

GEOENGINEERING

Although Rio+20 negotiators are discussing marine applications of geoengineering (so-called “ocean fertilization”) in the context of climate change and technological “quick fixes,” the wider issues of geoengineering, including so-called solar radiation management, are not being discussed. The UN Convention on Biological Diversity established a *de facto* moratorium on all forms of geoengineering in 2010. Nevertheless, some governments are continuing to look toward technological methods of blocking or reflecting sunlight and other planetary system adjustments. Rio+20 should make a firm statement banning geoengineering to prevent a handful of countries -- a new “coalition of the willing” from taking the Earth’s thermostat into their own hands.



Illustration 1: Bio-Wrench by Tanuki

NINE QUESTIONS ABOUT GEOENGINEERING:

- 1. HOW INTRINSICALLY RISKY IS GEOENGINEERING?** The risk is proportional to the planetary scale upon which it would operate and, like nuclear war, its effects are not reversible or predictable. Scientists agree that the outcome of geoengineering cannot be certain; therefore, the risk is commensurate with that of nuclear war.
- 2. ARE THE RISKS EVENLY DISTRIBUTED AMONG REGIONS AND PEOPLES?** Scientists agree that the impacts of geoengineering would be uneven and probably unpredictable within and between hemispheres and continents. People would also be differently vulnerable depending upon their livelihoods, locations and mobility (wealth). Marginalized people in fragile environments – exposed to extreme weather events and circumstances – would experience disproportionate risk.

RIO+20 AND GEOENGINEERING

ETC Group is calling for a ban on Geoengineering. The Biodiversity Conventions *de facto* moratorium – although a consensus decision by 193 governments – has yet to fully register in the policy circles of all governments and should be strengthened during the upcoming Rio conference. Just as governments agreed to a Nuclear Test Ban Treaty during the Cold War, governments should also agree to a Test Ban on Geoengineering as they address climate change. To have a climate impact, (non-laboratory) geoengineering tests must be on a scale tantamount to actual deployment and, therefore, invite transboundary impacts.

- 3. COULD GEOENGINEERING’S DEVELOPMENT/DEPLOYMENT NEGATIVELY IMPACT OTHER RESPONSES TO CLIMATE CHANGE?** All parties recognize that the prospect of even temporary technological fixes to climate change encourages some governments and industries to lower their (already weak) commitment to mitigation and

adaptation. Further, if technological alternatives are thought to be “cheaper,” other options and funds will attract less support. There are also direct impacts on other mitigation responses, such as less effective solar power in the presence of solar radiation management techniques.

4. **HOW WILL DECISIONS BE MADE?** This is unknown. However, as with nuclear weapons and other major global military and economic issues, geoengineering decisions will be made by those who have power. Because geoengineering could conceivably be undertaken by just one or a few countries, multilateral endorsement is not a prerequisite for action.
5. **WHAT IS OUR EXPERIENCE WITH RESPONSIBLE GLOBAL CRISES MANAGEMENT?** Humanity’s only comparable experience is with war. Powerful governments have never left such decisions to an intergovernmental vote. These governments have conducted ocean and stratospheric nuclear testing without UN support. It could be argued, of course, that hunger, disease and poverty are also global crises requiring a coordinated multilateral response. At least since the 1960s, we’ve been told that these problems are financially and technically solvable. Concerted, constructive action has been rare.
6. **WHAT IS OUR GLOBAL RECORD WITH EQUITABLE PROBLEM-SOLVING?** Governments have negotiated thousands of treaties that achieve practical solutions to practical problems. The solutions have sometimes been equitable. However, when it comes to the “big” issues of war and peace, justice, or equitable distribution, humanity has very few beneficial experiences to draw upon.
7. **WHAT ARE THE MECHANISMS FOR THE PARTICIPATION OF LESS POWERFUL PARTIES AND THOSE REGIONS AND PEOPLES THAT COULD BE MOST NEGATIVELY IMPACTED?** The issue has not been addressed. There have been discussions about governance in general, but proponents of geoengineering have not developed any mechanisms to meaningfully engage marginalized peoples or countries.
8. **WHAT RISK IS THERE THAT SCIENTIFIC ADVICE COULD BE SUPERSEDED BY SHORT-TERM POLITICAL INTERESTS?** As climate change shows, scientific advice is routinely marginalized or distorted to meet immediate political interests. Scientists lose control of their information/advice the moment it encounters the political agenda. This distortion has been consistent: from the health effects of tobacco, asbestos and radiation to BSE and nuclear safety today. The greatest consistency, however, is that science is no match for political will (or the lack of it).
9. **WHAT IS PLAN C IF GEOENGINEERING FAILS OR EXACERBATES CLIMATE CHANGE?** Good question. No answers – just wasted time and money.

FOR MORE INFORMATION

ETC Group has published several documents on issues related to geoengineering *Geopiracy. The Case against Geoengineering* available on our website: www.etcgroup.org/en/node/5217