

Assessing target alignment

Addendum to ACT low-carbon transition methodologies



CONTENTS

1.	INTRODUCTION.....	3
	1.1. WHAT HAS CHANGED AND WHY?.....	3
	1.2. HOW TO USE THIS DOCUMENT?.....	3
2.	REMINDER: BASICS OF THE PREVIOUS APPROACH	4
	2.1. BASICS OF THE SDA.....	4
	2.2. BASICS OF THE ACA.....	4
3.	THE SECTOR-SPECIFIC ABSOLUTE REDUCTION APPROACH	6
4.	CONSIDERING THE BASE YEAR INSTEAD OF THE REPORTING YEAR.....	6
	4.1. DRAWBACKS OF THE PREVIOUS APPROACH:	6
	4.2. HOW TO CALCULATE TARGET ALIGNMENT?.....	6
	4.2.1. FOR INTENSITY TARGETS	7
	4.2.2. FOR ABSOLUTE TARGETS	8
	4.3. SPECIFIC CASE WHERE THE BASE YEAR IS PRIOR TO THE START OF THE AVAILABLE BENCHMARK PATHWAY	10
5.	REFERENCES.....	12
6.	APPENDIX.....	13
	6.1. SPECIFIC CASES FOR INTENSITY TARGETS.....	13
	6.2. SPECIFIC CASES FOR ABSOLUTE TARGETS.....	17

1. Introduction

This document presents the changes brought to the ACT sectoral methodologies and the ACT on-line tool in December 2025 to allow a more accurate assessment of target alignment indicators.

1.1. What has changed and why?

Until now, most of the ACT sectoral methodologies assessed GHG emissions reduction intensity targets using the Sectoral Decarbonization Approach (SDA) [1, 2] and did not allow the assessment of absolute targets. Few ACT sectoral methodologies on heterogeneous sectors (that cannot be described using a single physical indicator) assessed absolute targets using the Absolute Contraction Approach (ACA) [1, 2].

CSRD (*Corporate Sustainability Reporting Directive*) reporting [3] requests that organizations disclose their targets in absolute emissions; targets in intensity can also be disclosed but are not mandatory. To better align ACT assessments with data that will be available in CSRD reports, ACT sectoral methodologies need to allow the assessment of absolute targets in any case.

Taking advantage of this modification, we also implemented another change: acknowledging the weaknesses of the previous practice that was to calculate gaps based on the reporting year (see dedicated section below), the alignment score is now calculated using the base year as the reference point.

Therefore, this addendum describes the way that target alignment is now assessed in any ACT sectoral methodologies, with these two main changes:

- Allowing assessment of absolute targets
- Target alignment calculation using the base year instead of the reporting year

1.2. How to use this document?

This document describes how the target alignment indicators are designed, replacing the previous approach described in each of the sectoral methodologies.

To assess the target alignment indicators, whatever the sectoral methodology used, users will need to consult this document as the addendum creates variations on ACT performance module 1. Notwithstanding potential further addendums, all other modules remain the same.

2. Reminder: basics of the previous approach

2.1. Basics of the SDA

In the sectoral decarbonization approach (SDA), each sector of activity is allocated a share of the remaining global carbon budget. The company's pathway is derived from the sectoral pathway (in intensity): starting from the emission intensity of the company in base year, it converges to the sectoral emission intensity in 2050 [1].

This method assumes that the carbon intensity reduction of a company converges with the reduction of the whole sector at a similar rate. Therefore, if a sector is heterogeneous and includes products that widely differ in terms of emissions intensity or emission reduction potential, this approach is not applicable.

