

Anthony Fratto

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ENERGY AND ENVIRONMENTAL ECONOMICS, INC.

Managing Consultant

New York City, NY

Mr. Fratto joined E3's bulk grid and planning group in 2019, where he helps clients in the global initiative to decarbonize and prepare for such a world. Mr. Fratto actively works in a variety of markets including, ERCOT, CAISO, PJM, ISO-NE and AESO. This includes an understanding of their current rules, regulations, stakeholders, and policies as well as their future dynamics in a changing energy landscape. Mr. Fratto applies this market analysis to asset valuation projects that require revenue stream and benefits analysis, due diligence for sales and purchases, off-taker assessments, as well as market rules and bidding strategies. Clients consist of international investment firms, private equity, utility holding companies, developers, and global energy producers and utilities. Additionally, Mr. Fratto works on state and national government decarbonization strategies with a focus on the future of hydrogen and RNG as well as adoption of and cost effectiveness of building and transportation electrification.

Mr. Fratto joined E3 from the Massachusetts Institute of Technology Energy Initiative (MITeI), focusing on the valuation of technology that will play a role in the decarbonization of electricity sector and the policy that will support such shifts. His collegiate career was spent between research labs, private industry, and fellowships with the Bureau of Land Management, the Utah Governor's Office of Energy Development, and Iberdrola's Global Regulation Department. Mr. Fratto holds an M.S. in Technology and Policy from MIT and a B.S. in Chemical Engineering and Political Science from the University of Utah.

Highlights of his work and public projects include:

- Market Forecasting:
 - Market manager for ERCOT and technical lead on ISO-NE, PJM, NYISO with knowledge and experience on CAISO, WECC + Canada regions, and the western EIM.
 - This includes understanding the energy, capacity, and ancillary service dynamics of ISOs across North America with an additional focus on vertically integrated utilities in the Pacific Northwest and their interactions with the California and Canadian energy markets.
 - Helped develop an e-commerce site for providing E3's market price forecast.
- Confidential asset valuations of individual & portfolio assets primarily surrounding offshore wind, transmission in WECC, storage, nuclear, and alternative fuels.
- **Local Gas Distribution Companies of Massachusetts Decarbonization Strategies (2021-2022).** Worked with LDCs on analyzing feasibility of their decarbonization strategies as well as determining appropriate pathway and business model options using economic and quantitative analysis to examine the role of hydrogen, biofuel, and electricity
- **California Energy Commission Targeted Decommissioning (2021-2022).** Target decommissioning of natural gas within pilot areas of northern California to determine the economics of alternative gas or electric heating and cooling

- **World Resources Institute Building Blocks for a Low-Carbon Economy (2020-2021).** Provided technical analysis on identifying the policies and investments needed to meet President Biden’s decarbonization targets
- **Opportunities for Low-Carbon Hydrogen in Colorado: A Roadmap (2021).** Examined the role hydrogen could play in the decarbonization of Colorado’s economy for the Colorado Energy Office
- **Philadelphia Gas Works Business Diversification Study (2021).** Defined and evaluated technology pathways to reduce greenhouse gas emissions from PGW’s natural gas business
- **Mitsubishi Power - Hydrogen Opportunities for a Low Carbon Future (2019-2020).** Analyzed hydrogen for use in transportation as well as a high-level evaluation of the hydrogen supply chain in the western U.S. in a deeply decarbonized future.
- **Colorado Greenhouse Gas Pollution Reduction Roadmap (2019-2020).** Developing the electricity sector modeling of Colorado using E3’s proprietary model RESOLVE.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Research Assistant, MIT Energy Initiative (MITeI)

Cambridge, MA

October 2017 – June 2019

- Analyzed the role and value of pumped hydro storage in the electricity dispatch market
- Developed dispatch algorithms for Spain’s electricity market in order to evaluate the impact of nuclear power plants and their continued operation

IBERDROLA

Global Regulation Graduate Fellow

Madrid, Spain

May 2018 – August 2018

- Modeled and analyzed Spanish energy markets and nuclear policy under deep decarbonization

SUSTINEO

Consultant

Dublin, Ireland

January 2017 – January 2018

- Implemented international standards (ISO 14001 & 50001) for companies to reduce energy usage
- Compiled local, national, and global climate action talking points for consulting presentations

UNIVERSITY OF UTAH

Research Assistant

Teaching Assistant

Salt Lake City, UT

May 2011 – August 2017

August 2016 – December 2016

- TA for “Chemical Engineering Process Design” and Guest Lecturer for “Renewable Energy”
- Research Assistant, University of Utah: Institute for Clean and Secure Energy (2017) on the lab-scale operation, maintenance, and study of a chemical looping combustion system; Crus Center for Renewable Energy (2015-17) developing renewable policy education and analyzing solar and storage within Utah; Department of Chemical Engineering (2013) modeling of algae growth to optimize liquid output for biofuels; Henry Eyring Center for Theoretical Chemistry (2011-2012) developing molecular dynamic simulations to characterize the phases of interfacial water

UTAH GOVERNOR’S OFFICE OF ENERGY DEVELOPMENT

Energy Fellow

Salt Lake City, UT

May 2016 – August 2016

- Produced a report on the impact of the Utah renewable energy tax credit and residential solar PV
- Facilitated a statewide stakeholder process on the policy future for solar PV

U.S. DEPARTMENT OF THE INTERIOR

Petroleum Engineering Intern

Washington, DC
May 2015 – August 2015

- Identified trends, concerns, and best practices for Major Undesirable Events on BLM land
- Participated in the internal review and implementation of the Hydraulic Fracturing Rule

Education

Massachusetts Institute of Technology

M.S., Technology and Policy (Energy and Power Systems Emphasis)

Cambridge, MA

2019

University of Utah

B.S., with Honors, Chemical Engineering (Energy Emphasis)

B.S., with Honors, Political Science (Public Policy Emphasis)

Salt Lake City, UT

2017

2017