



**Position Paper on**  
**TEG Interim Report**  
**On Climate Benchmarks and Benchmarks' ESG Disclosures**  
**June 2019**

**Executive Summary**

- 1** The reference scenario should be communicated in a methodologically sound manner.
- 2** The financial metric used for expressing greenhouse gas ("GHG") intensity metrics should be Gross Value Added ("GVA") instead of revenue. Given the significant need for innovation in the field of forward-looking climate impact metrics for equity indices, the Technical Expert Group ("TEG") should be open for alternative denominators, which make sense in the distinct context of forward-looking climate impact measurement.
- 3** Uncertainty of factors for determining Paris Alignment, such as Scope 3 emissions, should be addressed by e.g. adding appropriate confidence intervals for reaching the target values of the EU Paris-aligned Benchmark ("EU PAB") requirements.
- 4** The content of the 6<sup>th</sup> Assessment Report of the Intergovernmental Panel on Climate Change ("IPCC") and how it will support the definition of Paris Alignment should be picked up by the TEG.



## Introduction

right. based on science ("right."), is a young data provider which has developed the X-Degree Compatibility ("XDC") Model, combining climate science with economic developments. Therefore, we see ourselves in the position to provide relevant feedback on the TEG interim report on climate benchmarks and benchmarks' ESG disclosures.

right. has identified the following most critical key aspects regarding assessing methodologies for generating climate-related impact metrics, being understood as part of the "E" from Environmental, Social and Governance ("ESG").

Each key aspect raises a question, provides background information and refers to a possible solution.

## Key Aspects

### **1. *How can we communicate the 1.5°C scenario as a reference scenario in a methodologically sound way?*** (number 3.5.3 | page 29 and 5.5.1 | page 44 et seqq.)

Background: There are various 1.5°C-compliant emission trajectories that depend on varying assumptions about when and how technological progress, climate policy, and consumer behaviour lead to the required emission reductions as defined by the 1.5°C scenario. Communicating the overall 1.5°C emission scenario as a reference case makes methodological sense. It provides flexibility for carrying out sound climate-related analysis using various trajectories of a 1.5°C-compatible energy-economy-land system under various socioeconomic conditions. Understanding the variety of energy-economy-land system trajectories and testing the sensitivity of selected key elements for understanding exposure to climate-related risks and opportunities is essential for the goals of the TEG. Communicating and suggesting only one of the trajectories of a 1.5°C-compatible energy-economy-land system under one set of socioeconomic conditions as a reference scenario, is not methodologically sound.

Please note that using only one of those 1.5°C-compatible energy-economy-land system trajectories under one set of socioeconomic conditions can be a pragmatic, short-term starting point for analysing climate-related risks and opportunities, including 1.5°C-alignment. Developing robust Paris Alignment analysis frameworks in the mid-term that are not only helpful for communication but also serve risk management, due diligence and strategy purposes is pivotal. In order for this to be effective it is necessary



to work with a plausible range of 1.5°C-compatible energy-economy-land system scenarios under various sets of socioeconomic conditions.

It is critical that the TEG uses correct and consistent language, when it comes to various types of climate-related scenarios. Knowing the differences between e.g an emission scenario based on a Representative Concentration Pathway (“RCP”) and a climate change scenario generated by an Integrated Assessment Model (“IAM”) is crucially important for choosing the right reference scenario.

Joeri Rogelj et al. as the authors of the 1.5°C scenario write in a recent paper\* in Nature Climate Change: “The 2015 Paris Agreement calls for countries to pursue efforts to limit global-mean temperature rise to 1.5 °C. The transition pathways that can meet such a target have not, however, been extensively explored. Here we describe scenarios that limit end-of-century radiative forcing to 1.9 W m<sup>-2</sup>, and consequently restrict median warming in the year 2100 to below 1.5 °C. We use six integrated assessment models and a simple climate model, under different socio-economic, technological and resource assumptions from five Shared Socio-economic Pathways (SSPs). Some, but not all, SSPs are amenable to pathways to 1.5 °C. Successful 1.9 W m<sup>-2</sup> scenarios are characterized by a rapid shift away from traditional fossil-fuel use towards large-scale low-carbon energy supplies, reduced energy use, and carbon-dioxide removal. However, 1.9 W m<sup>-2</sup> scenarios could not be achieved in several models under SSPs with strong inequalities, high baseline fossil-fuel use, or scattered short-term climate policy. Further research can help policy-makers to understand the real-world implications of these scenarios.”

