



CORPUS PUBLISHERS

Environmental Sciences and Ecology: Current Research (ESECR)

Volume 2 Issue 5, 2021

Article Information

Received date : October 25, 2021

Published date: November 1, 2021

*Corresponding author

Soheil Shayegh, RFF-CMCC European Institute on Economics and the Environment (EIEE), Centro Euro-Mediterraneo sui Cambiamenti Climatici, Italy

Distributed under Creative Commons CC-BY 4.0

Opinion Article

Climate Crunch Time

Soheil Shayegh

European Institute on Economics and the Environment (EIEE), Centro Euro-Mediterraneo sui Cambiamenti Climatici, Italy

Opinion

The COVID-19 pandemic has provided us with a real-world planetary case study in crunch time decision making when any speculative solution from unproven medication to high-tech gene editing techniques, has a chance to capture people's attention. Similarly, climate change is challenging the communities around the world with unprecedented disasters, forcing decision makers to desperately look for a solution. The experience of solution-driven policy making during the global pandemic can guide policy makers in dealing with global climate crisis. It also provides a golden opportunity for "unconventional" climate geoengineering technologies to be brought into the spotlight. Climate geoengineering technologies are deliberate efforts to manipulate the climate system either by removing carbon dioxide from the atmosphere or by lowering the global mean temperature. In the former case, technologies such as Direct Air Capture and Sequestration (DACs) reduce the concentration of greenhouse gases in the atmosphere as the underlying cause of climate change. Therefore, they can be looked upon as a "cure" to climate problem while the "vaccine" remains the decarbonization of the economy through developing clean and renewable energies. Other geoengineering technologies such as Solar Radiation Management (SRM) are deployed to deal with the consequences or the "symptoms" of climate change, namely, the global mean temperature rise without reducing the greenhouse gas emissions. Similar to the use of ventilators for the patients with severe COVID-19, this group of technologies act as climate "ventilators" that only alleviate the severe consequences of high temperatures such as rising sea-levels. However, as ventilators are not a real cure for COVID-19, this group of geoengineering techniques are not a credible solution to the climate change problem either. As a potential application of this group of geoengineering technologies, they can be deployed at the onset of a major climate-induced catastrophe to contain the damages and buy some critical time for developing more permanent solutions (cure or vaccine). Historically, geoengineering technologies such as SRM have been under scrutiny for three main reasons: cost-benefit or economic justification, moral hazard, and the potential for unilateral misuse. The experience of crunch time decision making during pandemic, however, has changed how we perceive existential risks in a fundamental way and has brought the "doomsday" projections closer to reality than ever before. One lesson we have learned from the current pandemic is that facing the grave consequences of shutting down the economy indefinitely, investing in any alternative that prevents the catastrophe from happening or contains it temporarily, makes an invaluable economic sense. Similarly, in the post-COVID19 world, climate change is no longer a remote theoretical concept that only concerns handful of scientists in the academic sphere, but it occupies a significant part of our unconscious worries about upcoming catastrophes. In this world, the quest to find a way to stop climate catastrophes from happening or to contain their consequences can justify an unprecedented financial and political investment. As regulatory safeguards, deemed to protect us from the side effects of untested drugs and technologies, are being scrapped in the medical field [1], we should expect this trend to extend to the uncharted territory of climate change geoengineering technologies where bureaucratic red tapes might be slashed in the face of mounting climate worries. On the other hand, moral hazard arguments against geoengineering have been debunked even before the current pandemic [2]. The COVID-19 crisis has also shown the many flaws of moral hazard arguments. As no one accuses the ventilator manufacturers that they endanger or distract the public's attention from developing the cure or vaccine, the pursuit of decarbonizing the economy can and should go on regardless of temporary measures that alleviate the suffering of the climate change victims. Geoengineering, like ventilators, will reduce the catastrophic casualties and will buy us some critical time to get our act together and address the root cause of the problem. Finally, the current pandemic has highlighted the dangers of unilateral actions in the face of a global crisis. The crucial role of international governing bodies such as the World Health Organization (WHO) in relaying accurate information about the disease and coordinating international efforts to find a cure for that, as well as its shortcomings in building trust among the member countries by launching independent investigation into the origin of the pandemic, has valuable and transferable lessons for climate change policy making at global level [3]. In the case of geoengineering, the unilateralism would be even more dangerous since each country's independent action would not be limited to its boundaries and would be a defining factor in the global outcome. In the worst-case scenario, some technologies such as SRM could be weaponized against other countries. Therefore, a strong international governing mechanism is needed to be put in place before the large-scale deployment of such technologies. Geoengineering technologies will be needed sooner or later as we are failing to reduce the greenhouse gas emissions sufficiently to avoid climate change catastrophes. We should prepare for the worst outcome of these disastrous events by making sure such options are safe, tested, standardized, and regulated. We cannot afford to allow another crisis to shutter the world and suffocate our economies and the livelihood of most vulnerable populations. This is indeed the crunch time for climate change policy making.

Reference

1. <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-updatefda-continues-accelerate-development-novel-therapies-covid-19>
2. (2019) Geoengineering-is-no-climate-fix-but-calling-it-a-moralhazard-could-be-counterproductive/
3. (2019) Shayegh, Soheil and Herman, Kyle, Earth and Health: Learning Across the Boundaries of Global Governance.