# British scientists to launch solar geo-engineering research to combat global warming



British scientists are poised to commence experimental research on solar geo-engineering techniques aimed at reducing global warming, under a £50 million government-backed initiative. This project, funded by the Advanced Research and Invention Agency (ARIA), is expected to receive approval within weeks and seeks to investigate innovative methods to temporarily cool the Earth by reducing the amount of sunlight reaching its surface.

The scheme includes exploring a variety of methods such as dispersing clouds of reflective particles into the atmosphere, spraying seawater to brighten clouds, and thinning natural cirrus clouds, which typically act as heat-trapping blankets. The concept hinges on the idea that, by reflecting more sunlight away from the planet, surface temperatures could be moderated. This approach is viewed as a relatively cost-effective measure to combat climate change in the short term.

Professor Mark Symes, programme director for ARIA and head of the geo-engineering project, explained the urgency behind the initiative. Speaking to The Independent, he said: “Decarbonisation is vital, but our current progress puts us at risk of triggering a large number of temperature-induced climate tipping points.” He highlighted potential tipping points including the melting of Arctic winter sea ice, the loss of the Amazon rainforest and its ecosystem, and the collapse of major land-based ice sheets, all of which could lead to significant rises in global sea levels.

Professor Symes acknowledged that while the ultimate solution to the climate crisis is to reduce fossil fuel consumption and eliminate excess greenhouse gases, this transition may not occur swiftly enough to prevent these critical tipping points. “This programme will explore critical unanswered questions as to how (or whether) we might cool the Earth safely and responsibly on the timescales required to avoid climate catastrophe,” he said. The hope is that the project could essentially "buy time to decarbonise."

Despite the potential benefits, the project has attracted some criticism. Opponents warn that geo-engineering could disrupt weather patterns catastrophically and shift rainfall away from regions critical for food production. There is also concern that reliance on geo-engineering could diminish the urgency to reduce fossil fuel burning, which remains the root cause of climate change.

ARIA, which has been allocated £800 million of public funds over the next four years, has committed to environmental responsibility in this venture. Professor Symes assured that no toxic substances would be used in the experiments, and that a comprehensive environmental impact assessment would be conducted prior to any outdoor testing. Additionally, there will be consultations with local communities in the areas designated for experimentation.

Further details on the project's scope and methodology are expected to be released in the coming weeks, as the research initiates its work to explore whether solar geo-engineering can serve as a viable interim measure in the global battle against climate change.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

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