

Solar Geoengineering for War and Profit

December 17, 2025



By Silvia Ribeiro in La Jornada

Stardust, a new Israeli company, has announced that it raised \$60 million to develop a solar geoengineering project that it will sell to the highest bidder. This is by far the largest for-profit solar geoengineering project to date.

Stardust was founded in 2023 by researchers from the Israeli government specializing in nuclear energy and has since raised \$75 million. It initially received funding from AWZ, a multinational Israeli-American-Canadian company specializing in “security, intelligence, and technology,” which boasts contracts with the Israeli Ministry of Defense, the CIA, FBI, Mossad, and MI5. Stardust also highlights its connections to the Israeli military and the potential for the U.S. government to acquire the company in the future.

Its objective is clear: to develop commercial-scale solar geoengineering technologies that can be sold to governments, militaries, or anyone who can afford them. According to an interview with *Politico*, the company claims it will have the technology ready for stratospheric experiments by 2027, large-scale deployment by 2030, and global deployment by 2035.

Geoengineering has been under a moratorium by the UN Convention on Biological Diversity since 2010 due to the high risks it poses to the environment and biodiversity. States reaffirmed the moratorium by consensus in 2024. The activities Stardust has announced would violate these decisions.

Solar geoengineering refers to technological proposals that aim to reflect some of the sun’s radiation back into space with the goal of lowering global temperatures (as warming is one of the symptoms of climate change). It is inspired by the effect of volcanic clouds that sometimes prevent sunlight from reaching the Earth. The most studied proposal is the injection of aerosols into the stratosphere, especially sulfur, which would act like a sunshade. Other proposals involve mirrors or devices in space to create shadows on Earth. All these approaches are hypothetical; they entail negative side effects and increase the inequity of climate chaos, with a high potential for military use and increased geopolitical tensions.

Computer models indicate that large-scale solar geoengineering could lower temperatures but would have significant negative impacts in certain areas. There would be “winners” with better temperatures and “losers” who would suffer from worsened droughts or floods. Furthermore, sulfur particles damage the ozone layer and are toxic to both human health and the environment when they fall, which typically occurs a year or two after their injection. Since geoengineering does not change the causes of climate change, it would have to continue, creating a captive market for those who control the technology. The particles must be reinjected every year; if the project were to stop, temperatures would rise abruptly, creating a situation worse than the initial one, a phenomenon scientists refer to as “termination shock”.

Paradoxically, it is these aspects that make the proposal attractive from a business standpoint: it is a way to control the global thermostat, creating captive markets and dependence for decades or centuries, and it can be deployed unilaterally by a country, a group of countries, or even by some of the wealthiest individuals on the

planet. Some of them, along with their foundations, such as those of Bill Gates and Elon Musk, as well as others associated with Silicon Valley and Big Tech, have funded this type of research. Musk reacted enthusiastically to the Stardust announcement on X, suggesting that his satellite constellation could be used to help prevent global warming.

Stardust's activities and the lucrative business it envisions could unleash a race to develop these proposals commercially. The fact that greenhouse gas emissions are not being reduced and that warming is increasing is an incentive for their business. The less climate action there is, the larger their market will be. Stardust has spent large sums on U.S. lobbying. Academic proponents of research and experiments in solar geoengineering, such as David Keith at the University of Chicago, former Stardust advisor Janos Pasztor, and the Degrees Initiative, have claimed to distance themselves from commercial initiatives like Stardust and a previous one called Make Sunsets, which attempted to establish itself in Mexico in 2023 but was rejected by the government. However, the reality is that both companies state that they based their work on the geoengineering studies of these and other academics. The Stardust case clearly shows that if a technology is researched and developed, regardless of who does it, it will be used by those with the resources to do so, according to their own interests.

Given the prevailing injustices, inequalities, and geopolitical tensions in the world, solar geoengineering cannot be governed or managed democratically. Therefore, its research and development directly contribute to existing inequalities. This argument was cited by more than 600 scientists and academics from 62 countries who are calling for an international Solar Geoengineering Non-Use Agreement. A proposal for such a treaty was also supported in 2025 by the Conference of African Environment Ministers (AMCEN).

This is a translation of the article that originally appeared in La Jornada:
<https://www.jornada.com.mx/2025/11/29/opinion/018a1eco>