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Achieving 60% emission reductions by 2030

Assessment of policy options

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Objectives of the study

This short report by Cambridge Econometrics analyses impacts of increased climate action in the EU27 using a macroeconomic model. The key questions are:

- Is an increase to a 60% GHG reduction target possible?
- What could be key policy elements?
- What would be the economic and employment effects of meeting this target?

Methodology

1. HOW THE RESEARCH WAS CARRIED OUT

A macro-econometric model, E3ME is used to provide answers to the above questions. E3ME is a global E3 (Energy-Environment-Economy) model that is frequently used for the assessment of climate and energy policy. Recent E3ME applications include modelling contribution to the Stepping up Europe's 2030 climate ambition Impact Assessment (55% target) for the European Commission, Halfway There: Existing policies put Europe on track for emission cuts of at least 50% by 2030 report for EMBER Climate, and analysis of the China Net Zero target.

ECONOMETRICS APPROACH

The key distinction of the E3ME model is its econometric approach. The model can fully assess both short and long-term impacts and is not limited by many of the restrictive assumptions common to Computable General Equilibrium (CGE) models. In practice, this means that stepping up the ambition level of EU

climate policies will not by assumption result in additional burden to the economy. Instead, the measures can be assessed across relevant sectors, reflecting policy-driven access to financial resources. Further information about E3ME is given in the final section of this document.

This note covers three different scenarios based on the level of EU ambition:

- Baseline (including preliminary COVID impacts)
- 55% GHG reduction target
- 60% GHG reduction target

The E3ME model baseline includes preliminary COVID impacts and current policies prior to the pandemic. For the 55% and 60% scenarios, a combination of climate and energy policies is used to achieve the targets. The targets are set in line with the existing regulatory framework in relation to 1990 emission levels and do not include sinks through land use, land-use change and forestry (LULUCF).

It must be stressed that the modelling of the 55% scenario here is different to the E3ME analysis in the European Commission Impact Assessment. In this report the scenarios are determined by the policies outlined below, rather than modelling from the PRIMES energy system model. Furthermore, as noted above, here the 55% target does not include LULUCF. It must be stressed that the modelling of the 55% scenario here is different to the E3ME analysis in the European Commission Impact Assessment. In this report the scenarios are determined by the policies outlined below, rather than modelling from the PRIMES energy system model. Furthermore, as noted above, here the 55% target does not include LULUCF.

- [Read the full report \(pdf\)](#)

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