- 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 [5] [17] [18] [37] [38]:

- 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

RATIONALE	GE 4.4 SUB-CONTRACTED TRANSPORT SERVICE PERFORMANCE
RATIONALE OF THE INDICATOR	**RELEVANCE OF THE INDICATOR:** This indicator is used in the ACT Transport methodology. It stands as a mirror of indicators 2.1 assessing material investments of the company about its direct emissions from transport activities, but here it assesses the performance of the subcontractors.

It is necessary that the company investigates about 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 made 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.

The various dimensions of the maturity matrix are weighted as follows:

Dimension	Weight
Future emissions assessment	20%
Future activity assessment	20%
Low-carbon vehicles	20%
GHG emissions reduction on material	20%
GHG emissions reduction on operation	20%

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

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.

MANAGEMENT (WEIGHTING: 10%)

• GE 5.1 OVERSIGHT OF CLIMATE CHANGE ISSUES (WEIGHTING: 3%)

DESCRIPTION & REQUIREMENTS	GE 5.1 OVERSIGHT OF CLIMATE CHANGE ISSUES
SHORT DESCRIPTION OF INDICATOR	The company discloses that responsibility for climate change within the company lies at the highest level of decision-making within the company structure.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ Environmental policy and details regarding governance ♦ The reporter shall provide details on where is the highest level of direct responsibility for climate change within the organization External sources of data may also be used for the analysis of this indicator.
HOW THE ANALYSIS WILL BE DONE	The benchmark case is that climate change is managed within the highest decision-making structure within the company. The company situation will be compared to the benchmark case, if it is similar then points will be awarded. The position at which climate change is managed within the company structure will be determined from the company data submission and accompanying evidence.

Question	Basic	Standard	Advanced	Next practice	Low-carbon' aligned	Weight
Associated score	*0%*	*25%*	*50%*	*75%*	*100%*	
What is the position of the employee/ committee with highest responsibility for climate change?	*No one in charge of climate change issues*	*Manager /officer*	*Senior Manager/ Officer*	*Senior Manager/Officer closely related to decision-making structure within the company*	*Board or individual/sub-set of the board or other committee appointed by the board*	*100%*

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 project.

Managing oversight of climate change is considered as a good practice

• GE 5.2 CLIMATE CHANGE OVERSIGHT CAPABILITY (WEIGHTING: 3%)

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.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ Environmental policy and details regarding governance ♦ The reporter shall identify the position of the individual or name of the committee with this responsibility and outline their expertise regarding climate change and the low-carbon transition External sources of data may also be used for the analysis of this indicator.
HOW THE ANALYSIS WILL BE DONE	The presence of expertise on topics relevant to climate change and the low-carbon transition at the level of the individual or committee with overall responsibility for it within the company is assessed. The presence of expertise is the condition that must be fulfilled for points to be awarded in the scoring. The analyst determines if the company has expertise as evidenced through a named expert 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 or the relationship between the structures/experts identified should also be evident.

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weight
Associated score		*0%*	*25%*	*50%*	*75%*	*100%*	
Does this employee/committee have a proven expertise regarding climate change topics	*The presence of expertise on relevant topics to climate change and low-carbon transition within the individual or committee with overall CC responsibility*	*The employee/committee does not meet the following characteristics: - academic background/professional training related to energy & climate change, - former experiences on climate issues, - technical knowledges on climate (based on statements, published reports, …). Therefore, expertise is not evident.*	*The employee/committee meets several of the following characteristics: - academic background/professional training related to energy & climate change, - former experiences on climate issues, - technical knowledges on climate (based on statements, published reports, …).*	*The employee/committee meets all the following characteristics: - academic background/professional training related to energy & climate change, - former experiences on climate issues, - technical knowledges on climate (based on statements, published reports, …).*	*The employee/committee meets all the following characteristics: - academic background/professional training related to energy & climate change, - former experiences on climate issues, - technical knowledges on climate (based on statements, published reports, …). Expertise is closely related to decision-making*	*The employee/committee meets all the following characteristics: - academic background/professional training related to energy & climate change, - former experiences on climate issues, - technical knowledges on climate (based on statements, published reports, …). Expertise is completely integrated in decision-making*	*100%*

Elements of biography outlining expertise might be:

- Achievement of a course with a focus on climate change
- Training in climate change subjects by a certified organism
- Previous experience in an organization specialized in climate change (consulting companies in transition, NGO, …)

Supervision of studies to assess climate change impact on business and business impact on climate change

RATIONALE	GE 5.2 CLIMATE CHANGE OVERSIGHT CAPABILITY
RATIONALE OF THE INDICATOR	Effective management of the low-carbon transition requires specific expertise related to climate change and its impacts, and their likely direct 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 (WEIGHTING: 2%)

DESCRIPTION & REQUIREMENTS	GE 5.3 LOW-CARBON TRANSITION PLAN
SHORT DESCRIPTION OF INDICATOR	The company has a plan on how to transition the company to a business model compatible with a low-carbon economy.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ Environmental policy and details regarding governance ♦ The reporter should provide 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.)
HOW THE ANALYSIS WILL BE DONE	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 mar 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 highe 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
- 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 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 maximum score (100%) is assigned if all of these elements are demonstrated.

Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weight
Associated score	*0%*	*25%*	*50%*	*75%*	*100%*	
Level of approval within the organisation	*Not known*	*Operational level (CSR level)*	*Upper management level*	*Board / Strategic level*	*Matches highest level of responsibility as previously reported*	*15%*
Measure of success	*No measure of success*	*Measure of success is mainly qualitative*	*SMART KPI: specific, measurable, acceptable, realistic, time bound.*	*Measure of success is SMART. Measure of success contains both qualitative and quantitative targets.*	*Measure of success is quantitative*	*20%*
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 laid out OR short-term actions to start implementing plan are quantified in more 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 changes to the business is comprehensive, consistent, aligned with other indicators*	*8%*
Future considerations	*Implications to future business noted but not discussed properly*	*Contains actions the company expects to implement to make the transition a reality without any details*	*Contains discussion certain current company elements that need to be changed to make the transition a reality*	*Contains discussion of the potential portfolio of a future, low-carbon ready company*	*Contains one or more elaborate outlines of how the far-future company could look like in terms of physical assets and business model*	*8%*

Current considerations and plans	*Short-term considerations and remedial actions can be discussed but are not integrated in the plan*	*List of short-term considerations and remedial actions integrated in the plan*	*Contains discussion of the potential impacts of a low-carbon transition on the current business Relevant region-specific considerations are included*	*Contains details of actions the company realistically expects to implement (and these actions are relevant and realistic)*	*Consideration of potential short-term "shocks" or stressors (sudden adverse changes) has been made*	*16%*
Transition plan scope, consistency, analysis	*No clear scope to the plan, no consistency among sections and no analysis presented*	*The scope covers the entire business*	*Plan is consistent with reporting against other ACT indicators Contains a description of relevant testing/analysis*		*Transition covers entire business and is specific to it, with proper scoping, consistency and proper analysis*	*15%*
Transition timescale	*Covers only short-term (< 3 years)*	*Covers only medium term (< 5 years)*	*Should cover the short, medium and long term. From now or near future <5 years, until at least 10 years and preferably beyond*	*Covers the short, medium and long term. From now until at least 20 years*	*Covers the short, medium and long term. From now and beyond (2050)*	*8%*
Climate change adaptation	*The company does not consider climate issues related to its activities and remains passive in the face of climate risks*	*The company has been carrying out a diagnosis of climate change impacts on:* - *The physical integrity and operation of assets* - *Supply of goods or services which depends on climate conditions* - *Demand of products or services submitted to climate conditions*	*The company has been carrying out a diagnosis of climate change impacts, and identified related physical risks.* *It has set up indicators for decision making and impact thresholds*	*The company has been carrying out a diagnosis of climate change impacts, and identified related physical risks.* *It has set up indicators for decision making and impact thresholds.* *It has planned actions to reduce its physical risk, taking also into account other environmental*	*The company conducts a routine strategy, from diagnosis to action and assessment, including updating knowledge and learning processes.* *It checks that the adaptation actions do not harm, or even have a positive impact on climate change mitigation,*	*10%*

		- *Assessment of its adaptive capacity (HR, technical, financial, organizational)*		*issues (impact on climate change mitigation, biodiversity, health and pollution* *It has defined updating knowledge and learning processes*	*biodiversity, health and pollution.*	

RATIONALE	GE 5.3 LOW-CARBON TRANSITION PLAN
RATIONALE OF THE INDICATOR	All the sectors will require substantial changes to their business to align to a low-carbon economy, over the short, medium and long term, whether it is voluntarily following a strategy to do so or is forced to change by regulations and structural changes to the market. It is better for the success of its business and of its transition that these changes occur in a planned and controlled manner.

• GE 5.4 CLIMATE CHANGE MANAGEMENT INCENTIVES (WEIGHTING: 1%)

DESCRIPTION & REQUIREMENTS	GE 5.4 CLIMATE CHANGE MANAGEMENT INCENTIVES
SHORT DESCRIPTION OF INDICATOR	The Board's compensation committee has included metrics for the reduction of GHG emissions in the annual and/or long-term compensation plans of senior executives; the company provides monetary incentives for the management of climate change issues as defined by a series of relevant indicators.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ Management incentives ♦ The reporter shall report whether the company provides incentives for the management of climate change issues, including the attainment of targets ♦ The reporter shall provide details on the incentives provided for the management of climate change issues

- The reporter shall provide details on the activities that are usually rewarded by incentives in the company

HOW THE ANALYSIS WILL BE DONE

- The analyst verifies if the company has compensation incentives set for senior executive compensation and/or bonuses, that directly and routi reward specific, measurable reductions of tons of carbon emitted by the company in the preceding year and/or the future attainment of emiss reduction targets, or other metrics related to the company's low-carbon transition plan.

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weight
Associated score		0%	25%	50%	75%	100%	
Who is entitled to benefit?	Who is entitled to benefit?	Any other answer		Executive	Senior executive	Board chairman - Board/Executive board - Director on board - Corporate executive team - Chief Executive Officer (CEO) - Chief Operating Officer (COO) - Chief Financial Officer (CFO) - All employees	33%
What is the type of incentives (non-monetary/ monetary)?	Type of incentives	Non-monetary	Recognition (non-monetary)	Other non-monetary reward		Monetary reward	33%
*What are the targets related to CC incentives? **	Incentivized performance indicator	No targets incentivized	Behaviour change related indicator or other specification	Efficiency project, Efficiency target, Environmental criteria included in purchases, Supply chain engagement, or other specification		Emissions reduction project, Emissions reduction target, Energy reduction project, Energy reduction target, or other specification	33%

RATIONALE

GE 5.4 CLIMATE CHANGE MANAGEMENT INCENTIVES

RATIONALE OF THE INDICATOR

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

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

• GE 5.5 CLIMATE CHANGE SCENARIO TESTING (WEIGHTING: 1%)

DESCRIPTION & REQUIREMENTS	GE 5.5 CLIMATE CHANGE SCENARIO TESTING
SHORT DESCRIPTION OF INDICATOR	Testing or analysis relevant to determining the impact of transition to a low-carbon economy on the current and projected business model and/or business strategy has been completed, with the results reported to the board or c-suite, the business strategy revised where necessary, and the results publicly reported.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ The reporter shall provide the details and supporting documents on the organization's climate change scenario testing
HOW THE ANALYSIS WILL BE DONE	The analyst evaluates the description and evidence of the low-carbon economy scenario testing for the presence of best-practice elements and consis 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 is allocate elements indicating a higher level of maturity. Maximum points are awarded if all of these elements are demonstrated.

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon' aligned	Weight
Associated score		*0%*	*25%*	*50%*	*75%*	*100%*	
What is the scope of the scenario testing?	*Boundary*	*Large element not included*	*Large element included*	*Small element not included*	*Small element included*	*Covers entire boundary of the company*	*35%*
What is the time horizon of the scenario testing?	*Timescale*	*From present to future*	*From present to 2020*	*From present to 2025*	*From present to 2035*	*From present to 2050*	*20%*

Are the results in qualitative/ quantitative/ financial terms?	*Results*	*Expressed in qualitative terms*	*Expressed in qualitative terms*	*Expressed in financial terms*	*Expressed in financial terms and results are translated into value-at-risk*	*Expressed as value-at-risk*	*10%*
What are the types of changing conditions considered?	*Conditions considered*	*Considers no particular changing conditions*	*Considers a narrow range of different changes in conditions.*	*Considers a range of changing conditions together (multivariate)*	*Considers changing climate conditions in combination with changes in operating conditions*	*Considers changing conditions specific for a 2-degree decarbonization scenario*	*35%*

RATIONALE **GE 5.5 CLIMATE CHANGE SCENARIO TESTING**

RATIONALE OF THE INDICATOR

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

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

SUPPLIER ENGAGEMENT (WEIGHTING: 0 – 20%)

• GE 6.1 STRATEGY TO INFLUENCE SUPPLIERS TO REDUCE THEIR GHG EMISSIONS (WEIGHTING: 0-10%)

DESCRIPTION & REQUIREMENTS	GE 6.1 SUPPLIER ENGAGEMENT
SHORT DESCRIPTION OF INDICATOR	The company has a strategy, ideally governed by policy and integrated into business decision making, to influence, enable, or otherwise shift suppliers' choices and behaviour in order to reduce GHG emissions.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ Methods of supplier engagement, strategy to prioritizing supplier engagements and measures of success ♦ Number of suppliers engaged and proportion of total spend ♦ Data on suppliers' GHG emissions and climate change strategies
HOW THE ANALYSIS WILL BE DONE	The assessment will assign a maturity score based on the company's formalized strategy with their suppliers, 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.

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weight
Associated score		*0%*	*25%*	*50%*	*75%*	*100%*	
To what extent GHG emissions reduction issues are integrated in engagement with suppliers?	Consideration of reduction targets	No consideration	*CSR clause included in engagements with suppliers. Means commitment included in contracts*	*CSR clause with GHG emissions reduction included in engagements with suppliers. Results-driven commitment in contracts*	*CSR clause with quantified GHG emissions reduction included in engagements with suppliers. Results commitment in contracts. Regular reporting*	*CSR clause with GHG emissions reduction included as priority in engagements with suppliers. Results-driven commitment in contracts. Regular reporting.*	*20%*
What action levers are used by the company to encourage suppliers to develop low-carbon offer?	Use of action levers	No action levers used	*Passive approach (suppliers may offer low-carbon product/service but no specific requirements from the company)*	*Use of one action lever (awareness campaign, compensation, purchasing rule, etc.)*	*Use of several action levers (awareness campaign, compensation, purchasing rule, etc.)*	*Use of several action levers (awareness campaign, compensation, purchasing rule, etc.). Regular audits of the supplier by the purchaser or a representative*	*30%*
What is the scope of the action levers used?	Scope	No strategy applied to any suppliers	*Strategy applied to few large suppliers*	*Strategy applied to most large suppliers*	*Strategy applied to all large suppliers and few small suppliers*	*Strategy applied to all of suppliers*	*20%*

To what extent carbon issues are integrated in the selection process of suppliers?	Suppliers selection process	No selection of suppliers based on environmental criteria No change in suppliers' base	*Selection of suppliers based on at least one environmental criterion* *No change in suppliers' base*	*No change in suppliers' base* *Selection of suppliers with low-carbon alternatives*	*No change in suppliers' base* *Selection of suppliers offering low-carbon alternatives*	*Engaging suppliers over low-carbon alternatives*	*30%*

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

RATIONALE OF THE INDICATOR

RELEVANCE OF THE INDICATOR:

Supplier engagement is included in the ACT Generic assessment 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 (WEIGHTING: 0-10%)

DESCRIPTION & REQUIREMENTS	GE 6.2 ACTIVITIES TO INFLUENCE SUPPLIERS TO REDUCE THEIR GHG EMISSIONS
SHORT DESCRIPTION OF INDICATOR	The company participates in activities that help, influence or otherwise enable suppliers to reduce their GHG emissions. The indicator aims to be a holistic measure of these activities to assess how active the company is in reducing the emissions of their products/services in the value chain across all products/services.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ List of initiatives implemented to influence suppliers to reduce their GHG emissions, green purchase policy or track record, supplier code of conduct
HOW THE ANALYSIS WILL BE DONE	The assessment will assign a maturity score based on the company's formalized strategy with their suppliers, 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 p 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 the analyst deems it most appropriate.

