

Industry guidance touts untested tech as climate fix

August 23 2019, by Patrick Galey



The draft specifically mentions a procedure that would see aerosols injected directly into Earth's stratosphere to reflect more of the Sun's heat, a process known as Solar Radiation Management

Draft guidelines for how industry fights climate change promote the widespread use of untested technologies that experts fear could undermine efforts to slash planet-warming greenhouse gas emissions,

AFP can reveal.

The guidance appears to encourage high-polluting sectors to take the cheapest route towards limiting global warming, potentially decoupling emissions cuts from the temperature goals outlined in the Paris [climate](#) agreement.

The International Organization for Standardization (ISO), a global industry-driven non-profit group comprising more than 160 member states, has produced new draft guidance on [climate action](#) for businesses.

Rather than measuring climate action by the yardstick of emissions reduction, the draft, seen by AFP, concentrates on managing "radiative forcing", which is the amount of excess energy trapped in Earth's atmosphere.

Specifically, it looks at techniques for manipulating the climate through large-scale geoengineering, notably one called Solar Radiation Management (SRM).

SRM entails injecting heat-deflecting aerosols directly into Earth's stratosphere to bounce more of the Sun's heat back into space.

Studies have shown that SRM could be extremely effective—and relatively inexpensive—in stemming rising temperatures.

But there are fears that tinkering with Earth's atmosphere could unleash a tide of unintended consequences, potentially destabilising global weather patterns and undermining food security.

"There is a really profound risk when you take something as untested, controversial, politically volatile and morally risky as geoengineering and you make it the subject of industry-driven, market-oriented standards,"

said Carroll Muffett, president of the Centre for International Environmental Law.

"What is so significant about this process is that the ISO is a global standard-setting body. Companies tout their ISO compliance as a demonstration of the validity of what they are doing," he told AFP.

An ISO spokeswoman confirmed the validity of the draft guidance but said it was subject to significant further debate and modification.

An ISO working group will meet next week in Berkeley, California, to discuss the draft and will proceed with it only "if there is consensus", she told AFP.

'Substantial risks'

The 2015 Paris climate deal commits governments to capping [temperature rises](#) to "well below" two degrees Celsius (3.6 Fahrenheit) above pre-industrial levels in order to stave off the worst impacts of climate change.

The accord strives to stay within a safer limit of 1.5C of warming.

To do so, the United Nations Intergovernmental Panel on Climate Change says mankind must eventually reduce greenhouse gas emissions to net zero, the safest route to this being a rapid, sweeping drawdown in coal, gas and oil burned for energy.

The IPCC, in its landmark 1.5C report last October, decided against including SRM in its climate models, which project several pathways towards net zero.

It said that while SRM could be "theoretically effective" it comes with

"large uncertainties and knowledge gaps as well as substantial risks" to society.

In March, discussions at the United Nations Environment Assembly in Nairobi were held up over a dispute centred on the future governance of geoengineering schemes such as SRM.

Sources close to the talks told AFP at the time that the US and Saudi delegations voiced "fierce opposition" to even the mention of international oversight.

"Our interpretation is that they want to avoid further regulation, governance, oversight over these technologies and it's definitely in the interest of the fossil fuel industry," said Linda Schneider, senior programme officer at the Heinrich Boll Institute.

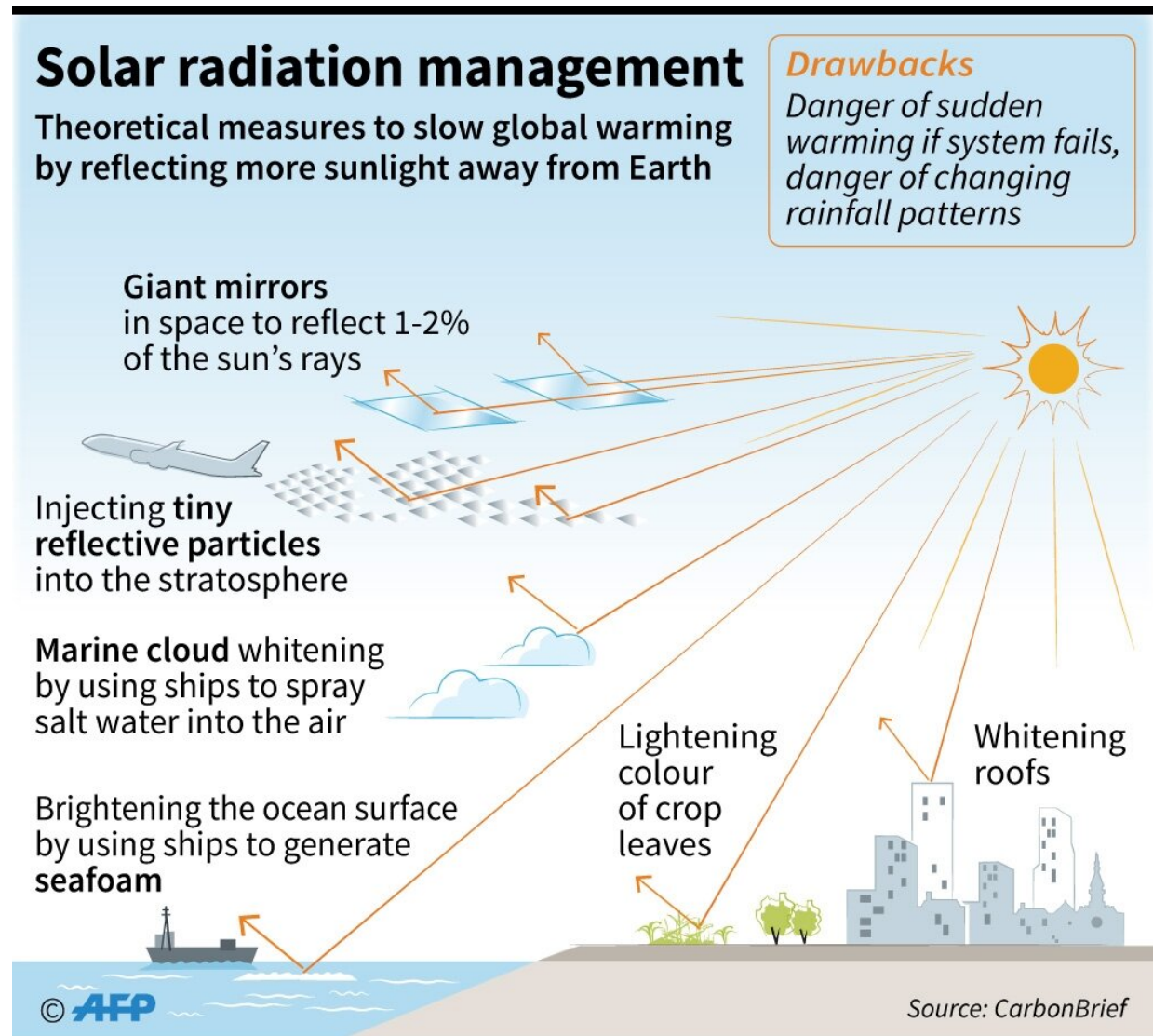
Trade organisations funded by oil and gas majors have for several years advocated SRM, including the influential American Enterprise Institute (AEI).

