ZEP response to the call for input on issues included in the annotated agenda and related annexes of the fifth meeting of the Article 6.4 Supervisory Body

The Zero Emissions Platform (ZEP) welcomes the opportunity to provide input to the Supervisory Body call for inputs on issues included in the annotated agenda and related annexes of the fifth meeting of the Article 6.4 Supervisory Body, namely document A6.4-SB005-AA-A09 'Information note: Removal activities under the Article 6.4 mechanism' (hereinafter, 'information note').

ZEP is pleased to contribute to the work of the Supervisory Body and remain available to expand on any element of this response.

The role of carbon dioxide removals in climate change mitigation

Tackling climate change will require a plethora of approaches. While removals must never be used as a substitute to emissions reductions, the development and deployment of carbon removals is an essential part of that portfolio and is necessary to counterbalance both residual and historical CO_2 emissions. As highlighted by the United Nations Intergovernmental Panel on Climate Change (IPCC)[1], carbon removals are crucial element on the road to net-zero (reducing net emission levels), to enable net-zero (balancing residual emissions) and to achieve and sustain net-negative emissions.

Reaching net-zero by 2050 and net-negative thereafter requires the deployment of large volumes of carbon dioxide removals, to be achieved through the various methods available – both land-based and engineered. As noted by the IPCC[2], around 30-1,090 Gt of engineered carbon removals are needed between 2020 and 2100 alongside emission reductions in order to keep the global average temperature increase within 1.5°C.

Main views and recommendations

In its current writing, the information note does not provide a balanced overview of the pros and cons of land-based and engineered activities (table 3, pp. 18-19), appearing biased against the latter. Other elements in the information note further contribute to a biased stance on engineered carbon activities, which can accomplish permanent storage, such as the inclusion of tonne-year accounting and the emphasis on a 100-year time horizon.

The deployment of the different types of carbon removal methods needs to take due consideration of their respective characteristics and potential trade-offs – for example, in terms of the storage timescale, reversal risks, financial cost, energy intensity and land-use. Monitoring, reporting,

[1] IPCC (2022). Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926

[2] idem

verification and governance mechanisms should be developed taking those characteristics into account. A good overview and comparison of the advantages and disadvantages in implementing the different removal methods is provided by the IPCC (pp. 115-116)[3].

As noted above, the science is clear about the contribution of engineered removals. Unlike postulated by the information note, this is in line with both Sustainable Development Goal (SDG) 13 (Climate Action)[4] and the objectives of the Paris Agreement Article 6.4 mechanism[5]. In the particular case of BECCS, the information note acknowledges that the activity can provide energy (e.g., for district heating or industrial processes) and remove carbon from the atmosphere, thus arguably fulfilling multiple SDGs when done with the appropriate safeguards.

Considering the important role that engineered carbon removals play in climate mitigation, it is essential that they are not excluded from the very mechanisms that can support its development at scale. This will provide the needed predictability for prospective carbon removal developers and corporate buyers, create early demand and thus support the need to scale-up removals in parallel to emissions reductions.

About the Zero Emissions Platform

ZEP is the advisor to the EU on the deployment of CCS and CCU – a European Technology and Innovation Platform (ETIP) under the European Commission's Strategic Energy Technologies Plan (SET-Plan).

ZEP supports the European Union's commitment to reach climate neutrality by 2050, defined as net-zero greenhouse gas (GHG) emissions by 2050. To this end, CCS technologies represent readily available and cost-efficient pathways for the decarbonisation of industrial and energy sectors in the European Union. Some applications of CCU – where CO_2 is stored in a manner intended to be permanent – can also contribute to this goal.

List of ZEP's previous CDR publications here:

https://zeroemissionsplatform.eu/wp-content/uploads/Europe-needs-a-definition-of-Carbon-Dioxide-Removal-July-2020.pdf

https://zeroemissionsplatform.eu/wp-content/uploads/Europe-needs-robust-accounting-for-Carbon-Dioxide-Removal-ZEP-report-January-2021.pdf

[3] idem
[4] https://www.un.org/sustainabledevelopment/
[5] https://unfccc.int/sites/default/files/english_paris_agreement.pdf