

European Scientific Advisory Board on Climate Change
Kongens Nytorv 6, 1050 Copenhagen, Denmark

Frans Timmermans, Executive Vice-President of the European Commission
Kurt Vandenberghe, Director-General, European Commission Directorate-General for Climate Action
European Commission
B-1049 Brussels/Belgium

Potsdam, 16 January 2023

Subject: Initial input to the determination of an EU-wide 2040 climate target and projected indicative greenhouse gas budget for the period 2030-2050

Dear Mr Timmermans, dear Mr Vandenberghe,

In keeping with the relevant provision of the European Climate Law, the European Scientific Advisory Board on Climate Change (the 'Advisory Board') would hereby like to provide its initial input to the European Commission on the issue of setting an EU-wide 2040 climate target and projected indicative greenhouse gas budget for the period 2030-2050.

The European Climate Law requires the European Commission to submit a proposal and accompanying report on these matters, within six months of the first Paris Agreement Global Stocktake. The Advisory Board has chosen to publish its first advice on this topic early in 2023 in order to provide a constructive and timely input in advance of the European Commission's preparations for this proposal.

Our key recommendation is that the European Commission should follow an approach that is systematic, transparent and guided by EU values. This will help to demonstrate that the proposal incorporates the full range of scientific, legal, technical and ethical issues that it is required to consider under the European Climate Law.

The document attached presents our recommendations in more detail. To ensure that the proposal addresses the required combination of issues, we recommend that the analysis considers the five following key areas:

1. The scientific and legal context
2. Physical limits to global emissions and the EU's 'fair share'
3. Transformation scenarios towards net zero greenhouse gas emissions by 2050 for the EU
4. Implications of different pathways in terms of side effects, co-benefits, resilience and feasibility
5. The use of value judgements, especially when addressing tensions between different issues and principles

Following the publication of this initial input, the Advisory Board intends to publish additional quantitative advice in the first half of 2023. This is expected to consist of an indicative range of emission pathways for the EU, based on available modelling results selected in accordance with the principles and method described in this initial input, as well as the associated interim target values, and discussion of the implications of choosing between different pathways.

We urge you to consider these attached recommendations in the preparation of the target proposal and accompanying greenhouse gas budget. We look forward to meeting with your services to present our recommendations and remain at your disposal to answer any questions that might arise.

Best regards,

A handwritten signature in black ink, appearing to read 'Ottmar Edenhofer', written in a cursive style.

Professor Dr. Ottmar Edenhofer

Chair of the European Scientific Advisory Board on Climate Change