

CEI Interdisciplinary Seminar Presents:

Will New Federal Policy Put the United States on the Path to Net-Zero?

The combined impact of the *Inflation Reduction Act of 2022* and *Infrastructure Investment and Jobs Act of 2021* marks the first time that the full financial might of the federal government is aligned behind the transition to clean energy. The wide ranging set of policies in the two acts includes tax credits, grants, rebates, loans, and other financial incentives to make clean energy and other climate solutions cheap, funding for demonstration and improvement of nascent technologies, and industrial policies that will build U.S. supply chains to manufacture components for solar PV and wind turbines, batteries and electric vehicles. But are the new laws sufficient to put the United States on the path to net-zero greenhouse gas emissions? What will the impact of these laws be on the U.S. energy system, greenhouse gas emissions, and clean energy adoption? The REPEAT Project (repeatproject.org), led by Prof. Jesse D. Jenkins (Princeton University Department of Mechanical & Aerospace Engineering and the Andlinger Center for Energy & the Environment), has used a suite of macro-energy system modeling tools to rapidly analyze the impacts of these new laws and provide a detailed look at the United States' evolving policy environment. Drawing on REPEAT Project findings, this presentation will summarize the major components of the *Inflation Reduction Act* and infrastructure law, their impacts, and current progress on the road to net-zero greenhouse gas emissions.



Jesse Jenkins

Assistant Professor of Mechanical and Aerospace Engineering and the Andlinger Center for Energy and the Environment
Princeton University

Thursday, October 6, 2022

Student Career Discussion 10:30 am – 11:30 am

Join Zoom Meeting: <https://washington.zoom.us/j/93612295381>

Meeting ID: 936 1229 5381

In Person Audience: MoIES 115

CEI Seminar (MOLENG599) 4:00 pm – 5:00 pm

NanoES 181

About the Speaker

Jesse D. Jenkins is an assistant professor and macro-scale energy systems engineer at Princeton University with a joint appointment in the Department of Mechanical and Aerospace Engineering and the Andlinger Center for Energy and Environment. He leads the Princeton ZERO Lab (Zero-carbon Energy systems Research and Optimization Laboratory), which focuses on improving and applying optimization-based macro-energy systems models to evaluate and optimize low-carbon energy technologies, guide investment and research in innovative energy technologies, and generate insights to improve energy and climate policy and planning decisions. Dr. Jenkins earned a PhD and SM from the Massachusetts Institute of Technology, worked previously as a postdoctoral fellow at the Harvard Kennedy School, and spent six years as an energy and climate policy analyst prior to embarking on his academic career. Dr. Jenkins recently served on the National Academies of Science Engineering and Medicine expert committee on *Accelerating Decarbonization of the U.S. Energy System*, was a principal investigator and lead author of Princeton's landmark *Net-Zero America* study, and leads the REPEAT Project (repeatproject.org), which provides regular, timely, and independent environmental and economic evaluation of federal energy and climate policies as they're proposed and enacted. He regularly provides technical analysis and policy advice for non-profit organizations, policy makers, investors, and early-stage technology ventures working to accelerate the deployment of clean energy.

