Brian Sergi

15013 Denver West Parkway, Golden, CO 80401 (484) 332-4181 | briansergi@gmail.com

EXPERIENCE

National Renewable Energy Laboratory Research engineer in power system modeling Aug. 2019 - present

Golden, CO

The Science & Technology Policy Institute

Aug. 2012 - June 2014

Science policy fellow Washington, DC

The Breakthrough Institute

June 2012 - Aug. 2012

Breakthrough Generation research fellow

Oakland, CA

Argonne National Laboratory

May 2011 - Aug. 2011

Science Undergraduate Laboratory Intern

Lemont, IL

EDUCATION

Carnegie Mellon University

Aug. 2014 - May 2019

Ph.D. in Engineering & Public Policy

Pittsburgh, PA

- Thesis: Integrating climate and health damages in decision-making for the electric power sector
- Thesis committee: Inês Azevedo, Alex Davis, Nick Muller, Peter Adams, Allen Robinson, Steven J. Davis

Georgetown University

Aug. 2008 - May 2012

B.S. in Science, Technology & International Affairs (summa cum laude)

Washington, DC

JOURNAL ARTICLES

- A. Abdulla, P. Vaishnay, B. Sergi, and D. G. Victor, "Limits to deployment of nuclear power for decarbonization: Insights from public opinion", Energy Policy, vol. 129, pp. 1339–1346, 2019. [Online]. Available: https://doi.org/10.1016/ j.enpol.2019.03.039.
- [4] B. Sergi, I. Azevedo, T. Xia, A. Davis, and J. Xu, "Support for Emissions Reductions Based on Immediate and Long-term Pollution Exposure in China", Ecological Economics, vol. 158, pp. 26-33, 2019. [Online]. Available: https: //doi.org/10.1016/j.ecolecon.2018.12.009.
- [3] B. Sergi, M. Babcock, N. Williams, J. Thornburg, A. Loew, and R. Ciez, "Institutional influence on power sector investments: A case study of on- and off-grid energy in Kenya and Tanzania", Energy Research and Social Science, vol. 41, 2018. [Online]. Available: https://doi.org/10.1016/j.erss.2018.04.011.
- B. Sergi, A. Davis, and I. Azevedo, "The effect of providing climate and health information on support for alternative electricity portfolios", Environmental Research Letters, vol. 13, no. 2, 2018. [Online]. Available: https://doi.org/10. 1088/1748-9326/aa9fab.

[1] B. Sergi, R. Parker, and B. Zuckerman, "Support for International Collaboration in Research: The Role of the Overseas Offices of Basic Science Funders", Review of Policy Research, vol. 31, no. 5, pp. 430–453, 2014. [Online]. Available: http: //doi.wiley.com/10.1111/ropr.12088.

TECHNICAL REPORTS

- J. Lovering, M. Shellenberger, and T. Nordhaus, "How to Make Nuclear Cheap: Safety, Readiness, Modularity, and Efficiency", The Breakthrough Institute, Tech. Rep., 2014. [Online]. Available: https://thebreakthrough.org/articles/ how-to-make-nuclear-cheap.
- Office of Science and Technology Policy, "National Plan for Civil Earth Observations", Washington, DC, Tech. Rep., 2014. [Online]. Available: https://www. usgs.gov/media/files/national-plan-civil-earth-observations.
- S. Howieson, E. Sedenberg, B. Sergi, and S. Shipp, "Department of Energy Technology Maturation Programs", The IDA Science & Technology Policy Institute, Tech. Rep., 2013. [Online]. Available: https://tinyurl.com/tfs9vo6.
- S. Howieson, B. Sergi, and S. Shipp, "Department of Energy Agreements for Commercializing Technology", The IDA Science & Technology Policy Institute, Tech. Rep., 2013. [Online]. Available: https://tinyurl.com/quwq98b.

- CONFERENCES Sergi, B., Davis, S.J., Muller, N., Robinson, A., Adams, P., Azevedo, I., Marshall, J., "Aligning Climate and Health Benefits of Power Plant Siting and Retirement Decisions". Presentation, American Geophysical Union. San Francisco, CA, Dec. 9-13, 2019.
 - Sergi, B., Davis, S.J., Muller, N., Robinson, A., Adams, P., Azevedo, I., Marshall, J., "Aligning Climate and Health Benefits of Power Plant Siting and Retirement Decisions". Presentation, United States Association for Energy Economics. Denver, CO, Nov. 3-6, 2019.
 - Goteti, N.S., Hittinger, E., Sergi, B., Azevedo, I., "How Does Energy Storage Affect the Generation and Revenue of Existing Generation Technologies?". Presentation, United States Association for Energy Economics. Denver, CO, Nov. 3-6, 2019.
 - Sergi, B., Davis, S.J., Muller, N., Robinson, A., Adams, P., Azevedo, I., "Aligning Climate and Health Benefits of Power Plant Siting and Retirement Decisions". Presentation, Energy Policy Research Conference. Boise, ID, Sept. 29-Oct. 1, 2019.
 - Sergi, B., Azevedo, I., Davis, S.J., Muller, N., "Transboundary health damages of air pollution in the U.S". Presentation, United States Association for Energy Economics. Washington, DC, Sept. 24-26, 2018.
 - Sergi, B., Davis, S.J., Muller, N., Robinson, A., Adams, P., Azevedo, I., "Integrating climate and health objectives to inform clean energy siting in capacity expansion modeling". Presentation, International Energy Workshop. Gothenberg, Sweden, June 19-21, 2018.
 - Sergi, B., Azevedo, I., Xu, J., Xia, T., Davis, A., "Using Discrete Choice Methods to Evaluate Public Preferences for Tradeoffs in Health, Climate, and Economic Benefits from Electricity Generation in China." Presentation, Western Economic Association International. San Diego, CA, June 25-29, 2017.
 - Sergi, B., Davis, A., Azevedo, I., "Assessing Public Perceptions of Energy Tradeoffs with Discrete Choice Analysis." Presentation, Behavior, Energy, and Climate Change Conference. Baltimore, MD, Oct. 19-21, 2016.
 - Sergi, B., Davis, A., Azevedo, I., "Understanding public perceptions of tradeoffs in climate, health, and energy using discrete choice analysis." Presentation, Association for Environmental Studies and Sciences, Washington, D.C., June 8-10, 2016.