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon' aligned	Weight
Associated score		*0%*	*25%*	*50%*	*75%*	*100%*	
How the company encourage suppliers to reduce their GHG emissions?	Suppliers GHG emissions	*No activity*	*Company requires suppliers to sign a code of conduct (or similar) and/or to provide data regarding their*	*Company assists suppliers to reduce their GHG emissions*	*Company partners with large suppliers to define common GHG emissions reduction plan*	*Company contributes in GHG emissions reduction along its value chain through close partnerships with suppliers*	*50%*

			environmental performance (for audited suppliers). Means-driven commitment				
Does the company develop a low-carbon demand?	**Low-carbon offer of suppliers**	*No green purchase*	*No green purchase*	*Company purchases low-carbon products/equipment/services*	*Company purchases low-carbon products/equipment/ services Company partners with suppliers to develop low-carbon products/services*	*Company purchases low-carbon products/equipment/ services Company partners with suppliers to develop low-carbon products/services*	*50%*

RATIONALE **GE 6. 2 ACTIVITIES TO INFLUENCE SUPPLIERS TO REDUCE THEIR GHG EMISSIONS**

RATIONALE OF THE INDICATOR

RELEVANCE OF THE INDICATOR:

Activities to influence suppliers are included in the ACT Generic assessment 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 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.

CLIENT ENGAGEMENT (WEIGHTING: 0-20%)

• GE 7.1 STRATEGY TO INFLUENCE CUSTOMER BEHAVIOUR TO REDUCE THEIR GHG EMISSIONS (WEIGHTING: 0-10%)

DESCRIPTION & REQUIREMENTS	GE 7.1 STRATEGY TO INFLUENCE CUSTOMERS TO REDUCE THEIR GHG EMISSION
SHORT DESCRIPTION OF INDICATOR	The company has a strategy, ideally governed by policy and integrated into business decision making, to influence, enable, or otherwise shift customer choices and behaviour in order to reduce GHG emissions.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ Strategy to influence clients GHG emissions ♦ % of products/services ♦ Data on customers' choices and preferences towards reducing GHG emissions

HOW THE ANALYSIS WILL BE DONE

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weight
Associated score		*0%*	*25%*	*50%*	*75%*	*100%*	
To what extent GHG emissions reduction issues are integrated in engagement with clients?	Consideration of reduction targets	*No strategy*	*GHG emissions reduction included in engagement with clients Means-driven commitment*	*Quantified GHG emissions reduction included in engagement with clients*	*Quantified GHG emissions reduction included in engagement with clients*	*Quantified GHG emissions reduction included as priority in engagements with clients*	*40%*

What action levers are used by the company to encourage clients to buy low-carbon products/ services?	**Influence on clients**	*No strategy*	*Passive approach*	*Use of one action lever (awareness campaign, compensation, purchasing rule, etc.) Provision of documents and tools by the lessor*	*Use of several action levers (awareness campaign, compensation, purchasing rule, etc.) Provision of documents and tools*	*Use of several action levers (awareness campaign, compensation, purchasing rule, etc.) Contribution to shift demand towards low-carbon products/services*	*40%*
What is the scope of the action levers used?	**Scope**	*No strategy*		*Only large clients (represent 20% of revenues in total)*	*Majority of clients (represent more than 60% of total revenues)*	*All clients (represent more than 90% of total revenues)*	*20%*

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

RATIONALE OF THE INDICATOR

RELEVANCE OF THE INDICATOR:

Strategies to influence customers are included in the ACT Generic assessment for the following reasons:

- 1. Companies usually have the ability to influence the strategy and performance of clients regarding climate thanks to their products or services.
- 2. 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 (WEIGHTING: 0-10%)

DESCRIPTION & REQUIREMENTS	GE 7.2 ACTIVITIES TO INFLUENCE CUSTOMERS TO REDUCE THEIR GHG EMISSION
SHORT DESCRIPTION OF INDICATOR	The company participates in activities, to influence, enable, or otherwise shift customer choices and behaviour in order to reduce GHG emissions.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ Activities to influence clients GHG emissions ♦ % of products/services ♦ Data on customers' choices and preferences towards reducing GHG emissions

HOW THE ANALYSIS WILL BE DONE

Question	Sub Dimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weight
Associated score		*0%*	*25%*	*50%*	*75%*	*100%*	
How does the company encourage clients to reduce their GHG emissions?	Clients GHG emissions	No engagement	Company promotes products/services with lower carbon footprint but no data reported Company defines means-driven commitment	Company assists clients to reduce their GHG emissions	Company partners with large clients to define common GHG emissions reduction plan Provision of documents and tools Multi-party working group with annual meeting at least	Company contributes in GHG emissions reduction along its value chain through close partnerships with clients	50%
Does the company promote low-carbon solutions to its clients?	*Low-carbon products/ services*	*No offer*	*The company does offer low-carbon/energy efficient products/services but no promotion strategy developed*	*The company promotes its low-carbon offer through marketing and communication channels*	*The company promotes its low-carbon offer through marketing and communication channels. The company offers buying incentives regarding low-*	*The company promotes its low-carbon offer through marketing and communication channels. The company offers buying incentives regarding low-*	*50%*

					carbon products/services	*carbon products/services . The brand identity of the company is based only on its range of low-carbon solutions.*	

RATIONALE	GE 7.2 ACTIVITIES TO INFLUENCE CUSTOMERS TO REDUCE THEIR GHG EMISSION

RATIONALE OF THE INDICATOR

RELEVANCE OF THE INDICATOR:

Activities to influence customers are included in the ACT Generic assessment for the following reasons:

- 1. Companies usually have the ability to influence the strategy and performance of clients regarding climate thanks to their products or services.
- 2. 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.

POLICY ENGAGEMENT (WEIGHTING: 5%)

• GE 8.1 COMPANY POLICY ON ENGAGEMENT WITH TRADE ASSOCIATIONS (WEIGHTING: 1%)

DESCRIPTION & REQUIREMENTS	GE 8.1 COMPANY POLICY ON ENGAGEMENT WITH TRADE ASSOCIATIONS
SHORT DESCRIPTION OF INDICATOR	The company has a policy on what action to take when industry organisations to which it belongs are found to be opposing "climate-friendly" policies.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ Public climate change policy positions ♦ Description of this policy (scope & boundaries, responsibilities, process to monitor and review) ♦ Trade associations that are likely to take a position on climate change legislation

HOW THE ANALYSIS WILL BE DONE

Question	Subdimension	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weight
Associated score		0%	25%	50%	75%	100%	
What is the scope covered by the engagement policy? Is the policy publicly available?	Transparency and scope	Does not cover the entire company or all group memberships. Is not publicly available.	Does not cover the entire company or all group memberships. Is publicly available.	Covers the entire company and its activities, and all group memberships and associations, but not publicly available		Covers the entire company and its activities, and all group memberships and associations. Public policy is publicly available	*40%*

Does the company have a review process of trade associations?	Oversight	No process to review trade associations positions	A process to monitor and review trade association positions exists but is not necessarily implemented	A process to monitor and review trade association positions exists and is well implemented	A process to monitor and review trade association positions exists and is well implemented at a high level of the organization	A process to monitor and review trade associations positions exists. Responsibility for oversight of the policy lies at top level of the organization	*40%*
Does the company have an action plan regarding engagement with trade associations?	Action plan	No mention of this element		Sets out what action is to be taken in the case of inconsistencies	Option to terminate membership of the association	Option of publicly opposing or actively countering the association position	*20%*

RATIONALE **GE 8.1 COMPANY POLICY ON ENGAGEMENT WITH TRADE ASSOCIATIONS**

RATIONALE OF THE INDICATOR

Trade associations are a key instrument by which companies can indirectly influence policy on climate. Thus, when trade associations 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 philosophy, ACT framework and ACT guidelines and common to the other sectoral methodologies.

- **GE 8.2 TRADE ASSOCIATIONS SUPPORTED DO NOT HAVE CLIMATE-NEGATIVE ACTIVITIES OR POSITIONS (WEIGHTING: 2%)**

DESCRIPTION & REQUIREMENTS	**GE 8.2 TRADE ASSOCIATIONS SUPPORTED DO NOT HAVE CLIMATE-NEGATIVE ACTIVITIES OR POSITIONS**
SHORT DESCRIPTION OF INDICATOR	The company is not on the board or providing funding beyond membership of any trade associations that have climate-negative activities or positions.
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ Company policy on engagement with trade associations Details on the climate polices supported by the company.

HOW THE ANALYSIS WILL BE DONE

Question	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weight
Associated score	*0%*	*25%*	*50%*	*75%*	*100%*	
Does the company support trade associations that have climate negative activities/positions?	**Company is on the board or provides funding beyond membership to trade associations that have climate-negative activities or positions.**		**The company is not on the board or providing funding beyond membership of any trade associations that have climate-negative activities or positions. Company can be member.**		**Company is not a member of any trade associations that have climate negative activities or positions**	**100%**

The list of trade associations declared in the CDP data and other external source entries relating to the company (e.g. RepRisk database), is assessed against a list of associations that have climate-negative activities or positions. The results are compared to any policy described in 5.1.

RATIONALE **GE 8.2 TRADE ASSOCIATIONS SUPPORTED DO NOT HAVE CLIMATE-NEGATIVE ACTIVITIES OR POSITIONS**

RATIONALE OF THE INDICATOR	Trade associations are a key instrument by which companies can indirectly influence policy on climate. Thus, participating in trade associations which actively lobby against climate-positive legislation is a negative indicator and likely to obstruct low-carbon transition. However, membership in associations that support climate positive policies should also be considered in the analysis.

• GE 8.3 POSITION ON SIGNIFICANT CLIMATE POLICIES (WEIGHTING: 1%)

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 questions comprising the information request that are relevant to 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. External sources of data shall also be used for the analysis of this indicator (e.g. RepRisk database, press news, actions in standard development)
HOW THE ANALYSIS WILL BE DONE	The analyst evaluates the description and evidence on company position on relevant climate policies for the presence of best practice elements, negative indicators and consistency with the other reported management indicators. The company description and evidence will be compared to the maturity matrix developed to guide the scoring and a greater number of points will be allocated for elements indicating a higher level of maturity. The company publicises direct opposition to climate policy (e.g. direct statement issues or given by a company representative in a speech or interview) List of cross-sectoral initiatives on the low-carbon transition of the economy: - Paris Agreement - SBT Initiative (validated targets)

- …

Question	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weight
Associated score	*0%*	*25%*	*50%*	*75%*	*100%*	
What is the position of the company on significant climate policies?	Reported direct opposition to climate policy can be found (third-party claims are found)	No reported direct opposition to climate policy	Publicly supports significant climate policies	Publicly commits to international low-carbon commitments Engages in sectoral/cross-sectoral initiatives against climate change*	Publicly commits to international low-carbon commitments Leads sectoral/cross-sectoral initiatives against climate change* (founding member/main sponsor/spokesperson of the initiative)	100%

RATIONALE	GE 8.3 POSITION ON SIGNIFICANT CLIMATE POLICIES
RATIONALE OF THE INDICATOR	Many initiatives have been developed about sustainable practices that contribute to the transition to a low-carbon economy. Companies should not oppose effective and well-designed regulation in these areas, but should support it. Assessing the position of the company regarding the evolution of the context is thus key to understand the corporate vision in these matters

- **GE 8.4 COLLABORATION WITH LOCAL PUBLIC AUTHORITIES (WEIGHTING: 1%)**

DESCRIPTION & REQUIREMENTS	GE 8.4 COLLABORATION WITH LOCAL PUBLIC AUTHORITIES
SHORT DESCRIPTION OF INDICATOR	The company is not opposed to any significant climate-relevant policy.
DATA REQUIREMENTS	The questions comprising the information request that are relevant to 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.

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

HOW THE ANALYSIS WILL BE DONE

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

Question	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weight
Associated score	*0%*	*25%*	*50%*	*75%*	*100%*	
Does the company partner and support local authorities in territory emissions reduction?	*No evidence that the company is collaborating with local authorities on emissions reductions other than respecting its contractual engagement, if any or Third-party claims are found showing that the company is not complying with local climate policies*		*The company is proactive on emissions reduction of the territory through established dialogue with local public authorities to design future climate policies enforcement*	*The company dialogues with local public authorities to design future climate policies enforcement, and participates in pilot programs to test or develop such policies on the territory*	*The company implements on a large-scale climate policy previously designed in collaboration with local authorities and tested through pilot programs on the territory. The company also shows willingness to replicate such initiatives in other areas.*	100%

RATIONALE

GE 8.4 COLLABORATION WITH LOCAL PUBLIC AUTHORITIES

RATIONALE OF THE INDICATOR

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

BUSINESS MODEL (WEIGHTING: 10-15%)

A company may transition its business model to other areas to remain profitable in a low-carbon economy. The company's future business model 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 activities outside the core business of the company.

This module aims to identify both relevant current business activities and those still at a burgeoning stage. 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 activities, although the latter (i.e. substantially sized, profitable, and/or expanding) business activities will be better rewarded.

- Focus will be on new business models
- High emissive / involved in high emissive activity companies should be benchmarked by quantitative modules (not in business model module)
- Score will be based on long-term viability of the company's business model in the low-carbon economy
- Is the company developing levers, and actioning them, to transition to LCE?
- Is there a need to change the fundamental business model? e.g. ticket agencies can just do train not air travel, engineering services no longer provided to fossil fuel companies.
- How linked to emissive activities is the business model?
- New business models vs. transitioning existing business model
- We shouldn't penalise companies who can't shift a business model because they are already low-carbon

Specific guidelines regarding multi-activity company will be available in ACT framework soon.

• GE 9.1 PROGRESS TOWARDS A FULLY DECARBONIZED BUSINESS (WEIGHTING: 3,3-7,5%)

DESCRIPTION & REQUIREMENTS	GE 9.1 PROGRESS TOWARDS A FULLY DECARBONIZED BUSINESS
SHORT DESCRIPTION OF INDICATOR	The company has identified the level of decarbonization required for its activity.

DATA REQUIREMENTS

The relevant data for this indicator are:

- % of company activities that need to be decarbonized
- Measurement of the total size of relevant company activity or product or services portfolio; financial metric (revenue, sales, profit) OR activity metric (volume of product sold, number of product units sold, number of SKUs offered, number of specialists employed)
- Measurement of the proportion of low-carbon products or services offered as a percentage for the total amount of products and serviced offered (as per units chosen above)
- Evidence that the company offers some products or services defined as low-carbon
- Evidence that the company has plans to phase out or exit high carbon products or services with phase out dates, in a public announcement or transition plan.
- Evidence that the company only offers products or services which meet the definition of "low-carbon" and are delivered in a low-carbon aligned way

HOW THE ANALYSIS WILL BE DONE

In order to align with a low-carbon future, it is expected that companies identify the level of decarbonization required for the products and services they offer, and show evidence they are changing their product/service mix as necessary to survive in a low-carbon economy.

The analyst evaluates the description and evidence of the company's current offer of low-carbon products and services as a proportion of its entire scope of activity, and evidence of its plan to that remain to be decarbonized in the coming years.

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.

The maturity matrix is provided below:

Question	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weight
Associated score	*0%*	*25%*	*50%*	*75%*	*100%*	
Identification of the level of decarbonization required	*All company activities covered by the assessment need to decarbonize – the company offers no low-carbon products or services. The company has no or little awareness of the need to transition to offering low-carbon products/ services*	*All company activities covered by the assessment need to decarbonize – the company offers no low-carbon products or services. The company has no or little awareness of the need to transition to offering low-carbon products/ services*	*40 – 75% of the product portfolio is defined low-carbon products or services and the company has a public timeline to align its product portfolio as 100% low-carbon.*	*75 - 95% of the product portfolio is defined low-carbon products or services and the company has a public timeline to align its product portfolio as 100% low-carbon.*	*Note: All (>95%) the company product portfolio is considered low-carbon products/services (as per an agreed definition of low-carbon products or services)*	100%

RATIONALE

GE 9.1 PROGRESS TOWARDS A FULLY DECARBONIZED BUSINESS

RATIONALE OF THE INDICATOR

This indicator aims to reward the progress of companies that have already started to decarbonize their activity over the years, or have already successfully transitioned towards offering only low-carbon products or services. ACT is willing to capture the dynamic of the company in its transition towards a low-carbon economy and this indicator shows both efforts that have been made by the company and progress that still needs to be achieved. The transition towards offering only low-carbon products and services produced in a decarbonized way has two aspects: 1) Awareness 2) Action. A company must first become aware of the need to eventually transition to only low-carbon products, before it starts taking action to decarbonize its portfolio of products and services. Some companies may only offer products or services which meet the definition of a low-carbon product or service.

