

# Banque de France Climate Indicator

## Methodology for the Transition Climate Indicator

The Banque de France is deploying a **Climate Indicator** designed to provide a robust and independent assessment of the greenhouse-gas (GHG) emissions pathways of non-financial corporations and of their exposure to climate hazards. It is a diagnostic tool for companies that aims to support the financing of the ecological transition as well as the management and prevention of climate risks by public and private stakeholders (central banks, companies, financiers, public authorities).

This publication is a **technical document intended to make public the fundamental methodological elements** of the Transition Climate Indicator (metrics used, modalities for computing scores, etc.). It complements the general information available on the **Climate Indicator [dedicated page](#)** on the Banque de France website. **This document outlines the methodology applicable as of 31 March 2026.**

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## 1. Foundations and general overview

Climate change is now considered by public authorities as a source of financial risks, insofar as its effects impact both price stability and financial stability. For this reason, the Banque de France is addressing this issue in order to meet the requirements of its mandate<sup>1</sup>. The European Central Bank has also integrated risks associated with climate change<sup>2</sup> and has defined a Climate and Nature Plan as part of its tasks<sup>3</sup>. Most central banks worldwide now integrate climate risks into their work, as shown by the success of the Network for Greening the Financial System (NGFS)<sup>4</sup>.

In this context, the Banque de France is deploying a Climate Indicator that covers the two dimensions of climate change: the transition towards a low-carbon economy and adaptation to climate hazards<sup>5</sup>. These dimensions are not aggregated into a single indicator, so as to avoid any undue offsetting effects:

- The **Transition Climate Indicator (mentioned below as “ICT”)**, which aims to assess the company’s decarbonisation pathway;
- The **Transition Maturity Climate Indicator (ICMT)**, which aims to assess the company’s transition strategy;

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<sup>1</sup> **François Villeroy de Galhau**, “The role of central banks in greening the economy,” [speech](#) of 11 February 2021: “The Eurosystem’s consideration of climate change is neither an abuse of mandate, nor a mere activist conviction or a passing trend; it is an imperative that we must pursue in the very name of our current mandate.”

<sup>2</sup> **Christine Lagarde**, “Central banks in a changing world: the ECB’s role in addressing climate and environmental risks,” [speech](#) of 7 June 2024: “Climate change can pose systemic risks to financial stability (...). Drawing on its analysis, the ECB acts within the framework of its mandate to help mitigate and prevent climate-related risks.”

<sup>3</sup> ECB, 30 January 2024, [Climate and Nature Plan](#)

<sup>4</sup> As of January 2026, the NGFS (Network for Greening the Financial system) comprises 149 members from 92 countries.

<sup>5</sup> The French **Monetary and Financial Code** empowers the Banque de France to ensure “the monitoring of the financing of non-financial corporations, including the measurement of these corporations’ exposure to climate risks” and to collect the necessary data from them (Art. L 141-6 CMF).

- **The Adaptation Maturity Climate Indicator (ICMA)**, which aims to appraise the company’s adaptation strategy.

**This document focuses on the methodology of the Transition Climate Indicator (ICT).** The transition and adaptation maturity indicators (ICMT and ICMA), whose methodology is not detailed here, are based on a set of primarily qualitative questions and are 100% aligned with the information requested under the European voluntary VSME standard<sup>6</sup>.

Operational since 2024, the deployment of the Transition Climate Indicator is progressive and prioritises transition-critical sectors (see below).

Targeted sectors for the transition indicator	Estimated launch date
Electricity generation	2024
Real Estate	
Transports/Freight	
Construction (residential building)	2025
Cement	
Vehicles construction	2026
Oil and gas (upstream & midstream)	
Aluminium production	
Chemistry (high-value chemicals)	
Steel	2026-2027
Agriculture (large crops)	

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<sup>6</sup> Voluntary standard for non-listed micro-, small- and medium-sized undertakings.

## 2. Positioning and objectives of the Climate Indicator

The Transition Climate Indicator provides an independent and robust assessment of companies' transition plans. This assessment is consistent with French, European and international frameworks.

- It is based on the ACT (Accelerate Climate Transition) methodology, an international initiative led by ADEME, the Carbon Disclosure Project (CDP) and the World Benchmarking Alliance (WBA);
- It refers to the objectives of the Paris Agreement as well as public trajectories for the transition to a low-carbon economy<sup>7</sup>.

The ICT approach has also been designed to be consistent with existing transition and carbon-accounting standards: SBTi, CDP, the GHG Protocol, etc. Finally, the ICT is closely related to the CSRD, notably with regard to ESRS E1 on climate matters<sup>8</sup>.

