

## Introduction

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We are pleased to introduce the fourth volume of *Environmental and Energy Policy and the Economy (EEPE)*. The six papers in this volume were first presented and discussed in May 2022 at the National Press Club in Washington, DC and online. The conference was hosted by the National Bureau of Economic Research (NBER), with participants from academia, government, and nongovernmental organizations. We were also fortunate to have a lively panel discussion over lunch on recent developments in the law and economics of the social cost of carbon, led by Richard Newell of Resources for the Future and Richard Revesz of the New York University School of Law.

The overall aim of the *EEPE* initiative is to spur policy-relevant research and professional interactions in the areas of environmental and energy economics and policy—and the papers here deliver. We are grateful to all of the authors for their time and effort in helping to make the fourth year of *EEPE* a continued success.

In the first paper, Gilbert Metcalf examines the distributional impacts of substituting a vehicle miles traveled (VMT) tax for the existing federal excise tax in the United States. The question is important because the increased popularity of electric vehicles is expected to diminish federal motor vehicle fuel excise tax revenue. But how would a revenue-neutral tax swap affect different groups? Metcalf shows that the swap will likely influence who buys electric vehicles, will benefit rural drivers, but will not have appreciably different impacts across racial groups.

David Weisbach, Samuel Kortum, Michael Wang, and Yujia Yao consider solutions to the leakage problem created by non-uniform climate policy, which arises when industries have an incentive to relocate to countries where carbon prices are lower. They consider the design of a carbon policy in one region of the world when the rest of the world has no such policy, producing several key findings about when and how carbon taxes should be applied to fossil fuel extraction, consumption, and/or production. The authors also provide insight about circumstances under which a border adjustment is undesirable and the importance of which countries are in a taxing coalition.

Danae Hernandez-Cortes, Kyle Meng, and Paige Weber quantify and decompose recent trends in air pollution disparities from the U.S. electricity sector. Beginning with a careful documentation of the significant reduction in particulate matter emissions since 2000, they find a dramatic convergence in exposure between Blacks, Whites, and Hispanics. Their decomposition then reveals that improvements in emissions intensities and compositional changes in electric generators explain nearly all of these trends in roughly equal proportions, with small contributions from scale effects and residential location changes.

Also focusing on the electricity sector, Severin Borenstein and Ryan Kellogg provide a comparative analysis of several mechanisms to reduce emissions in the electricity sector on a path to zero emissions. Their analysis is distinct from typical fare in economics because they take the ultimate outcome of zero emissions as given and then compare the emissions trajectories and market outcomes of different policy

instruments, including carbon pricing, intensity standards, and clean energy subsidies. They illustrate how differences depend on the correlation between private costs and emission rates, and that some of the differences between instruments maybe less important than often assumed when combined with an overall policy goal of eliminating emissions.

Sarah Anderson, Andrew Plantinga, and Matthew Wibbenmeyer document distributional differences in the allocation of U.S. wildfire prevention projects. They find that, after controlling for differences in wildfire risk, the likelihood that a community receives a nearby fuels management project is greater for wealthier, whiter, and more educated communities. Moreover, the results hold for wildfire prevention projects with a cost share requirement, suggesting that local financial resources are not a key driver of the overall results. Their results have important implications for recent policy pushes that focus on the environmental justice implications of federal programs.

In the final paper, Mark Curtis and Ioana Marinescu provide new evidence on the quality and quantity of emerging “green” jobs in the United States. Policymakers are increasingly interested in knowing if the growth of renewable energy benefits U.S. workers, and this paper uses a novel dataset and methods to provide answers. They consider the number and types of jobs, the relative pay scales, and the geographic locations. Their bottom line is that policies that promote the growth of renewable energy will likely create relatively high-paying jobs for less educated workers and for U.S. regions that currently have a high share of employment in the fossil fuel extraction industry.

Finally, we make some important acknowledgements. One of us, James Stock, is rotating off as a co-editor of *EEPE* after having served for the initial four years. We are grateful for his contributions, which have been critical to the initial success of *EEPE*, and we look forward to his continued involvement, albeit in a less formal way. We are also grateful to Jim Poterba, president and CEO of the NBER, for continuing to support the initiative, and to the NBER’s conference staff, especially Rob Shannon, for making the organizing a pleasure. Helena Fitz-Patrick’s help with the publication is also invaluable and greatly appreciated. Lastly, we thank Evan Michelson and the Alfred P. Sloan Foundation for the financial support that has made the *EEPE* initiative possible.