

2023 Annual Meeting

Next Decade Technologies for the Energy Transition

Friday, October 27, 2023

8:30 AM - 6:15 PM ET

Andlinger Center for Energy and the Environment, Maeder Hall

AGENDA

- 8:30 AM **Registration and Breakfast**
- 9:00 AM **Welcome**
Claire F. Gmachl, Interim Director of the Andlinger Center for Energy and the Environment; Eugene Higgins Professor of Electrical Engineering; Head of Whitman College, Princeton University
Barry Rand, Associate Director for External Partnerships, Andlinger Center for Energy and the Environment; Professor of Electrical and Computer Engineering and the Andlinger Center for Energy and the Environment, Princeton University
- 9:20 AM **Morning Keynote: Disruptive Energy Futures**
Amory B. Lovins, Adjunct Professor of Civil and Environmental Engineering, Stanford University; Co-founder and Chairman Emeritus, RMI (Rocky Mountain Institute)
- 10:30 AM **Break**
- 10:45 AM **Panel: Next-Generation Technologies for Carbon Capture, Utilization, and Storage**
Panelists will discuss emerging technologies for carbon capture, utilization, and storage (CCUS), including direct-air capture, direct ocean capture, techniques for transforming carbon emissions into useful products, and innovative carbon sequestration approaches.
Emily Carter, Moderator, Senior Strategic Advisor and Associate Lab Director for Applied Materials and Sustainability Sciences at the Princeton Plasma Physics Laboratory, Gerhard R. Andlinger Professor in Energy and the Environment and Professor of Mechanical and Aerospace Engineering, the Andlinger Center for Energy and the Environment, and Applied and Computational Mathematics, Princeton University
Sarah Gasda, Research Director, NORCE Energy; Professor, Department of Physics and Technology, University of Bergen
Erika La Plante, Assistant Professor of Materials Science and Engineering, University of California, Davis; Co-founder and Head of MRV and Environmental Impact Assessment, Equatic
Noah McQueen, Co-founder, Head of Research, Heirloom
- 12:00 PM **Lunch and Poster Session**
- 2:15 PM **Panel: Hydrogen's Role in a Decarbonized Energy System**
As a zero-carbon energy carrier, hydrogen could play a significant role in a decarbonized energy system as a fuel for dispatchable, on-demand power sources for

mobile and stationary applications. Panelists will explore the production and utilization challenges that are key to unlocking the full potential of hydrogen (and related carriers such as ammonia) as a zero-carbon fuel.

Michael Mueller, Moderator, *Professor of Mechanical and Aerospace Engineering, Princeton University*

Thomas Darrah, *Professor, School of Earth Sciences, The Ohio State University*

Jeffrey Goldmeer, *Global Hydrogen Value Chain Leader and Emergent Technologies Director, GE Vernova's Power Business*

Jennifer Kurtz, *Center Director, Energy Conversion and Storage Systems Center, NREL*

Amilcare Porporato, *Thomas J. Wu '94 Professor of Civil and Environmental Engineering and the High Meadows Environmental Institute, Princeton University*

3:30 PM

Break

3:45 PM

Panel: Public-Private Partnership Towards Fusion Power Plants

Panelists will outline the opportunities and challenges ahead for integrating fusion into the U.S. energy system, as well as the complementary roles that private industry and public institutions must play to shorten the time horizon for bringing fusion online.

Egemen Kolemen, Moderator, *Associate Professor of Mechanical and Aerospace Engineering and the Andlinger Center for Energy and the Environment, Princeton University*

Steven Cowley, *Director, the Princeton Plasma Physics Laboratory; Professor of Astrophysical Sciences, Princeton University*

Ahmed Diallo, *Distinguished Research Fellow, the Princeton Plasma Physics Laboratory; Program Director, Advanced Research Projects Agency-Energy (ARPA-E), U.S. Department of Energy*

David A. Gates, *Chief Technology Officer, Thea Energy*

5:00 PM

Adjourn

5:15 PM

Reception and Poster Session Awards