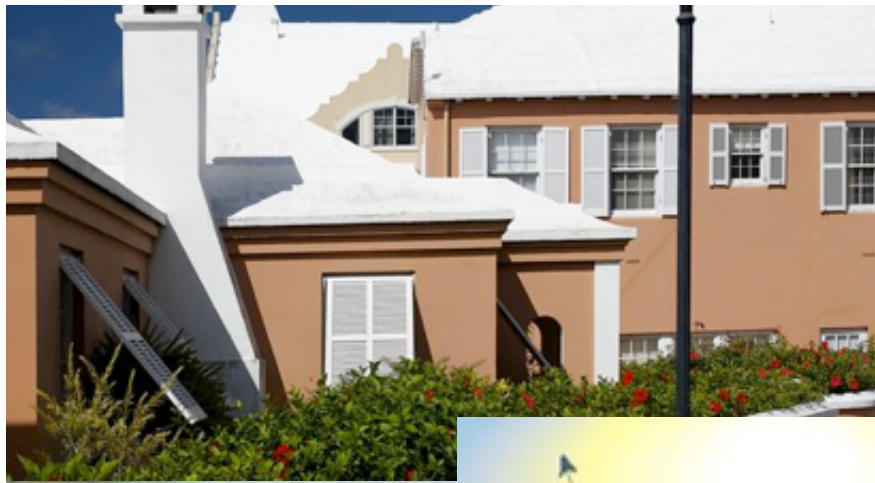


*white sky, anyone?  
wild about geoengineering  
mark byrne*

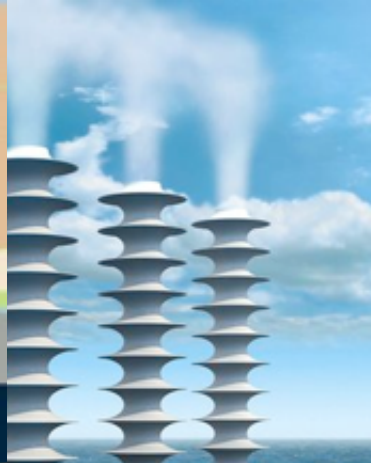
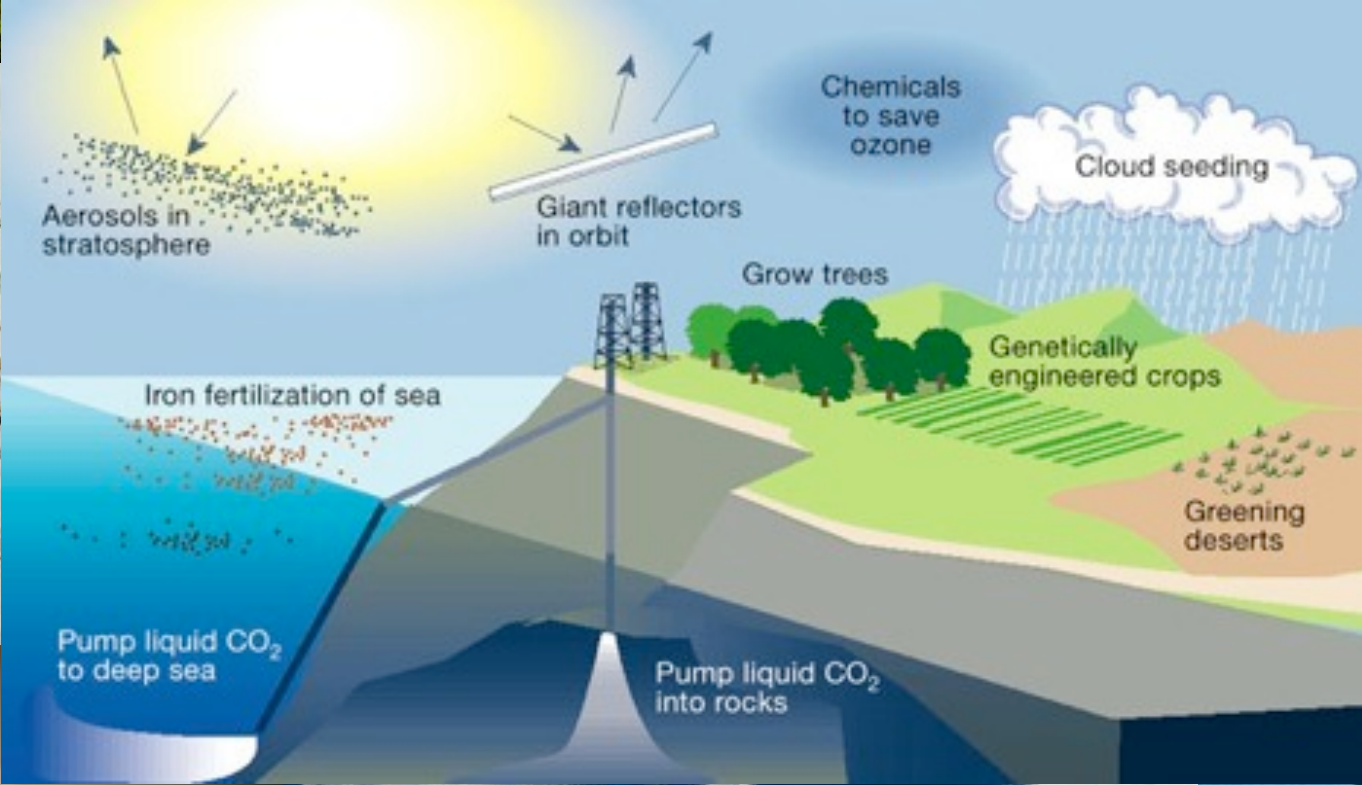
‘The deliberate large-scale manipulation of an environmental process that affects the earth's climate, in an attempt to counteract the effects of global warming.’ (OED 2010)

