



BCI's Strategic Direct Cooling Plan

The **Blue Cooling Initiative (BCI)** is an urgent and critical response to the accelerating climate crisis, spearheaded by a diverse coalition of scientists, opinion leaders, civil servants, and politicians. The initiative focuses on **advancing ocean-based cooling strategies**, with a particular emphasis on **Marine Cloud Brightening (MCB)**. By enhancing cloud reflectivity, MCB aims to increase the amount of sunlight reflected back into space, thereby cooling the planet. The focus on **Marine Cloud Brightening** and other **ocean-based cooling strategies** provides a promising path forward, but requires urgent and coordinated action to succeed within a critical timeframe

Autumn 2024.





The Blue Cooling Initiative

The Blue Cooling Initiative (BCI) is a foundation (2022) according to Dutch law and based in The Netherlands. The initiative was taken by the five founders (see www.bluecooling.org), three of them are the BCI Board. The founders come from different backgrounds and together they bring a wide range of relevant qualities and experiences to BCI's mission.

Our Mission

BCI aims to raise awareness and create momentum for the development, implementation and governance of Direct Climate Cooling technologies like Marine Cloud Brightening. We will promote the understanding and use of controlled climate cooling technologies as safeguards, buying time for longer term solutions. This initiative aims to be of aid in the transition to a more sustainable world and provide critical time for essential mitigation and adaptation measures to take effect.

What we have done

In coordination with Cambridge Climate Repair and the Climate Institute of Technical University Delft and many individual scientists we developed a good insight into what is happening worldwide in the field of cooling, the growing necessity of it and the forces that block or delay further developments.

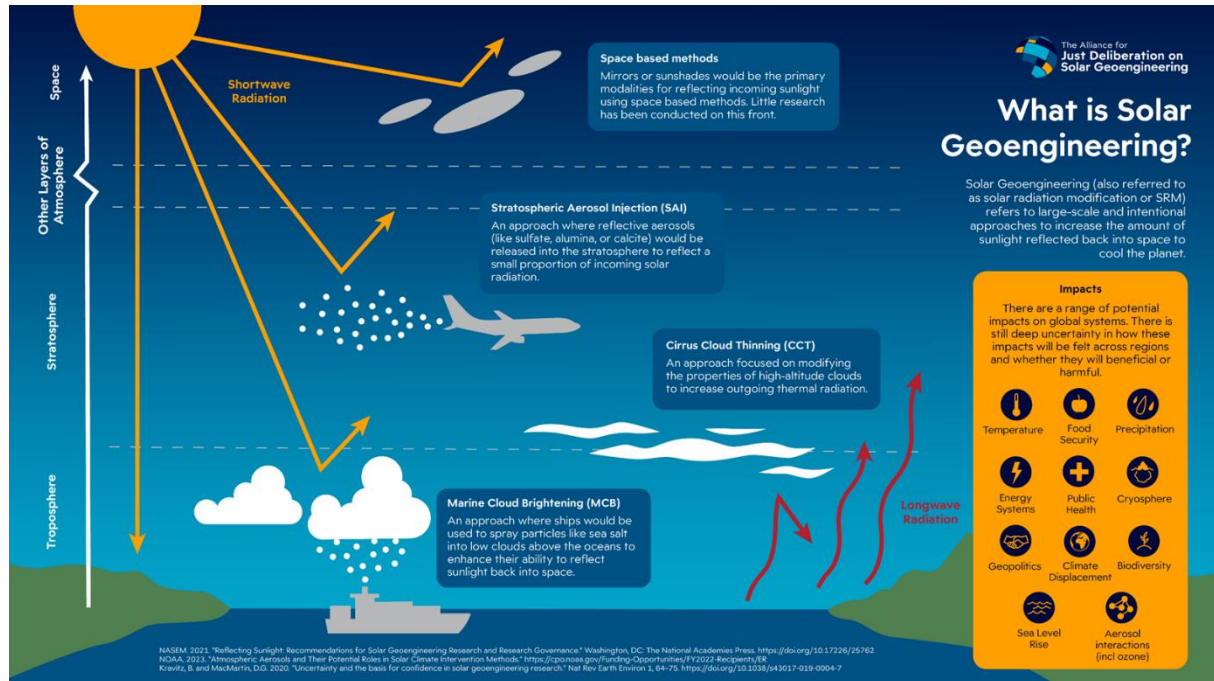
We were active as lobbyists and speakers in Brussels in the Parliament, at Embassies, with members of the Commission, but also at the Arctic Circle in Japan, at the COP preparations in Belgrade and at many meetings with policy makers, politicians and scientists in W-Europe. We spoke with the 'fathers' of the EU Green Deal, with the European Business Summit, with the Arctic Forum, Arctic Council, Cop Baku, WMO, got acquainted with the Arctic Youth movement and Indigenous Youth Groups, got involved in the Finnish Operaatio Arktis, spoke with individual African meteorologists and more...

