The National Academies of
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Committee on Developing a Research Agenda for Carbon Dioxide Removal and Reliable Sequestration

Webinar: October 16, 2017

Introduction to Bio-Energy with Carbon Capture and Storage

Webinar objective: *to provide an introduction to BECCS as a carbon dioxide removal approach, specifically panelists will explore the capacity for biomass to meet stationary generation and transportation fuel needs, the status, challenges, and costs of implemented bioenergy and biofuels, the technical challenges in utilizing various feedstocks, balancing desired properties and yields, and the navigation of land use competition among stakeholders.*

AGENDA

12:30 PM **Opening Remarks**
Erica Belmont, Committee Member

12:35 PM **Biomass Supply Capacity and Strategies**
Laurence Eaton, Natural Resource and Environmental Economist, Oak Ridge National Laboratory

- Process flow overview of biomass supply strategies
- What is the realistic potential for biomass supply, and what are the constraints (e.g. food and fiber)?
- What is the capacity for biomass to meet stationary generation and transportation fuel needs?

Matt Langholtz, Natural Resource Economist, Oak Ridge National Laboratory

- Economic considerations of biomass supply strategies
- What are the impediments to the economic feasibility of bio-energy and biofuel/biochar approaches?

1:05 PM **Prospects of BECCS and Negative Carbon Potentials**
Clair Gough, Research Fellow, University of Manchester, Tyndall Centre for Climate Change Research

- Overview of the status of BECCS
- General considerations of capacity and status of biomass for electricity generation
- What are the potentials for negative emissions capacity?
- What are the associated impacts of bio-energy (e.g. land-use impacts)?

1:25 PM **Status, Capacity, and Challenges of Biomass to Fuels/Char**
Alan Del Paggio, Vice President of Upstream and Renewables, CRI Catalyst Company

- Perspectives on biomass supply

- What is the status of implemented bioenergy and biofuels, including capacities, biomass types, and conversion method (e.g. gasification, combustion in air, pyrolysis, etc.): challenges and costs?
- Negative pathway potentials of biomass to fuels/char

1:45 PM **Q&A**

2:15 PM **Adjourn Webinar**

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.