

06.08.2024 | Ministry of Business, Innovation and Employment

Proposals for a Regulatory Regime for Carbon Capture, Utilisation, and Storage –
Climeworks Consultation Response

Dear CCUS team,

Thank you for the opportunity to provide a response to your consultation on the regulatory regime for CCUS. Climeworks is excited by the potential expansion of New Zealand's ETS to incorporate further removal activities. We are writing to respond specifically to the section of the consultation regarding "Treatment under the Emissions Trading Scheme".

3. *Should the ETS be modified to account for the emissions reductions achieved using CCS? If so, how do you think it should be modified?*

We strongly support the integration of CCUS technologies, including permanent removal technologies such as direct air capture and storage (DAC+S), into New Zealand's ETS. However, for this to be a system that can support removals resulting from CCUS activities e.g., BECCS and DAC+S technologies, further considerations are required. The system will not 'enable the development of direct air capture technologies' without the following considerations:

- Short and long carbon cycle removals:
 - Any plans to integrate permanent removals into an ETS, including those utilizing geological storage, should design the system considering their role in a 1.5C pathway.
 - The like-for-like principle should be applied to how different types of removals are integrated into New Zealand's ETS. There should be a clear differentiation between long-carbon cycle removal credits, e.g., those with geological storage, and short-cycle removal credits, e.g., those with biological storage. This differentiation should be applied to the type of credits (e.g. NZU Permanent CDR) they generate and how compliance entities can use these credits.
 - *"The like-for-like principle of using CDR credits – aligning the durability of sources with the durability of CDR. Different types of CDR credit may have differing use cases. As an example, the UNFCCC's Race to Zero campaign, among others, endorsed applying the "like-for-like" principle. This principle postulates that CDR strategies must match the nature and permanence of the emissions they aim to neutralize. It posits that CO₂ originating from the long carbon cycle, such as that emitted from fossil fuels, should be sequestered in equally permanent storage (e.g. through direct air carbon capture and storage); emissions from more transient sources, such as from land-use changes or short-lived greenhouse gases, can be offset by CDR involving less durable storage (e.g. through soil carbon sequestration). Applying this principle ensures that CDR efforts align with the specific impact and lifespan of different emission types" ([The State of Carbon Dioxide Removal 2nd Edition](#), 2024)*
- Defining removals and their role
 - Firstly, any further integration of removals into the NZ ETS should be used as an opportunity to correct the definition of 'removal activities' under the ETS. Removal activities are clearly defined by the IPCC, and this should be reflected in policy. Activities that reduce or avoid emissions are not removals:

- As defined by the IPCC: “Carbon Dioxide Removal (CDR) refers to technologies, practices, and approaches that remove and durably store (CO₂) from the atmosphere.” [IPCC AR6 WGIII: CDR Factsheet](#)
 - Secondly, removals and reductions have different roles to play in a 1.5C pathway. CO₂ emissions must decrease by at least 90% by 2050, according to the [SBTi](#). In addition, CDR solutions are needed to neutralize any residual emissions and thus enable the world to achieve net zero CO₂ by 2050.
 - To support a 1.5C pathway and future-proof NZ’s climate goals, the ETS should then be designed in a way that properly reflects the role of removals in a 1.5C pathway:
 - Short-term: Removals should not subtract from deep and rapid emissions reductions; however, the ETS should, in parallel, scale removals to the volumes that will be required to counterbalance residual emissions. Any further integration of removals should hence maintain the gross cap, to prevent further integration of removals increasing the overall emissions in the scheme.
 - Mid-long term: Removal integration into the ETS can be an effective mechanism for a net-zero cap, allowing for an economically efficient net-zero by balancing the most cost-effective volume of residual emissions with removals.
4. *Do you agree that all CCS activities should be eligible to receive recognition for the emissions captured and stored? If not, why not?*
- We support the integration of all CCS activities that reduce and remove greenhouse gas emissions, provided that the monitoring, reporting, and verification (MRV) systems are robust and, hence, effectively account for the climate impact of the emissions reduced or removed.
5. *Do you think there should be a separate non-ETS mechanism for providing economic incentives for CCS? If so, what would this mechanism be?*
- Additional policy support:
 - The price of NZUs today is insufficient to incentivize removals from CCUS activities. The Cost Containment Reserve trigger price of USD 112 is also below the cost of removals from CCUS and the social cost of carbon.
 - If New Zealand is to develop a permanent CDR industry that is at the scale for New Zealand to compensate for its residual emissions, further policy support is required today. A separate policy support package for permanent removals should, therefore, be explored. This might include price support mechanisms such as carbon contracts for difference and capital grants to bridge the critical funding gap for more novel technologies such as direct air capture and storage.
 - In the medium-long run, a system designed with a net-zero trajectory should generate prices sufficiently high to support the volume of removals required.