More impact is needed

We achieved to become a certain factor in this field of climate change but until present this was never sufficient to create the leverage (and organization) to accomplish what is urgently needed: development of ocean-based direct cooling technologies.

Our efforts are dedicated to much needed Advocacy:

- Influencing thinking & policy development on Direct Climate Cooling
- Supporting MCB and identifying the most promising new ocean-based cooling technologies for research and development and promote their funding
- Informing the public and combatting disinformation
- Fostering cooperation between various stakeholders: researchers, businesses, NGO's, and Indigenous Peoples
- Mobilise key decision-makers and governments to gain EU and UN support by 2027.



In line with this way of thinking we devised the BCI Strategic Cooling Plan (See below). To make this happen, we need a robust organization and funding.

We need a robust Organization

Currently, the BCI team consists of the founding partners. The founding team works unpaid and on a voluntary basis more or less in a flat organizational form. To achieve our objectives, a more solid project-organization is needed with a well-paid, creative and dedicated team, preferably between 30 and 60 years old. This team should have an office in Brussels (2 people) and one in The Netherlands (4 people including director). The organization should remain a flat hierarchical structure to allow for creative ideas and streamlined communication. One executive can lead both offices. All efforts will be defined in projects, when needed (very often) external specialists will be hired to be as effective as possible.

And Funding

The Blue Cooling Initiative seeks philanthropy funds and broad support to achieve its ambitious goals, emphasizing the urgent need for Solar Radiation Management technologies to prevent catastrophic climate tipping points and enable a gradual transition to a sustainable world.

And Controllable Spending

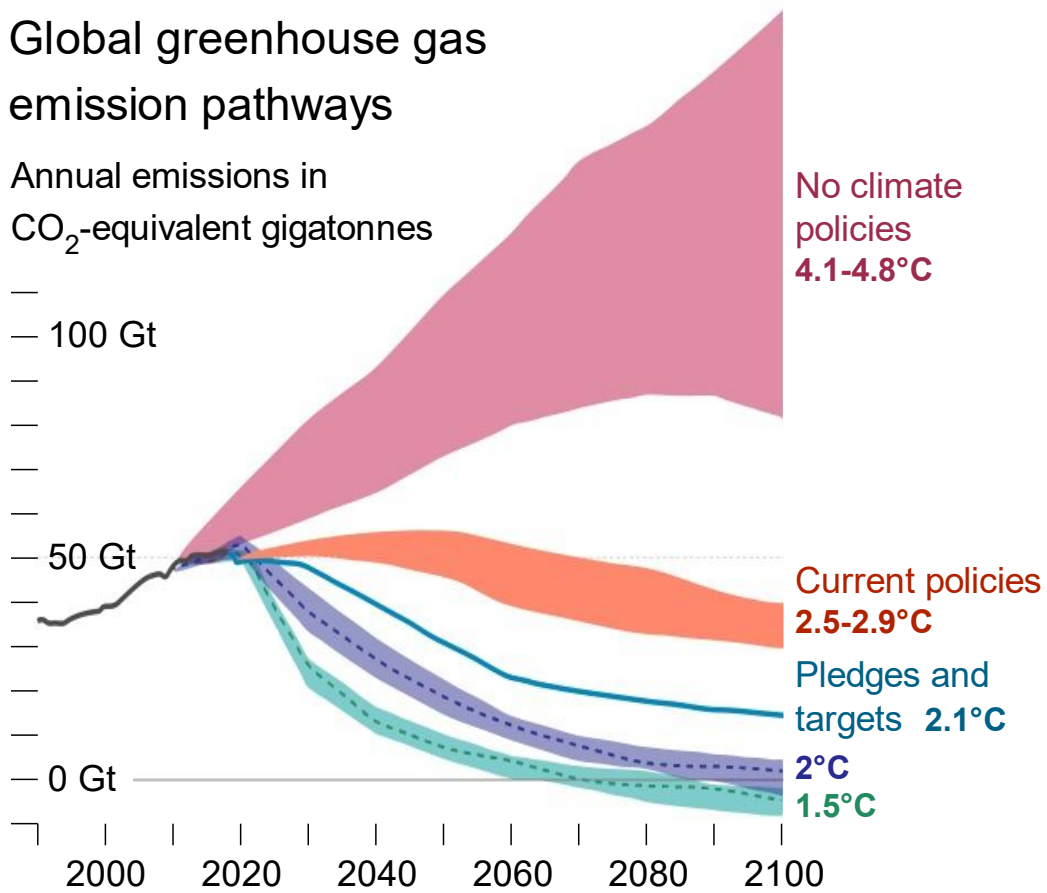
As soon as a budget of € 250.000 is achieved, we will install a supervisory board that will ensure that the funds are spent according to plan and in an auditable manner.