The **indicator is useful for the companies that engage in the process**, in particular through:

- Assessment of the company's transition plan: Banque de France analysts do not rely solely on corporate statements;
- Recognition of the company's actions by its value chain;
- Facilitation of dialogue with financiers.

In addition, the Climate Indicator is intended to become a **reference indicator**, insofar as it constitutes a **robust and independent evaluation tool for companies' transition challenges**.

- It is intended to contribute to financing the ecological transition insofar as, with the company's consent, the Banque de France may make the evaluation result and all or part of the collected data available to financing actors.

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<sup>7</sup> With regard to the Transition, the reference frameworks are based in particular on the work of the International Energy Agency (IEA) and the National Low-Carbon Strategy (SNBC).

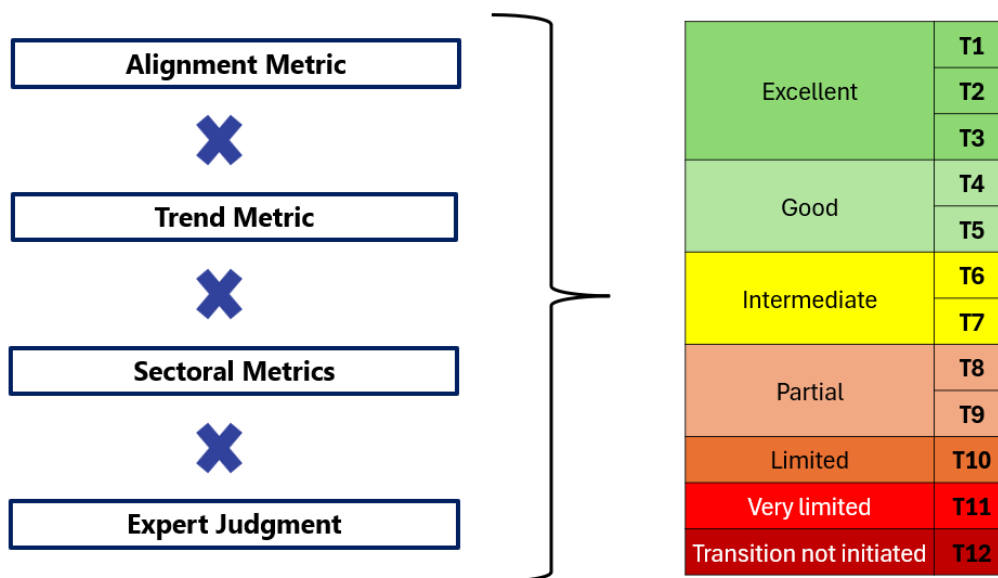
<sup>8</sup> The ICT methodology and the sectoral questionnaires remain independent of the CSRD, particularly in view of the changes affecting both the directive and the ESRS as part of the Omnibus project presented in 2025.

- It also has properties (methodological robustness, independence of the assessment) that allow it to be used in core central-bank functions (monetary policy, banking supervision, credit rating).

Moreover, the ICT provides a methodological evaluation framework that can be applied to external data, independently of those collected by the Banque de France, thereby enabling its use in other jurisdictions (see Section 4).

### 3. Methodology overview

The purpose of the Transition Climate Indicator (ICT and ICM-T) is to assess the compatibility of a company’s transition plan with the objectives of the Paris Agreement (1.5°C). To this end, several quantitative and qualitative elements are considered. These elements are converted into scores between 0 and 1 and then aggregated to obtain the final rating. This final rating is expressed on a twelve-notch scale that quantifies the degree of consistency of a company’s GHG emissions pathway with a scenario compatible with the Paris Agreement.



This section presents the methodology of the Transition Climate Indicator. Section 3.1 sets out the methodological principles that structure the approach, namely the **scientific anchoring**, **forward-looking** treatment of emissions, and **sectoral** tailoring of the analysis. Section 3.2 describes the **sectoral references** used to assess companies’ decarbonisation trajectories, mainly based on scenarios from the International Energy Agency (**IEA**). It specifies the **construction**, **granularity** and **application** of these references in the different sectors. It also details the mechanisms for assessing tangible decarbonisation actions (Section 3.3), as well as the metrics used (Section 3.4):

- the **alignment metric**, which compares future emissions with a trajectory compatible with a 1.5°C scenario;
- the **trend metric**, which assesses the pace of reduction in carbon intensity;
- the **complementary sectoral metric**, which captures potential sector-specific issues;

- the **qualitative metric**, which allows longer-term issues and elements relating to other scopes of emissions to be considered.

Finally, the last two parts set out the rules for **transforming** metrics into scores, the **aggregation** of scores, and the **principles** for computing the ICT **final rating**, allowing a company's carbon pathway to be positioned with regard to the requirements of the transition to a low-carbon economy.

