



Academic Working Group on the International Governance of Climate Engineering  
Meeting 4  
World Resources Institute, Washington, DC  
September 8-9, 2017

**Meeting Report**

**Executive Summary:**

In the fourth meeting of the Academic Working Group on the International Governance of Climate Engineering (AWG), the group refined the organizing themes of its joint report, examined in more detail what it means to translate key principles of good governance like equity into workable and concrete policy actions, and spent significant time building out the group's set of recommendations. The focus of the report was sharpened so that it is more specifically aimed at near-term governance activities (0-5 years) and in particular to governance of research, with an eye to establishing the conditions necessary for governance of deployment in the long term. While affirming the inclusion of guiding principles including equity, accountability, and participation, the group decided to reorganize the report and its recommendations to center on governance objectives, including democratic governance, enabling the production of necessary knowledge, ensuring climate engineering (CE) is developed only as part of a larger climate response portfolio, guarding against risk, and building institutional architecture.

**Update from Janos Pasztor:**

Janos Pasztor, director of the Carnegie Climate Geoengineering Governance Initiative (C2G2), joined the meeting early on the first day via Skype to give an update on C2G2's work. The mission of C2G2 is to engage new actors in the CE governance conversation and to place CE research and governance on the climate policy agenda. Pasztor emphasized that the vast majority of environmental policymakers are unaware of the nuances of CE. C2G2 has three near term priorities:

1. Facilitating the governance of CE research;
2. Helping to construct a prohibition on the uninformed deployment of CE; and
3. Shaping how carbon dioxide removal (CDR) is discussed within the UNFCCC.

**Operationalizing Equity:**

The substantive section of the meeting began with a discussion of the "equity" principle. The idea was to unpack the group's thinking about equity to work out where and how the principle could best be utilized in the report, and to have that discussion then inform the report's treatment of the other principles of good governance on which the AWG has already worked.



While previous reports on CE governance emphasize equity, there have been few efforts to operationalize this principle. In its current form, our report focuses on procedural justice rather than substantive justice. It was suggested that Rio Principle 21 could serve as an entry point to a human rights governance framework. Competing models for a just decision making process were proposed, including veto power and a consensus-based process like that of the UNFCCC. There was broad agreement that our report's conception of equity must include rights, responsibilities, and capacity. There was disagreement over the equity implications of patents, with some arguing for a ban on patents of CE technology, some arguing for a ban on SRM patents but that CDR patents are necessary to encourage research, and others arguing a ban on patents is not feasible nor perhaps desirable.

### **Designing Anticipatory, Robust, and Flexible Governance Architecture:**

Given the sharpening of the report to a focus on the near term, the group determined that its discussion of governance must center more on research, rather than deployment. It was stressed that the research process must be participatory and include safeguards against technological lock-in and moral hazard. A range of different existing frameworks and options for effective and participatory governance of research, including anticipatory governance, responsible innovation, and stage-gating, were presented and explored. Some broad criteria in support of shaping research in the public interest, such as requiring a state sponsoring SRM research to achieve its mitigation targets, were proposed, and there was conversation about the need to situate within existing examinations of environmental impact thresholds for research governance.

### **Identifying Audiences:**

Several audiences for the report were identified, including international, national, and subnational policymakers; CE research scientists; environmental nongovernmental organizations; and research funders.

### **Governance Objectives:**

The group identified identified several objectives for CE governance:

1. Enable broad-based, democratic governance of SRM.
2. Enable appropriate development of scientific knowledge in the public interest.
3. Ensure that SRM is considered only as part of a broader portfolio of responses to climate change.
4. Create the ability to guard against specific harms and risks, with particular attention to environmental risks, equity, and conflict.
5. Build institutional architecture that could, in the long-term, govern SRM deployment.

These objectives are informed by the following principles of governance:

1. Equity



2. Transparency
3. Accountability
4. Participation
5. Anticipatory

There was general agreement that these objectives (to which others may be added) would help to make a link between the problem description and the recommendations. The objectives are not meant to be hierarchical or have a temporal arrangement, in the sense that some objectives are more important than others or that some objectives must be dealt with before others can be tackled. Rather, the objectives describe, when taken together, the challenge of SRM governance. The idea is to make sure that all recommendations collectively add up to a governance architecture that meets these objectives.

**Attendees:**

Netra Chhetri, AWG  
Ken Conca, AWG  
Jane Flegal, FCEA  
Alexander Gillespie, AWG  
Aarti Gupta, AWG  
Sikina Jinnah, AWG  
Prakash Kashwan, AWG  
Myanna Lahsen, AWG  
Alex LaPlaza, rapporteur  
Andrew Light, AWG  
David Morrow, FCEA  
Simon Nicholson, FCEA  
Leslie Paul Thiele, AWG  
Michael Thompson, FCEA  
Carolyn Turkaly, FCEA and rapporteur  
Walter Valdivia, AWG

**Copy of Agenda:**

**Friday, September 8, 2017**

8:30 AM      **Breakfast**

9:00 AM      **Group PowerPoint Presentation**



- 9:30 AM      **Update from Janos Pasztor**
- 9:45 AM      **Welcome and Re-Orientation**
- 10:15 AM     **Coffee Break**
- 10:30 AM     **Incorporating Equity**
- 11:30 AM     **A Moratorium on SRM Deployment?**
- 12:45 PM     **Lunch**
- 1:45 PM      **Wrap Up Moratorium Discussion**
- 2:00 PM      **Building Robust, Anticipatory, and Flexible Governance Regimes**
- 3:00 PM      **Coffee Break**
- 3:15 PM      **To which policymakers is the report specifically speaking?**
- 3:30 PM      **International Governance Architecture—Polycentric vs Standalone Agreement**
- 4:15 PM      **Other Open Questions?**
- 4:45 PM      **IPCC 1.5 Special Report Discussion**
- 5:15 PM      **Summary of Today and Agenda for Tomorrow: Recommendations**
- 5:30 PM      **Break**

**Saturday, September 9, 2017**

- 8:30 AM      **Breakfast**
- 9:00 AM      **Goals for Remainder of the Meeting**



9:15 AM	<b>SRM Decision Points Graphic</b>
9:30 AM	<b>Overview of Recommendations</b>
10:00 AM	<b>Short-Term Recommendations Headings</b>
10:45 AM	<b>Coffee Break</b>
11:00 AM	<b>Short-Term Recommendations Headings Continued</b>
12:00 PM	<b>Lunch</b>
1:00 PM	<b>Final Review of Recommendation Headings</b>
1:30 PM	<b>Short-Term National Recommendations Workshop</b>
2:30 PM	<b>Coffee Break</b>
2:45 PM	<b>Short-Term International Recommendations Workshop</b>
3:30 PM	<b>Short-Term Non-state Recommendations Workshop</b>
4:00 PM	<b>Medium and Longer-Term Recommendation Headings</b>
4:45 PM	<b>Review of Recommendations</b>
5:00 PM	<b>AWG Next Steps</b> <ul style="list-style-type: none"><li>● Final meeting, February 22-24</li><li>● Presentation of AWG process and draft report snapshot at Climate Engineering Conference 2017</li></ul>
5:30 PM	<b>Break</b>