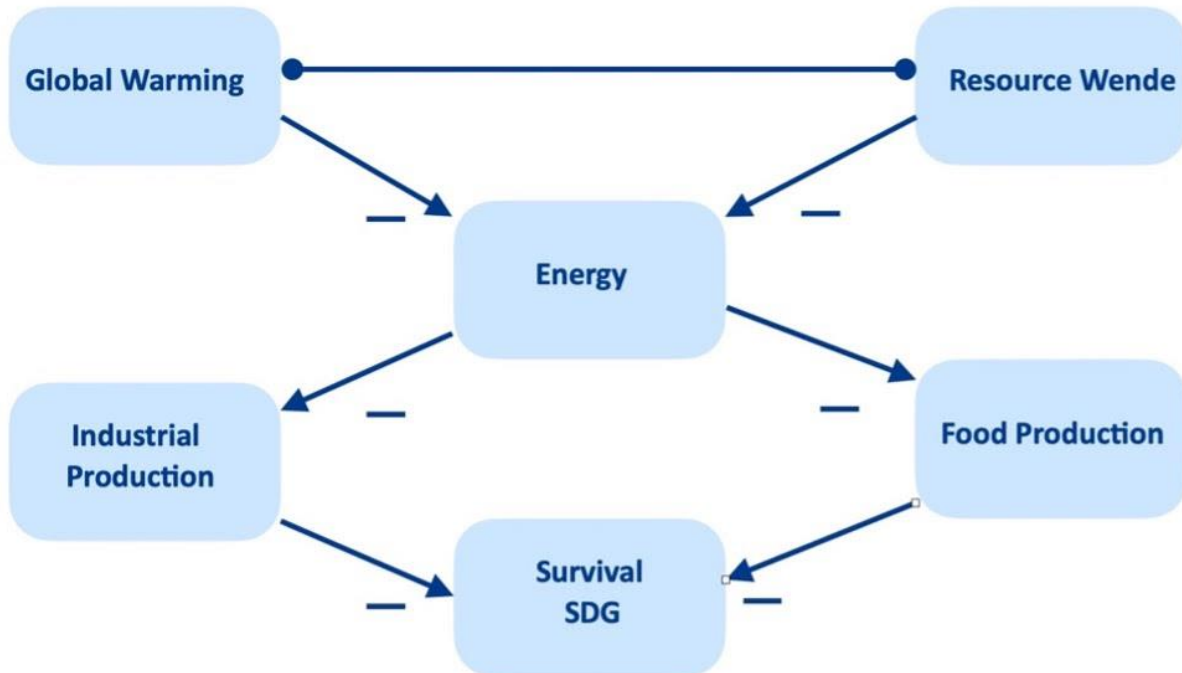


1Hothouse Earth

Global greenhouse gas emission pathways

Annual emissions in CO₂-equivalent gigatonnes





The Overshoot Agenda

- Global Warming, +2, +3, +4 degrees Celsius 2050 - 2100
- Resource Wende, a factor 10 less available in comparison to Global Demand
- With these shortcomings the next (renewable) energy is not feasible.
- Overshoot will transfer to collapse, and then the SDG-goals cannot be met.

The ways out

- Global Warming can be delayed and stopped by Climate Cooling technologies
- Resource shortages can be compensated by numerous technical and political repairs.
- Renewable green energy can be succeeded by the energy of the God Thor.
- By then, we may see a very different sustainable future.