### 3.1. Methodological principles

The Transition Climate Indicator is based on a set of methodological principles designed to overcome the limitations observed in other ESG rating tools (Kohler, Da Costa, Cluzel, & Umbricht, 2026):

- **Robustness:** the ICT is based on a partnership with ADEME (the French Agency for Ecological Transition), ensuring a scientifically grounded assessment consistent with climate objectives as defined by the Paris Agreement.
- **Forward-looking:** the evaluation focuses on future greenhouse-gas emissions (GHG), in line with the investment-planning horizon specific to each sector (3 to 5 years). This approach makes it possible to measure efforts already undertaken and those that remain to be achieved.
- **Support:** Banque de France analysts play a key role in guiding companies throughout the process, explaining the scoring mechanism and possible levers for improvement.
- **Physical approach:** the ICT uses physical production data to compute carbon intensity and to check coherence between needs, resources and emissions. Reference scenarios prioritise physical flows and stocks rather than monetary data<sup>9</sup>. The analysis combines carbon intensity and absolute emissions in order to measure both efficiency and the real decline in emissions. The chosen approach nevertheless preserves inter-sector comparability of the final rating scale (T1–T12).
- **Tangibility:** only credible and documented decarbonisation actions are taken into account. They must be quantified or quantifiable and, where relevant, have dedicated financial resources. Climate analysts validate each tangible action based on the information provided by the company.

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<sup>9</sup> Monetary intensities (emissions per value-added/turnover) are not taken into account, as these financial units are not soundly related to emissions : they can evolve independently from GHG emissions due to cost variations, commodities prices volatility or fiscal and accounting changes (Faria & Labutong, 2019).

- **Sectoral tailoring:** the methodology is adapted to the specificities of each sector. Emission sources, activity units, volumes considered, and the analysis time horizon are defined at sector level, to reflect the diversity of levers and constraints specific to each activity.

## 3.2. Benchmarks

The Transition Climate Indicator (ICT) relies on a comparison between a company's tangible decarbonisation pathway and a sectoral reference pathway compatible with the Paris Agreement, i.e. limiting global warming to below 1.5°C relative to the pre-industrial level.

Sectoral pathways must be coherent:

- **within sectors**, by reflecting technically and economically realistic developments for each sector;
- and **across sectors**, by ensuring that the transition of one sector does not jeopardise transition in other sectors.

The methodology also requires that these trajectories be expressed in **physical unit metrics**, so as to avoid biases linked to prices or market variations that affect monetary indicators.

### 3.2.1. Scenarios and providers

The sectoral references used for the ICT are based on global decarbonisation scenarios that allocate the global carbon budget by sector and by year. Among scenarios developed by international organisations, the **NZE** (Net Zero Emissions) scenario from the IEA's **GEC** (Global Energy and Climate) model meets the ICT's methodological requirements and was selected as the main reference for all sectors assessed in the 2024 climate campaign. In addition, the Banque de France also uses references provided by the **Carbon Performance Tool** and **ACT – NZE Refresh**, developed by ADEME and likewise based on IEA scenarios published in the World Energy Outlook (WEO) or Energy Technology Perspectives (ETP). Where necessary to better reflect sectoral or national specificities, Banque de France's Climate Indicator methodological unit may adjust or recalculate certain pathways from IEA scenarios, or use other sources such as CRREM for real estate<sup>10</sup>.

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<sup>10</sup> Carbon Risk Real Estate Monitor <https://www.crrem.eu/about-crrem/>

### 3.2.2. Operational uses of benchmarks

The scenarios used are broken down at various levels of granularity — geographical<sup>11</sup>, technological, or by product category — in order to best reflect the current situation of each sector and geography (available levers, average carbon intensity, electricity mix, etc.).

Each **year**, the Banque de France's Corporate Climate Service verifies that sectoral references meet the ICT's quality standards:

- **scientific** soundness of the provider;
- **consistency** with the Paris The scenarios used are broken down at various levels of granularity
- **fairness** across sectors;
- **relevance** of the **technological, geographical and temporal** level of granularity.

### 3.3. Assessment of declared decarbonisation actions

The **Tangibility** principle requires that companies be assessed based on a credible transition plan and not only on stated targets. To ensure compliance with this principle, each decarbonisation action is taken into account in the evaluation of the company's transition plan according to its level of credibility. Actions deemed by analysts to be of low credibility may be considered only partially by applying a haircut on the GHG emission reductions declared by the company for this action.