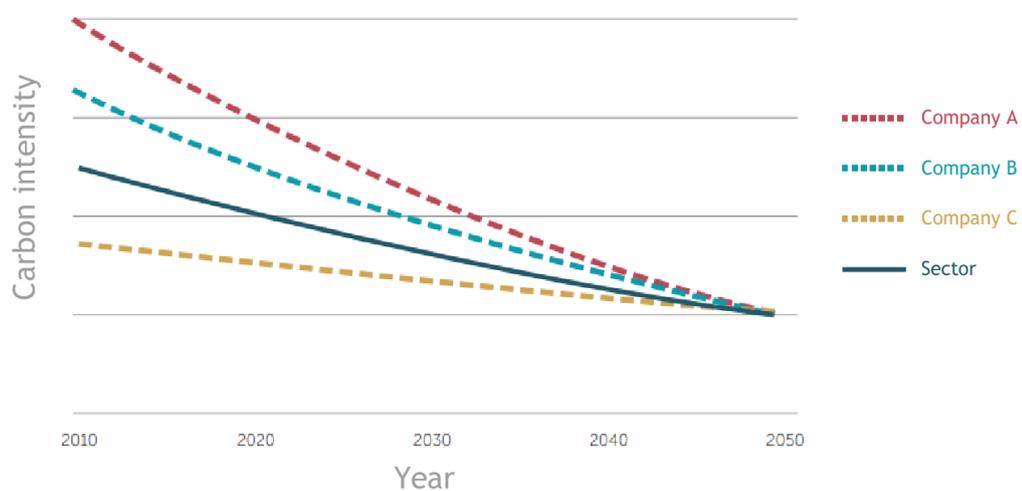


FIGURE 1: CARBON INTENSITY CONVERGENCE MECHANISM [1]

2.2. Basics of the ACA

SBTi initially developed the absolute contraction approach (ACA) to allow the ambition level of targets to be established for companies in sectors without a decarbonisation pathway. As of today, the ACA method is used by approximately four out of five companies with approved science-based targets [4].

The core principle of the ACA method is to design a generic benchmark and to consider that the company's benchmark should mimic the relative evolution of this generic benchmark.

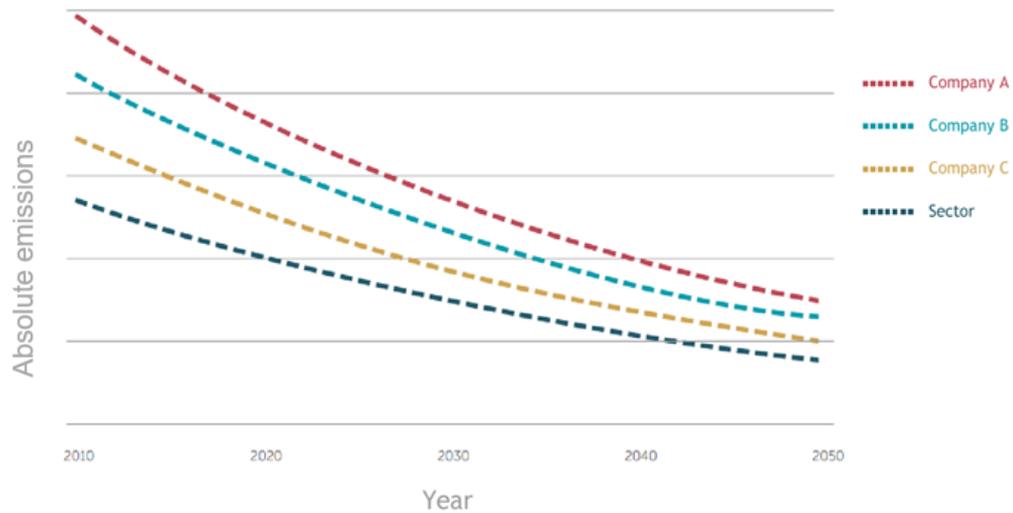


FIGURE 2: CARBON ABSOLUTE CONVERGENCE MECHANISM [1]

Until now, the SBTi approach [5] is based on the following two-leg benchmark:

- At near term, ensuring that a company reduces its emissions by at least 42% between 2020 and 2030 (for 1.5°C aligned targets). Therefore, if a company has a base year of 2020 or earlier then a 4.2% reduction is applied every year for the 10 years. However, if a company has a later base year, then the percentage reduction is increased to ensure that a 42% reduction is achieved by 2030.
- At long-term, requiring a reduction of at least 90% across all scopes by 2050 (or 72% for FLAG targets).