The changing product portfolio should be included in and consistent with the company's low-carbon transition plan.

- **GE 9.2 INTEGRATION OF THE LOW-CARBON ECONOMY IN CURRENT AND FUTURE BUSINESS MODELS (WEIGHTING: 3.3-7,5%)**

DESCRIPTION & REQUIREMENTS	GE 9.2 INTEGRATION OF THE LOW-CARBON ECONOMY IN CURRENT AND FUTURE BUSINESS MODELS
SHORT DESCRIPTION OF INDICATOR	The company is actively developing business models for a low-carbon future by demonstrating its application of low-carbon business model pathways.
DATA REQUIREMENTS	The questions comprising the information request that are relevant to this indicator are: ♦ Details on business model(s) shifting to reducing emissions through better production practices.
HOW THE ANALYSIS WILL BE DONE	Best practice elements to be identified in the test/analysis include: ♦ the business activity is profitable; ♦ the business activity is of a substantial size; ♦ the company is planning to expand the business activity; ♦ expansion will occur on a defined timescale The maturity matrix is provided below:

	Question	Basic	Advanced	Low-carbon aligned	Weight
	Associated score	0%	50%	100%	
9.1	*Identification of new low-carbon business model*	*No new low-carbon business model identified (new company projects all correspond to existing activities)*	*Company has identified need to decarbonize and is investigating a new business model through scenario analysis*	*New low-carbon business model was identified and is being implemented*	*20%*
9.2	*Profitability of business model*	*Non- estimated or in a very early stage of development (research or conception stage)*	*Mature business model but non- profitable or in a development stage (prototype / demonstration or test)*	*Mature and profitable business model*	*20%*
9.3	*Size of business model*	*Non- estimated*	*Limited size of business for the company (few FTE or time dedicated, small turnover, few revenues expected, etc.)*	*Substantial size of market for the company (significant number or FTE or dedicated hours, great turnover, great anticipated profitability, etc.)*	*20%*
9.4	*Growth potential of business model*	*Non- estimated or exploration of the business model interrupted*	*Scheduling next development steps*	*Scheduling the expansion of the target or size of the business model*	*20%*
9.5	*Deployment schedule of business model*	*Non- scheduled*	*Deployment scheduled with a 2 years horizon or less*	*Deployment scheduled with a 2 years horizon or more*	*20%*

Maximum points are awarded if all of these elements are demonstrated.

RATIONALE	GE 9.2 INTEGRATION OF THE LOW-CARBON ECONOMY IN CURRENT AND FUTURE BUSINESS MODELS
RATIONALE OF THE INDICATOR	In addition to developing sustainable practices, a company may transition its business model to other areas to remain profitable in a low-carbon economy. The company's future business model should enable it to decouple financial results from GHG emissions, in order to meet the constraints of low-carbon transition while continuing to generate value. This indicator aims to identify both relevant current business activities, and those still at a burgeoning stage. It is recognized that transition to a low-carbon economy, with associated change in business models, will take place over a number of years. The assessment will thus seek to identify and reward projects at an early stage as well as more mature business activities, although the latter (i.e. substantially sized, profitable, and/or expanding) business activities will be better rewarded.

• GE 9.3 SHARE OF LOW-CARBON CLIENTS (WEIGHTING: 0-5%)

DESCRIPTION & REQUIREMENTS	GE 9.3 SHARE OF LOW-CARBON CLIENTS
SHORT DESCRIPTION OF INDICATOR	A measure of the company contribution to decarbonize the value chain through the share of its low-carbon clients
PREREQUISITE	This indicator is only applicable for a company operating upstream of an emissive activity where there is an existing trajectory, producing a part of the final product (e.g. transport equipment manufacturer)
DATA REQUIREMENTS	The relevant data for this indicator are: ♦ The company's share of product/service used by final low-carbon products / activity
HOW THE ANALYSIS WILL BE DONE	The analyst will evaluate the share of the company's client mix dedicated to low-carbon clients. *Low-carbon products / services are defined according to the EU Green taxonomy. Please refer to the section "Appendix" in order to have more information*

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.

Low-carbon use mix:

Question	Basic	Standard	Advanced	Next practice	Low-carbon aligned	Weight
Associated score	*0%*	*25%*	*50%*	*75%*	*100%*	
What is the share of low-carbon client	*Below 20%*	*Between 20% and 40%*	*Between 40% and 60%*	*Between 60% and 80%*	*Above 80%*	*100%*

RATIONALE **GE 9.3 SHARE OF LOW-CARBON CLIENT**

RATIONALE OF THE INDICATOR

ACT Generic also aims to engage all the companies operating in the value chain of sectors specifically covered by another 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 evolution of a company's customer mix towards low-carbon customers. 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.

6. Assessment

6.1. SECTOR BENCHMARK

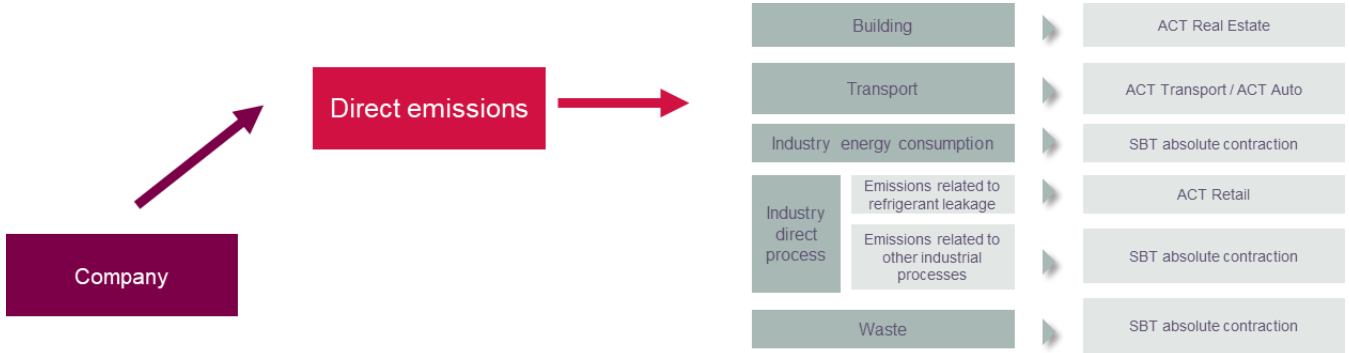
6.1.1. CONNECTION WITH OTHER ACT METHODOLOGIES

Some sectors covered by ACT Generic operate in a value chain where there is an existing / upcoming ACT sectoral methodology. For example:

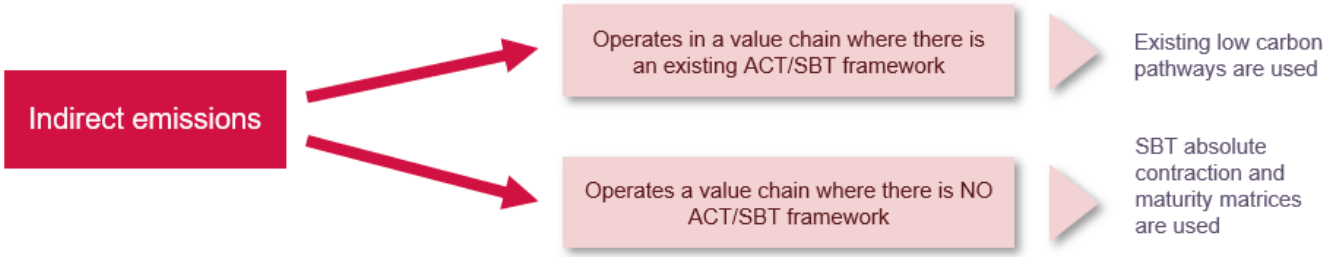
- Infrastructures and road construction activities are based on cement procurement (ACT Cement)
- Plane manufacturers are upstream the transport operators (ACT Transport)

In order to use the most relevant pathways for each company, ACT Generic is using existing low-carbon benchmarks identified in these other ACT methodologies.

- For direct emissions, most of the material emissions have a link with another existing methodologies:



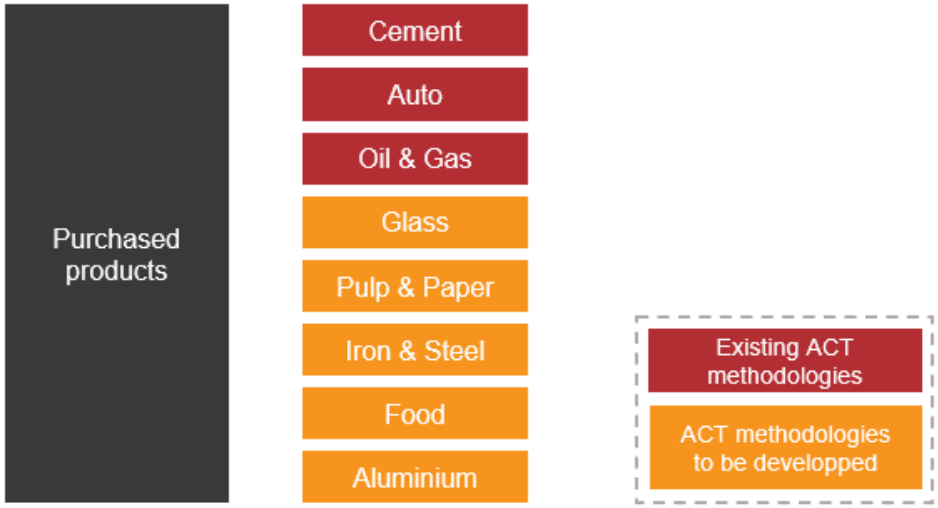
- For significant indirect emissions [5], two distinctive cases are considered:



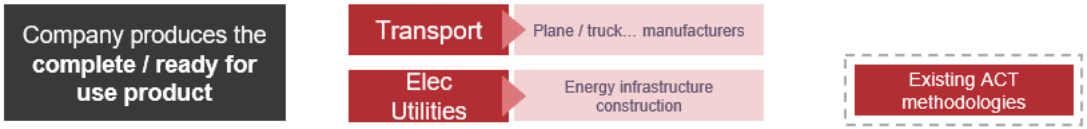
[6] Please, for more information, refer to the section "Sector Benchmark" where the links between existing and upcoming methodologies with ACT Generic are presented.

In the case where the company operates in a value chain where there is an existing ACT/SBT methodology, two practical situations result in quantitative analyses with existing ACT/SBT low-carbon trajectories:

- The company purchases emissive products whose climate performance is subject to existing sectoral trajectories. The analyst will rate the alignment of the performance of these purchased products with sectoral pathways, for instance cement.
  Existing and future sectoral pathways that can be applied are the following:



- The company produces ready-to-use products whose climate performance is subject to existing sectoral trajectories. The analyst will rate the alignment of the performance of the company's products with sectoral pathways, for instance transport.
  Existing and future sectoral pathways that can be applied are the following:



All existing and to be developed ACT methodologies that will be used for ACT Generic are detailed in appendix.

6.1.2. GENERAL BENCHMARK APPROACH

The fundamental target to achieve for all organizations is to contribute to not exceeding a threshold of 2º global warming compared to pre-industrial temperatures. This target has long been widely accepted as a credible threshold for achieving a reasonable likelihood of avoiding climate instability, while a 1.5ºC rise has been agreed upon as an aspirational target.

A sector benchmark for the Generic approach of ACT is a complex task, as the methodology covers heterogeneous sectors and companies that produce GHG emissions in very different ways.

In ACT sectoral methodologies, the benchmarks used rely on a unique intensity metric based on a physical unit. For instance, in the cement sector, tonnes of CO_2 per tonne of cement produced in the activity metric is used. This approach is not possible for ACT Generic. There are some reasons for this:

- An activity indicator may be relevant for a company but not for another. Indeed, the ACT Generic methodology covers companies operating very different activities: from mining companies to electrical equipment manufacturers, through pharmaceutical companies.
- On a company-scale, no single activity indicator can capture the majority of emissions. For instance, tonnes of CO_2e per unit of floor space can capture emissions performance and trend of the buildings owned by a company, but does not provide any information about the emissions intensity for transport activities or industrial processes.

The large differences in business models among the companies to be assessed under the ACT Generic methodology, the diversity of the products or services they offer and the fact that their most material sources of emissions are different from one another pose significant challenges for developing standardised benchmarks for the methodology. Therefore, the benchmark approach for the Generic methodology implements a combination of strategies to address those challenges, including:

- use of a range of different benchmarks;
- flexibility in applying them to ensure that they are relevant to the company being assessed:
    - where relevant, the methodology uses benchmarks in emissions intensity that were built during the development of previous ACT sectoral methodologies;
        - For the assessment of direct emissions, the methodology mainly relies on benchmarks developed in ACT Real Estate and ACT Transport;
        - For the assessment of indirect emissions, the methodology identifies the links between the value chain where the company operates and sectors covered by a sectoral approach of ACT. If a company is upstream or downstream to a sector covered by a specific ACT methodology, the Generic methodology will assess this company's performance thanks to the relevant benchmarks developed in other ACT methodologies.
    - where there is no existing benchmark, the benchmark used is an absolute contraction approach, as developed by SBTi (see figure below)

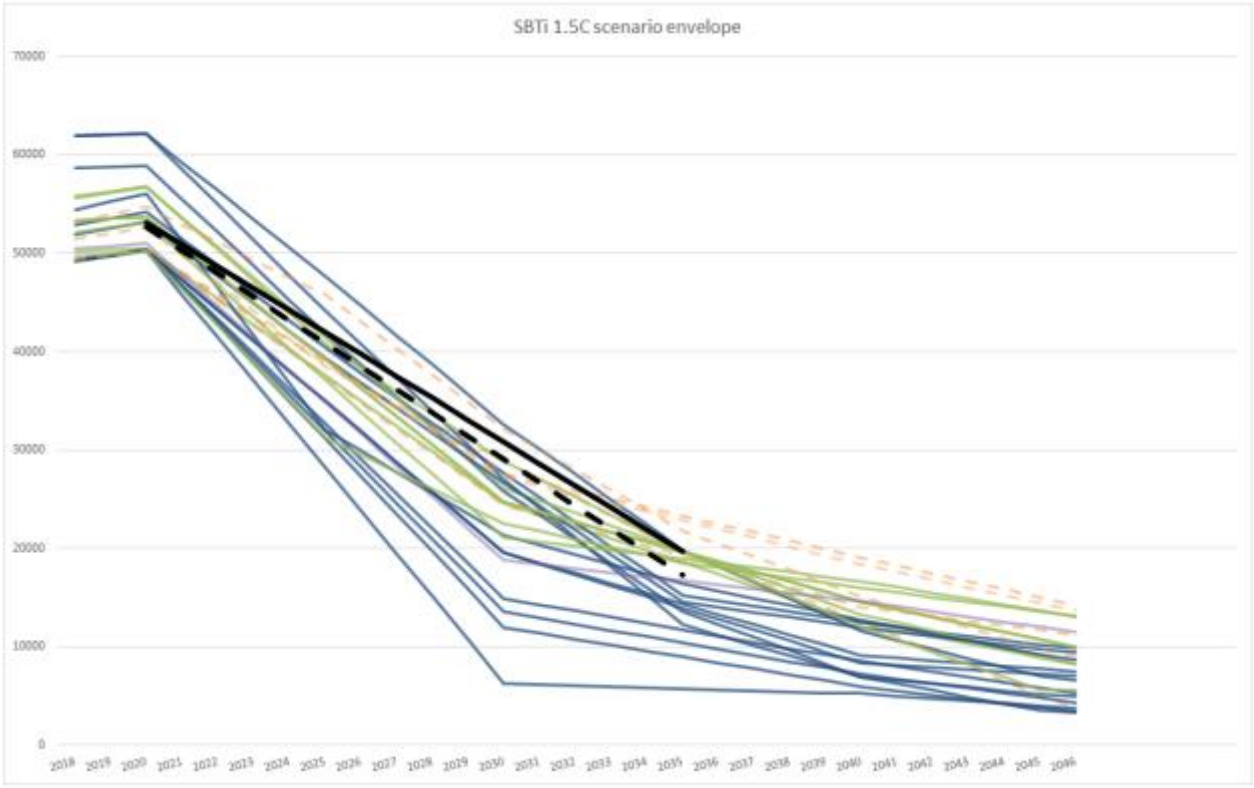


Figure: Scenarios in 1.5°C. The minimum annual linear reduction rates aligned with 1.5˚C is 4.2% (solid black line). (Source: SBTi)

- developing benchmarks in terms of potential actions and activities in addition to GHG emissions measurement.