This assessment relies on two complementary checks:

- **a technical and climate credibility check**, which compares the reductions announced by the company to values observed in the literature or statistics; if expected decarbonisation results declared by the company appear higher than available references, the analyst will ask the company to clarify its assumptions and their reliability;

*For example, in heavy industry, a decarbonisation plan based solely on carbon capture and storage (CCUS) will not be accepted as credible without very specific justifications, as this is a very immature technology. This can be objectively assessed using tools such as the IEA's Technology Readiness Level (TRL) scale.*

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<sup>11</sup> By default, world perimeter

- **a verification of the means deployed**, which checks the actual progress of each action and retains only those whose implementation is credible within the ICT horizon (2 to 5 years). The company must provide evidence of progress, notably on financial, administrative, contractual and technical aspects.

*For example, in the transportation sector, purchasing electric trucks represents a substantial cost for the company. The accuracy of the cost estimate and the securing of the associated financing are criteria for demonstrating the credibility of the initiative. This can be objectively assessed using detailed data on investment costs by sector or benchmark data on marginal abatement costs.*

### 3.4. Presentation of the different metrics

#### 3.4.1. Alignment Metric

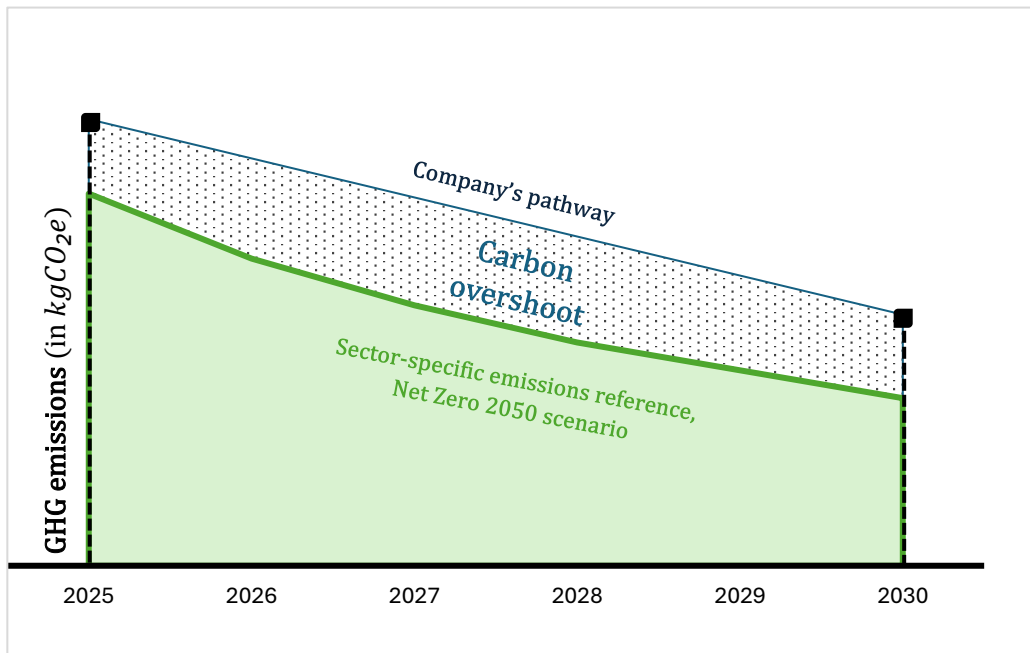
The **alignment metric** compares the company’s future emissions with the maximum level of emissions it could produce while remaining compatible with a ‘1.5 °C’ pathway in line with the Paris Agreement. The **reference emissions** are obtained by multiplying, for each year, the company’s physical activity (tonnes, m<sup>2</sup>, kWh, etc.) by the greenhouse gas emission intensity corresponding to its sector and activity segment, in accordance with the principle of **physical approach**.

The choice of **granularity level** for the reference intensity strongly influences the alignment metric. A fine granularity highlights companies that perform well within their specific segment, while a broader granularity gives more weight to lower-emission production models, revealing a modal shift dynamic. For example, in the electricity sector, a single reference value was chosen for all technologies in order to make visible the actors relying on renewable energy, rather than comparing each technology separately.

The **evaluation time window**, usually set between **2 and 5 years**, results from a compromise: long enough to capture climate-related challenges, but short enough to realistically assess the tangible actions planned by the company and to match each sector’s decision-making horizon.

The alignment metric is ultimately calculated as the ratio between the company’s projected emissions and its reference emissions aligned with a 1.5 °C trajectory, aggregated at the sector level.

$$Alignment_{company}^{1,5\text{ }^{\circ}\text{C}} = \frac{\sum_t Emissions_{company}(t) - Emissions_{reference}^{1,5\text{ }^{\circ}\text{C}}(t)}{\sum_t Emissions_{reference}^{1,5\text{ }^{\circ}\text{C}}(t)}$$



### 3.4.2. Trend Metric

The **trend metric** evaluates the company's transition dynamics by measuring **how quickly its carbon intensity decreases** relative to sectoral requirements. It especially helps distinguish, among **companies that are not aligned** (i.e., with a positive alignment metric), those that are reducing their emissions quickly enough to converge toward a pathway compatible with limiting global warming to +1.5 °C.