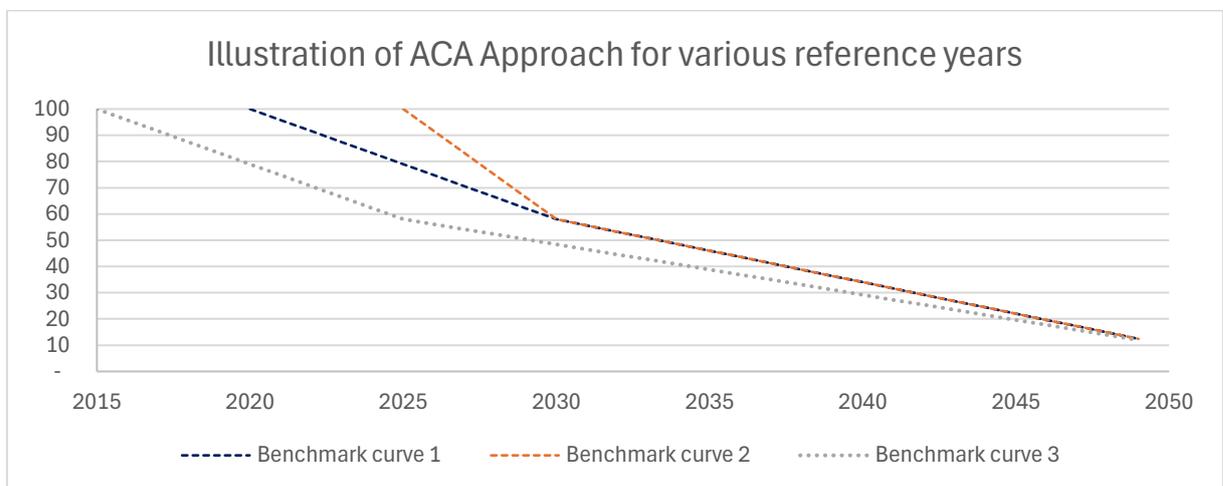


FIGURE 3: CARBON ABSOLUTE CONVERGENCE MECHANISM

This benchmark is currently being updated through the development of the SBTi CNZ 2.0 (still in draft version). ACT tools will adapt to this new reference when ready.

3. The sector-specific absolute reduction approach

The ESRS (*European Sustainability Reporting Standards*) E1 requires targets to be expressed in absolute emissions regardless of the sector [6]. To keep sector-specific pathways in ACT sectoral methodologies that match the CSRD requirements, a sector-specific absolute reduction approach, that acts as a “sectoral” ACA, is implemented. Apart from aligning with the CSRD, the aim of a such an approach would also be to avoid penalizing companies in homogeneous sectors that do not have an intensity target.

The sector-specific absolute reduction approach focuses on reducing emissions considering the specific characteristics of each sector on the basis of science-based scenarios, while still aiming for an absolute reduction in emissions across each sector.

For each sector, relevant and ambitious sectoral scenarios, such as the IEA’s Net-Zero Emissions by 2050 [7] are used to deduce the organization’s pathway, that mimics the slope of the decarbonisation pathway.

$$CE(Y) = CE(BY) \times \frac{SE(Y)}{SE(BY)}$$

Where:

- $CE(Y)$ is the company emissions in year Y (tCO_{2e})
- $CE(BY)$ is the company emissions in base year (tCO_{2e})
- $SE(Y)$ is the sector pathway emissions in year Y (tCO_{2e})
- $SE(BY)$ is the sector pathway emissions in base year (tCO_{2e})

This company’s pathway is then used to calculate the target alignment, as described in the next section.

4. Considering the base year instead of the reporting year

Previously, the company’s pathway was calculated in the ACT sectoral methodologies starting at reporting year. This methodological choice had been made during the development of the first ACT assessment methodologies (before 2019), since at that time many cases were faced where GHG emissions reduction pathways did not go far enough in the past to cover the base year of targets set by some companies.

4.1. Drawbacks of the previous approach:

- Not aligned with SBTi: a company with validated SBTi targets may not score 100% on the alignment target indicator, even though the same sectoral pathway is used, depending on its decarbonisation efforts since the base year.
- Companies that delay their action are “rewarded”, in particular with the ACA approach; their pathway calculated at RY being less ambitious than the one calculated at BY.
- On the contrary, companies that have already reduced drastically their emissions between BY and RY are penalised.

4.2. How to calculate target alignment?

The first two sections 4.1 and 4.2 recall the basis of the alignment score calculations, which are the same as in the previous methodology except that the base year is chosen as the starting reference point instead of the reporting year. Section 4.3 deals with the need to adapt for the cases where a relevant benchmark pathway is not available at the base year.

4.2.1. FOR INTENSITY TARGETS

The analysis is based on a trend ratio between the company's emissions intensity target and the company benchmark. Trends are computed between base year and the time horizon of the target.

The company's target pathway is the decarbonization over time, defined by the company's emissions intensity 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 low-carbon benchmark pathway calculated using the SDA approach.

The company achieves the maximum score if the company's target pathway and the company benchmark pathway are aligned (commitment gap = 0) and if the targets are covering most of the company's emissions.