Sergi, B., Davis, A., Azevedo, I., "The impact of climate change and air pollution information on support for CO2 emissions regulations." Poster, United States Association for Energy Economics, Pittsburgh, PA, Oct. 25-28, 2015.

Sergi, B., Parker, R.A., Zuckerman, B.L., "Support for International Collaboration in Science: The Role of Basic Research Funding Agencies International Offices." Presentation, Atlanta Conference on Science and Innovation Policy, Sep. 25-27, 2013.

GRANTS & FELLOWSHIPS

Bertucci Graduate Fellowship: \$20,000 + travel expenses

Dec. 2017

National Science Foundation East Asia and Pacific Summer Institute (EASPI) Summer Fellowship: \$5,000 + travel expenses

June 2016

Steinbrenner Institute for Environmental Education and Research

Graduate Research Fellowship: Approx. \$44,000 Aug. 2015 - May 2016

TEACHING

Teaching Assistant, Climate Change Mitigation

Fall 2018

Ph.D. and Master's level course (20 students)

- Designed and taught lectures on wind and nuclear energy
- Designed final course project on modeling emissions in PJM

Student Research Advisor

2017 - 2018

• Mentored a Master's level and an undergraduate student

Teaching Assistant, Quantitative Methods for Policy Analysis Ph.D. and Master's level course (25 students)

Spring 2017

- Developed lessons on data visualization
- Designed and taught lesson on sensitivity analysis in R and Excel

Executive Experience Mentor, Pittsburgh SciTech

2016 - 2017

 Mentored a high school student on designing and constructing a simple wind turbine

Director, SUCCEED Program

2016 - 2018

Summer Center for Climate, Energy, and Environmental Decision Making

- Educational outreach program for high school students (20) and teachers (10)
- Coordinated recruitment of student and teacher participants
- Developed program schedule and curriculum
- Organized field trip to Bruce Mansfield coal power plant
- Oversaw students during the completion of their final project
- Provided lesson on power plants, including hands-on demonstrations

Future Faculty Program Participant, Eberly Center

2016 - 2018

- Participated in seminars/workshops on improving teaching and communication
- Underwent a formal teaching observation and evaluation (Spring, 2016)

ACADEMIC SERVICE

Journal reviewer

- Journal of Environment, Development and Sustainability
- Sustainable Futures

Professional associations

• United States Association for Energy Economics

MEDIA COVERAGE

"Linking air pollution to climate change in Chinese policy." Carnegie Mellon University College of Engineering News, March 2019, https://engineering.cmu.edu/ news-events/news/2019/03/18-air-pollution-chinese-policy.html.

"US customers prepared to pay 40% more for cleaner electricity." Physics World-IOP Publishing, Aug. 2018, https://physicsworld.com/a/us-customers-preparedto-pay-40-more-for-cleaner-electricity/.

"Steinbrenner Institute Research Videos: Research Overview." Steinbrenner Institute for Environmental Education and Research, March 2017, https://www.youtube. com/watch?v=8_0pXc3JGRg.

HONORS & AWARDS

3 Minute Thesis Semifinalist Carnegie Mellon University	April 2018
Best Presentation Steinbrenner Institute for Environmental	
Education and Research Colloquium	May 2016
Honorable Mention National Science Foundation Graduate	
Research Fellowship Program	April 2016
Named "Future Influencer in Energy" Siemens AG	March 2014
Science, Technology, and International Affairs Award	
Georgetown University School of Foreign Service	May 2012
Phi Beta Kappa Honor Society Georgetown University	May 2011
Eagle Scout Boy Scouts of America	April 2008

SKILLS

Programming Advanced Python, R, PYOMO optimization package; working knowledge GAMS, Matlab, Analytica

Software PLEXOS, SAInt, Sawtooth (Lighthouse) Survey Software, Microsoft Office products (Word, Excel, PowerPoint)

Languages English (native), Spanish (proficient), French (beginner)

ACTIVITIES & VOLUNTEER WORK

Volunteer Interviewer Georgetown Alumni Admissions Program	2015 - present
Treasurer Carnegie Mellon Energy Club	2016 - 2018
Case Volunteer Case San Jose	2017
Chief of Staff Model U.N. National Collegiate Security Conference	2011