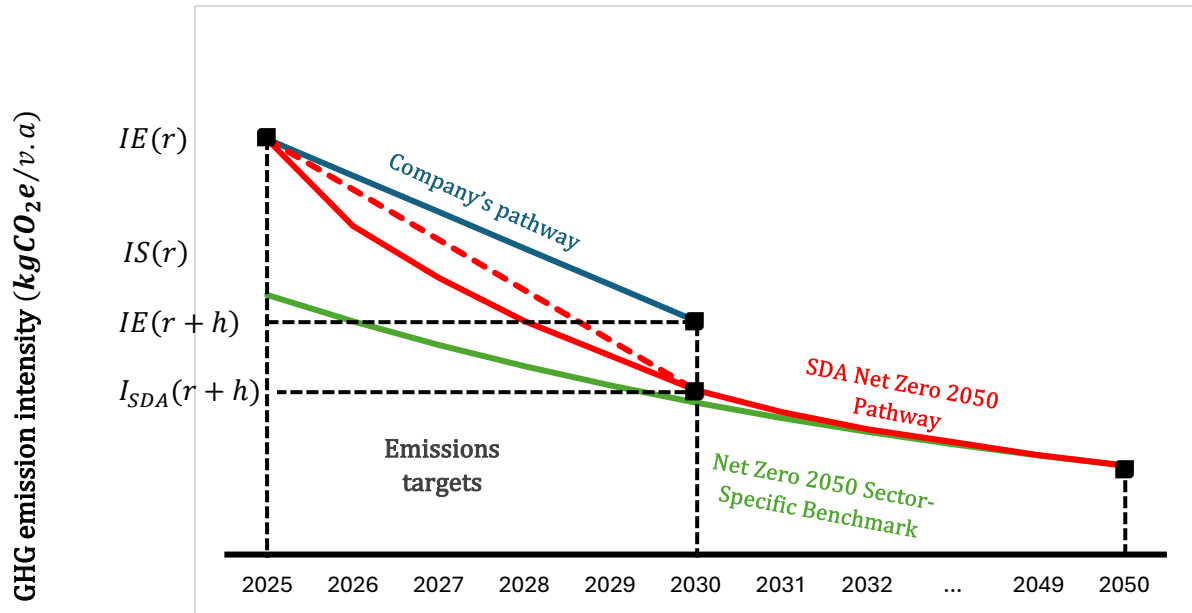
Unlike the alignment metric that focuses on absolute emissions, the trend metric is based on **carbon intensity**. Therefore, it requires that companies within the same segment express their activity in homogeneous physical units. For instance, freight transport and passenger transport cannot be grouped into the same segment.

This metric is based on the **SDA (Sectoral Decarbonization Approach)** pathway defined by the **SBTi** (SBTi, 2015), which sets reduction targets consistent with a sectoral pathway aligned with climate objectives.

$$BE_y = (IE_r - IS_{2050}) * m_y * \frac{IS_y - IS_{2050}}{IS_r - IS_{2050}} + IS_{2050}, \text{ with } m_y = \min\left(\frac{AE_r/AS_r}{AE_y/AS_y}, 1\right)$$

The **trend metric** is measured by comparing the slope of the company's carbon-intensity pathway with the 'target' slope of the SDA (sectoral decarbonization approach) pathway. The time window used for this calculation is the same as the one applied to the alignment metric. The **'market share' parameter** is designed to ensure compliance with the overall carbon budget of the scenario. A company whose activity grows faster than the rest of the sector (i.e., whose market share increases) must reduce its emissions intensity even more rapidly so as not to increase total sectoral emissions. This parameter is

reduced by a factor of 1 to avoid encouraging companies to underestimate their future growth. This approach is consistent with the current SBTi methodology (SBTi, 2019).



### 3.4.3. Complementary Sector Metric

The **complementary sector metrics** make it possible to account for transition challenges that are specific to each sector — elements that the alignment metric and the trend metric do not capture but that remain necessary to ensure a meaningful classification of companies. Defined according to the characteristics, constraints, and priorities of each activity, they provide additional discriminatory power in classifying companies.

For instance, in the electricity sector, the sector metric rewards the commissioning of new low-carbon generation capacities (the principle of additionality), while in the residential home construction sector, it evaluates the carbon emissions associated with the building’s energy consumption over its lifetime (50 years). In the oil and gas sector, the complementary metric allows to value the deployment of low-carbon technologies and to penalize technologies that must be fully phased out.