CALCULATION OF SCORE:

TREND RATIO

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

$$\text{Trend ratio} = \frac{\text{Company's target trend}}{\text{Benchmark pathway trend}} = \frac{CEI(TY) - CEI(BY)}{BEI(TY) - CEI(BY)}$$

Where:

- $CEI(TY)$ is the company targeted emissions intensity at target year (tCO_{2e}/unit of activity)
- $CEI(BY)$ is the company emissions intensity at base year (tCO_{2e}/unit of activity)
- $BEI(TY)$ is the company's pathway emissions intensity at target year (tCO_{2e}/unit of activity)

The commitment gap of the company is equal to 1 - trend ratio. Thus, when the company's target pathway is aligned on the company's benchmark, the trend ratio is equal to 1 and the commitment gap is equal to 0 (see Figure 4).

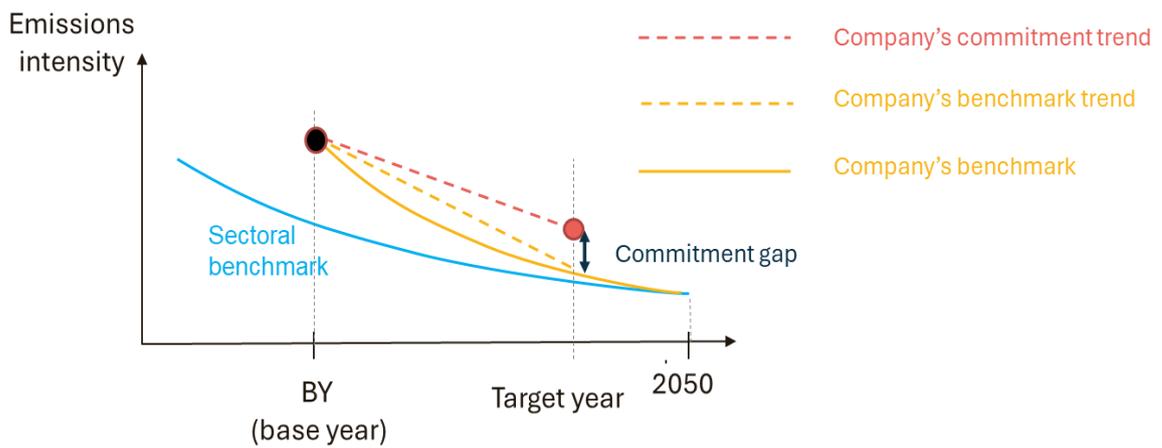


FIGURE 4: TREND RATIO AND COMMITMENT GAP

FINAL SCORE

The final score assigned to the indicator is calculated as follows (see Appendix 6.1 for a graphic illustration of the different cases):

Conditions	Score
$Company's\ target\ trend > 0$ Increase in company emissions intensity is targeted	0%
$Company's\ target\ trend \leq 0$ $0 \leq trend\ ratio \leq 1$ Decrease in company emissions intensity is targeted but company's commitment does not go beyond the company's benchmark ambition	$Trend\ ratio \times 100\%$
$Company's\ target\ trend < 0\ and\ CEI(RY) \geq BEI(2050)$ $trend\ ratio > 1$ Decrease in company emissions intensity is targeted and company's commitment equals or exceeds the company's benchmark ambition	100%
$Company's\ target\ trend \leq 0\ and\ CEI(RY) \leq BEI(2050)$ No increase in company emissions intensity is targeted and company's emissions intensity is already below the company's benchmark ambition for 2050	100%

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

$$Final\ Score = Score \times Target\ coverage\ of\ total\ company\ emissions\ (C_{RY})$$

4.2.2. FOR ABSOLUTE TARGETS

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

The company's target pathway is the decarbonization over time, defined by the company's 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 low-carbon benchmark pathway calculated using the ACA approach or the sector-specific absolute reduction approach described above (see section 3).

The company achieves the maximum score if the company's target pathway and the company benchmark pathway are aligned (commitment gap = 0) and if the targets are covering most of the company's emissions.

CALCULATION OF SCORE:

TREND RATIO

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

$$\text{Trend ratio} = \frac{\text{Company's target trend}}{\text{Benchmark pathway trend}} = \frac{CE(TY) - CE(BY)}{BE(TY) - CE(BY)}$$

Where:

- $CE(TY)$ is the company emissions at target year (tCO_{2e})
- $CE(BY)$ is the company emissions at base year (tCO_{2e})
- $BE(TY)$ is the company's benchmark emissions at target year (tCO_{2e})

The commitment gap of the company is equal to 1 - trend ratio. Thus, when the company's target pathway is aligned on the company's benchmark, the trend ratio is equal to 1 and the commitment gap is 0 (see Figure 55).