To deal with the heterogeneity of sectors and activities covered in the Generic approach of the ACT methodology, the company's GHG emissions to be benchmarked have been split in three categories:

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

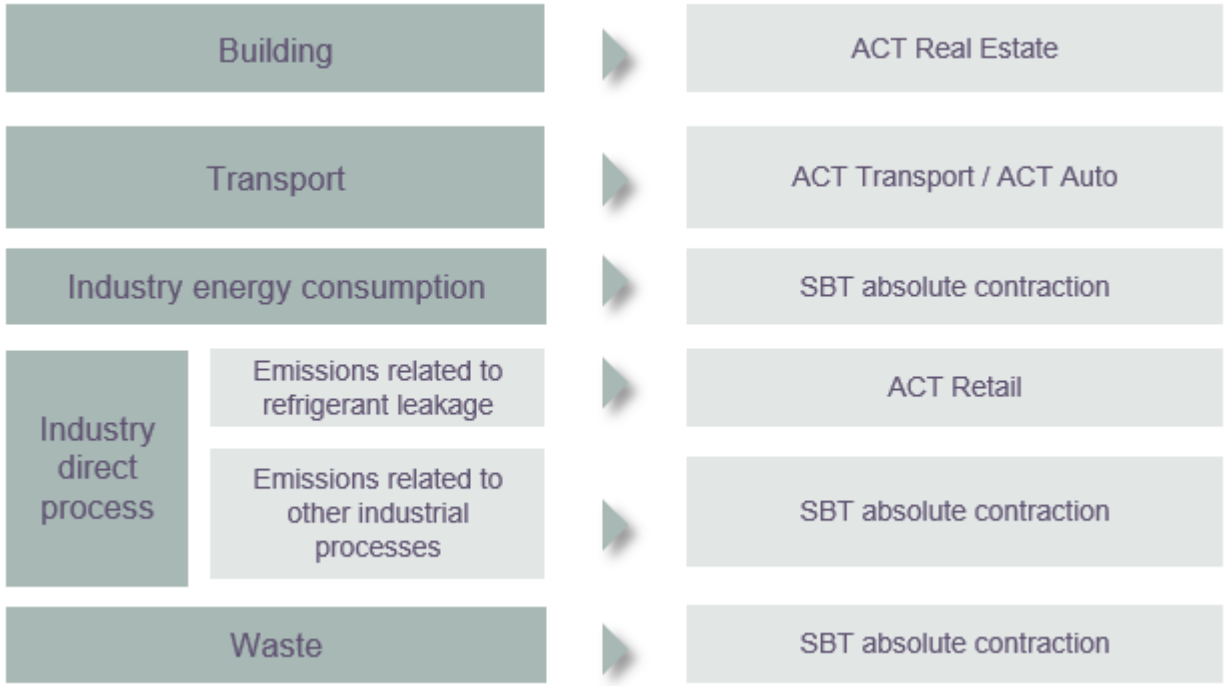
Those three dimensions may represent a small or a large part of the emissions of an assessed company, depending on its activities. The wide range of specific cases justify to tailor the benchmarks used to the company being assessed.
The details regarding the scopes of GHG emissions are included in the Scope & Boundaries part.
Except for some of the first ACT sectoral methodologies developed, all the benchmarks used by the ACT initiative are aligned at minimum with the ambition of the Beyond-2-Degree Scenario**11** (B2DS).

6.1.3. BENCHMARKING COMPANY DIRECT EMISSIONS TARGETS AND PERFORMANCE

In the Generic approach of ACT, benchmarks have been taken from different sources. Where it was relevant, the methodology uses benchmarks that were built during the development of previous sectoral methodologies (ACT Real Estate, ACT Auto, ACT Transport, ACT Retail). Otherwise, the Generic methodology relies on SDA methodologies (service buildings, power generation). When no sectoral benchmark is available or usable, the benchmark used is an absolute contraction approach, developed by SBTi.

[11] 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.

Mapping of benchmarks used of sources of direct emissions



- **BUILDINGS**

The sectoral benchmarks for building emissions are, where possible, taken from the ACT Real Estate methodology, that mainly relies on IEA ETP 2DS scenario (Option A). Otherwise, they are taken from the SDA methodology “Services Buildings” applied to the IEA ETP 2DS scenario. (Option B) The figure below synthesizes the distinction between the two options.

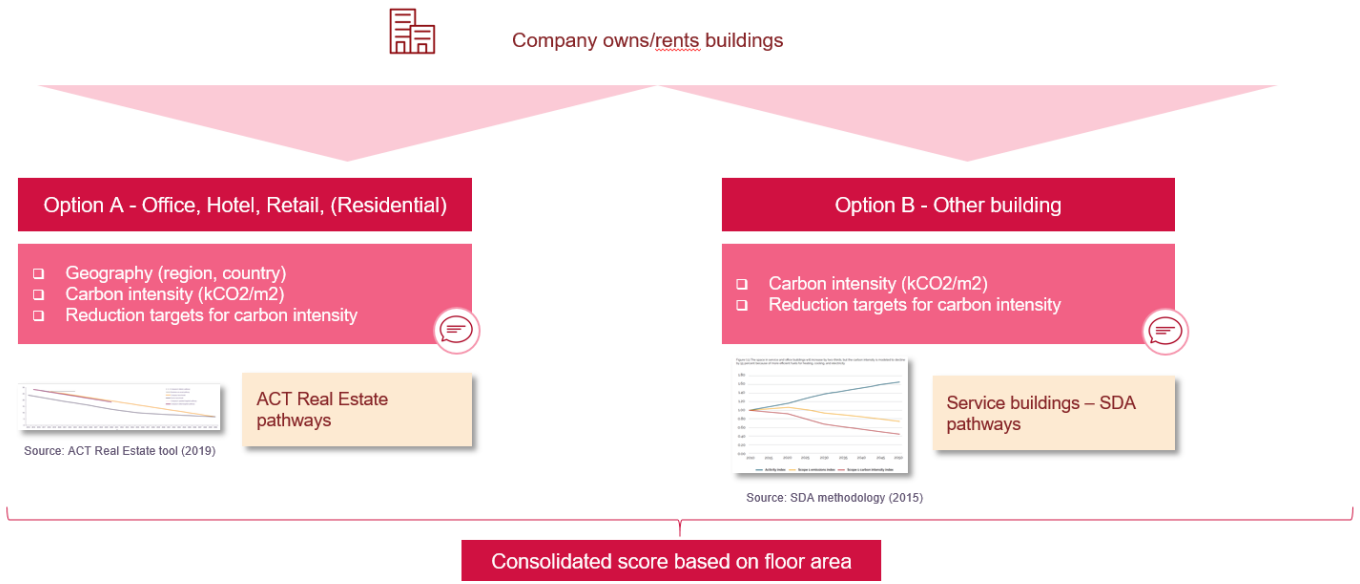


Figure: Synthesis of the buildings' GHG emissions assessment in ACT Generic

The 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 (almost as much details as in the ACT Real Estate methodology). Therefore, this option will be used only for companies meeting specific requirements. For other companies, the option B, which requires less detailed data, would be more appropriate.

Option A

- **Geographical Coverage**

The geographical coverage of buildings is detailed in the ACT Real Estate methodology.

- **Reference pathway**

For owned or rented buildings falling into the scope of ACT Real Estate methodology, a reference pathway defines the carbon intensity ($kgCO_2/m^2$) pathway from a given geographical area and/or country, as well as by building type. The reference pathway considers all the energy consumption from all the relevant end-uses (space heating, space cooling, lightning, water heating, appliances and miscellaneous and cooking).

The reference pathway classification is defined considering the three input data parameters:

- ❑ Building type: Office, Hotel, Retail, Residential;

- ❏ Geographical area: group of countries or relevant country in terms of CO_2 emissions;
- ❏ Country level: country pathway (e.g. for EU-28) or State pathway for relevant countries (e.g. for USA, but it is not developed in the first version of ACT Real Estate).

The Generic reference pathway designation is composed as follows:

Pathway_name =" Building type""_"Geographical zone"_"Country"

Example:

Name of the pathway for offices owned by a company in Germany = Office_Europe_Germany

- **Available Reference Pathways**

To date, 154 reference pathways are available:

- Geographical areas: Europe, USA, China, India, Brazil, Russia, ASEAN and South Africa
- Countries: E.U. 28 countries (as they are in 2018)
- Building types: Office, Retail and Hotel (**Reference pathways for the different building types are only available at country level**)

Since this part of the Generic approach of ACT is based on ACT methodology for Real Estate, it has to include the points of attention raised during the development of the former. As the ACT methodology for Real-Estate is meant to be used in any part of the world, the assessment report shall mention when data is unavailable for an area and which "proxy" has been used, with justification, according to the following table:

Description of the area with missing data compared to another documented area	Proxy

Country level data not available	1. If this zone is relatively similar (in terms of GDP/capita, type of energy and industry infrastructure, main features of the building stock…) to another one already documented, consider the same data, 2. If this zone is relatively similar to another one, but differs by climatic conditions, use the same data where applying specific climatic coefficients to in-use energy consumption, 3. If this zone is included in a larger zone that is already characterized, then consider the data of the larger zone,

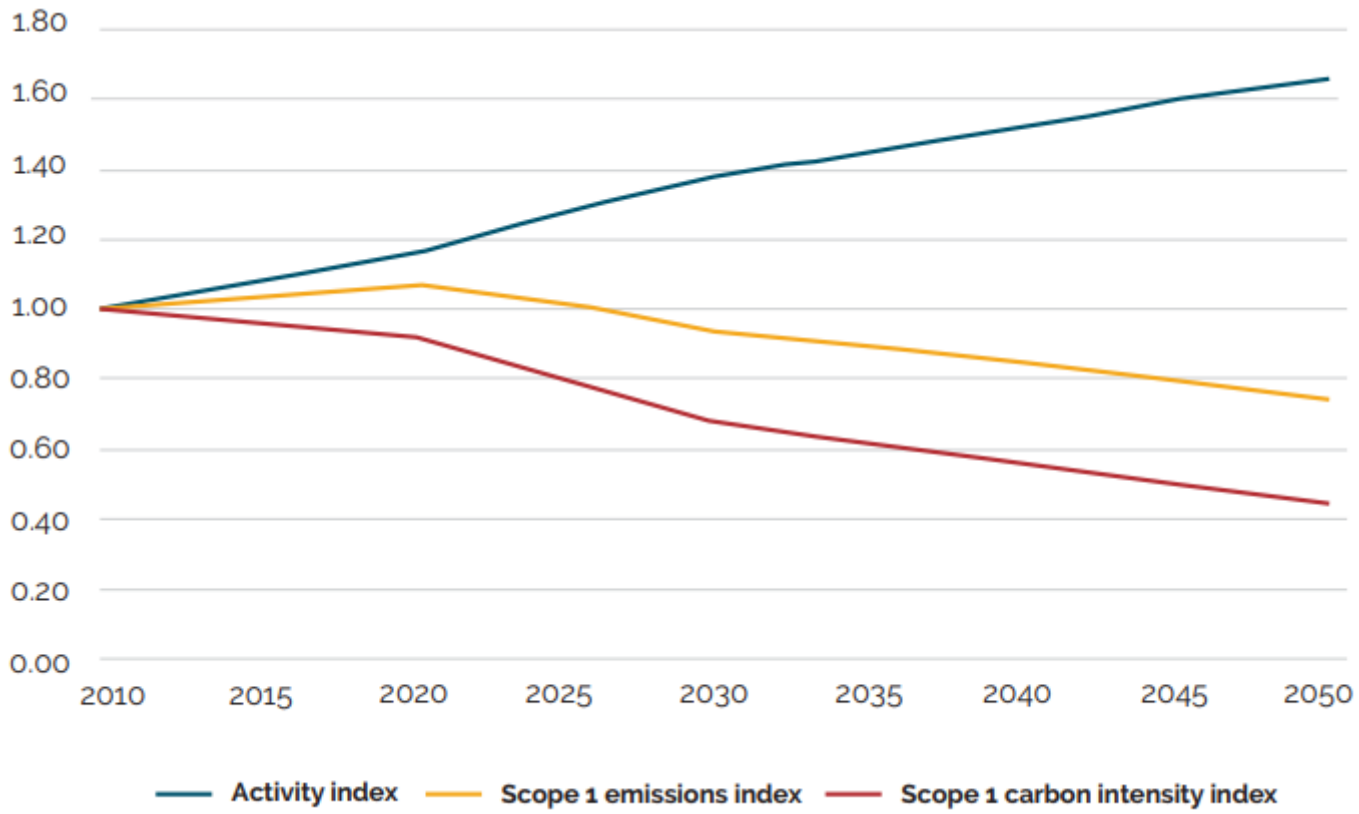
Option B

- **Geographical Coverage**

The reference pathway is given at global level only.

- **Reference pathway**

For other type of buildings, a default reference carbon intensity ($kgCO_2/m^2$) pathway is used. The figure below shows this default benchmark. In this chart, the 'activity index' represents the global growth of area in floor space in commercial buildings (excluding residential buildings). The 'Scope 1 emissions index' represents how the absolute emissions of the entire sector are poised to develop according to this benchmark. For retailers, this means that between the reporting year and 2050, total absolute emissions from their buildings need to be reduced by about 23%. 'Scope 1 carbon intensity' is calculated by dividing absolute emissions by the activity index. This means that the intensity in emissions (expressed in gCO_2e per square meter) needs to be reduced by ~ 55% according to the benchmark.



- **Available Reference Pathways**

The option B relies on SDA Service Buildings pathway.

Option A and Option B

- **Company Benchmark**

The company benchmark is a custom benchmark based in the 2°C scenario from the IEA, and its assets. A company benchmark is built following three steps.

- ❑ The company must calculate the different reference pathways for each building type and geographical area within its portfolio (option A)
- ❑ The company must calculate the floor area of its buildings falling into the option B. A default pathway is associated with it.

- Then, the company benchmark is built as a weighted (buildings' floor area) sum of one or a combination of several reference pathways, considering current values.

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 area.

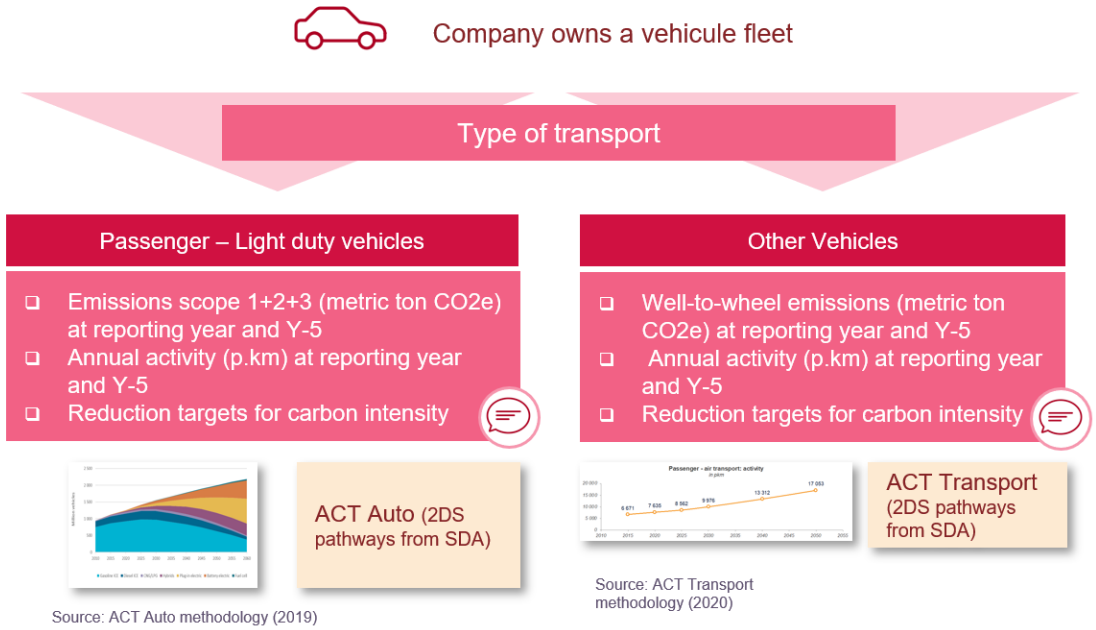
To determine the company benchmark one reference pathways is needed: *Office_Europe_Germany*. The other pathway is given by default (SDA Service buildings)

Company benchmark = $\frac{Floor-area-office-Germany}{Total\ company\ floor\ area} \times Office\_Europe\_Germany + \frac{Floor-area-Other\ Building}{Total\ company\ floor\ area} \times Default\ SDA\ Benchmark$

- **TRANSPORT**

The sectoral benchmarks for transport emissions are taken from the ACT Auto, for Light Duty passenger vehicles and ACT Transport methodologies, for other vehicles. To date both methodologies mainly rely on IEA ETP 2DS scenarios, but ACT Transport methodologies are currently updated to change to IEA ETP B2DS.