### 3.4.4. Qualitative Metric

The qualitative metric assesses the level of progress and the relevance of the company’s climate action plan, taking into account its activities, its sector, its priority transition levers, and any implementation or assessment constraints. It also incorporates indirect issues (R&D, long-term strategy), particularly

those related to scope 3 emissions, which are not primarily covered by the quantitative metrics, and is adapted to sector-specific characteristics.

It is currently evaluated on a five-level ordinal scale. Its assessment may require additional data collection by Banque de France analysts, or at minimum an expert review of publicly available non-financial reporting documents (through CSRD or VSME reports). In the absence of qualitative data, the methodological framework is modular and can, if needed, be applied without this metric.

### 3.5. Transformation of metrics into scores

The metrics are converted into scores ranging from 0 (lowest performance) to 1 (highest performance). This transformation makes it possible to standardise the interpretation of results and compare companies across all sectors. Indeed, the interpretation of the metrics may vary from one sector to another: depending on production methods, the range of variation in companies' carbon intensity may be more or less concentrated around the reference value, and 'best-in-class' companies may be more or less close to the 2050 target depending on expected technological progress.

To respect the principle of **sectorisation**, the score is therefore obtained by applying a transformation function specific to each metric, sector, and activity segment. This function defines how performance is mapped onto the 0-to-1 scales

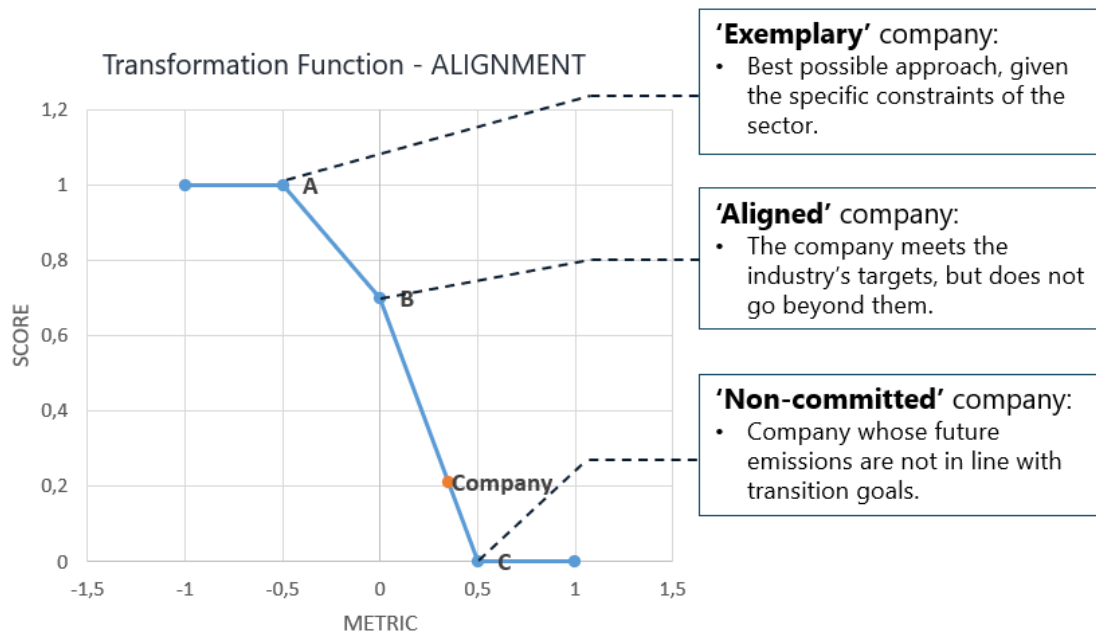
#### 3.5.1. Alignment Score

The alignment score distinguishes companies that outperform the reference pathway from those whose performance falls below it. To ensure this differentiation, one-third of the total score is allocated to companies that are already aligned, and two-thirds to those that are not. The transformation functions used are piecewise-linear to maintain simplicity and transparency. The key breakpoints structuring these segments are associated with interpretive narratives that explain the company's position relative to its sectoral pathway.