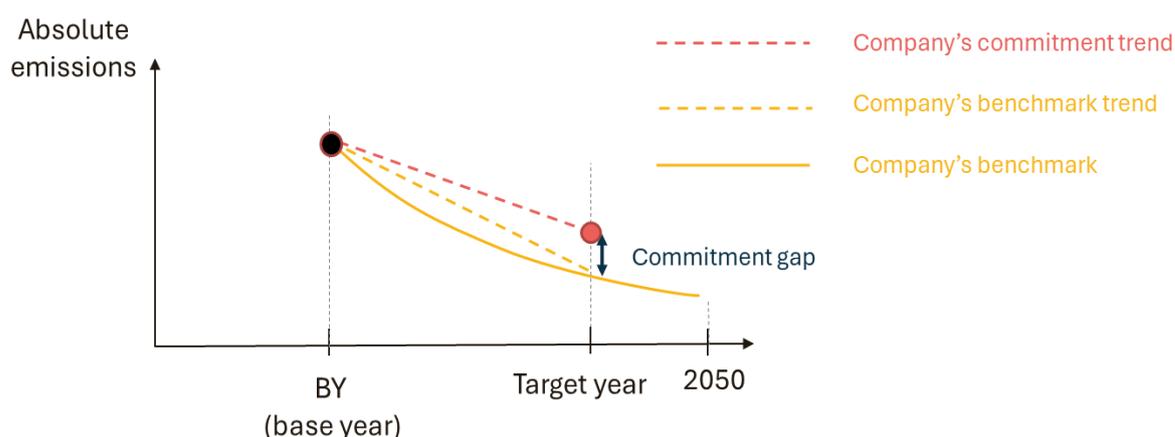


FIGURE 5: TREND RATIO AND COMMITMENT GAP

FINAL SCORE

The final score assigned to the indicator is calculated as follows (see Appendix 6.2 Specific cases for absolute targets for a graphic illustration of the different cases):

Conditions	Score
<p><i>Company's target trend > 0</i></p> <p>Increase in company emissions is targeted</p>	0%
<p><i>Company's target trend ≤ 0</i></p> <p>$0 \leq \text{trend ratio} \leq 1$</p> <p>Decrease in company emissions is targeted but company's commitment does not go beyond the company's benchmark ambition</p>	<i>Trend ratio</i> × 100%
<p><i>Company's target trend < 0 and trend ratio > 1</i></p> <p>Decrease in company emissions is targeted and company's commitment equals or exceeds the company's benchmark ambition</p>	100%

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

$$\text{Final score} = \text{Score} \times \text{Target coverage of total company emissions } (C_{RY})$$

4.3. Specific case where the base year is prior to the start of the available benchmark pathway

To be able to calculate the sector-specific absolute reduction score considering the base year, it would be necessary to have sectoral absolute emissions reduction scenarios available, **with data up to the target's base year**. However, most of the pathways used by ACT sectoral methodologies start around 2020 (such as those coming from IEA's NZE Scenarios). Therefore, if the assessed company has set a target using a base year prior to 2020, one would not be able to compute a score considering the base year using only these scenarios.

To fix this issue, i.e. being able to assess targets with base years prior to the start of the decarbonisation pathway, the following approach has been adopted, already used by the Science-based target Initiative (for example, in the Building tool [8]). This approach amounts to assuming that emissions from the sector between the starting year of the scenario and the base year have remained unchanged. Visually, this involves drawing a straight line parallel to the x-axis between the starting year of the scenario and the base year.

