



Policies and governance structures to support responsible deployment of CDR

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What is Carbon Dioxide Removal?

Key requirements

- CO₂ physically removed from the atmosphere
- Removed CO₂ is stored permanently (at least several centuries)
- All associated emissions estimated and accounted for
- Total permanent removals exceed total associated emissions
- Do No Harm and respect planetary boundaries



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Quantifying and Deploying Responsible Negative Emissions in Climate Resilient Pathways

Principles for carbon negative accounting

Horizon 2020, Grant Agreement no. 869192

Number of the Deliverable
DS.2

Work Package (WP): WP6
Task: Task 6.2 - Accounting

Lead beneficiary for this c
Editors/Authors: Steefs W

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Quantifying and Deploying Responsible Negative Emissions in Climate Resilient Pathways

Global governance of NETPs - global supply chains and coherent accounting

Horizon 2020, Grant Agreement no. 869192

Number of the Deliverable
6.3

Due date
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Work Package (WP): 6 - European and international governance

Task: 6.2 Accounting principles and governance: How do we account for negative emissions

Lead beneficiary for this deliverable: BELLONA
Editors/Authors: Samantha Eleanor Tanzer, Mark Preston Aragonès, Ana Serdoner, Aravind Dhakshinamoorthy,

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Call identifier: H2020-LC-CL-02-2019 - Negative emissions and land-use based mitigation assessment



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What is the climate role of Carbon Dioxide Removal?

- Supplement emissions reduction, which remains critical
 - Lower net emissions in the near term
 - Counterbalance residual for climate neutrality
 - Reach net negative
- If used to replace or slow decarbonisation, it creates mitigation deterrence
 - Current reality in many policy frameworks
 - Inclusion of CDR in offsetting mechanisms
- CDR is not equivalent to emissions reductions
 - Cannot undo the damage of emissions
 - Potential risks and impacts associated

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Quantifying and Deploying Responsible Negative Emissions in Climate Resilient Pathways

How do NETPs fit in existing climate frameworks?

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D6.1

Work Package (WP)
Task: T6.1 European
NETPs deployment

Lead beneficiary for
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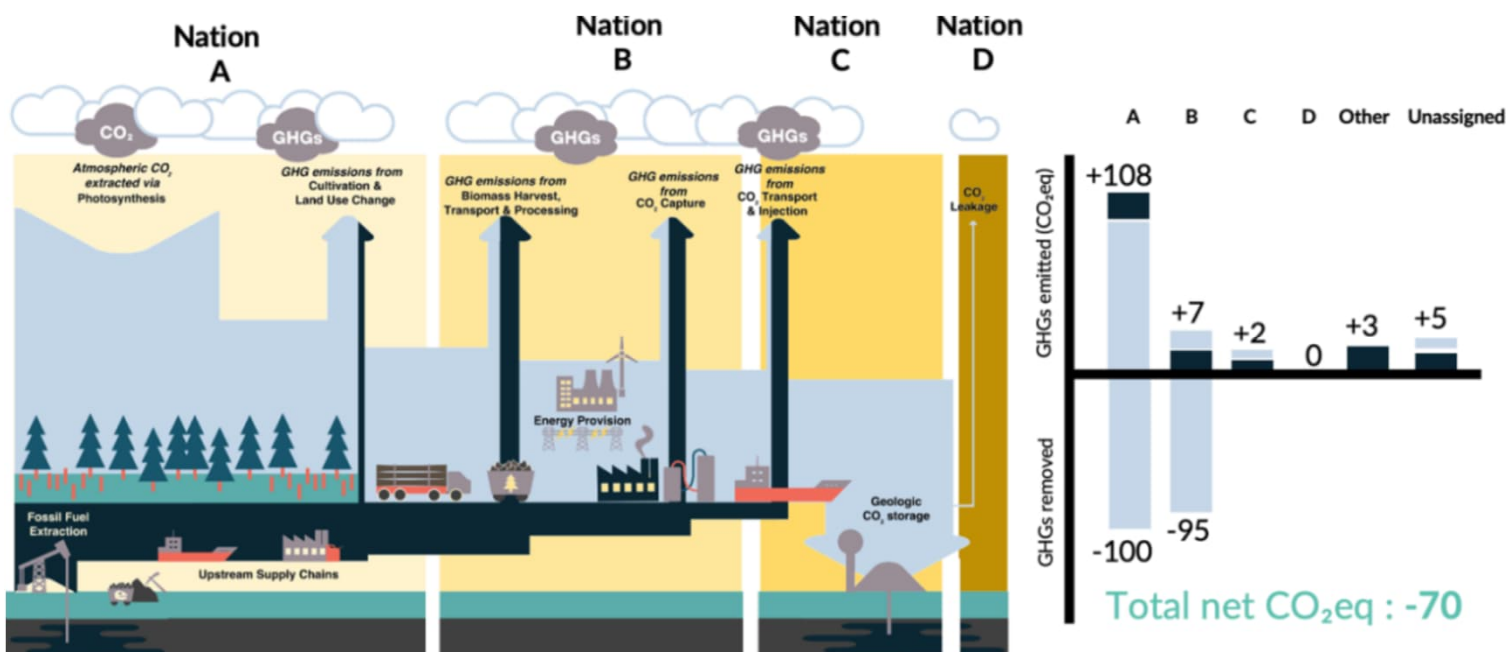


**Quantifying and Deploying
Responsible Negative Emissions**

Science-policy brief



Robust accounting frameworks are as essential as the NETPs themselves but existing accounting frameworks are inadequate.



