

Economic, regulatory, policy and MRV considerations for implementation of CCUS in the Baltic Region

Matthias Honegger Perspectives Climate Research

Baltic Carbon Forum 2023



Inspired by findings from



HORIZON-CL5-2021-D3-02-12. CCUS in hubs and clusters

Work Package 2

But any errors are my own

Social and Political challenges



- Social acceptance of CC(U)S when the technology is unknown to the public and to decisionmakers.
- Lack of trust in communicators of big projects or policies industry actors, investors, or politicians.
- Opportunity: Trust in communicators from research and NGOs tends to be high also in the Baltic Sea region.
- Where trust in government actors is low, information about CC(U)S may preferably come from academics and NGOs
- Communication also needs to include challenges and listening to (local) concerns

International Law



- National regulatory frameworks vary in maturity despite relevant guidance from EU CCS Directive.
- To export CO₂ for storage Parties to the London Protocol need to apply 2009 Amendment.
- Parties involved need an agreement following criteria in the Protocol (obligations differ if export is between two LP Parties or if CO₂ is exported from a LP Party to non-LP Party).

Natl. Regulatory Improvements



- Poland: CCS legislation and regulations are being amended to allow for commercial scale storage
- Latvia only allows for R&D, but Latvian Ministries are currently working on changing the CCS regulations.
- Germany: Restrictive CO₂ storage law is being reconsidered and capture for storage abroad clearly politically desired; carbon management strategy expected shortly.

Economic and MRV challenges



- GHG inventory guidelines lack detail for removals esp. when crossing national borders
- Comprehensive MRV for voluntary carbon markets (incl. emissions reductions and removals) emerging under Verra's Voluntary Carbon Standard (VCS).
- Awareness of carbon market MRV requirements limited among CCUS actors it
 will be important to consider them early in the development of CCUS projects
- The EU CCS Directive outlines guidance on monitoring and reporting for physical leakage, but the operationalization of the Directive varies with national capacities.
- The Paris Agreement Article 6.4 Carbon Market could become important international standard in 2024/2025.

Will ETS incentivize Biomass – CCS?



- Without recognizing negative emissions from biomass-processing installations under the ETS, the ETS fails to incentivize BECCS.
- To include removals in the EU ETS either:
 - 1) include new activities in Annex I of the EU ETS Directive, or
 - 2) allow use of carbon removal certificates for compliance in the EU ETS.
 - 3) both

Role of the EU Carbon Removal Certification Framework?



- The framework could in theory become a revenue source for CCU/S projects in the long term
- Fundamental problems at the stage of defining the frameworks scope undermine its credibility
- Unclear embedding in overall EU policy landscape
- Voluntary carbon markets may ignore the CRCF as irrelevant and given added transaction costs



Outputs: https://www.ccusnetwork.eu/

- Interactive mapping of non-technical issues (economic, legal, regulatory, acceptance)
- ➤ Stakeholder Workshop Summary
- >Synthesis white paper with recommendations





This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101075693



This project has received funding from UK Research and Innovation - Innovate UK under Innovation Funding Service (ISF)



Economic, regulatory, policy and MRV considerations for implementation of CCUS in the Baltic Region

Matthias Honegger Perspectives Climate Research

Baltic Carbon Forum 2023