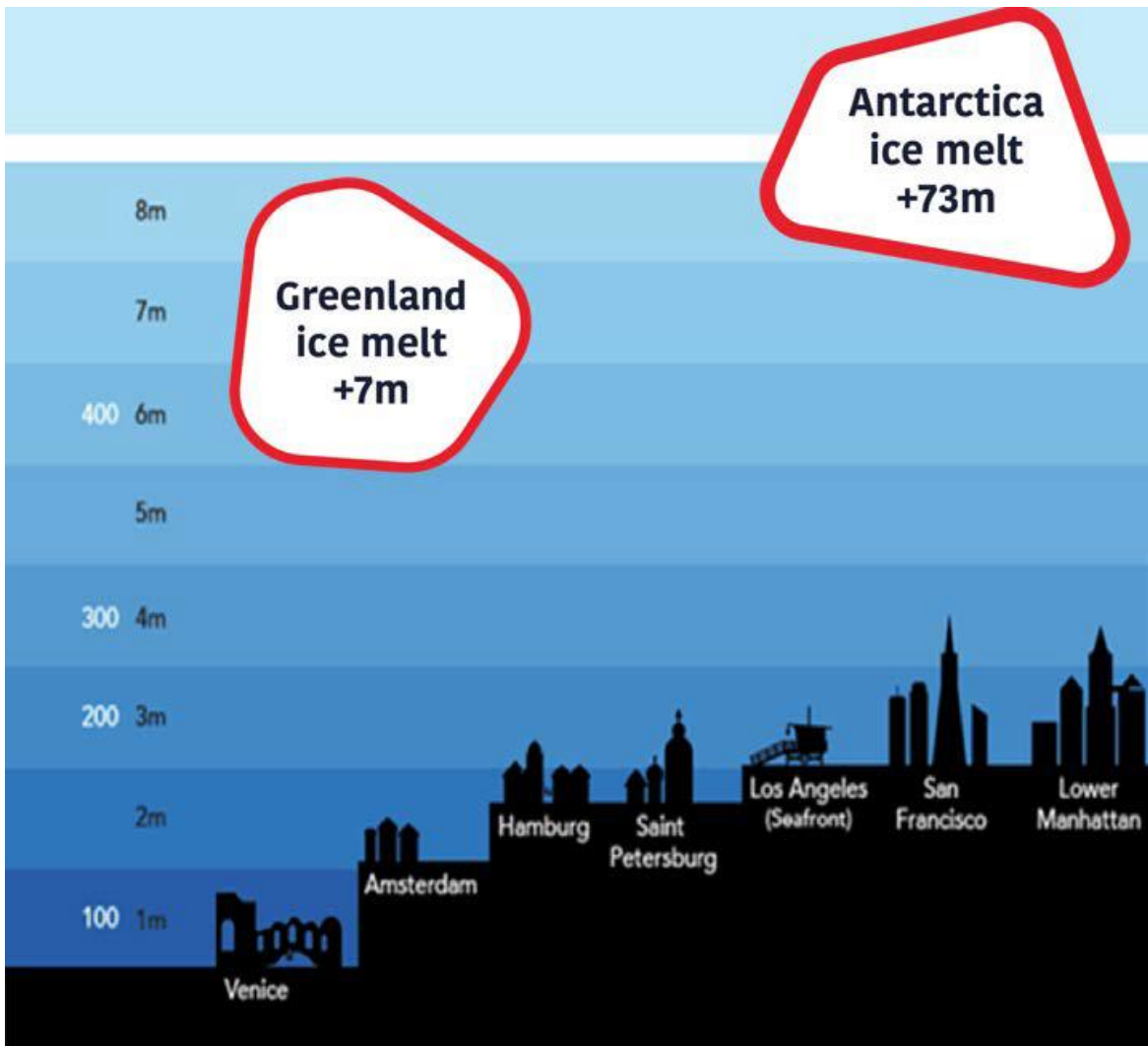
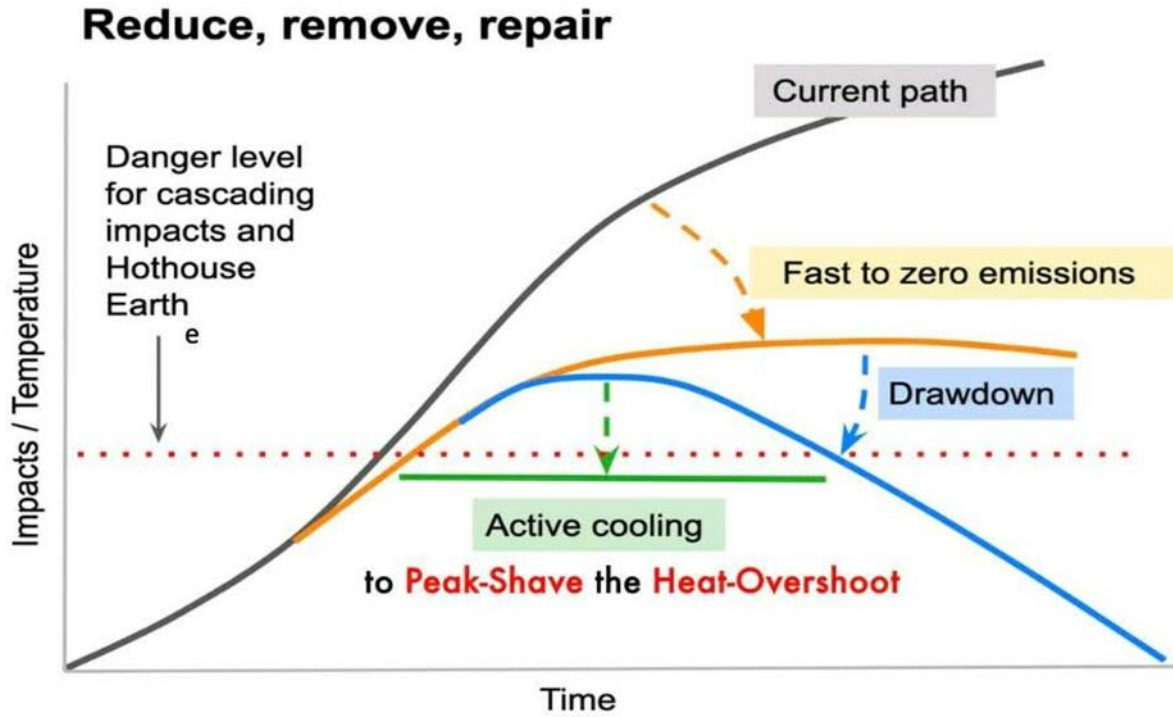
BCI-STRATEGIC DIRECT COOLING PLAN