The figure below synthesizes this approach:



Source: ACT Auto methodology (2019)

Source: ACT Transport methodology (2020)

Figure: Synthesis of the transports' GHG emissions assessment in ACT Generic (past emissions)

Light Duty passenger vehicles

- **Geographical Coverage**

As the ACT Generic methodology relies on ACT Auto regarding light duty passenger vehicles, the sectoral low-carbon benchmark pathway is divided into several pathways corresponding to the following regions/countries:

- USA
- EU-27
- China
- Japan
- Brazil
- Canada
- South Korea
- Mexico
- Australia
- India
- Russia
- Other

- **Available Reference Pathways**

The assessment of “light duty vehicles” relies on pathways developed in ACT Auto methodology. More details about those pathways could be found in this specific methodology.

Other vehicles

- **Geographical Coverage**

As the ACT Generic methodology relies on ACT Transport regarding other vehicles, the sectoral low-carbon benchmark pathway is divided into several pathways corresponding to the following regions/countries:

- OECD countries
- Non-OECD countries
- European Union
- United States
- Mexico

- Brazil
- Russia
- China
- India
- ASEAN
- South Africa

If no breakdown in geographical repartition of the transportation activities is available, there is a benchmark at world level.

- **Available Reference Pathways**

The assessment of “other vehicles” relies on pathways developed in ACT Transport methodology. More details about those pathways could be found in this specific methodology.

All vehicles

- **Company Benchmark**

The company benchmark is built following the following steps.

- The company must calculate the different reference pathways for each different geographical area for vehicles falling into option A (light duty passenger vehicles)
- The company must calculate the different reference pathways for each different geographical area for vehicles falling into option B (other vehicles)
- Then, the company benchmark is built as a weighted sum of one or a combination of several reference pathways, considering current values. The different pathways are computed according to the associated company’s GHG emissions.

• INDUSTRY ENERGY CONSUMPTION

The benchmark for industry energy consumption emissions is based on the absolute-contraction approach of the Science-Based Targets initiative. This method requires all companies to reduce their emissions by the same percentage of absolute emissions reductions as required for a given scenario. This benchmark relies on the IPCC Special Report on Global Warming of 1.5° (SR15) [4] for a 1.5C trajectory. This equates to at least 4.2% absolute reduction per year. As an exception, the analyst is allowed to choose the well below 2° reference, with a 2.5% absolute reduction per year, if it is duly justified.

The benchmark relies on absolute emissions. Economic intensity metric presents strong biases and was therefore not chosen. The company is allowed to opt for its own intensity metric based on a physical unit, only if the methodology is considered robust enough by the analyst.

• INDUSTRY DIRECT PROCESS

The benchmarks for industry direct process emissions are based on the best available scenarios. Where possible, the industry direct processed are benchmarked specific scenarios. As of this stage of methodological development, only one specific scenario has been identified: cold production (refrigerant leakage).

- **Cold production (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 2000. 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 ETP 2DS 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) [7] until 2030 and linearly extended to zero GHG emissions from leakage in 2050.

- **Other industry direct process**

The benchmark for other industry direct process emissions is based on the absolute-contraction approach of the Science-Based Targets initiative. This method requires all companies to reduce their emissions by the same percentage of absolute emissions reductions as required for a given scenario. This benchmark relies on the IPCC Special Report on Global Warming of 1.5°C (SR15) for a 1.5°C trajectory. This equates to at least 4.2% absolute reduction per year. As an exception, the analyst is allowed to choose the well below 2° reference, with a 2.5% absolute reduction per year, if it is duly justified.

The benchmark relies on absolute emissions. Economic intensity metric presents strong biases and was therefore not chosen. The company is allowed to opt for its own intensity metric based on a physical unit, only if the methodology is considered robust enough by the analyst.

- **RENEWABLE ENERGY**

The benchmark for renewable energy is based on SDA Power Generation. The targets set by companies regarding their share of renewable energy will be assessed according to it. Therefore, this benchmark applies to power generation only and not for electricity consumption.

6.1.4. BENCHMARKING COMPANY UPSTREAM INDIRECT EMISSIONS TARGETS AND PERFORMANCE

Given the heterogeneity of the sectors covered by the ACT Generic methodology, two distinct types of benchmarks are necessary to assess the upstream indirect emissions targets (GE 1.2) and performance (GE 4.2): ETP Scenario or SBT Absolute contraction.

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

- If a specific pathway based on carbon intensity from an ETP 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 asked and analysed (E.g. cement, steel...). Concretely, if a company is downstream on the value chain of a sector covered by a specific ACT methodology and sells products that have already been benchmarked, those products' performance will be assessed according to this benchmark.

E.g.: A company buys cement to build road and other infrastructures. The company will 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.

- 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. The company is allowed to opt for its own intensity metric based on a physical unit, only if the methodology is considered robust enough by the analyst.

6.1.5. BENCHMARKING COMPANY DOWNSTREAM INDIRECT EMISSIONS TARGETS AND PERFORMANCE

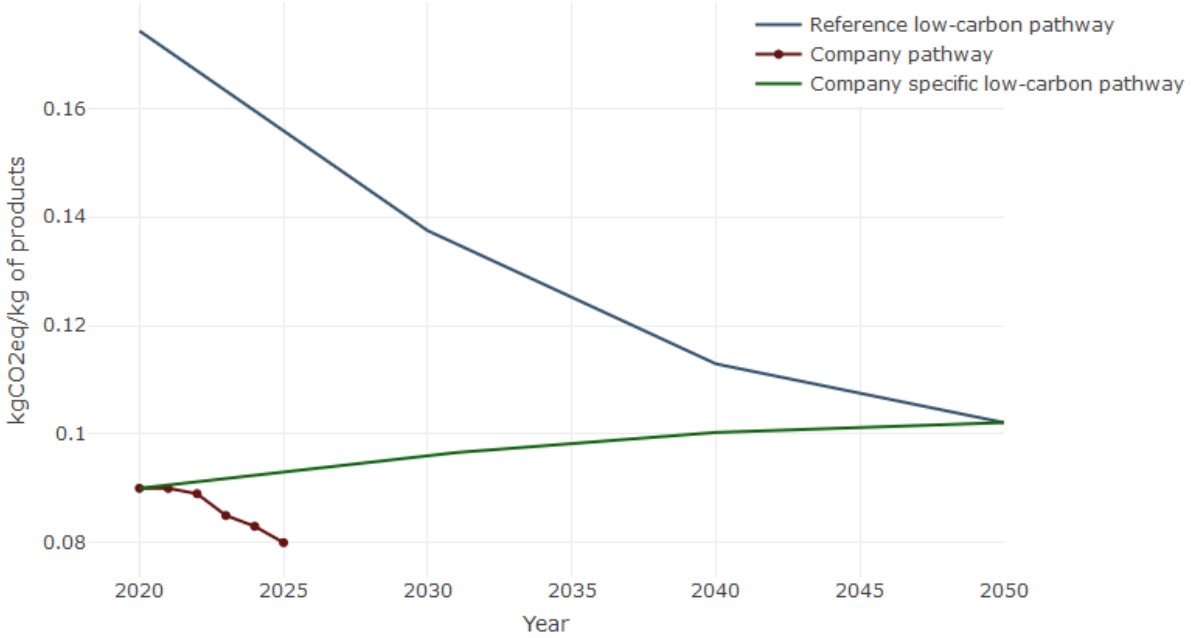
Given the heterogeneity of the sectors covered by the ACT Generic methodology, two distinct types of benchmarks are necessary to assess the downstream indirect emissions targets (GE 1.3) and performance (GE 4.2): ETP Scenario or SBT Absolute contraction.
The choice of the benchmark depends on the scenario 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 from an ETP scenario 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. The company is allowed to opt for its own intensity metric based on a physical unit, only if the methodology is considered robust enough by the analyst.

6.2. ALLOCATION METHOD AND SPECIFIC CASES

Some of ACT main quantitative indicator use the Sectoral Decarbonisation Approach method, developed by the SBT initiative, as an allocation method to compute company's specific low carbon pathway from sectoral pathways. The use of this approach implies that some specific case may happens during the computation of the low-carbon pathway, the main case reported to date is when a company is already below the level of emissions required at final year of the sectoral pathway, resulting in an increasing low-carbon pathway that cannot be used such as in trend indicators.



In this specific situation, where emissions intensity at year of reporting are inferior to emissions intensity of benchmark at final year, the attributed score is 100 %.

6.3. OTHER QUANTITATIVE BENCHMARKS USED FOR INDICATORS

Benchmark for the CAPEX Low-carbon & mitigation technologies

Low-carbon & mitigation technologies are the ones meeting the mitigation criteria of the EU Green Taxonomy. The list of eligible products will be detailed in an appendix and is set to be updated with the further development of this taxonomy. A list of technologies related to energy is also available in the ACT Oil & Gas sector.

Benchmark for the R&D in Low-carbon & mitigation technologies

A taxonomy has been established by the OECD (OECD Environment Working Papers No. 89 (2015)) in order to quantify the patents in environment-related technologies. It can be used to measure environmental innovation, if restricted to climate change mitigation technologies. It is based on the seven following categories:

- Environmental management
- Water-related adaptation technologies
- Biodiversity protection & ecosystem health
- Climate change mitigation related to energy
- CCS of GHG
- Climate change mitigation related to transportation
- Climate change mitigation related to building

The categories of this taxonomy used for ACT Generic are the ones related to climate change mitigation (climate change mitigation related to energy, transportation and building) and CCS of GHG.

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:

Y02B – CCMTs related to buildings
Y02C – Capture, storage, sequestration or disposal of greenhouse gases
Y02E – 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

(EPO, 2017)

This classification is used for ACT Generic.

6.4. WEIGHTINGS

As substantial emissions occur all along the value chain depending on the company, ACT Generic needs to capture each company's carbon material challenges. Unlike other frameworks, the ACT Generic methodology does not define explicitly boundaries, but propose a weighting matrix to define a weighting that is tailored to each company. The flexibility of this method enables the analyst to keep the initial objective of ACT initiative by assessing companies with 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
- If the company is in a high-emission value chain

TABLE: Weighting scheme matrix

		Not relevant	x	Low	x	Medium	x	High	x	Potential range	Module weight
1	Targets									15%	15%
2	Material investment	The company has very low climate challenges related to direct emissions		Direct emissions emissions represent low climate issues for the company		Direct emissions represent significant climate issues for the company		The most important climate challenges of the company are related to direct emissions		0%-35%	
		The company emissions related to direct emissions represent less than 10% of total emissions and less than 10,000 teqCO2		Emissions related to direct emissions represent less than 25% of total emissions (or less than 10% but more than 10,000 teqCO2)		Direct emissions represent less than 50% of total emissions		Direct emissions represent more than 50% of total emissions			
		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%	
4	Sold product performance	The company has very low climate challenges related to indirect emissions		Indirect emissions represent low climate issues		Indirect emissions represent significant climate issues		The most important climate challenges of the company are related to indirect emissions		0%-35%	
		Emissions related to indirect emissions represent less than 10% of total emissions and less than 10,000 teqCO2		Emissions related to indirect emissions represent less than 25% of total emissions (or less than 10% but more than 10,000 teqCO2)		Emissions related to indirect emissions represent less than 50% of total emissions		Emissions related to indirect emissions represent more than 50% of total emissions			
		The company has very few levers to reduce its indirect emissions		The company has some levers to reduce its indirect emissions		The company has sensitive levers to reduce its indirect emissions		The company has strong levers to reduce its indirect emissions			
								The company operates in an intensive value chain			
5	Management									10%	10%
6	Suppliers	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		0%-20%	
		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			
		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			
7	Clients	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		0%-20%	10%
		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			
		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%	5%
9	Business model									10%-15%	

Evaluation steps:

- When starting the evaluation, the evaluator enters the GHG profile of the company if it is available. With these data, the materiality line of each module will be automatically filled in the weighting scheme matrix. If the company does not have a GHG profile or if the evaluator estimates that it is not robust enough, the evaluator

will manually fill 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 at evaluate the company on its most materials sources of emissions.

- The evaluator needs then to fill the levers line of each module. This criterion aims at adjusting the weight of the modules depending on the levers the company has in order to reduce its GHG emissions at each level.
- An additional information is asked for 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. The objective of this category is to capture the risks related the client mix of the company, being in a high-emissive value chain.

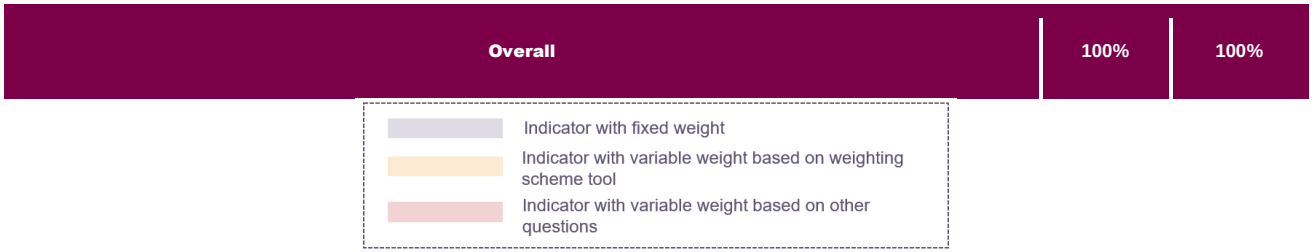
The weight of each module (noted Mi) is then subdivided between the different indicators that make it up, according to their own rules.

TABLE: Performance indicator weightings

GEN	Module	Indicator	Module weight	Indicator weight
1.1	**Targets**	Alignment of direct emissions reduction targets	M1	Share direct emissions * 12%
1.2		Alignment of upstream indirect emissions reduction targets		Share upstream emissions * 12%
1.3		Alignment of downstream indirect emissions reduction targets		Share downstream emissions * 12%
1.4		Time horizon of targets		2%
1.5		Achievement of past and present targets		1%
2.1	**Material Investment**	Trend in past emissions intensity from material investments	M2	1/12*M2*(1-L) +1/8*M2*L
2.2		Trend in future emissions intensity from material investments		1/4*M2*(1-L) + 3/8*M2*L

2.3		Share of low-carbon CAPEX		1/3*M2*(1-L) + 1/2*M2*L
2.4		Locked-in emissions		1/3*M2*L
3.1	**Intangible Investment**	R&D in low-carbon technologies	M3	0%-2.5%
3.2		Company low-carbon patenting activity		0%-2.5%
4.1	**Sold Product Performance**	Product/service-specific interventions	M4	M4*1/4 or M4*1/3
4.2		Product-specific performance		M4*1/4 or M4*1/3
4.3		Share of low-carbon products/services		M4*1/4 or M4*1/3
4.4		Sub-contracted transport service performance		M4*1/4 or 0%
5.1	**Management**	Oversight of climate change issues	M5	3%
5.2		Climate change oversight capability		3%
5.3		Low-carbon transition plan		2%
5.4		Climate change management incentives		1%

5.5		Climate change scenario testing		1%
6.1	**Supplier**	Strategy to influence suppliers to reduce their GHG emissions	M6	1/2*M6
6.2		Activities to influence suppliers to reduce their GHG emissions		1/2*M6
7.1	**Client**	Strategy to influence customer behaviour to reduce their GHG emissions	M7	1/2*M7
7.2		Activities to influence customer behaviour to reduce their GHG emissions		1/2*M7
8.1	**Policy engagement**	Company policy on engagement with trade associations	M8	1%
8.2		Trade associations supported do not have climate-negative activities or positions		2%
8.3		Position on significant climate policies		1%
8.4		Collaboration with local public authorities		1%
9.1	**Business model**	Identification of the level of decarbonization required	M9	1/3*M9 or 1/2*M9
9.2		Integration of the low-carbon economy in current and futures business models		1/3*M9 or 1/2*M9
9.3		Share of low-carbon clients		1/3*M9 or 0%



L is the share of total direct emissions covered by sources categories that can be assessed using the locked-in indicator, see indicator 2.4 Locked-in Emissions for more information.

