

Towards Effective Governance of Carbon Removals

Input to the Talanoa Dialogue

by the Carnegie Council for Ethics in International Affairs

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Where We Are Now

Researchers are exploring additional approaches to minimize the impacts of climate change and keep global temperatures down, including the largescale deployment of **carbon removal technologies**. Article Four of the Paris Agreement indirectly references the potential use of largescale carbon removals when it calls for a balance between anthropogenic emissions by **sources** and removals by **sinks** in the second half of the 21st century. Carbon removal technologies are not a substitute for emissions reductions. Any potential use of these technologies must be supplemental to the radical emissions reductions and adaptation measures urgently needed.

In order to stay below an average global temperature rise of 2°C, the large-scale use of carbon removal technologies (also known as greenhouse gas removal, or negative emissions technologies - NETs) in the second half of this century is already assumed in the vast majority of scenarios in the 2014 Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC). Some scientists now argue that to avoid a damaging temperature overshoot (i.e., sustained global average temperature increases beyond the 1.5-2°C range), which is increasingly likely, they need to be deployed much sooner than the second half of the century. The later the world starts removing atmospheric carbon; the longer and the higher temperatures are above a 1.5°C rise, and the more carbon removals will be needed.

Several real-world applications are under early development, and some governments are exploring national policies. Currently, however, there is very little in the way of governance at the national or international level on largescale carbon removal technologies, and policymakers have low levels of awareness about their risks and potential benefits.

The following list of governance issues demonstrates there is **currently insufficient consideration in the UNFCCC process of carbon removals** as one of the potential tools to manage climate risks, and in particular, on the **governance of carbon removals**, again, despite the fact they are indirectly referenced in Article Four of the Paris Agreement, and play a major role in IPCC climate scenarios modelling a 1.5-2°C pathway. There is currently in the UNFCCC process insufficient or no consideration of:

- Policy similarities and differences between carbon reductions and carbon removals in both the short and long term;
- Operational linkages to implementation of the Sustainable Development Goals (SDGs), Agenda 2030 and to the Convention on Biological Diversity (CBD);
- A policy framework for responsibility for carbon removal;
- Systems for encouraging carbon removal (e.g., carbon price, market mechanisms)
- A system for monitoring, reporting and verification;
- Realistic scenario planning for climate risk management options in terms of technical data, as well as socio-economic and political perspectives;

- Global benefits vis a vis local negative impacts, including liability and compensation schemes;
- International cooperation for technology development and implementation.

Where Do We Want To Go?

The Carnegie Council for Ethics in International Affairs, through its Carnegie Climate Geoengineering Governance Initiative (C2G2), is **catalysing a global conversation about the governance of largescale carbon removal**, with the UNFCCC being the most appropriate multilateral institution to address these issues.

C2G2 is neither for nor against research on or deployment of large-scale carbon removal technologies. These are decisions for society to make. We provide an **impartial platform** for governmental, intergovernmental and non-state actors to discuss these important and difficult issues.

Specifically, we aim to **help catalyse an inclusive, transparent governance discussion within the UNFCCC process around largescale carbon removal technologies**. The UNFCCC is the appropriate existing multilateral process to address the governance of largescale carbon removals, while recognizing that other multilateral fora and processes are also needed to coordinate and address linkages, such as, for example with the SDGs.

We believe there is an urgent need to develop an **international governance framework that addresses carbon removal in the context of overall management of climate risks**, and which also enhances and not reduce the ability of countries to implement and then maintain and go beyond the Sustainable Development Goals.

We call for urgent multilateral governance discussions to address, *inter alia*, these issues:

- Important trans-boundary issues, such as biodiversity, land use, food security, migration, and potential interactions with the Sustainable Development Goals;
- Liability and potential compensation mechanisms, including for long-term storage of carbon removals;
- Accounting methodologies and monitoring, reporting and verification;
- Research and technology development, including a framework for international cooperation on research.

In addition, to achieve the Paris temperature goals, we believe UNFCCC Parties will need to consider the national as well as international governance implications resulting from a possible inclusion of carbon removal technologies in the national plans to manage climate risks, including in the 2050 mid-century long-term plans and in the revised Nationally Determined Contributions (NDCs), potentially in the first global stock-take in 2020.

We also call for greater clarity and transparency in the terminology on mitigation and largescale carbon removals as used by the UNFCCC process, the IPCC, civil society and non—state actors.

How Do We Get There?

C2G2 will catalyse essential discussions on the governance of carbon removal technologies by broadening the conversation beyond the scientific community to the policymaking realm, and by creating or catalysing an impartial platform that seeks to include the voices and views

of all sectors of society, including civil society, faith communities, the private sector, and young people.

Within the UNFCCC framework, C2G2 will work with the UNFCCC Secretariat and Parties to explore the issues cited above and the actions listed below. Ultimately, it is governments that need to act, including at the international level. At the same time, non-state actors also play a vital role, including in calling on governments to act in a transparent, accountable manner, and ensuring that the views of all sectors of society are taken into consideration.

The following are examples of actions that would generate useful discussions on the governance of largescale carbon removals:

- Encourage leaders (Ministers, Heads of State and Government) to raise awareness about the role as well as the risks and benefits of carbon removals;
- Develop policy-relevant recommendations in SBSTA, based on assessments of technical options (possibly with inputs from UN Environment and from future special reports of the IPCC);
- Establish a community of practice on carbon removals, either under the UNFCCC or through another multilateral institution;
- Initiate intergovernmental discussions on carbon removals (in particular, between UNFCCC and UN Environmental Assembly, the CBD and the SDG implementation process).

C2G2 is aware that policymaking at the multilateral level takes time to come to fruition. That is why we are calling for a global discussion on the governance of carbon removal technologies to begin today. We do not have the luxury of time if the world is to research and deploy largescale carbon removals by or in mid-century, as indicated by IPCC models. Governance of the research and any potential use of these technologies must be developed beforehand, not after.

To advance the governance of carbon removal technologies, C2G2 will engage directly with Parties and the UNFCCC Secretariat, as well as with other multilateral institutions as appropriate (*inter alia.*, UN Environment, and the CBD). The release of the IPCC's 1.5°C Report this year and the CBD COP14 provide opportunities to advance governance discussions.

C2G2 is also forming a global network of leaders, from the global to the sub-national level, who understand the need for effective governance of carbon removals, and the potential value of well-governed technologies for minimizing the risks of climate change. At UNFCCC COPs, at the United Nations in New York, and in other capitals, we will regularly engage with government representatives who can spearhead diplomatic discussions on the need for, and benefits of, governance.

For more information consult C2G2's website (c2g2.net)

or

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