



CLIMATE ACTION NETWORK

Position on Solar Radiation Modification (SRM)

September 2019

Climate Action Network (CAN) is the world's largest network of civil society organizations working together to promote government action to address the climate crisis, with more than 1500 members in over 130 countries.
www.climatenetwork.org

1. **Robust adaptation and mitigation actions are the first-line solutions to climate change. SRM is not a substitute for either and should not be seen as climate action.**
2. **Recognize the inherent transboundary nature of SRM and significant and unknown risks (geopolitical, social, environmental, ethical) involved.**
3. **Strongly opposes deployment of SRM.**
4. **Strongly opposes real-world experiments.ⁱ**

There is unanimous alignment among CAN membership that **robust adaptation and mitigation actions are the first line solutions to climate change. SRM is not a substitute for either and should not be seen as climate action.**

CAN believes that SRM does not address the root causes of global warming and does not bring about the fundamentally needed transformational change in our societies to address the global crisis of resource consumption, equity and fairness to combat climate change and to achieve the Sustainable Development Goals by 2030. CAN supports the many recent scientific findings that averting dangerous climate change is possible without SRM. There is now clearer evidence that temperatures can be limited to 1.5^o C degrees and can be reached through deep cuts on greenhouse gas emissions from different sources, transformation of energy systems and "Natural Land Solutions". CAN assesses that compared and opposed to SRM, deep GHG and CO₂ emission cuts in various sectors and by various policies have a multitude of permanent environmental, sustainable development, economic and social benefits that reach far beyond limiting temperature increase alone.

CAN recognizes the transboundary risks associated with SRM.

CAN heeds the assessment of the IPCC that SRM "faces large uncertainties and knowledge gaps as well as substantial risks, institutional and social constraints to deployment related to governance, ethics, and impacts on sustainable development." If deployed, SRM poses substantial environmental and social risks with intergenerational justice implications. CAN believes that some SRM technologies would have to be perpetually deployed to be effective and to avoid "termination shock" that could result to catastrophic sudden rapid warming or sudden change in rain patterns and consequences would be mostly irreversible. Some modelling indicates that SRM could increase international and regional tensions due to changes in precipitation patterns which could unequally affect countries and regions. It could even be "weaponized", and thus could undermine the 1977 Environment Modification Convention (ENMOD).

For these reasons, CAN is strongly opposed to the deployment of SRM.

CAN also strongly opposes outdoor experiments on SRM.

CAN acknowledges that in order for outdoor experiments on SRM to yield useful information on its impacts on climate change, they need to be large scale and conducted over a long period which would be equivalent to deployment. Large-scale SRM experiments contradict the *de facto* moratorium on geoengineering agreed by the UN Convention on Biological Diversity. CAN notes that existing planned real-world experiments focus on technology development, not on testing the environmental or social impacts of large-scale geoengineering deployment – thus will not give useful information for evaluating the effectiveness of risks and impacts of deploying SRM at scale.

CAN believes that real world experiments are founded on the assumption that experiments are as much political as they are technical – thus dragging the world to a “slippery slope” where larger experiments will be required to validate previous ones that may have failed or not deployed at sufficient scale. Unforeseen consequences of human intervention into the climate and weather systems are to be expected.

¹ EDF and NRDC do not support an unequivocal ban on outdoor/real-world experiments on SRM. They believe, based on their best understanding of the current science, that engaging in transparent small-scale field research to further understanding of the climate system and the implications of any solar geoengineering proposals is prudent, and governance regimes should be established in parallel with the very first experiments. UCS believes that a precautionary approach to climate risks includes developing an understanding of the risks and efficacy of solar geoengineering. UCS strongly opposes large-scale tests and believes smaller-scale outdoor experiments should only go forward if legitimate independent governance mechanisms are established to ensure that proposed experiments have high scientific quality and value and that they pose negligible environmental, social and legal risks. Such governance mechanisms must be transparent and inclusive, ensuring meaningful engagement with climate vulnerable communities and other civil society stakeholders, and provide oversight over the duration of the experiments.