

The Danish Government's response to the European Commission's call for evidence for an impact assessment concerning certification of carbon removals

I. A trustworthy certification framework for carbon removals has a high potential to facilitate additional funding for the green transition in the EU

Substantial removals of CO_2 from the atmosphere are needed to reach Member States' individual climate targets, the EU's climate target for 2030 of reducing net greenhouse gas emissions by at least 55 pct. compared to 1990 as well as the EU's objective of reaching climate neutrality by 2050.

As most recently shown by the Intergovernmental Panel on Climate Change (IPCC) in its Sixth Assessment Report (AR6), *carbon removal and sequestration is a key element* in scenarios that limit warming to 2 °C or 1.5 °C globally by 2100. However, deployment of negative emissions technologies, such as bioenergy with carbon capture and storage (BECCS) and direct air CO₂ capture and storage (DACCS) is currently limited. For nature-based measures, such as afforestation and peatland restoration, there is a general lack of incentives for private landowners to adopt practices that increase carbon sequestration. According to the IPCC AR6 report, a political commitment to formally integrate carbon removals into existing climate policies is required to accelerate research, development, and demonstration, as well as to incentivise deployment.

As an essential first step, the Danish Government agrees with the need of a common, trustworthy EU standard for the certification of nature-based as well as technological carbon removals. If properly designed, a common certification framework could facilitate additional funding from private and public sources to support the green transition.

First, the framework could support this objective by providing a robust and trustworthy *alternative to standards used on the voluntary carbon markets* today. Importantly, voluntary carbon credits are entirely decoupled from Member States' EU and national climate targets. Nonetheless, with the rise of private net-zero commitments, voluntary carbon markets have a great potential for facilitating additional private funds for carbon removal projects. At the same time, however, the general credibility of voluntary carbon credits is uncertain, in part due to low perceived or actual

quality of monitoring, reporting and verification (MRV). A common certification standard for carbon removals in an EU context could help establish trust in the voluntary carbon markets and engender additional carbon sequestration to the benefit of the climate. Additionality, permanence, leakage, MRV, biodiversity and environmental safeguards are key elements of a credible EU certification system.

Secondly, the framework could allow for an effective design of national and EU policies to incentivise carbon dioxide removal in a market-based manner. If proven credible, certification of nature-based removals based on reliable MRV could be an important cornerstone for national and EU carbon farming policies in the future, which are much needed in order for Member States to implement the increased ambition of the proposed revision of the LULUCF Regulation. Likewise, certification of technological removals could contribute to market-based financing of negative emissions projects. Additional private funding of BECCS or DACCS facilities through the sale of voluntary carbon credits could reduce the need for public finance for deploying carbon capture and storage (CCS).

Denmark notes the plans for rapid employment of in particular BECCS and BECCU to achieve ambitious national 2030 climate targets in a number of Member States. Denmark further notes that Commission proposals on a revised LULUCF Regulation as well as revised sustainability criteria for biomass in the RE Directive will improve the accounting of forest carbon stock losses in the EU Member States linked to e.g. BECCS, as well as improve the overall sustainable production of biomass.

Finally, a certification framework may have the potential to make way for an *integration of carbon removals with the EU Emissions Trading System* (ETS) in the longer run. Integrating LULUCF removals would require a substantial revision of the current accounting system in order to ensure environmental integrity and to avoid double counting. The Commission is encouraged to explore this perspective in its Impact Assessment so as to spur a dialogue on the future EU climate architecture.

The different potential uses of a certification framework could imply a need *to plan for different stages of implementation*. For example, specific challenges related to nature-based removals (such as the complexity of measurement, permanence and baseline setting) should not impede a rapid development and implementation of a corresponding standard for technological removals. Namely, the Danish Government sees merit in immediately preparing for *integrating negative emissions in the EU ETS* as a means to provide cost-effective incentives for reductions and negative emissions, bearing in mind the sustainability of the specific projects. Apart from accelerating deployment of negative emissions technologies, integrating negative emissions in the EU ETS ensures that this system remains viable, effective and relevant as fossil fuels are phased out over time. In order to provide clarity for market actors and governments, it is of high importance that the Commission is clear in its communication about how it expects to apply the certification framework at different stages over time.

