

Swedenergy's comments on the call for evidence for an impact assessment regarding certification of carbon removals

Swedenergy is a non-profit industry and special interest organisation for companies that supply, distribute, sell, and store energy. Mainly electricity, heating, and cooling. Swedenergy monitors and promotes the interests of its members and the Swedish energy sector in general. The organisation has a total of 400 members, which includes state-owned, municipal, and private companies as well as associations within the energy sector.

Swedenergy supports an establishment of a framework for the certification of carbon removals

A framework for certification of carbon removals should be in place by 2026

Swedenergy is a strong supporter for a swift establishment of a framework for the certification of carbon removals. It is indeed an essential steppingstone towards achieving a net contribution from carbon removals in line with the EU climate-neutrality objective. Permanent carbon removal from the atmosphere is elementary in reaching EU's climate goals and to offset greenhouse gas emissions that are technically hard/impossible or very expensive to avoid. Although the 2050 net zero goal is 28 years from now it is of uttermost importance to kick start the deployment of carbon removal technologies due to long lead times for storage solutions, legal issues, new technologies, business models but also for social acceptance. Swedenergy consider a framework for the certification of carbon removals at latest should be in place from 2026. Sweden is planning on supporting bio energy CCS (BECCS) with possible large-scale removals already from 2026. Hence, the framework for certification needs to be finalised by then.

Carbon removal certification is a key measure for market-driven CCS/CCU development

Swedenergy has identified certification of carbon removals as a key to unlock funding from private and public sources (e.g. voluntary carbon markets, private purchasing or investment initiatives or public funding programmes). A robust framework is needed to achieve credibility and be socially acceptable to gain the trust of stakeholders and civil society. For an emerging market driven development of CCS and CCU technologies a certification of carbon removals is also key measure.

Swedenergy would like to point out that trading certificates, both national and inside EU (both business to business and between countries (however, not between companies and countries), need to be compatible with the Paris agreement and other relevant regulations. The coming legislation should ensure that this will be the case.

There is a need of quicker process for certification of carbon removals in the industrial sector

Swedenergy urges the Commission to consider splitting the establishment of a framework for the certification of carbon removals utilising carbon farming and industrial removal respectively into two separate processes. A certification for carbon farming is considerably more complex and time consuming compared to the relatively straightforward process regarding industrial removal. Hence, there is an obvious risk that the certification for industrial process will be delayed due to the complexity of certification of carbon farming.

Numerous energy companies with combined district heat and power (CHP) in Sweden have shown great interest in contributing to negative emissions using carbon capture and storage of CO₂ from biomass (BECCS) as an additional societal benefit linked to CHP. The district heating sector want to contribute to society reaching the long-term climate goals. Approximately 15 companies are already conducting feasibility studies on BECCS-solutions. We believe that BECCS can contribute to large CO₂ reductions in a cost-effective way. The goal for these companies is to contribute with between 3 and 4 million tonnes per year of negative carbon dioxide emissions 2035 by installing and utilizing BECCS technology in at least a dozen facilities of various sizes.

EU should raise its ambitions on carbon removals by 2030

Swedenergy strongly disagree with the, in our opinion, very low EU ambition mentioned in Commission's communication on Sustainable Carbon cycles of 5Mt of CO₂ annually removed from the atmosphere and permanently stored by 2030. The goal for BECCS for Sweden is 2 Mt by 2030. Hence, an EU wide goal could and should be considerably larger. The benefits with a larger amount of forerunner projects are e.g. steeper learning curve, developed business models, better liquidity on the supply side of a negative emission market, better competition in storage sites as well as for transport.

The Commission should also consider proposing a binding EU-wide goal-trajectory for CO₂ annually removed from the atmosphere and permanently stored for every year to 2045 and beyond. The trajectory should be based on the maximum quantity negative emissions allowed to offset other greenhouse gases each year needed to reach the EU climate targets.

It is important to clarify that the use of carbon removal credits must always be a complementary measure to reach net-zero GHG emissions, meaning that it should not to any extent replace the efforts to reduce GHG emissions by phasing out fossil fuels. At the same time, carbon removal will be necessary to achieve the global 1,5 °C target as well as the EU goals, hence it is important to focus on both types of climate action at the same time.

Permanent storage of CO₂ is a large share of the total CCS-cost. Hence, EU should stimulate competition by removing legal barriers and provide support to close the financial gap for storage projects.

Accounting principles for industrial carbon removal needs to be established

It is uncertain in which sector permanent industrial biogenic carbon removal should be accounted in the Nationally Determined Contribution (NDC) and in National Energy and Climate Plans (NECP). Most importantly, all carbon removal activities should be counted towards the EU's 'Fit for 55' framework as well as more long-term objectives.

Removal of carbon through BECCS, direct air CCS (DACCS) and carbon farming have e.g. different time horizons as carbon removal through BECCS is more or less permanent. Therefore, industrial carbon removal (BECCS and DACCS) should perhaps not be accounted for in the LULUCF-sector. Industrial carbon could be more logical to account towards the ESR domain. It is important that BECCS and DACCS is accounted in the same sector. Further assessment is needed around the role of carbon removal and the associated credits in the EU ETS domain. The integrity of the existing legal framework of the EU ETS and its rules for monitoring and reporting of emissions must be fully preserved at all times.

Accounting for a carbon removal credit should be done on both the company level and the government level. The actor who is credited for the carbon removal project must be able to sell or transfer the credit to a customer or any other counterpart. The improved national statistic that is associated with a carbon removal-project, on the other hand, should be possible to transfer between two countries in line with the existing flexibilities of the EU 2030 climate framework and the Paris Agreement's market mechanisms (Article 6). To avoid double counting, it is important that two companies will not be allowed to use, count or claim the same verified 1 tonne of carbon removal and that two countries will not be allowed to do it either. The ownership of the carbon removal credit must be clearly defined and follow the trade flow when the credit or statistic is sold.

Policy incentives to achieve carbon removals should be developed

A Swedish tendering system for providing financial support to full scale bio-energy CCS-projects are underway and some of the projects will most likely also get co-financing via the EU's Innovation Fund. Looking further ahead, it will be increasingly important to establish a market-based and EU-wide policy for scaling up and delivering the carbon removals that are required. In many regards, achieving negative CO₂ emissions is truly a common interest for the EU. Therefore, new policy incentives need to be developed in parallel with the EU certification framework.

Information content of the certificate

A carbon removal certificate should contain the following information:

- Serial number
- Issuing organisation
- Issue date
- Feedstock (biomass or air)
- Capture company
- Capture plant
- Capture method
- Transportation method
- Storage location
- Storage method with classification (e.g. geological storage)
- Leakage liability measure
- Volume

For more information

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