Support on Devising a Carbon Removal Certification Mechanism

Project

Duration

Dec 2020 - Nov 2022

This project supports the EU Commission's DG CLIMA to develop and evaluate different options for certifying carbon removal solutions. Carbon removals, also known as negative emissions, include nature-based technologies such as afforestation and soil carbon, and technology-based approaches, including carbon capture and storage from direct air or bioenergy. To reach the EU's 2050 goal of climate neutrality, alongside mitigation of GHG emissions, the EU must remove substantial amounts of carbon from the atmosphere. This project assesses existing knowledge and identifies policy options to increase carbon removals across Europe.

Carbon removals are critical for the EU to reach its climate targets

Carbon removals can be achieved by nature-based solutions or technology-based solutions; both of which must be massively upscaled to achieve the EU's climate targets. Today there are no significant examples of technological carbon removal in the EU and only limited EU incentives for the expansion of these methods. Nature-based solutions are widespread, but there are few incentives to encourage individual landowners to act. Certification is crucial to ensure that the future removals are real, permanent, and additional, and to protect against negative side effects.

Project objectives and methodology

This project assesses existing certification methods worldwide, including voluntary and regulatory approaches, to identify different approaches to key elements of certification, including the measurement, monitoring, and verification of removals, and methods to ensure permanence and avoid carbon leakage. A second task evaluates the EU GHG removal potential of different technological and nature-based solutions, as well as their suitability in terms of cost and broader sustainability impacts. An expert workshop and stakeholder conference, as well as a large survey, gathers external expertise and input. The bulk of the project then focuses on developing and evaluating different options for an EU-wide carbon removal certification mechanism, drawing on the findings from the earlier steps. A final task supports the development of a potential pilot phase and accompanying monitoring plan to test options on the ground.

Ecologic Institute leads the task evaluating existing certification mechanisms. This builds on work completed on a previous DG CLIMA project, "Analytical support for the operationalisation of an EU Carbon Farming Initiative". Ecologic Institute is also involved in the evaluation of nature-based carbon removal options and contributes nature-based solution expertise throughout the project.

Funding

European Commission, Directorate-General for Climate Action (DG Climate), International

Partner

Environment Agency, Austria
Ecologic Institute, Germany
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Carbon Counts, Germany

Team

Hugh McDonald
Dr. Ana Frelih-Larsen
Laurens Duin
Benjamin Görlach

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