For module 1, the total of emissions to compute share only take into account scope (upstream/direct/downstream) for which materiality is superior to 10% or 10,000 tCO2eq.

For modules 2, 4 and 9, the presence of several possible weightings is explained by the fact that one indicator per module can be non-activated (indicator 2.4 for module 2, indicator 4.4 for module 4 and indicator 9.3 for module 9), thus impacting the weighting of the other indicators within the modules.

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%. The indicators within the modules also carry their own weighting.

- **RATIONALE FOR WEIGHTINGS**

The selection of weights for both the modules and the individual indicators was guided by a set of principles (see the ACT framework document for more information). These principles helped define the weighting scheme of the 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.

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 direct emissions*, *alignment of indirect upstream emissions* and *alignment of indirect downstream emissions*. Those 12% are allocated on a pro-rata basis according to the emissions breakdown between direct emissions, indirect upstream emissions and indirect downstream missions.
A weight of is attributed to the *previous achievement* indicator, which measures the company's past credentials on target setting and achievement. It is not very important by the principles outlined above, but nonetheless can provide contextual information on the company's experience to meet ambitious targets Finally, the *time horizon of targets* has a weight of 2%. It is a proxy of how forward-looking the company is, which is very long-term oriented.

Material Investment 0-35%

The Material Investment module has a variable weight that ranges from 0% to 35%. The weight is allocated on a pro rata basis to modules 2 (Material Investment) and 4 (Sold Product Performance) determined by the weighting scheme matrix.
The global evaluation is therefore mostly future-oriented, what justifies a higher weight for the sub-indicator "Trend in future emissions intensity" than for the sub-indicator "Trend in past emissions intensity". The four indicators within this module *trend in past emissions intensity, trend in future emissions intensity*, *share of low-carbon CAPEX* and *locked-in emissions* will be weighted as follows, given M2 the weight of the module:

Indicator	Weight
GE 2.1 Trend in past emissions intensity	8,25%*M2 or 12,5%*M2
GE 2.2 Trend in future emissions intensity	24,75%*M2 or 37,5%*M2

GE 2.3 Share of low-carbon CAPEX	33% or 50%*M2
GE 2.4 Locked-in emissions	0% or 33%*M2

Intangible Investment 0% or 5%

The R&D investments in climate change mitigation technologies indicator is focused on the company's intangible investments or financial costs into climate change mitigation technologies. For companies operating in value chains with high stakes regarding low-carbon transition, R&D investments towards low-carbon technologies 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, this indicator is not relevant and is therefore weighted 0%. In that case, the remaining 5% are allocated to module 9 (Business Model).

The general information given by the company will determine whether this module is relevant for it.

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.

Sold product performance 0-35%

The Sold product performance module has a variable weight that ranges from 0% to 35%. The weight is allocated on a pro rata basis to modules 2 (Material Investment) and 4 (sold product performance), determined by the weighting scheme matrix.

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 weighting scheme matrix (GE 4.1 and GE 4.2) and specific questions (GE 4.2 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:

Indicator	Weight
GE 4.1 Product/service-specific interventions	M4*25% or M4*33% or M4*50%
GE 4.2 Product/service-specific performance	0% or M4*25% or M4*33%
GE 4.3 Share of low-carbon products/services	M4*25% or M4*33% or M4*50%

4.4 Sub-contracted transport service performance	0% or M4*25% or M4*33%

Management 10%

Management is a multi-faceted module that makes up 10% of the score, because it incorporates many different smaller indicators that together paint a picture of the company's management and strategic approach to the low-carbon transition. The majority of this weight is placed on the oversight of climate change issues and the climate change oversight capability, which are weighted 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 0% to 20%

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

Depending on their significant indirect 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 weighting scheme matrix.

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 0% to 20%

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

Depending on their significant indirect 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 weighting scheme matrix.

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.

Policy engagement 5%

In line with the rationale for the management indicators of low weight, the policy engagement indicators are also contextual aspects which tell a narrative about the company's stance on climate change and how the company expresses it in their engagement with policy makers and trade associations. 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 *positions of the company's trade associations that do not have climate-negative activities*.

Business model 10-15%

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.

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.

6.5. DATA REQUEST

Table 6 introduces the list of information which will be requested to companies through a questionnaire, as well as the corresponding indicators.

Module	Indicators	Data request
1 - Targets	1.1	Reduction targets in carbon intensity, carbon intensity at reporting year, and other information if necessary (geography, …)
		Reduction targets in absolute contraction
	1.2	Reduction targets in absolute contraction for each GHG emissions item or in carbon intensity
		% of Upstream emissions covered by the targets
	1.3	Reduction targets in absolute contraction for each GHG emissions item or in carbon intensity
		% of Downstream emissions covered by the targets
	1.4	A comparison of: (a) the longest time horizon of the company's targets, and (b) the long-term point fixed by ACT assessment methodology.
		The company has interval targets that ensure both short and long-term targets are in place to incentivize short-term action and communicate long-term commitments.
	1.5	Base year
		Reporting 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 absolute emissions intensity
2 - Material investment	2.1	Carbon intensity at reporting year, Y-5 and other information if necessary (geography, …)
		Total emissions at reporting year and Y-5.
	2.2	Carbon intensity at reporting year and Y+5, other information if necessary (geography, …)
		Total emissions at reporting year and Y+5.
	2.3	Average share of low-carbon CAPEX (out of total CAPEX) for the next 3 years
	2.4	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 lanned assets, number of units per year …)
3 - Intangible investment	3.1	R&D costs/investments in climate change mitigation technologies of the company.
		Total R&D costs/investments of the company.
	3.2	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 Product Performance	4.1	Intervention on products/service reporting tool
	4.2	Carbon intensity of the purchased products/service (if relevant) at Y-5 and Y+5:
	4.3	Share of turnover generated by low-carbon products (out of total turnover) at Y-5, Y and Y+5
	4.4	Information on subcontractors (projected emissions, activity, time horizon investments, low-carbon vehicles actions for emissions reduction)
5- Management	5.1	Environmental policy and details regarding governance
	5.2	Environmental policy and details regarding governance
	5.3	Environmental policy and details regarding governance
	5.4	Management incentives

	5.5	Scenario testing
6 - Suppliers engagement	6.1	Methods of supplier engagement, strategy to prioritizing supplier engagements and measures of success
		Number of suppliers engaged and proportion of total spend
		Data on suppliers' GHG emissions and climate change strategies
	6.2	List of initiatives implemented to influence suppliers to reduce their GHG emissions, green purchase policy or track record, supplier code of conduct
7 - Client engagement	7.1	Strategy to influence clients GHG emissions
		% of products/services
		Data on customers' choices and preferences towards reducing GHG emissions
	7.2	Strategy to influence clients GHG emissions
		% of products/services
		Data on customers' choices and preferences towards reducing GHG emissions
8- Policy engagement	8.1	Public climate change policy positions
		Description of this policy (scope & boundaries, responsibilities, process to monitor and review)
		Trade associations that are likely to take a position on climate change legislation
	8.2	Company policy on engagement with trade associations
	8.3	Position of the company on significant climate policies (public statements, etc.).
	8.4	Public climate change policy positions
		Description of this policy (scope & boundaries, responsibilities, process to monitor and review)
9 - Business Model	9.1	% of company activities that need to be decarbonize
	9.2	New low-carbon business model
		Profitability of business model
		Size of business model
		Growth potential of business model
		Deployment schedule of business model
	9.3	The company's share of product/service use by final low carbon products / 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 3: LOWEST, HIGHEST AND MIDPOINT FOR EACH ACT SCORE TYPE

LOW SCORES	MID SCORES	HIGH SCORES
1,E,-	10,C,=	20,A,+

See the ACT Framework [1] for general information and methodology on the ACT rating.

7.1. NARRATIVE SCORING

Narrative scoring shall be performed in compliance with the ACT Framework.
The information reported in Module 2 and 4 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 transport service, and assess the consistency of actions taken with respect to targets, business model and engagement with other stakeholders.

RELEVANT PERFORMANCE INDICATORS FOR NARRATIVE SCORING FOR ACT GENERIC

Module	Indicator
Material investments	GE 2.2 Trend in future emissions intensity from material investment
	GE 2.3 Share of low-carbon CAPEX
	GE 2.4 Locked-in emissions
Management	GE 5.3 Low-carbon transition plan

Policy engagement	GE 8.2 Trade associations supported do not have climate-negative activities or positions
	GE 8.3 Position on significant climate policies
Business Model	GE 9.1 Identification of the level of decarbonization required
	GE 9.2 Integration of the low-carbon economy in current and future business model
	GE 9.3 Share of low-carbon clients

Other indicators might also be relevant in the calculation of the narrative score.

7.2. 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 for ACT Generic.

RELEVANT PERFORMANCE INDICATORS FOR TREND SCORE

Module	Indicator
Targets	GE 1.1 Alignment of direct emissions reduction targets
	GE 1.2 Alignment of upstream indirect emissions reduction targets
	GE 1.3 Alignment of downstream indirect emissions reduction targets
	GE 1.4 Time horizon of targets
Material Investment	GE 2.2 Trend in future emissions intensity
Management	GE 5.3 Low-carbon transition plan
	GE 5.5 Climate change scenario testing

Other indicators might also be relevant in the calculation of the narrative score.

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]

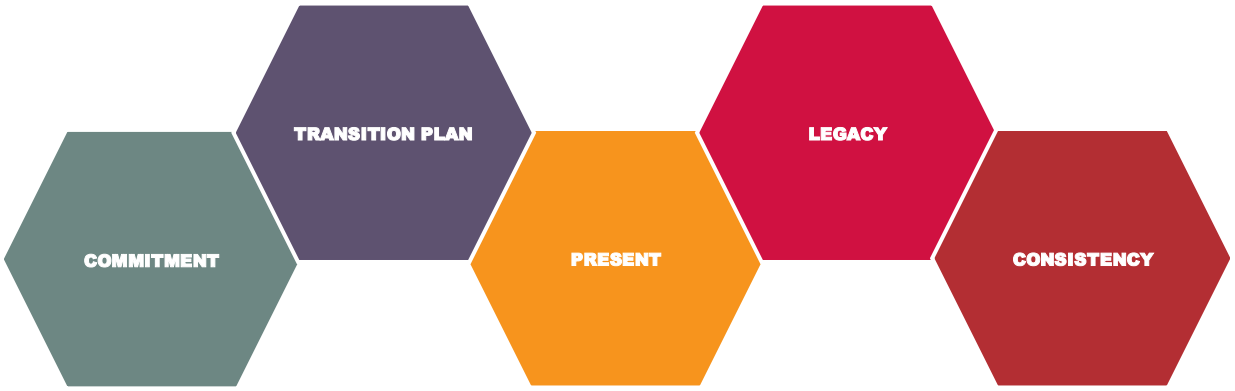


FIGURE 2: ALIGNED STATE FOR COMPANIES IN THE AGRICULTURE & AGRIFOOD SECTOR

1	2	3	4	5
The company has science-based targets for its activity and for all agricultural emissions. The targets have a consistent time horizon with the lifetime of assets.	The company's strategic planning details the investments and shifts towards a low-carbon food value chain. Actions to incentivize dietary changes are included.	Current share of products and plans are shifting to low-carbon products.	The trend is evident of lowering emissions intensity along all the value chain. The company has already implemented actions over the last 5 years to lower its emissions and reduce food waste.	The company's targets, transition plan, present actions and past legacy show a consistent willingness to achieve the goals of low-carbon transition, especially by developing new food business models.

9. Sources

[1] OECD Environment Working Papers No. 89 (2015)
[2] The European Patent Office (EPO, 2017)
[3] US Patent and Trademark Office (USPTO)
[4] IPCC Special Report on Global Warming of 1.5°C (SR15)
[5] ACT Methodological Framework
[6] List of NACE codes
[7] RGR EU15 scenario for 2030 [10] - Zero leakage tolerance in 2050.
[8] IAE, Energy Technologies Perspectives
[9] ACT Real Estate
[10] ACT Auto
[11] ACT Transport
[12] ACT Cement
[13] ACT Oil & Gas
[14] ACT Electric Utilities
[15] SBT absolute contraction
[16] SDA power generation
[17] SDA service building

10. Glossary

2 DEGREES (2°C)	A political agreement was reached at COP21 on limiting global warming to 2°C above the pre-industrial level (**COP21: Why 2°C?**). A 2°C scenario (or 2°C pathway) is a scenario (or pathway) compatible with limiting global warming to 2°C above the pre-industrial level.
ACT	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 (**ACT website**).
ACTION GAP	In relation to emissions performance and reduction, the action gap is the difference between what a given company has done in the past plus what it is doing now, and what has to be done. For example, companies with large action gaps have done relatively little in the past, and their current actions point to continuation of past practices.
ACTIVITY DATA	Activity data 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 l'Environnement et de la Maîtrise de l'Energie; The French Environment and Energy Management Agency (**ADEME webpage**).
ADVANCED VEHICLE	Advanced vehicles include: ♦ **Plug-in hybrid vehicles (PHEV)** ♦ **Battery electric vehicles (BEV)** ♦ **Fuel cell electric vehicles (FCEV)** ♦ **Conventional hybrids** ♦ **Other high-efficiency ICE vehicles** Conventional hybrids and other high-efficiency ICE vehicles are advanced vehicles but they are not low-carbon vehicles.
ALIGNMENT	The ACT project seeks to gather information that will be consolidated into a rating that is intended to provide a general metric of the 2-degree alignment of a given company. The wider goal is to provide companies specific feedback on their general alignment with 2-degrees in the short and long term.
ANALYST	Person in charge of 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.
AU	Abbreviation of the 'Automotive' sector
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**).
BC	Abbreviation of the 'Building Construction' sector
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 plan for the successful operation of a business, identifying sources of revenue, the intended customer base, products, and details of financing. Under ACT, evidence of the business model shall be taken from a range of specific financial metrics relevant to the sector and a conclusion made on its alignment with low-carbon transition and consistency with the other performance indicators reported.
BUSINESS-AS-USUAL	No proactive action taken for change. In the context of the ACT methodology, the business-as-usual pathway is constant 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 (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 2-degrees maximum.
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.
CONVENTIONAL (TECHNOLOGY)	In relation to automobiles and emissions, conventional internal combustion engines (ICE) are those that generate motive power by burning fossil fuels, as opposed to advanced (low-carbon) vehicle engines such as battery electric vehicles or hydrogen fuel cells.
COP21	The 2015 United Nations Climate Change Conference, held in Paris, France from 30 November to 12 December 2015 (**COP21 webpage**).
DATA	Facts and statistics collected together for reference and analysis (e.g. the data points requested from companies for assessment under the ACT project indicators).
DECARBONIZATION	A complete or near-complete reduction of 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 direct GHG emissions as emissions from sources that are owned or controlled by the reporting entity, and indirect GHG emissions as emissions that are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity (**GHG Protocol**).
ENERGY	Power derived from the utilization of physical or chemical resources, especially to provide light and heat or to work machines.
EU	Abbreviation of the 'Electric Utilities' sector.
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 natural 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)	Greenhouse gas (e.g. carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O) and three groups of fluorinated gases (sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs)) which 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 a company's production assets (particularly carbon intensive) and the time-horizon of its commitments. Companies with large asset-lives and small-time horizons do not look far enough into the future to properly consider a transition plan.
INCENTIVE	A thing, 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 indicator is a quantitative or qualitative piece of information that, in the context of the ACT project, can provide insight on a company's current and future ability to reduce its carbon intensity. In the ACT project, 3 fundamental types of indicators can be considered: ♦ **Key performance indicators (KPIs);** ♦ **Key narrative indicators (KNIs); and** **Key asset indicators (KAIs).**
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 SCENARIO (OR PATHWAY)	A low-carbon scenario (or pathway) is a 2°C scenario, a well-below 2°C scenario or a scenario with higher decarbonization ambition.
LOW-CARBON SOLUTION	A low-carbon solution (e.g. energy, technology, process, product, service, etc.) is a solution whose development will contribute to the low-carbon transition.
LOW-CARBON TRANSITION	The low-carbon transition is the transition of the economy according to a low-carbon scenario.