‘The deliberate large-scale manipulation of the planetary environment. Geoengineering methods can be largely classified into two main groups: Solar Radiation Management (SRM) and Carbon Dioxide Removal (CDR).’ (IPCC 2010)

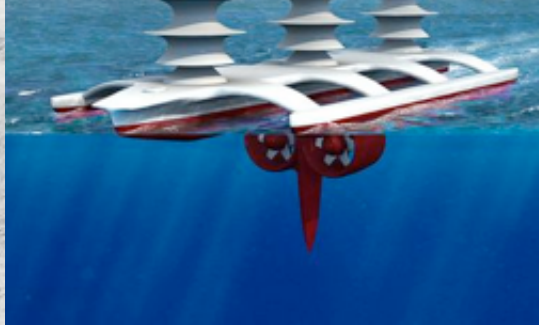




SRM



CDR



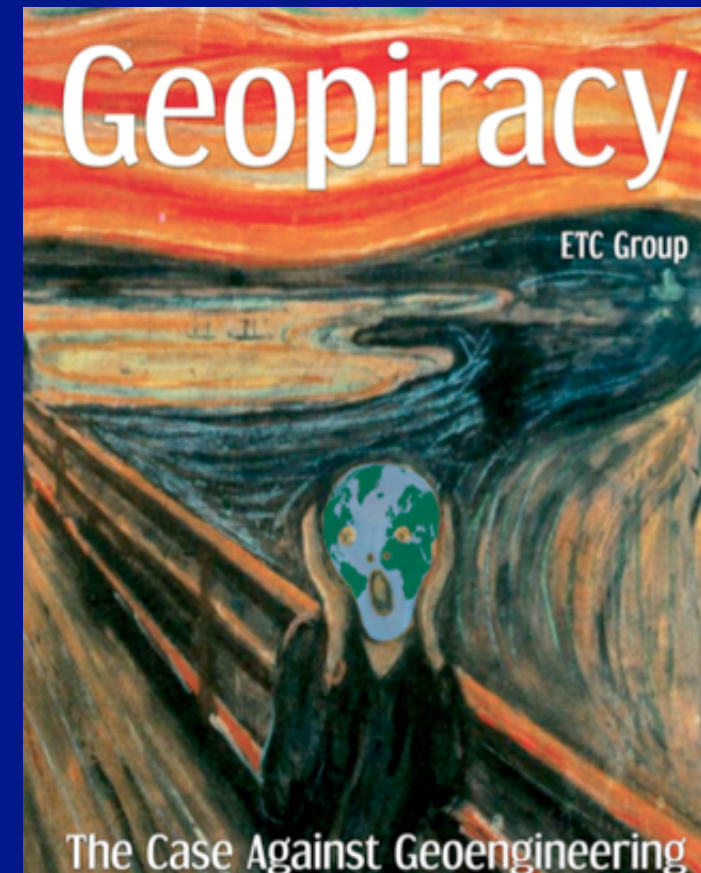
# planktos

'Planktos, Inc. was a U.S. start-up company that intended to sow the oceans with iron in order to create plankton blooms that would theoretically sequester CO<sub>2</sub>. By early 2007 Planktos was already selling carbon offsets on its web site, claiming its initial ocean fertilization test, conducted off the coast of Hawaii from the private yacht of singer Neil Young, was taking carbon out of the atmosphere. In May 2007, Planktos announced plans to set sail from Florida to dump tens of thousands of pounds of tiny iron particles over 10,000 square kilometres of international waters near the Galapagos Islands, a location chosen, among other reasons, because no government permit or oversight would be required.'



# potential impacts

“The potential for accidents, dangerous experiments, inadequate risk assessment, unexpected impacts, unilateralism, private profiteering, disruption of agriculture, inter-state conflict, illegitimate political goals and negative consequences for the global South is high. The likelihood that geoengineering will provide a safe, lasting, democratic and peaceful solution to the climate crisis is non-existent.”



# oxford principles

- Geo-engineering to be regulated as a public good
- Public participation in decision making
- Disclosure of geo-engineering research and open publication of results
- Independent assessment of impacts
- Having in place clear governance arrangements before deployment

# existing governance

- London (Marine Dumping) Convention 1972 + 1996 Protocol
- Environmental Modification Convention 1977
- Biodiversity Convention 1992

