

EUROPEAN COMMISSION
Impact Assessment Board

31 JAN. 2011

Brussels,
D(2011)

Opinion

Title **DG CLIMA - Roadmap towards a 2050 low-carbon economy**
(draft version of 21 December 2010)

(A) Context

The roadmap towards a 2050 low-carbon economy follows the call from the October 2009 European Council, which agreed with the need to reduce by 2050 the global emissions by 50%, with developed countries reducing their emissions by 80-95%, as compared to 1990 levels. These goals should serve to establish mid-term goals, subject to scientific review. In this context the Council supported the EU objective to reduce by 80-95% by 2050 as compared to 1990 levels.

The objective of the analytical report accompanying the roadmap is to provide a scenario analysis on what is needed to achieve the GHG reduction objectives by 2050. It provides the common baseline scenario for the IA reports of number of related initiatives, such as the White Paper on Transport, a roadmap for the energy (to be presented later this year), and an initiative on energy efficiency. Only within the context of these initiatives policy options will be developed and assessed that could achieve the identified targets.

(B) Overall assessment

The submitted report provides modelling results that can be used as an essential input for the impact assessment work of related decarbonisation initiatives exploring concrete policy actions. It will help to ensure coherence between these initiatives on the basis of a common analytical basis (including the baseline scenario).

While the Board acknowledges the analytical work carried out, the report should be improved further in several regards. Firstly, it should complement the modelling work with more qualitative analysis using other available information, to go beyond the insights that the model is capable of supplying. Secondly, it should provide greater clarity on any action (in addition to the policies already agreed) that will be needed by 2020 to deliver on the decarbonisation target required by 2050. Thirdly, it should assess key macro-economic effects, such as impacts on GDP and employment. Fourthly, the report should discuss distributive and competitiveness impacts in more depth. Finally, it should clarify a number of methodological points, including assumptions on carbon and oil prices.

Given the specific analytical focus of the report, it is not and should not be considered to be a standard impact assessment as it does not assess and compare policy options that could deliver on the overall policy goal.

(C) Main recommendations for improvements

(1) Broaden the problem analysis and situate the model scenarios in a wider context.

The report should analyse a wider spectrum of problems that may hinder the structural shift needed to reduce carbon emissions by 2050 and should clearly indicate the limits of analysing them with model exercises, due to the increasing uncertainty over time about technology and market developments. Modelling results for the scenarios should be complemented by qualitative analysis, for instance of likely international oil market developments. The report should also explain to what extent demand-side management and sustainable production and consumption measures could have been taken into account in the modelling. Finally, the report should provide a clearer analysis for each scenario of the expected developments in terms of the challenges identified in the problem section. It should also identify and analyse associated risks such as barriers to research and development, energy security, carbon leakage or competing demand for the land use and related environmental impacts.

(2) Clarify the action needed before 2020 to deliver on the carbon reductions of 80-95% by 2050. For this purpose the report should use the analytical work carried out for the 'Communication on analysing options to go beyond 20% GHG emission reductions and assessing the risk of carbon leakage' (COM(2010) 265 final). It should clarify to what extent the existing policy package and the current 2020 target are consistent with the target for 2050. The report should also clearly indicate how economic sectors (e.g. agriculture, forestry, energy efficiency) will contribute to achieving the 80% target and should discuss the potential additional effort that may be needed by specifying which related concrete initiatives and impact assessment activities are planned.

(3) Analyse macro-economic effects and investment needs. The report should explain why modelling of changes to GDP and employment levels up to 2050 has not been possible. It should include an analysis of more immediate impacts on the economy and employment, for which the analytical work done for the above-mentioned Communication can be used. This analysis should be complemented with a discussion of how the identified investment needs could be financed. The report should also make use of other available studies, in order to discuss in more depth possible impacts beyond 2020.

(4) Assess distributional and competitiveness impacts. The report should complement the analysis of the impact on household expenditure with a discussion of how impact would vary depending on income category. The report should also discuss in more depth competitiveness impacts for the most affected economic sectors.

(5) Clarify methodological issues. The report should clarify assumptions regarding technology deployment and development, and thus the availability of carbon reducing technologies, under scenarios with fragmented and global action. It should also provide a fuller justification for the assumption regarding equal carbon price for all sectors. Finally, the report should inform how the compensation measures for sectors prone to carbon leakage have been modelled.

Some more technical comments have been transmitted directly to the author DG and are expected to be incorporated in the final version of the report.

(D) Procedure and presentation

The report should present the model outcomes in the main text in a more accessible and policy relevant manner. This should include giving key data and results in absolute values (for example, carbon prices in different scenarios), and complementing or replacing some of the numerous small charts with tables. At the same time the report should also be considerably shortened by moving some of the detailed technical analysis to the annex. The report should also clearly indicate follow-up initiatives and planned impact assessment work.

(E) IAB scrutiny process

Reference number	2011/CLIMA/005
External expertise used	No
Date of IAB meeting	26 January 2011