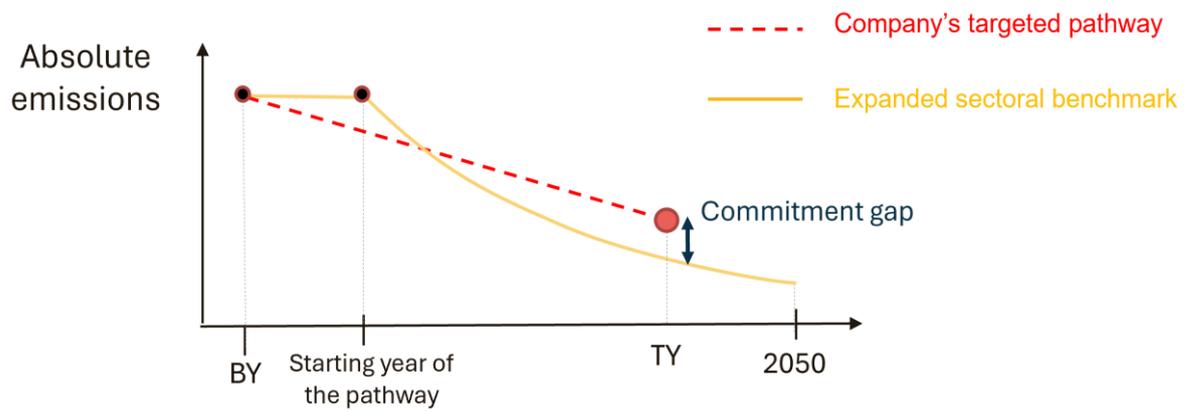


FIGURE 6: CASE WHERE THE BASE YEAR IS PRIOR TO THE START YEAR OF THE PATHWAY

With this way of assessing target alignment, the more the base year is close to the starting year of the pathway, the less the score will be biased. According to SBTi's dataset [9], less than 3% of the certified targets have base years prior to 2018, and less than 0.1% have base years prior to 2015. Therefore, the biases induced by this approach will be limited. Moreover, it has been decided that targets with base years prior to 2015 will no longer be taken into account within the target alignment indicators.

5. References

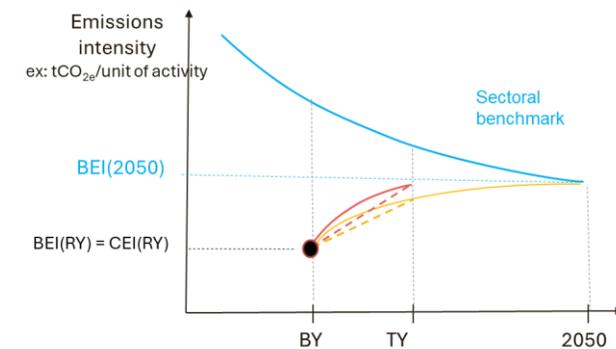
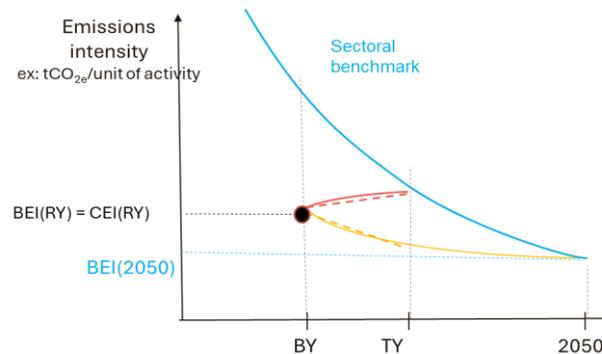
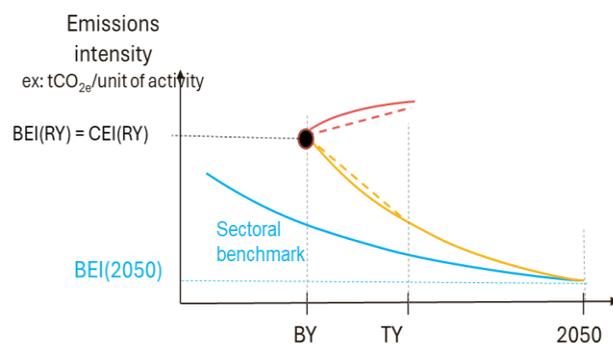
- [1] SBTi, "Sectoral decarbonization approach (SDA): a method for setting corporate emission reduction targets in line with climate science," 2015.
- [2] SBTi, "Foundations of science-based target setting, version 1.0," 2019.
- [3] European Commission, "Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 on the publication of non-financial information by certain undertakings and groups (CSRD). Official Journal of the European Union (2022)," 2025.
- [4] SBTi, "FAQ - Are there sector specific resources or requirements for setting targets?," [Online]. Available: <https://sciencebasedtargets.org/faqs#25767>.
- [5] SBTi, "SBTi Corporate Net-Zero Standard, V 1.3," 2025.
- [6] EFRAG, "[Draft] ESRS E1 Climate change," Nov 2025.
- [7] IEA, "Net Zero for 2050 - A Roadmap for the Global Energy Sector," 2021.
- [8] SBTi, "SBTi Buildings Target-Setting Tool," [Online]. Available: https://files.sciencebasedtargets.org/production/files/SBTi-Buildings-Target-Setting-Tool.xlsx?dm=1758725576&_gl=1*xun17d*_gcl_au*MjkyMzIxNTczLjE3NjYxNTY2NDE.*_ga*MTM1MTA3NjM5MC4xNzU4MjA3MTY4*_ga_22VNHNTFT3*czE3Njc5NzU0NjYkbzM0JGcwJHQxNzY3OTc1NDY2JGo2MCRs. [Accessed 09 01 2026].
- [9] SBTi, "Dataset by target (extract from 09/2025)," [Online].

