

Engineering Winter

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Interested in reversing global warming? There is a chance that geoengineering, a method that uses human intervention to forcibly counteract global warming, could make the earth stabilize to more natural temperature patterns. Alternately, the experiment could ruin the world.

An article titled "[Geoengineering Could Save or Destroy the Earth](#) [1]" explains that legal scholars, scientists and philosophers recently banded together to talk about the risky method. In their meeting, they discussed a report that was recently released in London by Britain's Royal Society, which stated that "reflecting a small amount of sunlight back into space before it strikes the Earth's surface would have an immediate and dramatic effect."

Geoengineering could also involve spraying aerosols into the stratosphere, brightening clouds with sea water, painting roofs white, placing "sun shades" over the earth and using various other strategies to trick Mother Nature into cooperating.

Just a few years after the implementation of geoengineering, our climate could return to pre-Industrial Revolution levels, levels that Earth has not seen for 250 years, the report says. Yet, as you may assume from the article's ominous title, geoengineering also has the potential to make our weather patterns more unpredictable.

“Actions such as spraying sulfur into the air or brightening clouds with sea water to reflect more sunlight would have to be sustained indefinitely because ‘there would be a large and rapid climate change if it were terminated suddenly,’” the report explains.

Many countries have grown increasingly fearful of the effects of global warming and unpredictable weather patterns, but U.N. negotiations to limit fossil fuels and reduce greenhouse gas emissions have failed — after 20 years of discussions.

Nations cannot seem to agree on methods to halt unnatural climate change, and some scientists have warned that it is almost too late to change our ways. If nations do not reach an agreement soon, global warming may become an unstoppable force.

If countries cannot agree to take measures to limit their greenhouse gas emissions, how would they agree on their approach to geoengineering? Would some countries embrace it, while others would choose to limit their emissions? Would some try to ignore climate change altogether?

Performing geoengineering experiments could put the entire world in danger: not just the country that chooses to run tests. If some countries chose to use the method, it is almost guaranteed that they would face opposition, yet it would be difficult to stop them.

A 50/50 shot at the world’s safety does not seem like a scientific miracle, it seems like a premise for an apocalyptic movie. Luckily, the geoengineering talks were not a result of U.N. or governmental interest; they were meant to start the ball rolling and encourage leaders to discuss the method.

“I hope it can be continued in a more formal and mandated framework, because eventually somebody will have to make some decisions,” said John Shepherd, an oceanographer who is also a lead author of the report.

Perhaps leaders should spend their time discussing how to limit their emissions and reduce their carbon footprint: actions that may not have an immediate, dramatic effect, but are safer alternatives to geoengineering. Implementing such procedures may be inconvenient, but they will pay off.

Yet, if 20 years of U.N. discussions, scientists’ warnings of irreversible damage, and evidence that the world’s temperatures may rise “as much as 6.4°C by 2100, swelling the seas with melted glacial water and disrupting climate conditions around the globe” haven’t made leaders implement changes, it is difficult to know if a united effort to reduce carbon emissions will ever become a reality.

Although we have contributed to global warming, geoengineering is not the solution to the problem. As the old adage says: “Two wrongs don’t make a right.”

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