II. Danish priorities on technical issues

For a certification framework to be credible, have environmental integrity and ensure additional removals, a number of technical challenges must be resolved. The Commission Impact Assessment should be transparent about the available options and the trade-offs associated in this regard. Some of these challenges are generic to any reliable carbon removal certificate, while others are specific to certain branches of technologies. However, they should all be addressed regardless of the use of the certification framework, as discussed above.

- A common EU standard for carbon removals must be clear on how additionality is defined and tested for. Particularly, the standard should be clear about the legitimacy of privately funded voluntary carbon offsets contributing to national and EU climate targets. Additionality, meaning that the carbon removal achieved by a project would not have happened regardless, is a defining concept of any carbon removal standard. Demonstration of additionality may include identification of alternatives to the project activity, given legal and regulatory requirements, as well as investment analysis to determine whether the project activity is likely to be financially attractive in the absence of carbon credits. Despite the wide acknowledgement of the importance of demonstrating additionality, there are substantial differences in how the concept is being interpreted and implemented in practice. The Danish Government believes that credible voluntary carbon certification is an important tool for private actors to make real contributions to the ambitious climate targets of their host countries, whether or not the certificates are used for voluntary offsetting. For the EU to achieve climate neutrality by 2050 and to become net-negative thereafter, the voluntary efforts of private companies and individuals are key. In order to provide clarity for market actors, it is important that the Commission's legal proposal clearly define additionality within the context of a specific project rather than political targets.
- Furthermore, the need for documenting additionality may vary substantially between projects. Consequently, it is important to limit administrative and methodological burdens for project owners.
- The framework should encourage co-financing of carbon removals so as to mobilize private funds with a view to reducing the need for public support. It is clear that project activities, which are fully subsidized or compensated by public means, such as the Common Agricultural Policy, cannot be considered additional. Therefore, no voluntary offset claims should be made on the basis thereof. However, where additional private finance is an important enabler of project activities, carbon removal certificates could be a key instrument to incentivise private engagement. The Commission's Impact Assessment should evaluate models for how to determine the additionality of private involvement



and how to credit such additionality in terms of issuance of certificates in a fair and transparent manner.

- The framework should be *applicable to the full range of options for tech-nological carbon removal*. Current efforts on technological options for carbon removals focus primarily on BECCS from combustion processes. Other options for CCS of biogenic CO₂ include CO₂ from fermentation processes (such as biomethane production, wastewater treatment plants, and industrial fermentation) and from waste incineration of biogenic sources. DACCS is another option for reducing the atmospheric concentration of CO₂. Likewise, Denmark regards biochar as having considerable potential for carbon sequestration in agricultural soils. To promote a technology neutral approach, the Commission should consider all forms of BECCS, DACCS and biochar sequestration in its legal proposal.
- A common EU standard must contain rules on how to account for *temporary carbon storage*. For carbon removals to balance a given emission, the removed carbon should be stored for a duration at least equivalent to the time the emitted amount of CO₂ resides in the atmosphere. With respect to the voluntary carbon market, it is currently unclear how to value the benefits of temporary storage for example, 10 or 100 years of carbon storage against true permanent storage. This discussion is fundamental to answering the question of how much temporary storage is needed for private actors to legitimately offset an emission and, thus, important to resolve to establish trust in the voluntary carbon market. The Commission is encouraged to analyse options for how to account for temporary carbon storage in its Impact Assessment.
- The Commission is encouraged to clearly define which carbon farming practices should be eligible for certification under the framework. In its impact assessment, the Commission should examine the possibility of including carbon farming practices that aim to protect carbon pools by reducing carbon emissions. Particularly, rewetting of carbon rich soils has a great potential for reducing CO₂ emissions and protecting carbon in agricultural soils and could be considered within the scope of the framework. Furthermore, the Commission should also examine the perspectives of certifying activities that aim to reduce emissions of methane and nitrous oxide from agricultural activities.
- Finally, the certification framework should take into account fluxes of all greenhouse gases within project boundaries. For example, rewetting of carbon rich sols may reduce CO₂ emissions and increase net carbon sequestration but give rise to increased gross methane emissions. In order to ensure the environmental integrity of EU carbon removal certificates, such fluxes must be appropriately accounted for alongside removals of carbon from the atmosphere, in MRV as well as in baseline setting.