Session 3 – How are forest-related Impact Assessments used for EU and national polices

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HE-ForestNavigator, 18/09/2024

What is the roles of models?

- **Provide quantifiable evidence** of the expected impacts including complex interaction effects
- **Inform** policy makers of expected and unexpected effects
- **Compare** different possible policy options
- **Compare** modelling results with other evidence

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Modelling outputs are often used as quantified evidence in Impact Assessments…

- Climate Target 2040 Impact Assessment *(SWD(2024) 63)*
- Climate Target 2030 Impact Assessment *(SWD (2020) 176)*
- Nature Restoration Law Impact Assessment (*SWD/2022/167 final*)
- Etc.

What is an Impact Assessment?

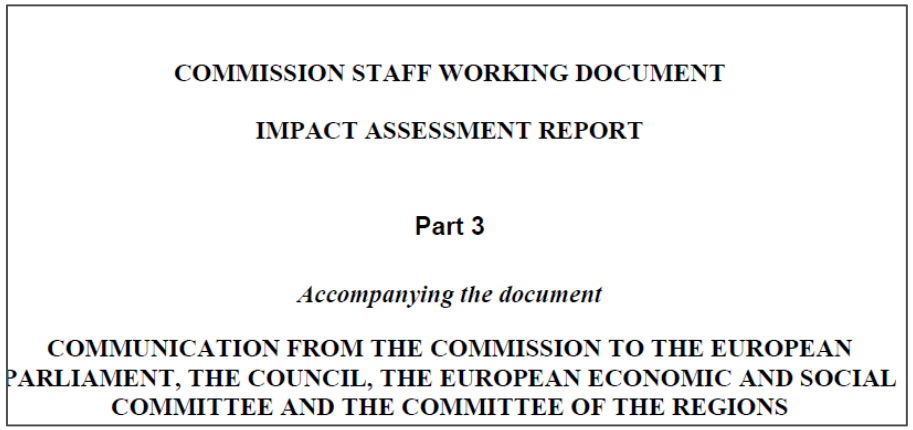
- "impact assessment is a process comprising a structured **analysis of policy problems and corresponding policy responses**. It develops policy objectives and alternative policy options and assesses their impacts. (…) Though impact assessments are led by a DG, they are developed in **collaborative efforts across Commission services**."

- **Impact assessments examine whether there is a need for EU action** and **analyse the possible impacts of available solutions**. These are carried out during the preparation phase, **before the Commission finalises a proposal** for a new law.

- " Impact Assesssments in the EU are required **when policy proposal is likely to lead to significant impacts*** and the Commission has a **choice between alternative policy options**"

*As outlined in the Better Regulation Toolbox 2021

What is an Impact Assessment?



COMMISSION STAFF WORKING DOCUMENT

IMPACT ASSESSMENT REPORT

Part 3

Accompanying the document

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

- An Impact Assessment **follows a rigorous procedure and timeline** involving a regulatory scrutiny board (RSB), Interservice Consultations, and Call for Evidence. (see 'provide' and 'inform')

- An Impact Assessment usually **includes several sources of information**, from a **public consultation** / call for evidence; **stakeholder consultations, scientific literature reviews, dedicated studies**, quantified estimations e.g. through **modelling outputs** (see 'compare')

*As outlined in the Better Regulation Toolbox 2021

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Impact Assessments then serve to support policy making decisions and help to explain policy proposals and positions

EN Official Journal of the European Union L 10

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(Legislative acts)

REGULATIONS

REGULATION (EU) 2023/839 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 19 April 2023

mending Regulation (EU) 2018/841 as regards the scope, simplifying the reporting and compliance

- LULUCF Regulation *(EU) 2023/839*
- Effort Sharing Regulation *(EU) 2023/857*
- COM Proposal for AFOLU Target 2035 *COM(2021) 554*
- Communication: 'Fit for 55': delivering the EU's 2030 Climate Target on the way to climate neutrality (*COM/2021/550)*
- COM Proposal for a Nature Restoration Law *(COM/2022/304 final)*

