

Why consider climate engineering?

The challenges of reducing global greenhouse gas emissions have led to the serious discussion of climate engineering – ideas for global-scale interventions to alleviate the impacts of climate change. While climate engineering methods might have the potential to complement mitigation and adaptation measures, their viability, reliability, safety and public acceptability require a thorough assessment. Due to the potential risks involved, it is important to develop a good knowledge base in order to adequately inform and advise policy maker and the broader public.

We are critically assessing climate engineering drawing from a wide spectrum of backgrounds. We also seek to engage in an active dialogue with civil society and policy audiences in Europe about climate engineering, its uncertainties, difficulties and benefits.

What is climate engineering?

Climate engineering covers a variety of methods that aim to intentionally alter the climate system in order to alleviate the impacts of climate change. They range from small-scale afforestation to global sulphur injections. Climate engineering has been categorized into two groups of technologies:

1. Carbon Dioxide Removal (CDR), which aims to diminish the atmospheric content of greenhouse gases, and
2. Solar Radiation Management (SRM), which aims to reduce the amount of sunlight warming the surface of the Earth.

Climate engineering is a potential, yet highly controversial future response to climate change. Its role relative to mitigation and adaptation responses has not yet been fully defined.

What are we doing?

Our team is working to:

- Develop a next-generation assessment of the potentials, uncertainties, risks and implications of climate engineering options
- Identify the most important gaps in our current understanding of climate engineering
- Actively engage in dialogue with the public, policy-makers and civil society stakeholders in order to share information on climate engineering and to understand their concerns and perspectives
- Outline options and pathways for the EU and its partners in Europe and abroad for addressing the challenges of climate engineering

To engage different people in an accessible and constructive debate we use innovative methods such as:

- An interactive Argument Map to help understand the complex discourse around climate engineering and the technologies used
- Online videos and social media to facilitate sharing of information and debate
- Regularly published online essays reflecting on state-of-the-art research and debates on climate engineering
- A lively website with latest news from the research community and public events on the topic
- A final assessment report to be published in spring 2014 with an Executive Summary and Policy Recommendations in 22 European languages