The Blue Cooling Initiative's mission, challenges, strategic plan, success metrics, and timeframe. The initiative's focus is on leveraging scientific advocacy, building a compelling narrative, combating misinformation, and securing necessary funding and permissions for the development of SRM (especially BCI) technologies.

We are confronted with the following observations and challenges:

- **Ineffective emissions mitigation:**
Up till present all efforts to mitigate emissions have proven to be **too little and too late**. (See figure with Keeling Curve and COPS since 1992).
 - Even if all GHG emissions would stop immediately, the temperature would still rise as a result of previous emissions in the atmosphere or absorbed by the ocean and of which the effect is still in the pipeline (Report Jim Hansen et al).
- **Planetary Heating:**
Scientific consensus is growing that **we have passed the Paris Agreement Targets of 1.5 °C** and are likely to exceed 2°C, heading for at least 3 °C or more. On top of this it becomes clear that the IPCC figures are underestimating the effect of what is already present in the atmosphere and the oceans.
- **Tipping Points:**
The planet is at risk crossing critical tipping points (See Johann Rockström's presentation on the World Economic Forum 2023). Those tipping points will lead to irreversible and uncontrollable climate impacts which will make all our mitigating efforts useless. We risk the much feared Hot House Earth.
 - Safety measures that prevent passing those tipping points are urgently needed. And the only technologies that can manage the amount of solar radiation directly and fast are Direct Cooling or Solar Radiation Management Technologies (see reports UNEP2023 and Royal British Society 2009).
- **Opposition:**
The development of those technologies has been **delayed and blocked** by the fact that they are considered to be Geo-engineering. That word triggers Frankenstein analogies and these technologies have therefore been **bedevilled and banned** from the mainstream climate change approaches (*EX Non Use Agreement*, a lobby started January 2023 in Utrecht, See also UNEP overview on page 35).
 - Temperatures should remain below tipping point thresholds. Then we have a chance to gradually reduce emissions, reduce GHG already in the atmosphere via Carbon Dioxide Removal (CDR), restore ecosystems and develop a more sustainable world. But that will take at least fifty to a hundred years.