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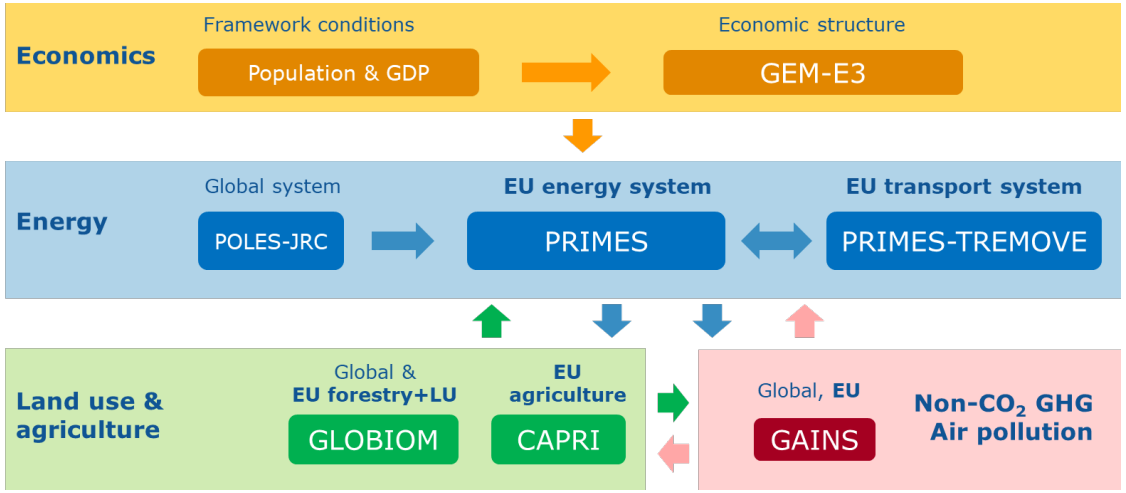
Modelling in DG CLIMA is using integrated approach



- DG CLIMA looks for an integrated, economy wide approach (‘provide)
- Integration of different model suites allows assessing different impacts and interaction effects (‘inform’)
- This integration allows the assessment of related impacts such as on biodiversity, employment, economic output etc.
- Crossvalidation of model outputs (‘compare’)

Some vivid examples

dots indicate the combinations that can be reached at a low range of economic costs; however, as just argued, costs are only one of the considerations that should come into play in the choice of the optimal mitigation mix.

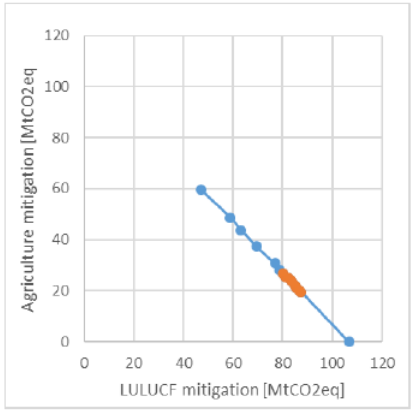
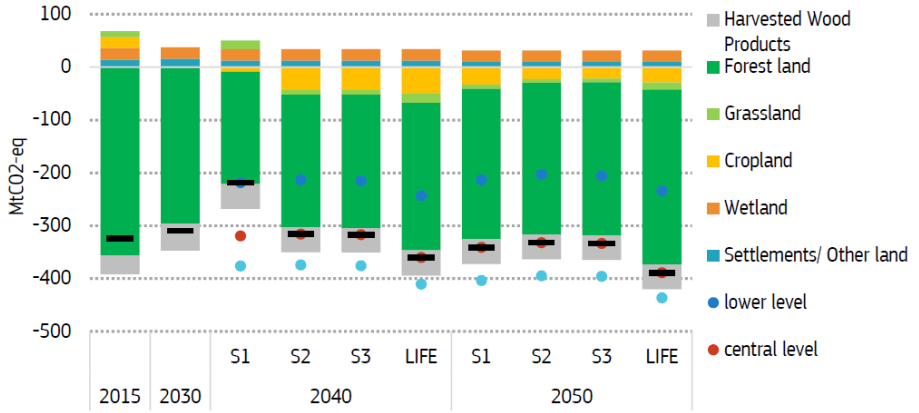


Figure 8 – Each point in the graph corresponds to a combination of additional LULUCF removals (x-axis) and additional emission reductions in Agriculture (y-axis) to achieve an EU climate neutral land sector in 2035. Points on the blue line correspond to combinations that deliver additional mitigation of 106 MtCO2eq; this level would bridge the gap that remains after the low-hanging fruits (the LULUCF and agricultural mitigation actions that are assumed at zero costs per ton of CO2eq) are carried out. The range shown in the graph goes from 47 MtCO2eq of LULUCF removals and a reduction of 59 MtCO2eq in agriculture on the top left end of the blue line, to 106 MtCO2eq of

Modelling output used to define a region of cost-efficiency for splitting emission reductions between Agriculture and LULUCF (Proposal AFOLU 2035 target)

Figure 95: LULUCF net removal emissions and removals



Note: Emissions and removals include all GHG-emissions from the LULUCF sector and are reported in MtCO2-eq. For the calculation of LULUCF net removals of the scenarios in 2040, S1 considers the "lower level", while S2 and S3 the "central level". All scenarios consider the "central level" in 2050.

