

# Solar Geoengineering and International Law

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Solar Geoengineering Deployment

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# Key Points

1. Existing international law provides little guidance on solar geoengineering, either positive or negative.
2. The only existing institution with relevant, binding decision-making authority is the Security Council, but it would not be able to limit solar geoengineering by P-5 states.
3. international governance is not legally necessary for solar geoengineering deployment.
4. A future legal regime on solar geoengineering might:
  - a. Promote cooperation in SG research.
  - b. Provide general standards to evaluate SG
  - c. Establish procedural requirements for SG

# What roles could IL, in theory, play?

## Potential Role

- Prescribe rules of conduct
  - Substantive
    - Prohibitions/limitations
    - Permissions
    - Liability rules
  - Procedural
- Provide evaluative principles to structure and guide debate
- Establish decision-making institutions and procedures

# Existing rules and principles

Treaties	<ul style="list-style-type: none"><li>• UNFCCC: doesn't address SG</li><li>• Paris Agreement: 1.5/2° temperature goal</li><li>• Montreal Protocol: might apply generally to SAI, but no specific controls</li><li>• CLRTAP: applies only regionally; specific controls unlikely to limit SAI</li><li>• UNCLOS – general principles</li><li>• ENMOD – addresses only hostile uses</li><li>• London Convention/Protocol: applies to CDR, not SG</li><li>• Convention on Biological Diversity (CBD): decisions non-binding</li><li>• Espoo Convention on environmental impact assessment</li><li>• Aarhus Convention on public participation</li></ul>
Custom	<ul style="list-style-type: none"><li>• Duty to prevent</li><li>• Precautionary principle</li><li>• Duty to assess</li><li>• Duty to notify and consult</li></ul>

# Existing institutions

## Institutions

- Scientific/expert organizations (ICSU, WMO)
- Conferences of the Parties (COPs) of multilateral environmental agreements
  - UNFCCC, CBD, UNCLOS, MP, etc.
- Security Council
- Judicial bodies: ICJ, ITLOS

## Governance tasks

- Forum for discussion
- Coordination
- Information
  - Ex ante: assessment
  - Ex post: monitoring, review
- Standard-setting
  - Legal rules
  - Non-binding recommendations
  - General principles
- Decision-making / authorization
- Implementation
- Dispute settlement

# What role does existing IL actually play?

Potential Role	Existing International Law
<ul style="list-style-type: none"><li>• Prescribe rules of conduct<ul style="list-style-type: none"><li>• Substantive<ul style="list-style-type: none"><li>• Prohibitions/limitations</li><li>• Permissions</li><li>• Liability rules</li></ul></li><li>• Procedural</li></ul></li></ul>	<ul style="list-style-type: none"><li>• No substantive prohibitions, limitations, or liability rules</li><li>• But procedural rules relating to assessment, notification</li></ul>
<ul style="list-style-type: none"><li>• Provide evaluative principles to structure and guide debate</li></ul>	<ul style="list-style-type: none"><li>• Yes, to some degree</li></ul>
<ul style="list-style-type: none"><li>• Establish decision-making institutions and procedures</li></ul>	<ul style="list-style-type: none"><li>• Security Council could address SG if it posed threat to international peace and security</li><li>• But subject to veto by P-5</li></ul>

# 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?
    - Possibly 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

# What role could/should IL, in practice, play?

Potential Role	Future International Law
<ul style="list-style-type: none"><li>• Prescribe rules of conduct<ul style="list-style-type: none"><li>• Substantive<ul style="list-style-type: none"><li>• Prohibitions/limitations</li><li>• Permissions</li><li>• Liability rules</li></ul></li><li>• Procedural</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Substantive<ul style="list-style-type: none"><li>• Moratorium?</li><li>• General prohibitions, with limited exceptions?</li></ul></li><li>• Reinforce/enhance procedural rules</li></ul>
<ul style="list-style-type: none"><li>• Provide evaluative principles to structure and guide debate</li></ul>	<ul style="list-style-type: none"><li>• Yes, to some degree &gt; could help legitimate SG</li></ul>
<ul style="list-style-type: none"><li>• Establish decision-making institutions and procedures</li></ul>	<ul style="list-style-type: none"><li>• Unlikely, beyond the Security Council</li></ul>



# New norms: Content?

- General principles
  - Principles governing humanitarian intervention possibly a model:
    - Right intent
    - Last resort
    - Reasonable prospect of success
- Substantive rules
  - Moratorium: could address “slippery slope” concern about research
  - Prohibitions on specific SG techniques: analogy to arms control agreements
  - Liability rules: unlikely to be agreed

# New norms: Legal or non-legal?

- Treaty vs. code of conduct/guidelines
- Pros and cons
  - Treaties in theory promote compliance
  - But treaties
    - More difficult to negotiate
    - Bind only those states that consent
    - Generally more difficult to revise

# Future governance

- What international governance functions potentially acceptable to states (based on evidence from other regimes)?
  - Forum for discussion: yes
  - Coordination of research: likely
  - Information (monitoring, assessment): likely
  - Standard-setting: possibly
  - Decision-making/authorization: unlikely
  - Dispute resolution: unlikely
- 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?