Introduction

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We are pleased to introduce the sixth volume of *Environmental and Energy Policy and the Economy* (*EEPE*). The six papers that follow were initially presented at an annual conference hosted by the National Bureau of Economic Research (NBER) and held at the National Press Club in Washington, DC. The aim of the *EEPE* initiative is to spur policy-relevant research and professional interactions in the areas of environmental and energy economics and policy. Conference participants included a range of individuals from academia, government, and nongovernmental organizations.

We were fortunate to have a keynote presentation about inequality and the value of statistical life by Cass Sunstein, a professor at Harvard Law School and, at the time, a Senior Counselor at the U.S. Department of Homeland Security. We are grateful to all the authors for their time and effort producing outstanding papers and helping to make the sixth year of *EEPE* a continued success.

In the first paper, James Bushnell and Aaron Smith illustrate a new way of modeling uncertainty for purposes of understanding climate policy effects in the U.S. electricity sector. They apply their techniques to provisions of the U.S. Inflation Reduction Act (IRA) and the western U.S. electricity grid. Focusing on tax credits for zero-carbon electricity generation and storage resources, they find that what may be the most important implication of the IRA is the way that it narrows the range of future carbon emissions.

Xinmin Du, Muye Ru, and Douglas Almond estimate the effect of a federal requirement for oil and gas firms to detect and repair methane leaks, showing that removal of the regulation in 2020 prompted an increase in emissions. Their findings are important because industry often claims such regulations are unnecessary, as suppliers already have an economic incentive to prevent the loss of a valuable resource. This paper nevertheless shows that regulation does have an impact and reduces emissions.

Ivan Rudik, Derek Lemoine, and Antonia Marcheva explore equity and efficiency tradeoffs in climate adaptation funding as part of the 2021 U.S. Bipartisan Infrastructure Law. Public funding for projects took place under provisions of the Justice40 Initiative, which stipulates that 40 percent of the benefits should be allocated to “disadvantaged” Census tracts. Their analysis evaluates how well the federal government is meeting this objective and shows that different ways of targeting communities designated as disadvantaged result in more or less effective adaptation spending.

John Bistline, Kimberly Clausing, Neil Mehrotra, James Stock, and Catherine Wolfram outline a range of different U.S. climate policy options for near-term implementation. With the expiration of many tax cuts in 2025, and unmet climate targets, opportunities could emerge in the coming year for changes to climate policy in the United States. The paper considers several policy options and outlines their effects on emissions, abatement costs, fiscal costs, and household energy expenditures. The results provide a useful guide for thinking about tradeoffs among different approaches.

Frances Moore considers the potential economic consequences of accounting for non-stationarity in the distribution of weather because of climate change. The paper develops a conceptual framework and illustrates the important ways that shifts in the climate distribution can interact with damage functions to result in large economic impacts. Particular attention is given to potential implications in the insurance sector.

In the final paper, Ben Groom and Frank Venmans discuss different ways of quantifying the social value of temporary reductions in atmospheric carbon. The question is important because emerging markets for greenhouse gas emissions reductions often require conversions among reductions that might be permanent or temporary and uncertain. While concerns are increasing about markets for carbon offsets, for example, they outline a constructive approach to consider whereby uncertainty can be priced into offset markets.

Finally, we would like to thank Evan Michelson and the Alfred P. Sloan Foundation for the financial support that has made the *EEPE* initiative possible. We are also grateful to Jim Poterba, president and CEO of the NBER, for continuing to support the *EEPE* initiative, and to the NBER staff, especially Rob Shannon and Helena Fitz-Patrick.