

Revision of Biofuel, Bioliquid, and Biomass Fuel Production Pathway Values and Methodologies

CONSULTATION RESPONSE

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Bellona welcomes the opportunity to provide feedback on the proposed updates to greenhouse gas (GHG) emission values and factors for biofuels (liquid and solid) and biomass fuel production pathways (Annex V and IV and the Renewable Energy Directive). As an organization committed to advancing sustainable and science-based climate solutions, we offer the following observations and recommendations.

1. Scientific Rigor and Methodological Updates

We commend the Commission for basing the updates on the Joint Research Centre's (JRC) mandated report and the Intergovernmental Panel on Climate Change's (IPCC) 2019 methodologies. These sources represent a robust and scientifically rigorous foundation for revising GHG emission values, ensuring that policy decisions are grounded in the latest research and evidence.

2. Expansion of Production Pathways and Feedstocks

The inclusion of new production pathways and feedstocks is a positive step. However, we encourage the Commission to further expand this scope to address **mixed feedstocks and heterogeneous streams**, such as:

- Mixed non-lignocellulosic and lignocellulosic materials
- Combined fossil and biogenic streams
- Third-generation biofuels derived from marine resources.

Additionally, we note the absence of **landfilling and biogas production pathways directly integrated into the grid**. Including these pathways would provide a more comprehensive framework for assessing the full potential of biomass and bioenergy systems.

3. Granularity for Waste and Residues

Greater granularity in the treatment of waste and residues would enhance the accuracy and applicability of the revised values. This would support more precise GHG accounting and incentivize the sustainable use of underutilized resources.

4. Cascading Use of Biomass

While the draft acknowledges the importance of the cascading use of biomass, we recommend the inclusion of **operational guidelines** and **reporting mechanisms** to ensure the effective implementation of this principle. Clear guidelines would facilitate compliance and promote the efficient use of biomass resources across sectors.

5. Monitoring, Reporting, and Verification (MRV) for CCS and BioCCS

To align with the EU's climate ambitions, we urge the Commission to incorporate MRV standards for Carbon Capture and Storage (CCS) and Bioenergy with Carbon Capture and Storage (BioCCS) in the annexes. Robust MRV frameworks are essential for verifying the climate benefits of these technologies and ensuring their integrity within the Renewable Energy Directive (RED).

6. Carbon Debt and Indirect Land Use Change (ILUC)

The current methodology excludes the carbon debt of biomass, which risks oversimplifying carbon accounting. We strongly recommend that **ILUC and carbon debt assessments** be integrated into the methodology. A zero rating of biomass within the RED does not reflect the full climate impact of biomass use and could undermine the Directive's environmental objectives.

Bellona remains committed to supporting the EU's transition to a sustainable and climate-neutral energy system. We appreciate the Commission's efforts to refine these critical methodologies and stand ready to provide further input or collaboration as needed.

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