



Retreat Agenda

June 11, 2024

Princeton Marriott at Forrestal

Building a clean future: Decarbonizing cement, steel, and other heavy industries

At the **eleventh annual Princeton E-affiliates Partnership Retreat**, experts will explore the hard-to-abate sectors — including cement, steel, and iron — that form the bedrock of modern infrastructure yet are responsible for over 15% of the world’s carbon emissions. Panels will spotlight new technologies and processes for cutting emissions from these well-established industries, as well as the necessary partnerships for developing and deploying these low-carbon solutions at the speed and scale needed to meet global climate targets.

- 8:45 a.m. **Registration and Breakfast**
- 9:15 a.m. **Welcome and Overview** | Princeton Ballroom, Marriott
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
Iain McCulloch, Director, Andlinger Center for Energy and the Environment, Gerhard R. Andlinger Professor in Energy and the Environment, and Professor of Electrical and Computer Engineering, Princeton University
- 9:25 a.m. **Introduction and Background for the Topics of the Day** | Princeton Ballroom
Claire White, Associate Professor of Civil and Environmental Engineering and the Andlinger Center for Energy and the Environment, Princeton University
- 9:30 a.m. **Keynote Address** | Princeton Ballroom
Decarbonizing U.S. Industry
Paul Majsztrik, Program Manager, Industrial Efficiency and Decarbonization Office (IEDO), U.S. Department of Energy
- 10:30 a.m **Break** (15 minutes)
- 10:45 a.m. **A New Foundation: Decarbonizing Cement and Concrete** | Princeton Ballroom
Researchers and industry professionals will highlight the challenges and opportunities for decarbonizing cement and concrete production, outlining the technological solutions that could play a significant role in cutting the industry’s carbon emissions.
Claire White, Moderator, Associate Professor of Civil and Environmental Engineering and the Andlinger Center for Energy and the Environment, Princeton University
Emmanuel Gallucci, Head Global Research Construction Materials, Sika Technology AG
Maria Juenger, L.B. (Preach) Meaders Professor of Engineering in the Maseeh Department of Civil, Architectural and Environmental Engineering, The University of Texas, Austin
Isabelle Rojas, Senior Principal Scientist, Program Supervisor, Energetics
Davide Zampini, Vice President of Global Research and Development, CEMEX

- 12:00 p.m. **Lunch** | Gratella Room, Lower Level
- 1:00 p.m. **Pathways to Low-carbon Iron and Steel** | Princeton Ballroom
Experts will discuss strategies for reducing the carbon intensity of iron and steelmaking, spotlighting greener alternatives to conventional production approaches.
Robert Kumpf, Moderator, *Managing Director, Deloitte Consulting LLP*
Shivakumar Kuppuswamy, *Development and Innovation Director, ResponsibleSteel*
Daniel Stewart, *Senior Steel Industry Engineer, Energetics*
Lachlan Wright, *Manager, Climate Intelligence, RMI*
- 2:15 p.m. **Break** (15 minutes)
- 2:30 p.m. **Forging Ahead: Translating New Construction Technologies into Practice** | Princeton Ballroom
Panelists will overview the concerns – including costs, compliance with construction standards, and liability – associated with the use of green technologies in the construction industry and beyond, identifying a roadmap to the widespread deployment of low-carbon technologies across sectors.
Anne McPhee, Moderator, *Vice President, Business Development, Chemicals and Fuels, Worley Consulting*
Jack Andreasen, *Manager, Carbon Management, U.S. Policy and Advocacy, Breakthrough Energy*
Phil Hodgson, *Chief Executive Officer and Managing Director, Calix Limited*
Harry Warren, *President, CleanGrid Advisors LLC; Non-resident Fellow, Andlinger Center for Energy and the Environment, Princeton University*
- 3:45 p.m. **Wrap-up Discussion and Next Steps** | Princeton Ballroom
Claire White, *Associate Professor of Civil and Environmental Engineering and the Andlinger Center for Energy and the Environment, 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*
- 4:00 p.m. **Poster Session and Reception** | University and Treehouse Lounges