All indicates that the Window of Time is critical





OUTLINE OF THE BCI-STRATEGIC DIRECT COOLING PLAN

Realization main objective in 3 – 5 years, costs BCI 3 million per year

The key points and context are summarized below:

Main Goal

The primary objective of this Strategic Plan is to create momentum for the development, implementation and governance of solar radiation management (especially MCB) technologies as a means to combat climate change. The initiative aims to position MCB as a safeguard technology to aid in the transition to a sustainable world.

The Strategic Plan contains the following building stones or project-fields, which are all interconnected:

1. Developing Leverage by building a Movement:

- **Build an international Movement for ocean-based Direct Climate Cooling Technologies, a coalition of scientists, experts and impacted peoples advocating for SRM technologies.**
- **Grow membership from existing platforms like the Planetary Restoration Action Group (PRAG) and the Healthy Planet Action Coalition (HPAC).**

This grassroots-movement has individual members. It is more than a one issue movement as it should always be seen in the context of Buying Time for Reduce, Restore and Remove. In the second place this coalition is a network of scientific *antenna's* always looking for new, better or improved ideas to combat Climate Change / Heat.

This movement will be a counterbalance to the witch-hunting groups mentioned above and help decisionmakers to develop a pro-cooling attitude. It will provide controllable scientific information and can play a significant role in thinking through the governance of the various cooling measures.

Membership can be built starting from the existing pro-cooling platforms of scientists (PRAG & HPAC), we aim to grow to 500 – 1000 members within a year. Currently this movement does not yet need a legal status and can be run from BCI-offices: administration, organize meetings (live & digital), spread information etc. Membership is free as no barriers should be created to become a member.

Costs per year € 400.000

2. Building Appealing Narratives (instruments for communication):

- **Create compelling narratives based on scientific accuracy to reach diverse audiences.**
- **Utilize various media channels (e.g., websites, YouTube, X, TikTok) to disseminate information.**

A diversity of audiences (NGO's, decision makers, young people) asks for a variety of media: both websites, YouTube, X, TikTok. Facebook, Instagram etc.. The scientific info is available but communication content should always be screened on reliability by knowledgeable people/experts. Crucial is also the interpretation of our current predicament (HEAT) and what it will lead to.



This manifold task asks for a well thought out communication strategy/plan adapted to the various audiences. For practical & political reasons our current strategy is to focus on EU-decisionmakers, influentials, NGO's and young audiences. Creating a social media strategy for these groups in Europe involves a nuanced approach that considers the unique characteristics and preferences of these target audiences. Thus we will create an effective and impactful (social) media strategy tailored to the diverse European landscape.

Costs per year estimated at 1.500.000

3. Combating Disinformation:

- **Establish a Rapid Response Taskforce to counteract misinformation and promote accurate information about SRM technologies.**

An ad hoc team of Science journalists and communication experts will be working on this in combination with the communication plan.

Costs per year: € 300.000 (mostly staff)

4. Engaging Influentials, Decision Makers, Businesses and Philanthropy:

- **Organize lobbying efforts to engage politicians and other decisionmakers**
- **Form coalitions between scientific institutions and branch organisations/businesses.**
- **Promote bilateral agreements between countries to support SRM development.**
- **Engage philanthropy support at least until 'mainstream' goal is achieved**

Apart from a Brussels office & staff, events will be organized, participations in other events (European and global) will be needed, travel costs etc. etc.

Costs per year estimated a: € 800.000

Metrics for Success

1. **Changing Attitudes:** Shift the narrative from scepticism and fear (e.g., "Frankenstein analogies") to a cooperative approach towards SRM.
2. **Securing Funding and Permits:** Obtain financial support and legal permissions for research and development of SRM technologies.
3. **Conducting Open Air Trials:** Facilitate numerous trials to refine SRM technologies and assess their impacts.
4. **Developing Governance:** Create robust data sets to support governance frameworks for potential SRM deployment.

Timeframe

The initiative aims to embed SRM technologies into mainstream climate strategies within the next 3-5 years, with readiness for deployment as a safeguard technology five years later.

Total Costs: 3 million per year (minimum)



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