LOW-CARBON VEHICLE	Vehicles described as low-carbon (LCV) are defined as vehicles that have a drivetrain that have the potential to operate on non-fossil energy sources for at least > 50% of their common use phase. This includes: ♦ **Plug-in hybrid vehicles (PHEV)** ♦ **Battery electric vehicles (BEV)** ♦ **Fuel cell electric vehicles (FCEV)** Conventional hybrids are excluded from the definition of low-carbon vehicles. Because conventional hybrids do not eschew fossil fuels (aside from the minor addition of biofuels into the fuel mix), they are not qualified for the definition of an LCV.
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).
PATHWAY (EMISSIONS)	A way of achieving a specified result; a course of action (e.g. an emissions reduction pathway).
PERFORMANCE	Measurement of outcomes and results.
PLAN	A detailed proposal for doing or achieving something.
POINT	A mark or unit of scoring awarded for success or performance.
POWER	Energy that is produced by mechanical, electrical, or other means and used to operate a device (e.g. electrical energy supplied to an area, building, etc.).
POWER GENERATION	The process of generating electric power from other sources of primary energy.
PRIMARY ENERGY	Primary energy is an energy form found in nature that has not been subjected to any conversion or transformation process. It is energy contained in raw fuels, and other forms of energy received as input to a system. Primary energy can be non-renewable or renewable.
PROGRESS RATIO	An indicator of target progress, calculated by normalizing the target time percentage completeness by the target emissions or renewable energy percentage completeness.
RELEVANT / RELEVANCE	In relation to information, the most relevant 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.

RT	Abbreviation of the 'Retail' sector
SCENARIO	The **Fifth Assessment Report** (AR5) of the Intergovernmental Panel on Climate Change (IPCC) presents the results of an extensive climate modelling effort to make predictions of changes in the global climate based on a range of development/emissions scenarios. Regulation on climate change-related issues may present opportunities for your organization if it is better suited than its competitors to meet those regulations, or more able to help others to do so. Possible scenarios would include a company whose products already meet anticipated standards designed to curb emissions, those whose products will enable its customers to meet mandatory requirements or those companies that provide services assisting others in meeting regulatory requirements.
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 **Science-Based Targets Initiative**.
SCOPE 1 EMISSIONS	All direct GHG emissions (**GHG Protocol Corporate Standard**).
SCOPE 2 EMISSIONS	Indirect GHG emissions from consumption of purchased electricity, heat or steam (**GHG Protocol Corporate Standard**).
SCOPE 3 EMISSIONS	Other indirect emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. T&D losses) not covered in Scope 2, outsourced activities, waste disposal, etc. (**GHG Protocol Corporate Standard**).
SECTOR	A classification of companies with similar business activities, e.g. automotive manufacturers, power producers, retailers, etc.
SECTORAL DECARBONIZATION APPROACH (SDA)	To help businesses set targets compatible with 2-degree climate change scenarios, the **Sectoral Decarbonization Approach** (SDA) was developed. The SDA takes a sector-level approach and employs scientific insight to determine the least-cost pathways of mitigation, and converges all companies in a sector towards a shared emissions target in 2050.
SHORT-TERM	Occurring in or relating to a relatively short period of time in the future.
STRATEGY	A plan of action designed to achieve a long-term or overall aim. In business, this is the means by which a company sets out to achieve its desired objectives; long-term business planning.
STRESS TEST	A test designed to assess how well a system functions when subjected to greater than normal amounts of stress or pressure (e.g. a financial stress test to see if an oil & gas company can withstand a low oil price).
SUPPLIER	A person or entity that is the source for goods or services (e.g. a company that provides engine components to an automotive manufacturing company).
TARGET	A quantifiable goal (e.g. to reduce GHG emissions). ♦ **The following are examples of absolute targets:** → **metric tonnes CO_2e or % reduction from base year**

	→ **metric tonnes CO_2e or % reduction in product use phase relative to base year** → **metric tonnes CO_2e or % reduction in supply chain relative to base year** ♦ **The following are examples of intensity targets:** → **metric tonnes CO_2e or % reduction per passenger. Kilometre (also per km; per nautical mile) relative to base year** → **metric tonnes CO_2e or % reduction per square foot relative to base** **metric tonnes CO_2e or % reduction per MWh**
TECHNOLOGY	The application of scientific knowledge for practical purposes, especially in industry (e.g. low-carbon power generation technologies such as wind and solar power, in the electric power generation sector).
TRADE ASSOCIATION	→ Trade associations (sometimes also referred to as industry associations) 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).
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	The allowance or adjustment made in order to take account of special circumstances or compensate for a distorting factor.

11. Appendix

- **CDP/NACE CORRESPONDENCE**

NACE classification	Proposed correspondence with CDP (CDP Activity Group)
AGRICULTURE, FORESTRY AND FISHING	
Crop and animal production, hunting and related service activities	Crop farming Fish & animal farming
Forestry and logging	Logging & rubber tapping
Fishing and aquaculture	Fish & animal farming
MINING AND QUARRYING	
Mining of coal and lignite	Coal mining
Extraction of crude petroleum and natural gas	Oil & gas extraction & production
Mining of metal ores	Metallic mineral mining
Other mining and quarrying	Other mineral mining
Mining support service activities	Industrial support services
MANUFACTURING	
Manufacture of food products Manufacture of beverages	Food & beverage processing
Manufacture of tobacco products	Tobacco
Manufacture of textiles Manufacture of wearing apparel Manufacture of leather and related products	Textiles & fabric goods
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	Wood and rubber products Wood & paper materials
Manufacture of paper and paper products	Paper products & packaging
Printing and reproduction of recorded media	

Manufacture of coke and refined petroleum products	Oil & gas processing
Manufacture of chemicals and chemical products	Chemicals
Manufacture of basic pharmaceutical products and pharmaceutical preparations	Biotech & pharma
Manufacture of rubber and plastic products	Light manufacturing Plastic product manufacturing Wood and rubber products
Manufacture of other non-metallic mineral products	Cement & concrete Other materials
Manufacture of basic metals	Metal products manufacturing Metal smelting, refining & forming
Manufacture of fabricated metal products, except machinery and equipment	
Manufacture of computer, electronic and optical products	Electrical & electronic equipment
Manufacture of electrical equipment	
Manufacture of machinery and equipment n.e.c.	Powered machinery
Manufacture of motor vehicles, trailers and semi-trailers	Transportation equipment
Manufacture of other transport equipment	
Manufacture of furniture	Leisure & home manufacturing
Other manufacturing	Medical equipment & supplies
Repair and installation of machinery and equipment	Powered machinery
ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	
Electricity, gas, steam and air conditioning supply	Energy utility networks Oil & gas retailing Biomass & waste generation Nuclear power generation Renewable power generation Thermal power generation Industrial support services
WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	

Water collection, treatment and supply	
Sewerage	
Waste collection, treatment and disposal activities; materials recovery	Non-energy utilities
Remediation activities and other waste management services	
CONSTRUCTION	
Construction of buildings	Construction
Civil engineering	Specialized professional services
Specialised construction activities	Construction
WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	
Wholesale and retail trade and repair of motor vehicles and motorcycles	
Wholesale trade, except of motor vehicles and motorcycles	Convenience retail Discretionary retail Trading, wholesale, distribution, rental & leasing
Retail trade, except of motor vehicles and motorcycles	
TRANSPORTATION AND STORAGE	
Land transport and transport via pipelines	Oil & gas storage and transportation Intermodal transport & logistics Rail transport Road transport
Water transport	Marine transport
Air transport	Air transport
Warehousing and support activities for transportation	Industrial support services
Postal and courier activities	
ACCOMMODATION AND FOOD SERVICE ACTIVITIES	
Accommodation	Bars, hotels & restaurants
Food and beverage service activities	
INFORMATION AND COMMUNICATION	

Publishing activities	
Motion picture, video and television programme production, sound recording and music publishing activities	Media, telecommunications & data center services Print & publishing services Web & marketing services
Programming and broadcasting activities	
Telecommunications	
Computer programming, consultancy and related activities	IT & software development
Information service activities	Media, telecommunications & data center services
FINANCIAL AND INSURANCE ACTIVITIES	
Financial service activities, except insurance and pension funding	
Insurance, reinsurance and pension funding, except compulsory social security	Financial services
Activities auxiliary to financial services and insurance activities	
REAL ESTATE ACTIVITIES	
Real estate activities	Land & property ownership & development
PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	
Legal and accounting activities	
Activities of head offices; management consultancy activities	
Architectural and engineering activities; technical testing and analysis	
Scientific research and development	Specialized professional services
Advertising and market research	
Other professional, scientific and technical activities	
Veterinary activities	

ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	
Rental and leasing activities **Employment activities** **Travel agency, tour operator and other reservation service and related activities** **Security and investigation activities** **Services to buildings and landscape activities** **Office administrative, office support and other business support activities**	**Commercial & consumer services**
PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	
Public administration and defence; compulsory social security	**International bodies**
EDUCATION	
Education	**Other services**
HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	
Human health activities	**Health care provision** **Other services**
Residential care activities **Social work activities without accommodation**	**Other services**
ARTS, ENTERTAINMENT AND RECREATION	
Creative, arts and entertainment activities **Libraries, archives, museums and other cultural activities** **Gambling and betting activities** **Sports activities and amusement and recreation activities**	**Entertainment facilities**
OTHER SERVICE ACTIVITIES	
Activities of membership organisations **Repair of computers and personal and household goods**	**Other services**

Other personal service activities	
ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHOLDS FOR OWN USE	
Activities of households as employers of domestic personnel **Undifferentiated goods- and services-producing activities of private households for own use**	**Other services**
ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	
Activities of extraterritorial organisations and bodies	**International bodies**

• INFORMATION ON EU GREEN TAXONOMY

The European Green Taxonomy is a classification system – or taxonomy – for sustainable activities. Its first goal is to create a common language for all actors in the financial system, to allow investors and companies to identify sectors that generate environmental benefits.

To be included in the framework, economic activities have to make a substantial contribution to climate change mitigation or adaptation, while avoiding significant harm to the four other environmental objectives: sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention control, and protection and restoration of biodiversity and ecosystems.

In order to develop recommendations for technical screening of the economic activities, a Technical Expert Group (TEG) on sustainable finance has been established by the European Commission in July 2018. The TEG published its final report on March 2020. The report contains recommendations relating to the design of the EU taxonomy, as well as extensive implementation guidance on how companies and financial institutions can use and disclose against the taxonomy.

The Taxonomy Regulation was published on 22 June 2020 in the Official Journal of the European Union and entered into force on 12 July 2020. This is the final version of the taxonomy, but it will be updated in the coming years. It is therefore necessary to refer to the latest available version of the taxonomy.

The last version available of the technical annex to the TEG final report on the EU taxonomy:

https://ec.europa.eu/info/files/200309-sustainable-finance-teg-final-report-taxonomy-annexes_en

The sectors covered by the taxonomy are summarised on page 13 of the document.

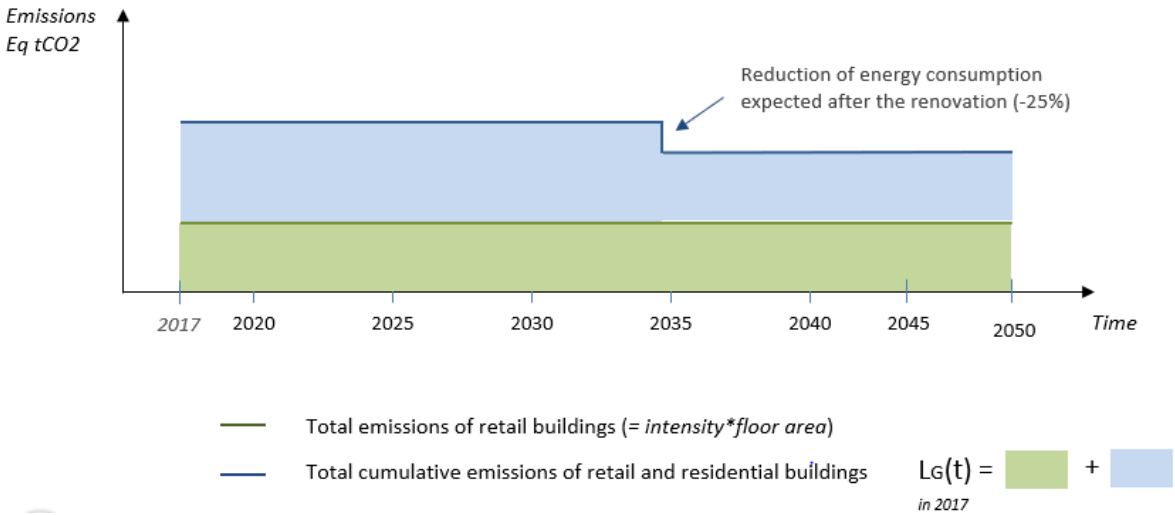
The TEG has also prepared Excel tools to help users of the Taxonomy to implement it in their own activities:

https://ec.europa.eu/info/files/sustainable-finance-teg-taxonomy-tools_en

• BUILDING LOCKED-IN EMISSIONS

The analysis is based on the ratio between the company's managed buildings' emissions from the reporting year [L_G (t)] to 2050, and the emissions budget entailed by the company's carbon budget [B_G (t)] over the same period of time. For each type of building, the locked-in emissions are based on the current emissions released until the next planned renovation. After the renovation, the locked-in emissions are based on the expected reduction of energy consumption = current emissions – emissions saving expected related to the renovation. If there is no expected saving, the reduction in emissions is set by default at 25% of the current emissions. If no renovation is planned, the locked-in emissions are based on the emissions of reporting year. The emissions lock-in are integrals (see following calculations).

As an example, company A manages retail building and residential buildings. For its retail portfolio, the company plans a renovation in 2035 which will reduce total emissions of 25%. No renovation is planned for residential buildings. The company's locked-in emissions are presented in the following chart:



L_G (t) is calculated as the total cumulative emissions implied by the lifetimes of buildings managed in the property portfolio.

L_G (t) is calculated as the company's locked-in carbon commitments, up until the chosen time period t, 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, multiplying with floor area emission intensity F_G:

$$L_G(t) = \int_{the\ reporting\ year}^{t} F_G * CA_G$$

B_G (t) is calculated as the company's carbon budget up until time t, which is derived by taking the area under the absolute emissions reduction curve. This curve in turn is derived from the company benchmark pathway (CB_G) by multiplying with floor area emission intensity F_G:

$$B_G(t) = \int_{\text{the reporting year}}^{t} F_G * CB_G$$

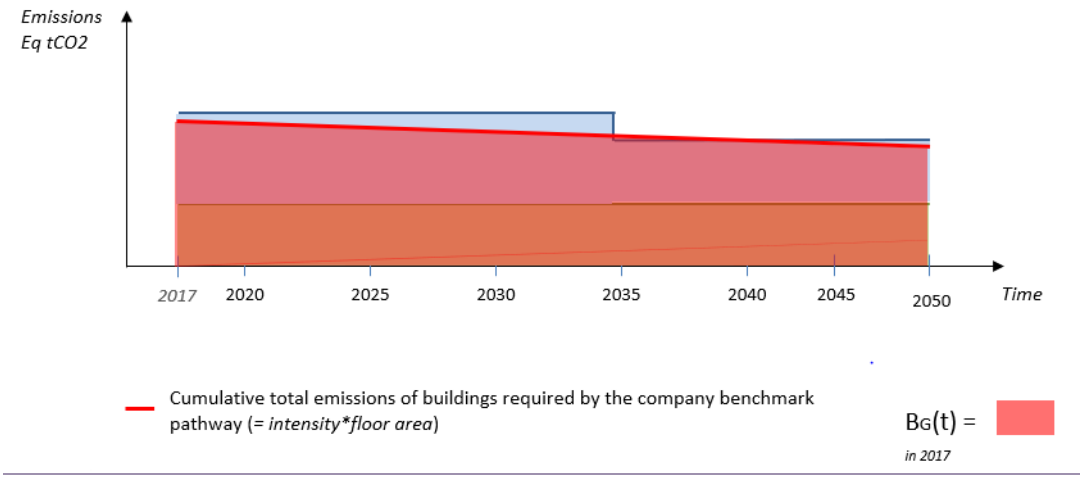


FIGURE 1 – ILLUSTATION OF CARBON BUDGET:

Depending on the data availability, the computation of these areas may not be as straightforward as the equations present and will be done by approximation, but the principles will hold.