# cbd moratorium

‘Ensure, in line and consistent with decision IX/16 C, on ocean fertilization and biodiversity and climate change, in the absence of science based, global, transparent and effective control and regulatory mechanisms for geo-engineering, and in accordance with the precautionary approach and Article 14 of the Convention, that no climate-related geo-engineering activities that may affect biodiversity take place, until there is an adequate scientific basis on which to justify such activities and appropriate consideration of the associated risks for the environment and biodiversity and associated social, economic and cultural impacts, with the exception of small scale scientific research studies that would be conducted in a controlled setting in accordance with Article 3 of the Convention, and only if they are justified by the need to gather specific scientific data and are subject to a thorough prior assessment of the potential impacts on the environment...’



# future fora

- UN Security Council
- UN General Assembly
- ICJ advisory opinion
- Rio 20+
- ILC/IUCN CEL/ICEL advsory opinions/policy papers
- Human Rights Council
- International Coventant on Environment & Development?
- ICENT?
- World Charter for Nature/Earth Charter

# International Convention for the Evaluation of New Technologies

- Strict application of precautionary principle
- No unilateralism
- Ensuring environmental integrity
- Full consideration of potential negative social, cultural or environmental impacts
- Open and transparent process with full civil society participation, including social movements and indigenous peoples
- Fair, full and equitable representation and participation of developing countries
- Respect for international human rights and environmental law

# principles of iel

- Sovereign right to exploit resources
- Duty to prevent transboundary harm
- Polluter pays
- Conservation of biological diversity
- Intergenerational equity
- Common but differentiated responsibilities
- Right to development
- **Precautionary principle**
- Duty to consider environmental impacts
- Sustainable development
- Care of global commons
- Common concerns of humanity
- Prevention of harm
- Respect for nature/all life forms/Earth

# precautionary principle

**‘Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.’**

**(Rio Declaration, Principle 15)**

# prevention

**‘Protection of the environment is better achieved by preventing environmental harm than by endeavouring to remedy or compensate for such harm.’**

(1995 Draft ICED, Art 6)