Source: UNFCCC 2023, GLOBIOM

LULUCF emissions and removals per scenario (Climate Target 2040 IA)

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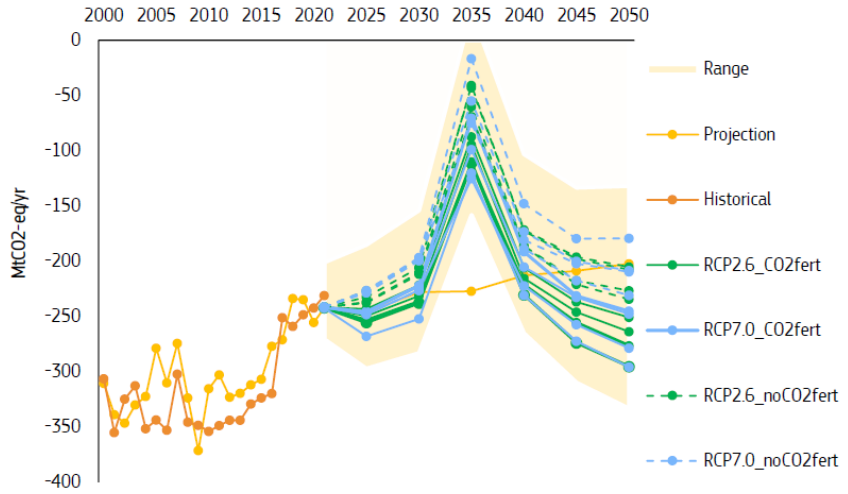
Some vivid examples

Figure 98: Estimated climate change impacts and extreme events on LULUCF net removal

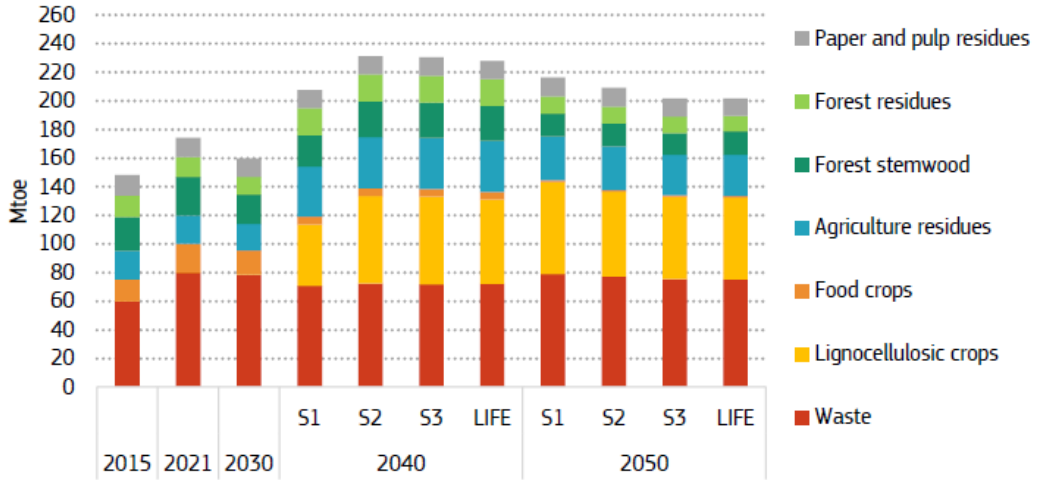


Note: The graph displays a model-based projection of the range of the LULUCF net removal under impacts from climate change and simulated extreme events. The 'historical' trajectory shows the inventory data based on UNFCCC 2023, the 'projection' shows the trajectory of the lower boundary of the LULUCF range (lower level net removal) without impacts from climate change and extreme events. The different 16 trajectories show RCP 2.6 vs. 7.0 (2) X different climate models (4) X CO2 fertilisation vs. no fertilisation (2). The range illustrates the range of uncertainty due to climate change impacts across all trajectories including uncertainty due to soil carbon removals. In 2035 a series of extreme events is simulated to illustrate its impact on the LULUCF net removal.

Source: GLOBIOM, UNFCCC 2023

Climate Change impacts and natural disturbances simulation (Climate Target 2040 IA)

Figure 88: Domestic supply of feedstock for bioenergy and waste



Note: 'Lignocellulosic crops' includes short rotation coppice and lignocellulosic grass. Manure is included in 'Waste'.

Source: PRIMES, GLOBIOM

Biomass supply for bioenergy (Climate Target 2040 IA)

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Thank you

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