The transformation is based on three reference points:

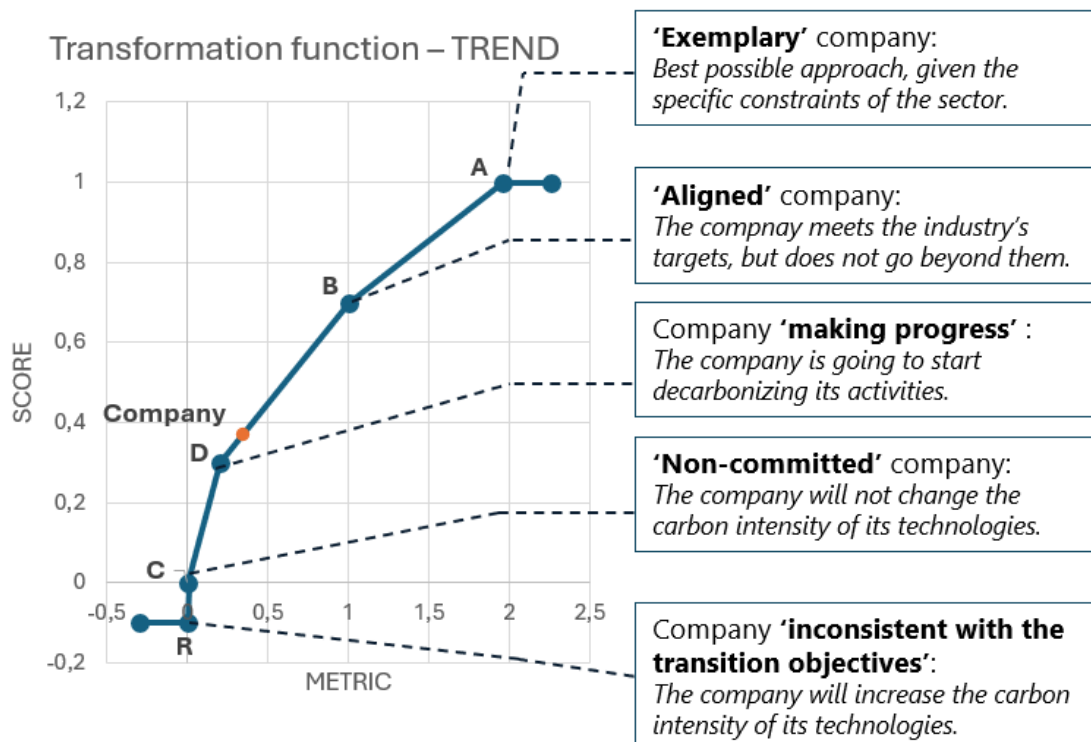
- **Point B (aligned company):** When the alignment metric equals 0%, the company is considered aligned and receives a score of 0.7, which lies at the boundary between the underperformance and outperformance zones.
- **Points A and C (boundaries of the scale):**
  - The lower bound corresponds to the metric value yielding the maximum score **(1)**.
  - The upper bound corresponds to the metric value yielding the minimum score **(0)**.

These thresholds must be defined for each sector, since decarbonisation challenges differ across activities. The metric values associated with Points A, B, and C are therefore determined specifically for each sectoral trajectory. For example, in the electricity sector, the lower threshold is set at 0 gCO<sub>2</sub>/kWh, corresponding to a representative company relying exclusively on renewable generation technologies. The lower bound for Point A is therefore –100% for this sector.



### 3.5.2. Trend Score

The transformation function for the trend score is also defined as a piecewise-linear function. It allows to distinguish companies whose decarbonisation pathway is consistent with, or exceeds, sectoral requirements from those whose pathway deviates from them.



### 3.5.3. Score associated with the complementary sector metric

Given the diversity of the complementary sector metrics considered, there is currently no standard scoring function for these metrics. However, the same principle applies: transforming the results into a score ranging from 0 to 1.

### 3.5.4. Score associated with the qualitative metric

The qualitative metric is currently assessed on a five-level ordinal scale. Its conversion into a score is carried out by allocating the [0–1] interval across five classes corresponding to these levels.

## 3.6. Final rating

### 3.6.1. Aggregating scores

The alignment and trend metrics can be calculated at different levels:

- at the overall company level;
- at the asset level;
- at the activity-segment level.

A company may therefore have multiple scores depending on the perimeter considered. Where multiple alignment or trend scores (for instance, corresponding to several business sectors) need to be consolidated, aggregation is carried out by weighting them by **reference emissions**, so as to correctly reflect the specific stakes of each segment.

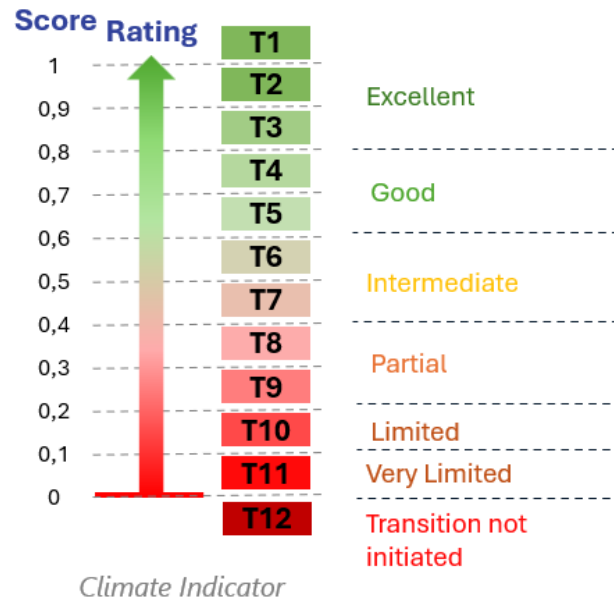
After aggregation at the company's sectoral level, a **final score** is computed by combining the different components:

- **60% to 80% for alignment,**
- **10% to 30%** for trend,
- **10%** for the qualitative metric.