6. Appendix

6.1. Specific cases for intensity targets

CASE 1

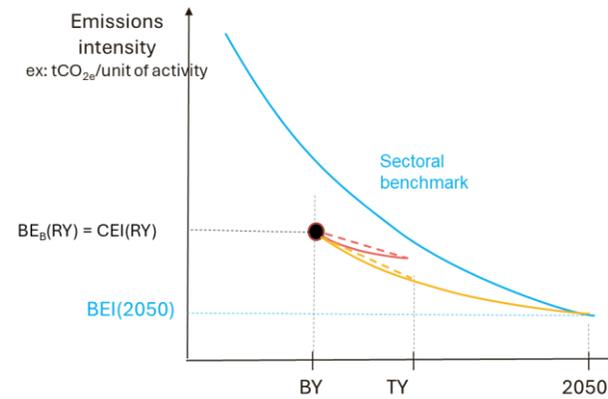
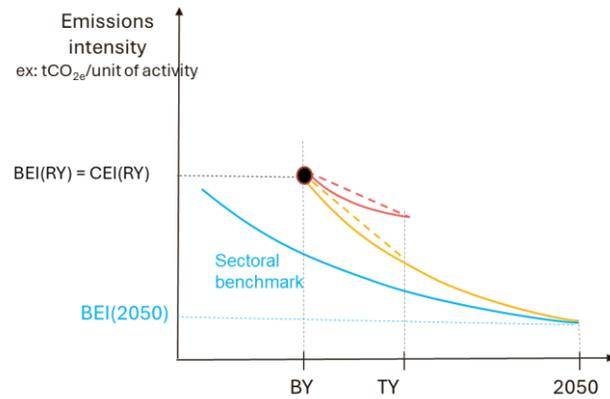
Conditions	Score
<p><i>Company's target trend > 0</i></p> <p>Increase in company emissions intensity is targeted</p>	0%



- - - - - Company's trend
- - - - - Company's benchmark trend
- Company's benchmark

CASE 2

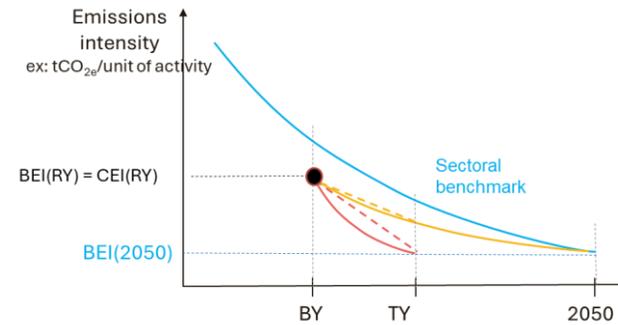
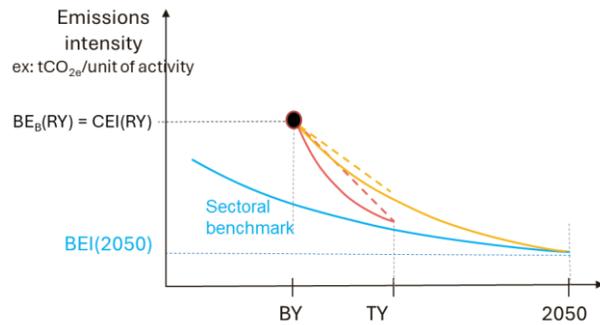
Conditions	Score
<p style="text-align: center;"><i>Company's target trend ≤ 0</i></p> <p style="text-align: center;">$0 \leq \textit{trend ratio} \leq 1$</p> <p>Decrease in company emissions intensity is targeted but company's commitment does not go beyond the company's benchmark ambition</p>	<p><i>Trend ratio $\times 100\%$</i></p>



- - - - - Company's trend
- - - - - Company's benchmark trend
- Company's benchmark

