

Call for Proposals: Economics of Energy Markets

With the generous support of the U.S. Department of Energy and the National Science Foundation, the National Bureau of Economic Research (NBER) is organizing a research initiative on “The Economics of Energy Markets.”

This research initiative, which will be led by Richard Newell of Duke University and NBER, will consist of seven distinct projects, each examining an important aspect the functioning of energy markets or the linkages that connect energy markets and other sectors of the economy. The initiative will bring together researchers in energy economics, industrial organization, macroeconomics, public finance, and related fields to study issues of current importance and to develop an agenda for future research on these issues.

To launch this initiative, the NBER welcomes research proposals for projects on a number of topics within the field of energy economics. The principal investigator on each project, or at least one investigator in the case of multi-authored projects, must be a faculty member at a U.S. college or university. Proposals from researchers with and without NBER affiliations are welcome.

Potential research topics might include, but are not limited to:

* **Energy Infrastructure and Policy.** Research could explore potential market failures with respect to energy infrastructure and the impact of potential policies to address them, and the role of regulatory policy in affecting market outcomes. Infrastructure of interest includes railways, pipelines, electricity transmission, inland water ways, and ports. This research could include an analysis of the effect of infrastructure upgrades on productivity and economic growth, a comparison of regulated and unregulated electricity markets, energy tax policy, and the increasing prevalence of intermittent electricity generation.

* **Strategic Energy Policy.** The United States currently maintains a strategic petroleum reserve (SPR) of over 700 million barrels of oil. Research could explore the economics of the SPR and associated infrastructure, and how these institutions are related to a variety of stated and implied government objectives. Potential topics could include an analysis of the relationship between government storage and private storage, oil price dampening effects of SPR releases, and alternative management strategies, such as using the SPR to support an option portfolio or managing releases from the SPR from a profit maximizing or utility-maximizing perspective.

* **Energy Financing.** The U.S. government finances energy projects, infrastructure, and investment through a variety of means, including taxes, tax credits, loan guarantees, and production subsidies. Research could explore the comparative effectiveness of various financing strategies that are used in the energy sector, compare the extent to which these strategies advance various policy objectives, analyze the interaction between federal and private financing, the potential distortions corrected by or introduced by different financing approaches, the role of auctions or prizes in distributing financing, and the distributional impact of various energy financing methods.

* **Energy markets and innovation.** The rate of technological innovation in the energy sector is a critical determinant of future energy production. Researchers could explore innovation in both the discovery and production of energy, which could include fossil fuels, alternative energy sources, energy storage, and end-use energy consumption and efficiency, as well as innovations in engine design, boiler efficiency, and in the level of emissions associated with combustion.

* **Employment and income effects.** How have recent energy discoveries—such as the application of horizontal drilling and hydraulic fracturing to shale formations—affected employment in the regions affected by these discoveries? Which sectors, if any, contracted as the energy sector grew, and which

sectors grew in tandem with the energy sector? In addition to understanding the impact of energy development, research could also explore how various regions are affected by falling energy prices. How have declining coal prices, for example, affected regions that produce coal? What are the lessons of the past regarding the way regions with declining industries evolve toward new economic equilibria? How have energy price fluctuations affected employment and income in different regions of the United States? What effects have there been on house prices, on healthcare utilization, on educational outcomes, and on state and local government revenues?

Researchers interested in studying these or other related questions should send short proposals – no more than five pages, single spaced, including references, tables, graphs, and other supplementary material, in PDF format – by Wednesday, November 4 to Ms. Elisa Pepe, epepe@nber.org. Proposals should describe the research question to be studied as well as the data and methods to be used. They should present preliminary findings if possible, and indicate the composition of the research team that will be carrying out the project. Proposals will be reviewed by a committee including Meredith Fowlie of the University of California – Berkeley and NBER, Chris Knittel of MIT and NBER, and Richard Newell. This committee will make recommendations for funding, subject to the approval of the Department of Energy. Researchers who submit proposals that are selected for inclusion in the project will be notified by December 15, 2015. The research team for each project will receive \$12,000 of salary support for the principal investigator(s), \$9,500 in research assistant support, \$1000 for travel, and \$500 for other research costs. Investigators and research assistants will be paid as NBER employees. Research teams will be expected to participate in a research preconference that will be held in Cambridge, MA, in April or May 2016 and to present their findings at a final research conference in May or June 2017. Depending on the nature of the selected projects, it is possible that a refereed journal will be invited to consider the collection of research papers for a special issue.

All proposals must be accompanied by a conflict of interest statement that describes any financial or other interests of the researchers that might bear on the proposed work, and in particular that discloses any ties to the energy industry.