One AEI policy paper from 2013 concluded: "The incentives for using SRM appear to be stronger than those for (greenhouse gas) control."

AEI did not respond to an AFP request for comment.

Muffett said that geoengineering, and SRM in particular, was preferred by big polluters as it could "allow business as usual to continue in the near term to take slower action to reduce emissions."

Janos Pasztor, executive director of the Carnegie Climate Governance Initiative and a former UN deputy secretary general for climate change, agreed that the ISO stance on geoengineering could distract from vital emissions cuts.



Geoengineering the planet

"Governments, corporations, regions, and cities might wish to continue with the fossil fuel emissions economy because there is another technology now that maybe can give us a solar shield to cool the planet," he told AFP.

Upside?

The October 2018 IPCC 1.5C report made it clear that even drastic cuts in carbon pollution may not be enough to stop potentially dangerous temperature rises.

Its 1,200-page assessment allowed for a climate crisis "Plan B" in the form of bioenergy and carbon capture and storage (BECCS) technology, which would require planting millions of square kilometres in biofuel crops and then drawing off the CO₂ produced when they are burned to generate energy.

By contrast, SRM lowers temperatures but does nothing to remove greenhouse gases. Its proponents say it has the potential to buy Earth time to retool its economy away from fossil fuels.

Jessica Strefler, from the carbon management team at the Potsdam Institute for Climate Impact Research, said the technology already exists to implement large-scale SRM.

Computer modelling of the effect of injecting tonnes of sulphate particles into the stratosphere suggest that as few as 200 planeloads of aerosol a year could halt global warming.

SRM has another obvious advantage: cost.

Strefler said the geoengineering tech would cost "at least one order of magnitude" less than emissions cuts.

"It's dangerously cheap," added Pasztor. "Peanuts."

The draft ISO guidelines urges companies to prioritise "cost-effective" approaches to managing temperature rises, something campaigners fear

will push firms further towards SRM.

Yet SRM, even if successfully deployed to maintain surface temperatures, will do nothing to offset the other effects of global warming, including acidifying oceans and crop damage.

For Strefler, the main argument against the technology is how it is governed.

"There's not really a limit to how much we could do. So then who decides which temperature is most desirable? Do we limit them to 1.5C? Do we want to go down to 1C, or to pre-industrial temperatures?" she said.

"Who decides that?" she added. "There's a huge international conflict potential."

Industry influence

The United Nations Framework Convention on Climate Change (UNFCCC), the main international, government-led climate process, measures each nation's contribution towards fighting [global warming](#) in terms of emissions cuts.

But the ISO appears to propose a new standard altogether, in which progress is defined by "management" of radiative forcing to fix the climate to an undefined temperature.

It also defines the Paris temperature goals as "problematic".

The ISO itself says "industry experts drive all aspects" of the guidance development process, something Muffett said was cause for concern given that industry, including oil and gas majors, often advocate self-

regulation when it comes to greening their business models.

"Here you see geoengineering pushed as a solution through precisely the sort of voluntary approach that industry has long advocated," he said.

While ISO guidelines are voluntary and advisory, they help to shape global international business norms.

"You have a wide array of the world's most damaging companies from an environmental perspective who can point very proudly to their ISO certification. It's a body that is by design heavily industry-influenced," said Muffett.

Pasztor said governance of geoengineering technology, because of its global ramifications, "cannot be left to a subset of actors".

"When it comes to tough decisions that have large impacts—large-scale land use for carbon capture, but the most obvious is SRM—they need engagement from different governments," he said.

"When you look at the ISO process, that's much more limited and that's not right because most of the impacts, good or bad, will be on developing and vulnerable countries that are not part of that process."

© 2019 AFP

Citation: Industry guidance touts untested tech as climate fix (2019, August 23) retrieved 1 May 2024 from <https://phys.org/news/2019-08-industry-guidance-touts-untested-tech.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--