The ranges retained for alignment and trend vary according to the importance given to the complementary sector metric in the overall evaluation.

### 3.6.2. From the aggregated score to the final transition rating

After aggregating the different components of the ICT, the degree of consistency of the company's short and medium-term GHG emissions pathway with the requirements of the transition to a low-carbon economy is assessed. It is then classified according to the following levels:



## 4. A modular methodology that could be scaled up at the European level

### 4.1. The operational deployment of the Transition Climate Indicator in France

To deploy the Climate Indicator, the Banque de France relies on its network of regional branches throughout France. Collection and analysis of information from companies, as well as feedback of results to companies CEOs, are handled entirely by Banque de France regional teams. More specifically:

- initial contact is made by a regional climate analyst, who can also support the company in filling the questionnaire;
- the file review and assignment of the transition score are handled by the analyst and then validated by a reviewer, so that each file benefits from at least two reviewers.

The Transition Climate Indicator covers both French companies and foreign companies operating in France. For data-availability reasons, the perimeter taken into account varies according to the company's nationality:

- for a French company, the ICT covers all its activity, **in France and abroad**;
- for a subsidiary of a foreign company operating in France, the ICT covers **only its activity in France**.

The data collected to compute the ICT cover the following elements:

- **current activity** volumes in physical units (MWh, m<sup>2</sup>, passengers-kilometre, etc.);
- **projected activity** volumes over a one to five-year horizon depending on sectors;
- the **associated GHG emissions** (when they are not available, Banque de France provides intensity proxies and multiplies by activity volumes);
- **decarbonisation actions** undertaken or planned.

In total, sectoral questionnaires include 3 to 5 types of data, and the number of data points varies depending on the company's size and activities. Data collection focuses on the scope(s) of interest, i.e.

the most significant scopes in terms of emissions, and therefore varies by sector<sup>12</sup>. By 2027, around 30,000 companies operating in France will be targeted by the ICT. These companies belong to economic sectors representing at least 50% of territorial GHG emissions.

## 4.2. Possibilities for scaling up the approach at the European level

**The Indicator’s methodology can be used independently of direct data collection from companies. Data from external providers can thus be used to extend the coverage of the Climate Indicator, both quantitatively (i.e. generating additional indicators) and geographically (i.e. generating indicators for companies that do not operate in France).**

This option has been tested by generating transition scores for companies across the euro area, for sectors where the methodology is ready and using data from Asset Impact. It opens up further perspectives for the Climate Indicator, notably for use cases that require scaling up at European level (monetary policy, banking supervision). It also enables others jurisdictions (e.g. Eurosystem central banks) to adopt the methodology with their own data sources, potentially paving the way for a Europe-wide approach.

The different components of the Climate Indicator (methodology, data used, deployed sub-indicators) can thus be mobilised together or separately depending on the nature and needs of users (companies, central banks, credit institutions, public authorities).

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<sup>12</sup> As an example, the scope of interest for transportation is scope 1, the scope of interest for the aluminum is scope 2, and the scope of interest for construction vehicles is scope 3.

## 5. Bibliography

Faria, P., & Labutong, N. (2019). A description of four science-based corporate GHG target-setting methods. *Sustainability Accounting, Management and Policy Journal*, 591-612.  
Récupéré sur  
<https://www.sciencedirect.com/org/science/article/abs/pii/S2040802119000270>

Kohler, M., Da Costa, P., Cluzel, F., & Umbricht, L. (2026). A review of corporate climate ratings: Assessing divergence from scientific expectations. *Renewable and Sustainable Energy Reviews*. Récupéré sur  
<https://www.sciencedirect.com/science/article/pii/S1364032125010251>

SBTi. (2015). *Sectoral Decarbonization Approach (SDA): A method for setting corporate emission reduction*.

<https://files.sciencebasedtargets.org/production/files/Sectoral-Decarbonization-Approach-Report.pdf>

SBTi. (2019). *Foundations of Science-based Target Setting*.

<https://files.sciencebasedtargets.org/production/files/foundations-of-SBT-setting.pdf>