

Carbon removals in a revised EU Climate Law



Martin Cames, Senior Researcher, Öko-Institut

Proposal for a revision of the EU Climate Law

Key amendments to the text:

- Art 2: Climate neutrality and mandatory net-negativity;
- **Art. 4**: Separate targets for emissions reductions, biogenic sequestration and permanent removals by 2040.
- Art. 4a (new): Role and mandatory protection of natural sinks.
- **Art. 4b (new)**: Role and binding targets for permanent removals.





Article 4

3 With a view to achieving the climate-neutrality and net-negativity objectives set out in article 2(1) of this Regulation, the binding Unionwide climate target for 2040 shall be a domestic reduction of net greenhouse gas emissions by at least [XX]% compared to 1990 levels by 2040. This net target shall be based on a gross reduction of greenhouse gas emissions of at least [XX]% by 2040, and the contribution of net biogenic sequestration and permanent **removals** referred to in Article 4a and 4b shall be limited to **[XX] and** [XX] million tonnes of CO₂ equivalent respectively.



Article 4a

Role of biogenic sequestration by natural sinks

3 EU targets and policies dedicated to the protection of natural sinks and the enhancement of their carbon sequestration, ..., shall be kept separate from emissions reduction and permanent removals targets for the purpose of achieving the Union climate neutrality obligation set out in Article 2(1) of this Regulation. **Because of their temporary nature, biogenic sequestration by natural sinks shall not be used to counterbalance anthropogenic emissions** in achieving the Union climate neutrality objective by 2050.



Article 4b

Role of permanent carbon removals

4 In order to ensure that sufficient emissions reductions are deployed up to 2050, the **contribution of permanent removals ... should be limited to the amount of residual emissions** referred to in paragraph (5). Any **overachievement of the permanent removal targets ... shall not lead to a decrease in the ambition for reducing emissions**.



Permanence of carbon pools

- Managed lands
- Harvested wood products
- Geological CO₂ storage
- Other

- Minerals (enhanced weathering, carbon negative cement)
- Marine sediments in the open ocean (biomass sinking)



Transparency

- Distinguish
 - Emission reduction from carbon removal
 - Carbon pools with different permanence
- Enhanced understanding of effort and mitigation achieved
- Allow for targeted policy to ensure that all targets are met
- Include in National Determined Contributions (NDC)



Negative emissions

Breakdown of contributions to global net CO₂ emissions in four illustrative model pathways



- Long-term demand for carbon storage
 - <50%: Offset residual remissions
 - >50%: Address overshoot (negative emissions) -
- Contribution of biogenic removals is decreasing with larger overshoot

C.3.3. Pathways that overshoot 1.5° C of global warming rely on CDR exceeding residual CO₂ emissions later in the century to return to below 1.5° C by 2100, with larger overshoots requiring greater amounts of CDR (Figure SPM.3b) (high confidence).



Benefits

- Provide clear signals to investors
- Ensure transition in limited time scale
- Prepare for negative emissions beyond 2050
- Squaring the circle
 - Developing carbon removals while
 - Preventing mitigation deterrence

