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**Committee on Developing a Research Agenda for Carbon Dioxide Removal and
Reliable Sequestration**

Workshop: October 24, 2017
8:30 AM – 5:00 PM PDT
Beckman Conference Center
100 Academy, Irvine, CA 92617
Irvine, CA 92617

Direct Air Capture

Workshop objective: *to examine the scientific questions for developing a research and development plan of DAC moving forward, and assess co-benefits, costs, and barriers to implementation of this technology at significant scales.*

AGENDA

8:30 AM **Workshop Introduction**
Stephen Pacala (NAS) - Committee Chair

Part 1: Direct Air Capture

8:45 AM **Opening Remarks**
Jennifer Wilcox - Committee Member

Session I - Commercial-Scale Activities
9:00 AM Geoff Holmes – Carbon Engineering
9:25 AM Jan Wurzbacher – Climeworks
9:50 AM Discussion

10:30 AM **Break**

Session II – Scaling out and up of CCS, Challenges and Lessons Learned
10:45 AM Ron Munson - Global CCS Institute
11:00 AM Clay Sutton and Tim Barckholtz - ExxonMobil
11:15 AM Ajay Mehta - Shell
11:30 AM Roger Aines - Lawrence Livermore National Laboratory
11:45 PM Discussion

12:30 PM **Lunch**

Session III – System-Level Considerations of DAC
1:30 PM Matthew Realff – Georgia Institute of Technology
1:50 PM Niall MacDowell – Imperial College of London
2:10 PM Discussion

2:40 PM **Break**

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Part 2: Mineral Carbonation

Opening Remarks

2:55 PM Peter Kelemen (NAS) - Committee Member

Session IV – Mineral Carbonation Approaches

3:15 PM Greg Dipple – University of British Columbia

3:40 PM Phil Renforth – Cardiff University

4:05 PM Discussion

4:35 PM Discussion on DAC and mineral carbonation

5:00 PM Workshop Adjourn

NOTE FOR PUBLIC MEETINGS: This meeting is being held to gather information to help the committee conduct its study. This committee will examine the information and material obtained during this, and other public meetings, in an effort to inform its work. Although opinions may be stated and lively discussion may ensue, no conclusions are being drawn at this time; no recommendations will be made. In fact, the committee will deliberate thoroughly before writing its draft report. Moreover, once the draft report is written, it must go through a rigorous review by experts who are anonymous to the committee, and the committee then must respond to this review with appropriate revisions that adequately satisfy the Academies' Report Review Committee and the NAS president before it is considered an official Academies report. Therefore, observers who draw conclusions about the committee's work based on today's discussions will be doing so prematurely.

Furthermore, individual committee members often engage in discussion and questioning for the specific purpose of probing an issue and sharpening an argument. The comments of any given committee member may not necessarily reflect the position he or she may actually hold on the subject under discussion, to say nothing of that person's future position as it may evolve in the course of the project. Any inference about an individual's position regarding findings or recommendations in the final report is therefore also premature.