

The Who, What And Wherefore Of Solar Geoengineering Governance

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Wherefore? Why is governance needed?

Concern	Purpose of governance
<ul style="list-style-type: none">• Too much climate engineering	<ul style="list-style-type: none">• Limit/prohibit climate engineering
<ul style="list-style-type: none">• Too little climate engineering	<ul style="list-style-type: none">• Facilitate climate engineering• Reassure public
<ul style="list-style-type: none">• Potential for conflict, risky behavior	<ul style="list-style-type: none">• Mechanisms to structure debate and make decisions

What are the different forms of governance?



Forum

Coordination/
Facilitation

Transparency/
Reporting

Standard-
setting

Decision-
making

Dispute
resolution

Matching form to function

Concern	Purpose of governance	Governance techniques
<ul style="list-style-type: none">• Too much climate engineering	<ul style="list-style-type: none">• Limit/prohibit climate engineering	<ul style="list-style-type: none">• Moratorium/specific restrictions• Compliance system
<ul style="list-style-type: none">• Too little climate engineering	<ul style="list-style-type: none">• Facilitate climate engineering• Reassure public	<ul style="list-style-type: none">• Coordination• Funding• Evaluative standards
<ul style="list-style-type: none">• Potential for conflict, risky behavior	<ul style="list-style-type: none">• Mechanisms to structure debate and make decisions	<ul style="list-style-type: none">• Forum for discussion• Transparency• Evaluative standards• Decision-making

Who governs?

Issues

- Global, regional, or club?
- Qualifications?
 - Representativeness
 - Expertise
- Existing or new institution?

Options

- Security Council
- MEA COP
 - UNFCCC
 - Convention on Biological Diversity
 - Ocean dumping (London Convention/Protocol)
- UN Environmental Assembly /UNEP
- Scientific organizations (ICSU, WMO)
- New institution

Governance of whom?

- States
 - Regulation of climate engineering by states

Which states might do climate engineering unilaterally?

Severe CC
Impacts Likely

		YES	NO
Economic and Technical Capacity	YES	US, China, India, Brazil, South Africa, Australia	Russia, Canada, UK, France, Germany
	NO	Bangladesh, Small Island Nations, Rest of Africa, Southern Europe	Rest of Northern Europe

Source: Lloyd &
Oppenheimer, *Global
Environmental
Politics* (2013)

Governance of whom?

- States
 - Regulation of climate engineering by states
- Private actors/business
 - Requirements that states regulate private conduct

Future governance: What forms of governance likely to be acceptable to states?



Forum	Coordination/ Facilitation	Transparency/ Reporting	Standard- setting	Decision- making	Dispute resolution
Likely	Likely	Possibly	Possibly	Unlikely	Unlikely
			Moratorium Code of conduct Requirement to regulate private conduct		

Would SG deployment require international governance?

- Claim often made that solar geoengineering deployment would require international governance
- Three senses of “required”
 - Legally required?
 - Probably not. Unilateral SG deployment not *per se* prohibited by international law.
 - Politically required?
 - Probably not. At least in extremis, states might be willing to engage in SG unilaterally or as part of coalition of the willing
 - Morally required?
 - Possibly, although unilateral SG deployment might be justified if multilateral approval impossible.

Some policy questions

- How to provide incentives for R&D?
- Possible standards
 - How specific/general?
 - Legal vs. non-legal? (new agreement?)
- New vs. existing institutions?
- Universal vs. limited membership?

Some research Qs

- What are relevant analogies?
 - Humanitarian intervention?
 - Arms control?
- Is the deliberate nature of SG legally relevant?
- Is SG different from other government policies with transboundary/global effects (e.g., interest rate changes by the Fed) and, if so, how?