The locked-in ratio (r_{LB}) is calculated:

$$r_{LB}(t) = \frac{L_G(t)}{B_G(t)}$$

Calculation of score

If r_{LB} is 1 or lower, then the company stays within its carbon budget, and will be assigned the maximum score (100%). If r_{LB} is 1.5 or higher, then the company strongly exceeds its carbon budget, and will be assigned the minimum score (0%). If r_{LB} is between 1 and 1.5, then the company will be assigned a score of 1.5- r_{LB} divided by 50%.

Fleet locked-in emissions

The analysis is based on the ratio between the company's emissions from existing and planned fleet for the 15 forthcoming years after reporting years (Locked-in Emissions from fleet LE_F (y_r+15)) and the emissions budget entailed by the company's carbon budget (B(y_r+15)) over the same period of time. The investment plans won't need to go as far as y_r+15, or they can go further depending on the mode. Typically, a truck put into service in 2025 will still operate in 2035-40, an aircraft delivered in 2025 will still fly in 2050, etc.

$LE_F(y_r + 15)$represents the total cumulative emissions implied on the period of operation of currently active and confirmed planned fleet vehicles that are going to be commissioned in the near future. If unknown, the commissioning year of vehicles is estimated from investment plans.

$LE_F(y_r + 15)$is calculated 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 for its transport services *CI*, multiplied by the transport activity A_T:

$$LE_F(y_r + 15) = \int_{the\ reporting\ year}^{y_r+15} A * CI$$

Figure 2 illustrates locked-in emissions of one vehicle and of the whole fleet.

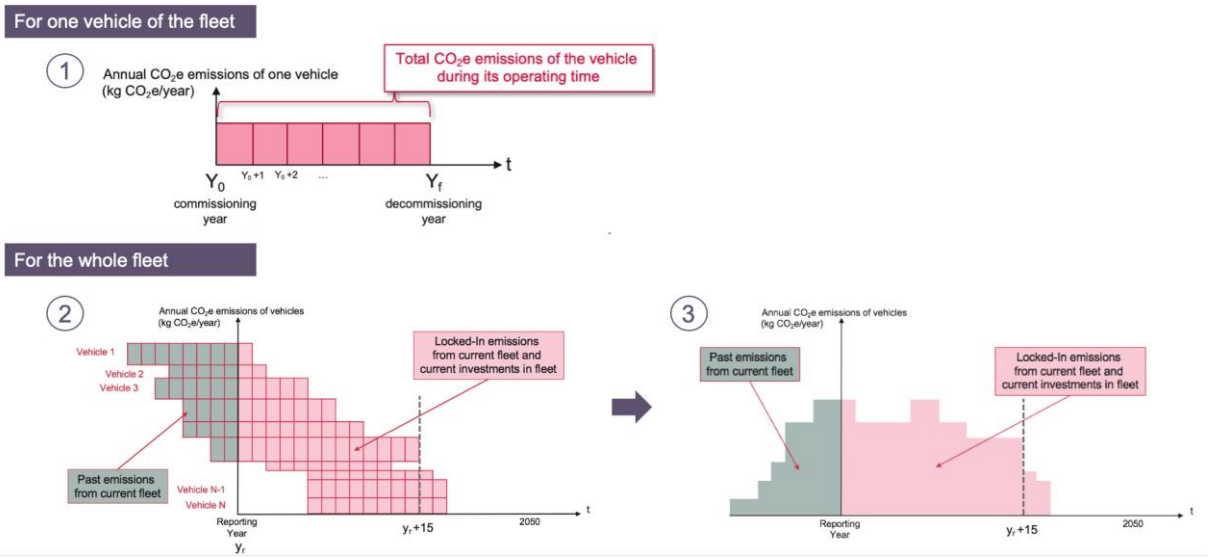


FIGURE 3 : COMPUTING LOCKED-IN EMISSIONS FROM FLEET

$B(y_r + 15)$is calculated as the company's carbon budget up to reporting year + 15 years, which is derived by taking the area under the absolute emissions reduction curve. This curve in turn is derived from the company benchmark pathway CB_T by multiplying it by transport activity A_T:

$$B(y_r + 15) = \int_{the\ reporting\ year}^{y_r+15} A_T * CB_T$$

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. The carbon budget is illustrated below :

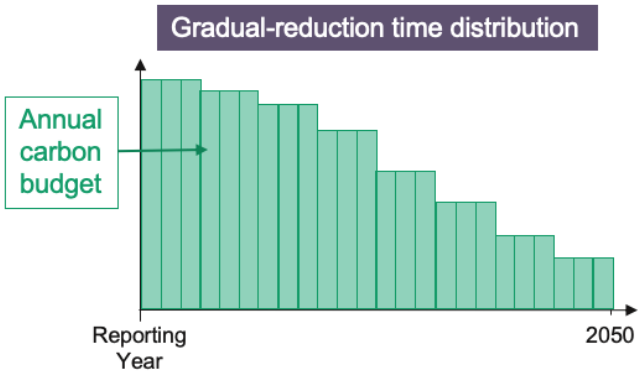


FIGURE 4 : CARBON BUDGET DERIVED FROM THE COMPANY'S BENCHMARK

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

The locked-in ratio r_{LB} is illustrated in Figure 4 and calculated as follows:

$$r_{LB}(y_r + 15) = \frac{LE_F(y_r + 15)}{B(y_r + 15)}$$

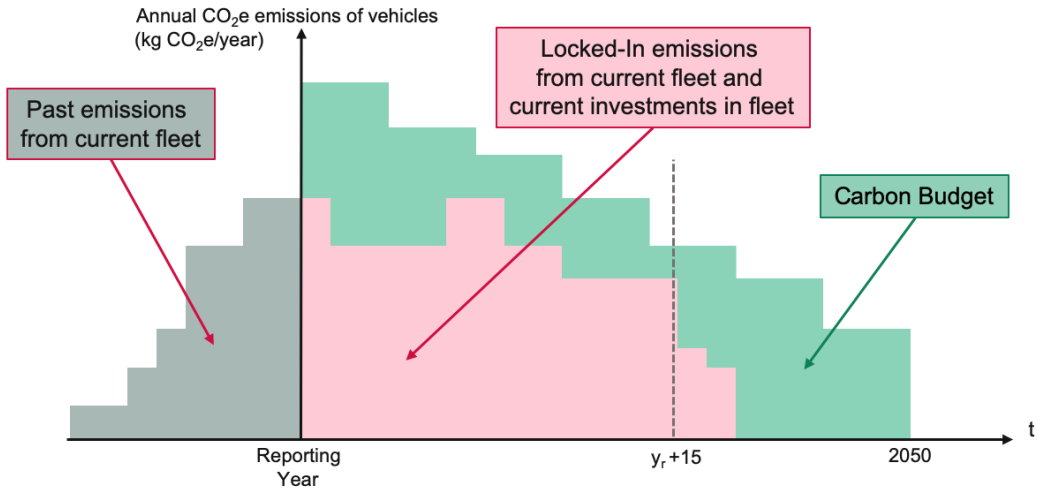


FIGURE 4 : ILLUSTRATION OF THE LOCKED-IN RATIO

To be able to give a score regarding the amount of carbon budget consumed, the level of activity performed with the fleet 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 the vehicles in its current and planned fleet, per year. It is called the secured activity and is illustrated in Figure 5.

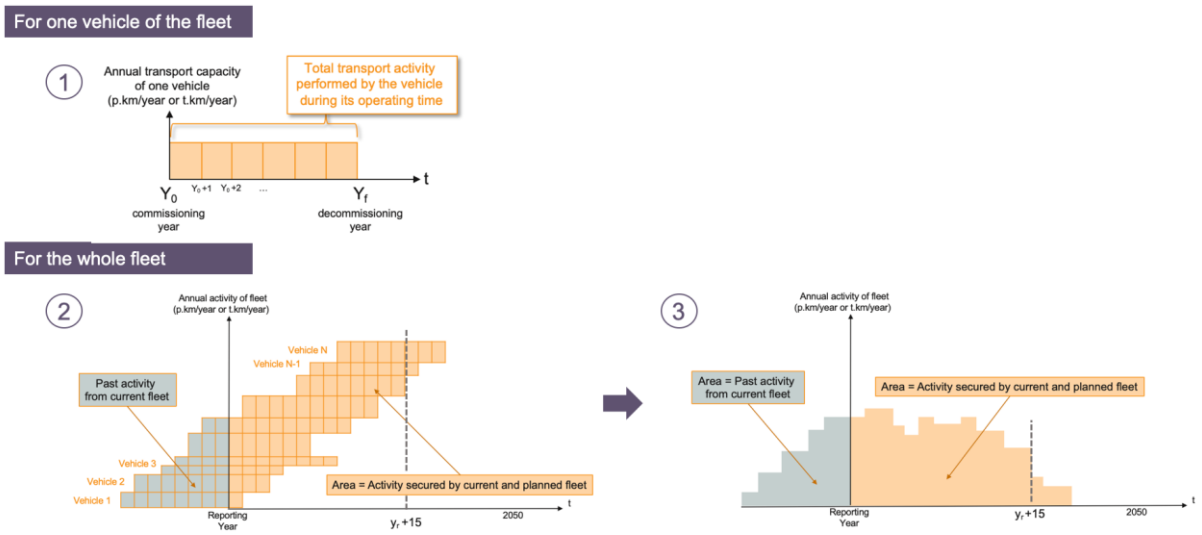


FIGURE 5 : SECURED ACTIVITY BY THE FLEET

The secured activity is compared to the level of activity projected by the company up to reporting year + 15 years. If the company does not have any projections or not up to reporting year + 15 years, it will be considered that its market share will remain constant and its activity will evolve at the same rate as the sector and sectoral projection of activity are used (see section Erreur ! Source du renvoi introuvable.). The company's projected activity is illustrated in Erreur ! Source du renvoi introuvable.

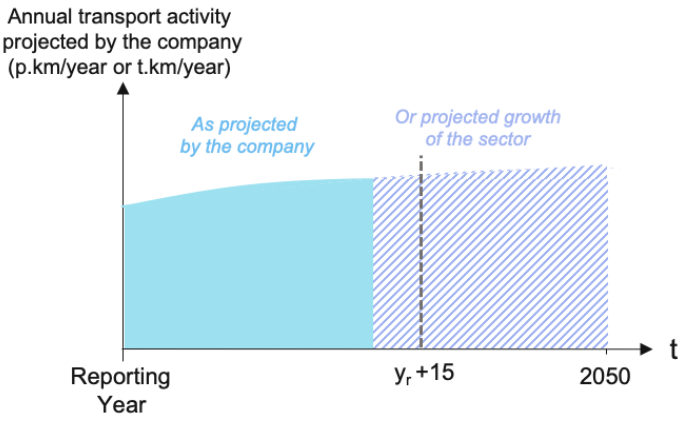


FIGURE 6 : PROJECTED ACTIVITY

The secured activity ratio $r_{SA}(y_r + 15)$ compares the secured activity up to 2050 $A_S(y_r + 15)$ with the projected activity up to 2050 $A_p(y_r + 15)$It is illustrated in Figure 7

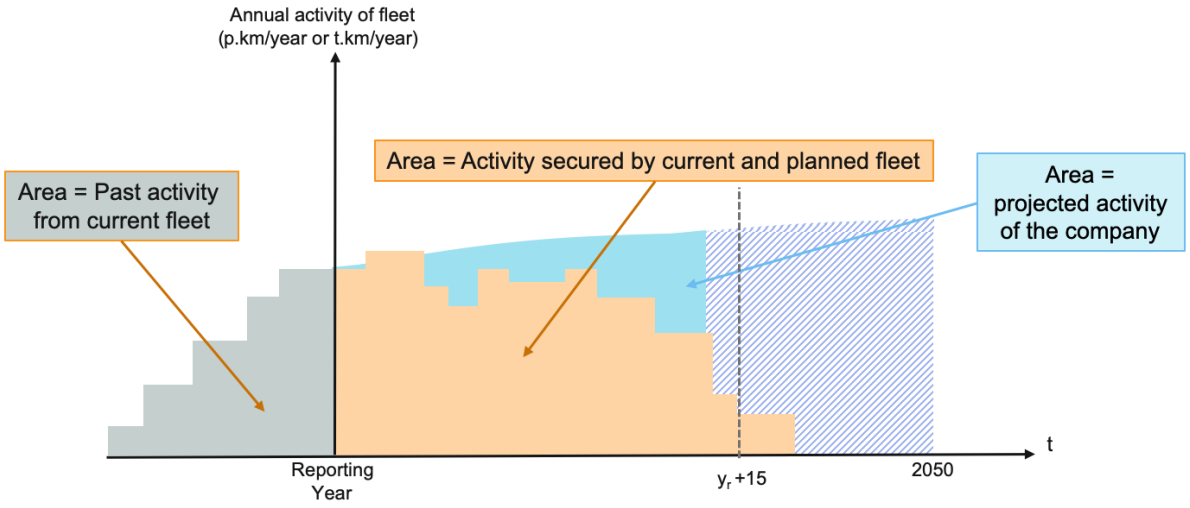
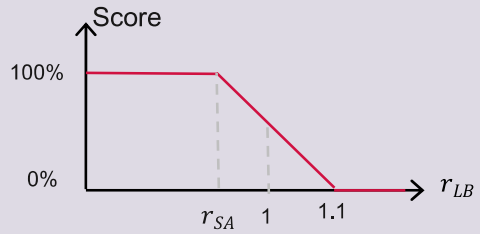


FIGURE 7 : SECURED ACTIVITY RATIO

CALCULATION OF THE SCORE:

r_{SA} is used as a threshold value for the scoring:

RSA<1: MORE INVESTMENTS WILL BE NEEDED	
$r_{LB} \leq r_{SA}$	100%
$r_{SA} < r_{LB} < 1.1$	$\frac{r_{LB}-1.1}{r_{SA}-1.1}$
$r_{LB} \geq 1.1$	0%



CASE OF FLEET COMPOSED OF LEASING VEHICLES

If the company operates leased vehicles the locked-in emissions are calculated up to the end of the longest leasing contract instead of to reporting year + 15 years, as illustrated in Erreur ! Source du renvoi introuvable. below.

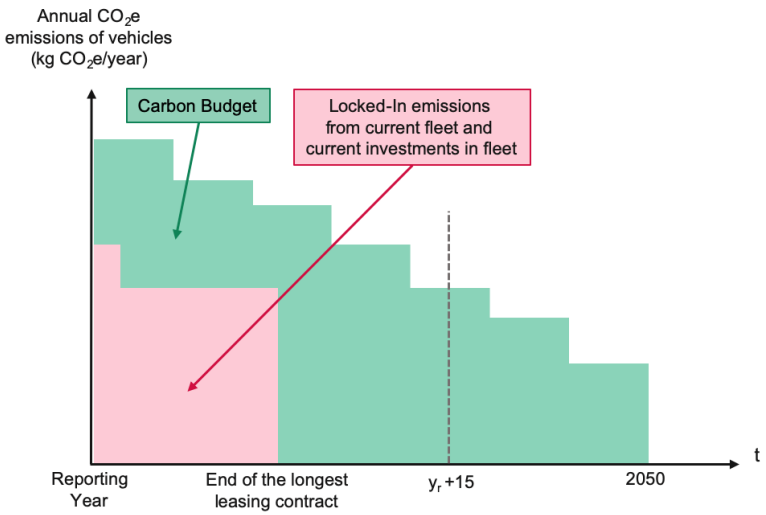


FIGURE 8 : LOCKED-IN RATIO IN CASE OF LEASED VEHICLES