\*Rogelj J et al. (2018) Scenarios towards limiting global mean temperature increase below 1.5 °C. Nature Climate Change 8: 325–332. doi: 10.1038/s41558-018-0091-3

Possible solution: Experts on the various types of climate-related scenarios should be more involved into further working on the report. Approaches should take advantage of the various scenarios provided by academic and non-academic entities. Targets should not be based on deterministic outputs of an IAM such as the International Energy Agency (“IEA”) scenarios in their current form but should be based on a more dynamic scenario framework for Paris Alignment analysis, such as the RCP X SSP framework. Dynamic assessments via customized approaches that are based on sector-specific emission budgets depending on a variable rate of decoupling of emissions and GVA in each sector, should be set out as the direction for innovation in this field.

## **2. How can we choose the most appropriate metrics for generating GHG intensity metrics?** (number 5.3.3 | page 40)

Background: The TEG proposes revenue as the denominator in the calculation of the carbon intensity for corporates and GDP for sovereigns. Since revenue is not an



appropriate measure for a company's financial performance, this denominator might lead to hidden risks when used for investment steering and management purposes. High revenues but even higher costs would result in a low GHG intensity. From a financial risk perspective, such a low GHG intensity would obviously be problematic. In addition, it would be handy to choose a financial metric for corporates that is comparable to that of gross domestic product ("GDP") for sovereigns. Using GVA would also resonate with the Taxonomy, which has selected most important sectors based on their GVA and not based in revenue. We see a misalignment between EU Benchmark Disclosures and the Taxonomy, that could be easily resolved by also promoting GVA as a denominator for GHG intensity for corporates.

In terms of equity indices, the EU proposes Total Capital as the denominator for GHG intensities. Total Capital might be a viable option based on the current state of backward-looking climate impact measurement methodologies. When it comes to future-looking methodologies, which will gain more relevance in the future for measuring climate impact, we believe the TEG should be less deterministic.

Possible solution: The financial metric used for expressing GHG intensity metrics should be aligned with the Taxonomy and thus be GVA. GVA is a book value that measures the actual value that a company generates between costs and revenues without distortions stemming from taxation and interest rates. It can be easily linked to GDP as a macroeconomic reference point. Given the significant need for innovation in the field of forward-looking climate impact metrics for equity indices, the TEG should be open for alternative denominators, which make sense in the distinct context of forward-looking climate impact measurement. In our opinion, GVA would be suitable here as well.

### **3. *How can we take material uncertainties into account?*** (number 5.4 | page 43)

Background: The analysis of climate-related risks and opportunities depends on data which can be highly uncertain. The best examples are Scope 3 emissions of an economic entity or the value of a CO<sub>2</sub>-price in the near, mid and long term. Outputs of analyses can vary significantly depending on the range of plausible assumptions being incorporated into the analysis. The sensitivity of the output to changes in parameter assumptions is valuable information. In order to benefit from it when interpreting outputs, uncertainties within the calculation process of Paris Alignment must be identified and measured. Hence, material uncertainties should be considered when analysing Paris Alignment.

Possible Solution: Uncertainty does not give license to ignore corresponding factors but rather requires methods for incorporating a reasonable range of values for uncertain



factors. The higher the uncertainty, the larger the range on which computations should be based on, in order to derive valid and useful results. A good example for factors that are uncertain is Scope 3 emissions. The materiality threshold for uncertainties being considered when analysing Paris Alignment can be set depending on how sensitive the outcome is to changes of a factor's input value. This should be taken into account when defining Paris Aligned Benchmarks in the form of e.g. confidence intervals for hitting the target values.

#### ***4. What major progress can we anticipate in terms of 1.5°C scenarios as a result of the 6th assessment report in 2021/2022?***

Background: Climate-related risks and opportunities, including challenges for mitigation and adaptation on the same level of global warming as represented by an RCP vary significantly depending on socioeconomic conditions. Because of such findings, Coupled Model Intercomparison Project Phase 6 ("CMIP6") as the upcoming generation of climate change scenarios, will incorporate socioeconomic aspects in form of the SSPs in a more thorough manner into its methodology and results. SSPs will play a major role when it comes to defining and describing transition options into a <2°C-world. Advanced, better harmonized and thus usable data sets can be expected to be published with the 6<sup>th</sup> Assessment Report of the IPCC in 2021/2022.

Possible solution: The TEG should take the content of the 6<sup>th</sup> Assessment Report of the IPCC into account. The dynamic RCP x SSPs scenario framework as a focus point of the mitigation section of the 6<sup>th</sup> Assessment Report of the IPCC should at least be acknowledged as a viable option for Paris Alignment analysis. At the core of this framework are the interdependencies of socioeconomic conditions and climate change. As it is made evident in the above extracted text from the Rogelj paper about the 1.5°C scenario, SSPs played a major role for defining 1.5°C transition pathways. Using this framework for Paris Alignment analysis will not only be beneficial for defining company-specific targets but also for building up the necessary competencies when it comes to climate-related risk management.

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