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Quantifying and Deploying Responsible Negative Emissions in Climate Resilient Pathways

Full-day workshop on financing tools for NETPs

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This deliverable presents a summary of event: “Long-term financing mechanisms for implementing and operationalising the EU CRCF”

1 Workshop background

A range of technologies and practices are under development to remove carbon dioxide from the atmosphere and store it for long periods of time. This reduces net emissions and contributes to achieving Net-Zero climate goals. Efforts have been made to layout a framework for certifying the activities that remove carbon, such as the EU framework proposal (EU CRCF) recently agreed between the European Council, European Parliament and the European Commission. However, it is still unclear how activities under these frameworks can be financed or used to generate sustainable revenue streams that align with both physical and social credibility, and still remain attractive to support innovation and implementation of carbon removal at a large and necessary scale for climate action.

In this invite-only Chatham House rule workshop on Tuesday 20th February 2024, academic, technical and political experts gathered to stimulate discussion on potential mechanisms to implement the CRCF, the associated benefits and pitfalls, and pave a way forward on financing options and relevant public policy. The workshop organised by Bellona was divided into three targeted sessions, that firstly covered the specific requirements of carbon farming, and permanent carbon removal activities, followed by a panel discussion on broader revenue generating tools and mechanisms. Each session began with introductory remarks by invited experts, followed by a wider moderated discussion between the in-person and online participants.

1.1 Carbon farming activities

This session, moderated by Georg Kobiela (Bellona), discussed the financing needs for activities engaged with the land sink. Although the demand for using carbon as a metric in carbon farming is present, the farming system alone is insufficient to incentivise secondary practices, such as carbon farming. Methodologies need to be developed to evaluate success that go beyond carbon, have criteria for activities that provide additional ecosystem services, and that not only encourage production efficiency but consider changes of the current production models. This may need reform of other EU policies that provide subsidies for agricultural activities, such as the Common Agricultural Policy (CAP), as this could provide an opportunity to holistically assess food and biomass production and compensate farmers for shifting towards more sustainable practices.

The discussions highlighted the need for coherence between funding systems so that incentives are aligned rather than separated, and reduce risks associated with transitions and changes in activities. All types of payments and subsidies have advantages and disadvantages. Whatever system is implemented to generate revenue, this system needs to be stable and predictable to incentivise change in production systems, without burdening producers nor consumers. It will be important to find a useful balance for both the implementer at the farm-level and the climate system, ensure fair access to finance for small and large-scale farming enterprises.

1.2 Carbon removal activities

In this session, moderated by Kati Koponen (VTT), the question surrounding uncertainty in quantifying carbon flows spilled over from the previous session into discussions on carbon removal activities. Three experts from the EU and USA gave a brief assessment of emerging financing tools and policy on permanent carbon removals, how to incorporate uncertainty into financing, and funding approaches that are not reliant on the quantification of carbon flows. Currently carbon credits is the only

mechanism that is seen to provide revenues because of lack of legislation embedding CDR activities in existing policy. There is no need to reinvent financing mechanisms for CDR, rather these need to be tailored to the needs of CDR by accommodating uncertainty, ensuring transparency, buffering current investment risks for first investors, among other measures.

Various tools were identified in this session with most indicating a preference for central funding options such as the EU Innovation Fund. Mixed opinions were expressed surrounding integration of permanent carbon removals into an ETS due to the risk of mitigation deterrence and incompatibility with Net-Zero goals. However, a market-based approach could be a potential alternative source of finance compared to public subsidy schemes of CDR funding which may reduce the burden on public expenditure. Other ideas proposed included embedding CDR more generally into industrial and trade policies or long-term compliance instruments, beyond an ETS-type instrument.

As for many novel technologies, first investors in CDR technologies and associated infrastructure take on significant risk with high uncertainty for expected returns. However, the need for immediate action was stressed, even if there are economic disadvantages. Hence, a central goal of CDR policy should be facilitating learning and managing failures to buffer this risk regardless of the policy mechanism.

1.3 Tools and approaches for incentive development and financing

Moderated by Wijnand Stoefs (Carbon Market Watch), the panel discussion reflected previous sentiments that the CDR sector needs to be scaled up and built quickly in a way that retains trust, integrity and transparency, avoiding issues of double claiming and mitigation deterrence. Financing of carbon removals in the EU will depend on the architecture of the EU's climate policy pillars and how CDR will interact with these. In response, to the question "who should pay", workshop participants generally considered that a mix of public and private funding will be needed and will shift over time. Public funding will be needed initially, also to build substantial supporting infrastructure in parallel for e.g. renewable energy supply, CO_2 transport and storage capacity. While in the interim, subsidies and grants may initially come to support private actors, policy must ensure that emitters will pay as this model is otherwise not sustainable in the long-term.

A lot of expectation is being placed on carbon markets and promises of growth. The voluntary carbon market was considered inadequate for the scale of financing required and its persistent credibility issues. However, funding for innovation is seen as a key pathway to achieve this by bringing down costs and building public trust, and maintaining adaptability for the CDR sector to accommodate technological developments as they arise.

2 Conclusions

The discussions produced more questions than finding concrete solutions, however the CRCF was viewed as the first step in building a CDR "taxonomy". CDR was mentioned several times as a public good and some collective themes could be found in all discussions:

- **Working with uncertainty**: Financing tools need to accommodate uncertainty surrounding success and failure in projects, and the physical uncertainty in quantification of carbon flows or ecosystem co-benefits within each project. Financing schemes should thus reward the lowering of uncertainty.
- **Learning-by-doing:** There is a need for action now despite a lot of uncertainty surrounding expensive technologies, in particular for novel carbon removal activities. Procurement was strongly encouraged by some workshop participants. Other themes included flexibility for financing mechanisms to absorb risk of project failure, adapt to new approaches and use

failure as a learning tool to reduce the uncertainty in the technologies and build confidence in investment.

- **Derisking:** Financing tools should provide long-term stability, acknowledge and reduce the risk for long-term investments, instilling trust and confidence in upscaling removals.
- **Purpose:** Clarification is needed on why carbon flows need to be quantified and what certifications will be for. This is an important element to consider in the development of methodologies.
- **Complexity**: Financing tools need to accommodate a diverse range of complex activities that do not happen in isolation. All options need to be considered: adaptation of or embedding into existing trade/industrial policy, development of new funding pillars, broad or targeted funding.

Open questions arising from the workshop:

- How reliably and easily can we measure results and carbon flows, and what developments in MRV are needed to do this at the needed scale for quantifying project-level carbon flows?
- How much risk for sustainable financing depends on the reliability of MRV frameworks and the ability to quantify carbon flows?
- How to produce food and biomass while also retaining carbon stored in soils and forests?
- How to balance priorities by creating demand for carbon removals to enable cost-reduction and scaling to meet demand, yet retaining removals at a scale which remains within sustainable boundaries and resource use?
- Will incentives for achieving Net-Zero be appropriate for after Net-Zero?