

Geoengineering and the Freedom of Research

Event

[Dinner Dialogue](#)

Date

16 February 2010

Location

Berlin, Germany

Speaker

Lee Lane

An Ecologic Dinner Dialogue featuring Lee Lane, Resident Fellow and Co-Director of the American Enterprise Institute's Geoengineering Project, was held in Berlin on 16 February 2010. Following Lee Lane's introductory speech, participants discussed the technical, political, sociological and legal aspects of geoengineering and the way in which future research on the topic could take place.

In his introductory speech, Lee Lane began by defining the concept of geoengineering. Also often called 'climate engineering,' geoengineering refers to two basic ways of engineering the climate so as to halt or reverse the effects of climate change: via air capture and via Solar Radiation Management (SRM).

Air capture refers to the group of geoengineering techniques, such as fertilizing the oceans or constructing artificial 'trees,' that would absorb CO₂ from the atmosphere. These techniques would be generally more expensive to implement, but would tackle multiple consequences of climate change, not just temperature rise (another major consequence of climate change is ocean acidification). SRM refers to the group of geoengineering techniques that would reduce the amount of solar radiation the Earth receives, e.g. through pumping sea water into the atmosphere or through creating artificial clouds.

Lee Lane expressed a preference for a mix of solutions to climate change, consisting not only of geoengineering but also of mitigation and adaptation strategies. This he supports on the basis of his research, which has shown that greenhouse gas emission controls alone will most likely not suffice in solving climate change.

In his opinion, the economies of geoengineering could potentially be extraordinary, resulting in billions of dollars in savings. On the other hand, Lee Lane acknowledged that the indirect costs of geoengineering cannot be approximated at this point, and could include such dangers as ozone depletion and precipitation pattern disturbance. Thus Lee Lane concluded his speech by emphasizing that research and development are of the utmost importance at this point in time, not actual

implementation of geoengineering techniques.

Lee Lane's presentation was followed by a lively discussion of the legal issues, economics, technicalities and politics surrounding geoengineering research and possible implementation.

Further Links:

- Climate Talk: [Research on Geoengineering](#)
- Transatlantic Lunch: [Geoengineering and the Governance of International Spaces](#) â Paul Berkman & Ralph Czarnecki
- Ecologic Publication: [SchÃ¼nner Leben im Labor? Geo-Engineering und das Recht, die Welt zu verÃ¤ndern](#)
- [Researching Solar Radiation Management as a Climate Policy Option](#) (Lane, Lee. House Committee on Science and Technology. November 05, 2009.)
- Panel Discussion: [Geo-Engineering â an effective solution to climate change?](#)

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Keywords

[Adaptation](#)
[Climate](#)
[Environmental Law](#) â [Ecologic Legal Governance](#)

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