Join us for a discussion about the role of nuclear energy in addressing climate change.

Nuclear energy is one of the most reliable sources of carbon-free electricity, and maintaining the current nuclear power fleet is a key part of U.S. trajectories to reach net-zero emissions by 2050. However, nuclear energy is not without risks, and it produces radioactive waste that lasts for millennia. As such, nuclear energy is a contentious topic with complex tradeoffs. **Kara Colton (Energy Communities Alliance)** will moderate a nuanced conversation with **Ahmed Abdulla (Carleton University)** and **Michael Ford (Princeton Plasma Physics Laboratory)** about the challenges and opportunities related to the current and future role of nuclear energy in efforts to decarbonize the U.S. The conversation will touch on the science and engineering of nuclear reactors; the current social, political, and regulatory environment around nuclear energy in the U.S.; and lessons that can be learned from other countries that also employ nuclear energy.

The webinar will be webcast on this page on **Thursday, May 25, 2023 from 3-4:15pm ET.** Closed captioning will be provided. The conversation will include questions from the audience and will be recorded and available to view on the page after the event.

Climate Conversations: Pathways to Action is a monthly webinar series from the National Academies of Sciences, Engineering, and Medicine that aims to convene high-level, cross-cutting, nonpartisan conversations about issues relevant to policy action on climate change.

Participant Bios

Ahmed Abdulla is an assistant professor in the Department of Mechanical and Aerospace Engineering at Carleton University (Ottawa, ON). He investigates energy system design for deep decarbonization—focusing on the role of disruptive energy technologies that sit at a low level of technical readiness, including energy storage systems, advanced nuclear power, and negative emissions technologies. Dr. Abdulla employs process modeling, systems engineering, engineering economics, and quantitative risk and decision analysis in his research, while also integrating insights from public policy and behavioral science to optimize the design and deployment of truly sustainable technologies—ones that are both techno-economically viable and socio-politically acceptable.

Kara Colton is the Director of Nuclear Policy at the Energy Communities Alliance and has spent over fifteen years working with the local elected officials in frontline communities hosting and directly impacted by the Department of Energy's federal nuclear facilities. She leads ECA's New Nuclear Initiative to help define the role for local governments considering nuclear missions and to facilitate the partnerships necessary to develop priorities, policies, educational resources and outreach on new nuclear development.

Michael Ford is the Associate Laboratory Director for Engineering at the Princeton Plasma Physics Laboratory, where he leads the pursuit of the Laboratory's mission to develop advanced fusion engineering knowledge and techniques and is responsible for all engineering support. He also holds an appointment as a Research Scholar at Princeton's Andlinger Center for Energy and

the Environment. Prior to his time at Princeton, Dr. Ford was Strategy Development Director for the Energy and Global Security (EGS) Directorate at Argonne National Laboratory, where he led Phase I of the National Demonstration Reactor Siting Study supporting the National Reactor Innovation Center. Dr. Ford is a member of the DOE Nuclear Energy Advisory Committee and also served a full career as an officer in the nuclear U.S. Navy.

Disclaimer: The views expressed in the conversation are those of the participants and do not necessarily represent the National Academies of Sciences, Engineering, and Medicine.