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Quantifying and Deploying Responsible Negative Emissions in Climate Resilient Pathways

Global governance of NETPs - global supply chains and coherent accounting

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Number of the Deliverable: 6.3
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LCA/project accounting

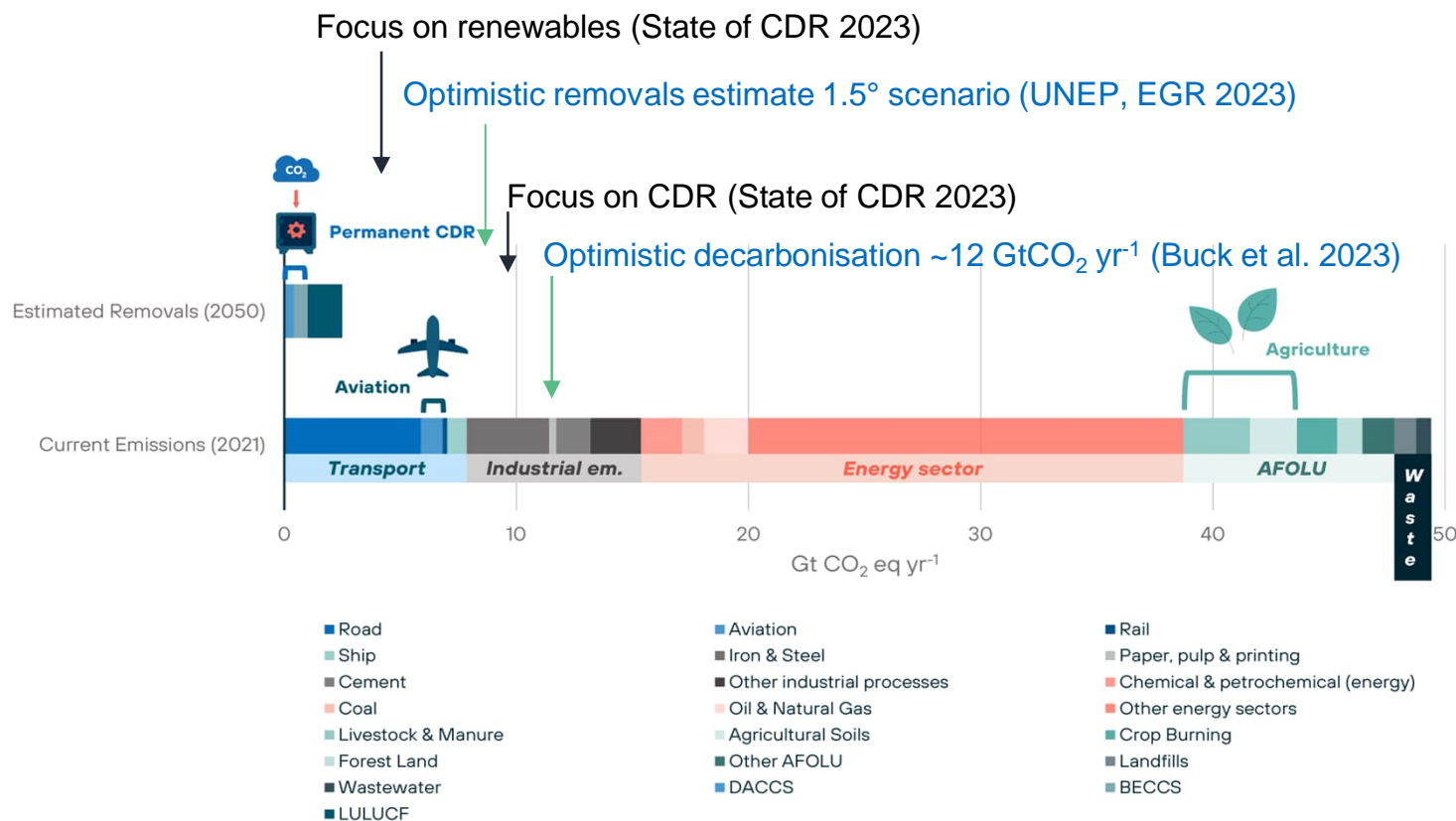
Lacks explicit accounting of temporal issues and their uncertainties, e.g. delays between emissions and storage, carbon payback period, (the risk of) impermanence.

Territorial accounting

Lacks treatment of non-biological extraction of CO₂ from the atmosphere.
Lacks treatment of accounting for non-geological storage of CO₂.



Managing expectations: Climate policy should reflect a CDR supply deficit for the foreseeable future.



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Quantifying and Deploying Responsible Negative Emissions in Climate Resilient Pathways

Who should use NETPs?

Managing expectations for NETP demand: Considerations for allocating carbon dioxide removals

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Work Package (WP): 6 – European and international governance
 Task: T6.4 – Private actors and global governance – a framework for NETPs interaction with mitigation and offsetting

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- NETP deployment should be strategic and efficient (CDR, natural/physical resources, economic)
- Allocation to users must align with principles of physical and social credibility and ensure counterbalancing is achieved at systemic level.

Recommendations for climate policy frameworks



Adopt a robust definition for CDR (4 principles).



Create separate targets and governance frameworks for emission reductions, permanent CDR and land-based sequestration. CDR must be supplementary to fast and deep emissions reduction.



Limit dependence on CDR, based on a supply-driven approach and to match residual emissions.



Accurately and comprehensively account for real removals and consider variable timescales of carbon removals.



Adopt a holistic perspective on Earth system stability, respecting Planetary Boundaries. Policies integrate climate stabilisation and biosphere stewardship to account for their equally fundamental role in supporting Earth system resilience.

Principles should be included in the **EU 2040 target** and **NDC** for international replication.

See more in “*CDR Handbook for Policymakers*”.



Thank you!

Project Partners



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