CASE 3

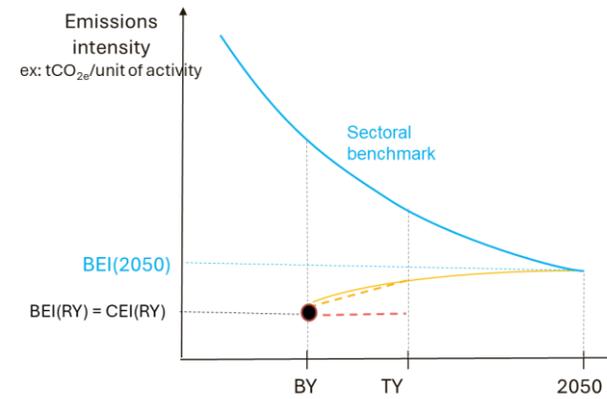
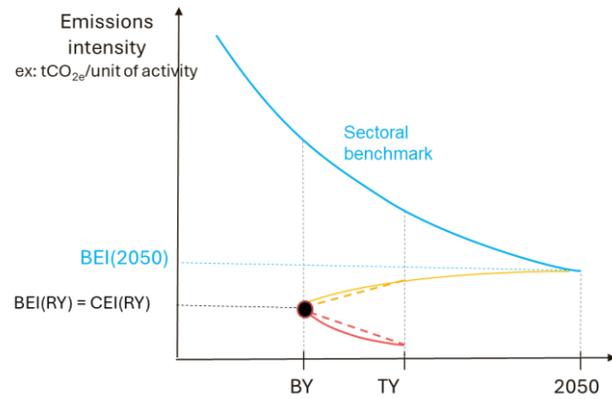
Conditions	Score
<p><i>Company's target trend < 0 and CEI(RY) ≥ BEI(2050)</i></p> <p><i>trend ratio > 1</i></p> <p>Decrease in company emissions intensity is targeted and company's commitment equals or exceeds the company's benchmark ambition</p>	100%



- - - - - Company's trend
- - - - - Company's benchmark trend
- Company's benchmark

CASE 4

Conditions	Score
<p><i>Company's target trend ≤ 0 and $CEI(RY) \leq BEI(2050)$</i></p> <p>No increase in company emissions intensity is targeted and company's emissions intensity is already below the company's benchmark ambition for 2050</p>	100%

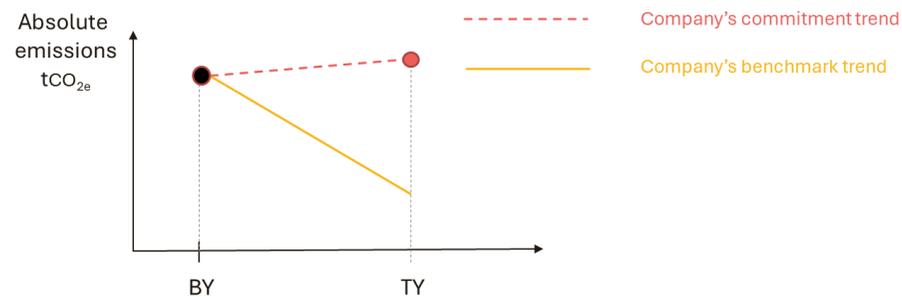


- - - - - Company's trend
- - - - - Company's benchmark trend
- Company's benchmark

6.2. Specific cases for absolute targets

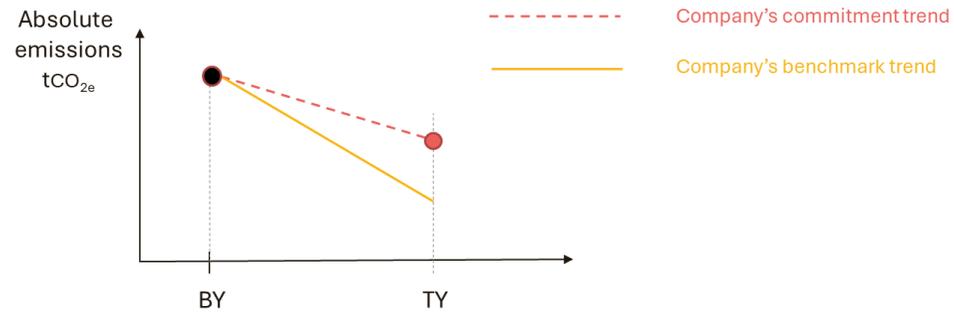
CASE 1

Conditions	Score
<p>$Company's\ target\ trend > 0$</p> <p>Increase in company emissions is targeted</p>	0%



CASE 2

Conditions	Score
<p>$Company's\ target\ trend \leq 0$</p> <p>$0 \leq trend\ ratio \leq 1$</p> <p>Decrease in company emissions is targeted but company's commitment does not go beyond the company's benchmark ambition</p>	$Trend\ ratio \times 100\%$



CASE 3

Conditions	Score
<p><i>Company's target trend < 0 and trend ratio > 1</i></p> <p>Decrease in company emissions is targeted and company's commitment equals or exceeds the company's benchmark ambition</p>	100%

