



Elizabeth (Liz) Mettetal, Ph.D.

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ENERGY AND ENVIRONMENTAL ECONOMICS, INC.

Boston, MA

Associate Director

Based in E3's Boston Office, Dr. Mettetal is an experienced energy economist and project manager within E3's clean energy and resource planning practices. Her work enables utilities, companies, and regulators to support the clean energy transition. Prior to E3, Dr. Mettetal spent four years in energy and environmental consulting at Abt Associates and NERA Economic Consulting, where she oversaw and performed economic analyses for utilities and federal agencies on topics related to energy, natural gas, water, waste, air quality, climate change, and transportation. At NERA, this work included managing and performing economic analyses for multiple power generation facilities within the Northeast. Dr. Mettetal holds a Ph.D. in Public Policy from Harvard University and a B.S. in Environmental Engineering Science, with a minor in Economics, from the Massachusetts Institute of Technology. Selected recent projects at E3 include:

- **National Deep Decarbonization Technical Analysis, World Resources Institute, 2020-2021.** Dr. Mettetal served as the project manager for E3's technical modeling for the World Resources Institute. The study evaluated the potential effect of high-impact federal policies, including tax credits and spending and policy incentives, on deep decarbonization across the U.S. using E3's PATHWAYS and RESOLVE models.
- **Net-Zero New England: Ensuring Electric Reliability in a Low Carbon Future, Calpine Corporation, 2019-2020.** Dr. Mettetal served as the project manager for E3's study to evaluate electricity sector reliability under resource portfolios consistent with New England achieving economy-wide "net zero" greenhouse gas emissions.
- **Integrated Resource Planning Support, Nova Scotia Power, 2019-2020.** Dr. Mettetal managed E3's support for NS Power's 2020 IRP, which included development of long-term electricity resource plans that align with aggressive clean energy goals. Using E3's RESOLVE and RECAP models, Dr. Mettetal and her team identified optimal resource investment portfolios under scenarios designed to reach net-zero emissions by 2050, while ensuring reliability and cost-effectiveness.
- **Hydrogen Opportunities in a Low-Carbon Future, Mitsubishi Hitachi Power Systems, 2019.** Dr. Mettetal served as the project manager for E3's analysis of the potential for green hydrogen to serve as a source of zero-carbon energy across buildings, transportation, industry and the power sector, relying on E3's PATHWAYS and RESTORE model. E3 demonstrated significant opportunities for hydrogen as long-duration storage in the West.

ABT ASSOCIATES

Associate

Cambridge, MA

September 2017 – June 2019

- Managed and performed economic analyses for federal agencies on topics related to energy, natural gas, water, waste, air quality, climate change, and transportation. Main clients included U.S. Environmental Protection Agency (EPA), U.S. Pipeline and Hazardous Safety Administration (PHMSA), and National Oceanographic and Atmospheric Administration (NOAA).

- Conducted regulatory impact analysis, cost-benefit analysis, economic impact assessments, uncertainty analysis, and applied econometric and statistical analysis. Analyses regularly withstood rigorous review and external evaluation by policy stakeholders.
- Senior economist on team that won company-wide Abt Technical Innovation Award (2018) for work building modeling tools that evaluate economic and environmental impacts of solid waste management strategies.

NERA ECONOMIC CONSULTING

Consultant

Boston, MA

April 2015 – August 2017

- Provided expert consulting services on the economics of environmental and energy policies related to air quality, water, climate change, and the electric grid.
- Managed and performed analysis evaluating the economic and environmental impacts of potential electricity resource alternatives for a major western utility's Integrated Resource Planning (IRP) process.
- Contributed to writing testimonies and expert reports submitted to the Court, public utility commissions, and other regulatory proceedings.

HARVARD UNIVERSITY

Teaching Assistant

Research Assistant

Cambridge, MA

February 2011 – May 2013

April 2010 – June 2014

- Head Teaching Fellow for undergraduate/masters-level Fundamentals of Environmental Economics and Policy for Professor Robert Stavins (Spring 2011-2013)
- Teaching Fellow for masters-level Advanced Microeconomics Analysis for Professor Chris Avery (Fall 2011)
- Research Assistant to Professor Robert Stavins, Professor Rohini Pande, and Professor Michael Kremer on projects related to environmental/energy economics and development economics

TECHNOSERVE

Consultant

Mozambique

June 2008 – May 2009

- Performed financial and strategic analyses to build sustainable businesses, increase economic growth, and reduce poverty.
- Main project involved researching interactions between human and environmental health in Nampula province, organizing workshop for key stakeholders to contribute and share insights, and providing integrated planning recommendations for NGOs, government, and investors.

MCKINSEY & COMPANY

Business Analyst

Washington, DC

September 2006 – June 2008

- Served private, public, and social sector clients on consulting projects related to organizational challenges and business opportunities.
- Selected projects include creating a growth strategy for a city development organization; quantitative analysis of potential gains from improvements in claims processing for a major health insurance company; and evaluating and redesigning the incentive structure for call center agents at a financial services company.

Education

Harvard University
Ph.D., Public Policy

Cambridge, MA
2015

Massachusetts Institute of Technology
B.S., Environmental Engineering Science

Cambridge, MA
2006

Citizenship

United States