

Atmospheric Methane Removal Needs, Challenges, and Opportunities—A Workshop

OCTOBER 17-18, 2023

VIRTUAL | KECK CENTER (500 5th St. NW Washington DC, 20001)

Additional information available on the event page

This workshop will consider needs, challenges, and opportunities for emerging atmospheric methane removal approaches. The workshop will be an opportunity for the community to engage around questions of the need for atmospheric methane removal; the potential, risks, and co-benefits of viable technological options; and research gaps that could improve understanding. Information gathered during the workshop will be used to inform the current National Academies' consensus study, *Atmospheric Methane Removal: Development of a Research Agenda*.

TUESDAY, OCTOBER 17, 2023 | All times ET

9:30–9:45 Welcome and Opening Remarks

Gabrielle Dreyfus, Institute for Governance and Sustainable Development (IGSD), Committee Chair

9:45–10:30 Session 1: Setting the Context: The Role of Methane in the Climate System and Methane Mitigation

Moderators: Gabrielle Dreyfus, IGSD, & Rob Jackson, Stanford University, Committee Members 10 minute talks + 15 minutes Q&A

- Euan Nisbet, Royal Holloway, University of London
- Claire Henly, US Department of State
- Kirsten Zickfeld, Simon Fraser University

10:30–11:30 Session 2: Potential Atmospheric Methane Removal Technologies and Applications

Moderators: Chris Jones, Georgia Institute of Technology, & Lisa Stein, University of Alberta, Committee Members

5 minute lightning talks + 25 mins Q&A/discussion

- Desirée Plata, Massachusetts Institute of Technology
- Matteo Cargnello, Stanford University
- Shu Hu, Yale University
- Matthew Johnson, University of Copenhagen
- Subir Roychoudhury, Precision Combustion, Inc.
- Mary Lidstrom, University of Washington
- Jessica Swanson, University of Utah

11:30–11:45 Break

11:45–13:00 Session 3: Costs and Key Leverage Points for Atmospheric Methane Removal Technologies

Moderators: Tom McKone, UC Berkeley, & José Santiesteban, ExxonMobil (Retired), Committee Members

15 minute presentation on commissioned paper draft + 10 mins Q&A

- Morgan Edwards, University of Wisconsin-Madison
- Kavita Surana, Vienna University of Economics and Business

5 minute lightning talks + 30 mins Q&A/discussion with all speakers

- Julie Zimmerman, Yale University
- Eric Masanet, UC Santa Barbara
- Sarah Baker, Lawrence Livermore National Laboratory
- Edan Prabhu, Prabhu Energy

13:00–13:45 Lunch

13:45–14:55 Session 4: Potential Intended and Unintended Consequences of Atmospheric Methane Removal Technologies

Moderators: Hinsby Cadillo-Quiroz, Arizona State University, & Alex Turner, University of Washington, Committee Members

15 minute presentation on commissioned paper draft + 10 mins Q&A

• Hannah Horowitz, University of Illinois Urbana-Champaign

5 minute lightning talks + 25 mins Q&A/discussion with all speakers

- Daphne Meidan, Cornell University
- Alex Archibald, University of Cambridge
- Sean Thomas, University of Toronto
- Vincent Gauci, University of Birmingham

14:55–15:10 Break

15:10–16:20 Session 5: Potential Social Impacts of Atmospheric Methane Removal Technologies Moderators: Ben Converse, University of Virginia, & Sikina Jinnah, UC Santa Cruz, Committee Members

15 minute presentation on commissioned paper draft + 10 mins Q&A

• Emily Grubert, University of Notre Dame

5 minute lightning talks + 25 mins Q&A/discussion with all speakers

• Thomas Dietz, Michigan State University

- Simon Nicholson, American University
- Shuchi Talati, Alliance for Just Deliberation on Solar Geoengineering
- Mahmud Farooque, Arizona State University
- 16:20–16:30 Wrap Up and Plans for Day 2

16:30 END OF DAY 1

WEDNESDAY, OCTOBER 18, 2023 | All times ET

10:00–10:15 Welcome and Opening Remarks Gabrielle Dreyfus, IGSD, Committee Chair

10:15–11:25 Session 6: Domestic and International Legal and Policy Landscape

Moderators: Holly Buck, University at Buffalo, & Gabrielle Dreyfus, IGSD, Committee Members 15 minute presentation on commissioned paper draft + 10 mins Q&A

• Romany Webb and Korey Silverman-Roati, Columbia University

5 minute lightning talks + 30 mins Q&A/discussion with all speakers

- Daniel Bodansky, Arizona State University
- Rory Jacobson, US Department of Energy
- Ilissa Ocko, Environmental Defense Fund

11:25–11:40 Break

11:40–12:50 Session 7: Potential Synergies and Co-benefits of Atmospheric Methane Removal Technologies

Moderators: Jack Lewnard, Advanced Research Projects Agency–Energy, & Faruque Hassan, Texas A&M University, Committee Member

5 minute lightning talks + 30 minutes panel discussion

- Jacek Koziel, US Department of Agriculture
- Zachary Smith, Massachusetts Institute of Technology
- Marc Dumont, South Hampton University
- Shaina Kelly, Columbia University
- Matteo Bertagni, Princeton University
- Thomas Graedel, Yale University
- Cooper Rinzler, Breakthrough Energy

12:50–13:00 Instructions for Breakout Discussions

13:00–13:50 Lunch

- 13:50–14:35
 Session 8: Breakout Discussions

 Participants join assigned hybrid breakout rooms; 45 minutes structured discussion
- 14:35–14:50 Break Transition back to plenary
- 14:50–15:20
 Report Back to Plenary

 Breakout moderators report back on key takeaways from their discussions
- 15:20–15:30 Closing Remarks
- 15:30 ADJOURN WORKSHOP