

Governing Large-Scale Carbon Dioxide Removal: Are We Ready?

CONTEXT

- In 2015, Parties to **the Paris Agreement agreed to limit global temperature increase** to well below 2°C above pre-industrial levels, and to pursue efforts to limit the increase to 1.5°C. The current global response is only about 1/3 of the ambition level needed.
- In 2018, the IPCC Special Report on Global Warming of 1.5°C warned that **all pathways to limit warming to 1.5°C envisage the large-scale removal of CO₂ from the atmosphere**. This is known as Carbon Dioxide Removal (CDR). While there are several types of CDR, each with varying pros and cons, large-scale use of CDR would have implications for attaining and maintaining the Sustainable Development Goals (SDGs).
- Removing CO₂ from the atmosphere isn't new, but **it has never been tried at this scale**.
- Is the world prepared to govern CDR at this level? What incentives are needed to scale those technologies society deems acceptable? Can the risks, benefits and trade-offs be managed? [C2G2 and Climate Analytics explore these questions in a timely new report](#).

TOP LINE MESSAGES

- There are rules and practices already in place which could govern large-scale Carbon Dioxide Removal, primarily within the UNFCCC, but they are insufficient for the scale of activity the IPCC says is needed to limit temperature rise to 1.5°C.
- We need both to accelerate emissions reductions, and create the guardrails and incentives to effectively govern CDR if we are to limit temperature rise to 1.5°C.

KEY FINDINGS

1. The longer it takes to reduce emissions, the more carbon dioxide will need to be removed from the atmosphere.
2. A number of existing provisions under the UNFCCC, the Kyoto Protocol and the Paris Agreement address governance aspects of Carbon Dioxide Removal.
3. Despite existing provisions, many key governance gaps and challenges remain for large-scale CDR and will need to be addressed.
4. Priority gaps on mitigation, information, accounting, knowledge and incentives can be addressed in the near-term, both inside and outside of the UNFCCC process.

PRIORITY GOVERNANCE GAPS TO ADDRESS IN THE NEAR-TERM

- Narrow the mitigation gap to reduce possible future reliance on CDR options;
- Improve inventory data and information management systems;
- Put in place robust accounting rules;
- Create incentives to accelerate research, investment and implementation;
- Engage the research community in scoping specific CDR options and necessary incentives;
- Improve public awareness of potential CDR options, risks and trade-offs in planning processes;
- Improve international collaboration and cooperation.